Emergency Physicians and Opioid Overdoses: A Call to Aid

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Despite encouraging news, our country remains amid an opioid overdose epidemic, and emergency physicians have a front-line view and opportunity to continue progress in reducing overdoses. Although recent data in the United States indicate a slowing in overdose fatalities,[1] a decrease in opioid prescribing and opioid misuse,[2,3] and a decrease in the number of people initiating heroin use,[3] it is too early to declare success. Although initially linked to prescription opioids, the opioid overdose epidemic now is largely fueled by highly potent illicit agents such as illegally manufactured fentanyl and various fentanyl analogues; alongside of this are increases in psychostimulant and cocaine overdoses.[4] What does all of this mean for emergency physicians? We seek to highlight successes achieved in recent years, but also call for more ongoing action by emergency physicians, with specific patient-centered actions.

First, we applaud emergency physicians and their emergency departments (EDs) as they seek to relieve pain by using appropriate prescribing and pain management practices. However, prescription opioids continue to be involved in many deaths nationally, estimated to be more than 17,000 of the 47,600 opioid-involved overdoses in 2017. Furthermore, the number of opioids prescribed in morphine milligram equivalents per person in the United States is still nearly 3 times what it was in 1999.[2] We support ED changes that seek to decrease prescribing for conditions that opioids are not well suited for (eg, fibromyalgia, migraines) and to reduce both coprescribing opioids with benzodiazepines and prescribing high-dose or longer-term opioids from the ED.[5] The latter are well-known riskier opioid uses and something easily altered in daily emergency care. Although opioid prescribing among emergency physicians accounts for a small amount of the overall opioid prescribing pool in the United States, wide variation in prescribing among emergency physicians exists and shows that opportunity for improvement is ongoing.[6] Gleber et al[7] highlighted the successes being made in local EDs to reduce opioid prescribing; throughout a 6-year period, opioid prescriptions decreased from 38% to 13%, coupled with an increase in nonopioid medications from 6% to 11% in pain-related ED visits. This shows we can become more knowledgeable about alternative pain management modalities and use them in the ED. The American College of Emergency Physicians (ACEP), through its E-QUAL Network Opioid Initiative portal (https://www.acep.org/administration/quality/equal/e-qual-opioid-initiative/), has resources available to assist, including alternatives-to-opioids protocols. These protocols describe nonopioid medications and procedures for first-line treatments for pain management in select conditions. An alternatives-to-opioids deployment in a Colorado ED resulted in a more than 20% reduction in the use of intravenous opioids, with no decrease in patient satisfaction scores.[8] By scaling up alternatives-to-opioids protocols to more hospitals, using tools such as state prescription drug monitoring programs when opioids or other controlled substances are prescribed, and using the lowest dose possible for the shortest duration when opioids are prescribed as recommended in the Centers for Disease Control and Prevention (CDC) Guideline for Prescribing Opioids for Chronic Pain,[5] further progress can be made.

Second, given the increasing number of Americans who need access to lifesaving addiction treatment, we believe all emergency medicine training programs should ensure their graduating residents are trained and equipped to treat patients with opioid use disorder. This includes identification of candidates and initiation of medications for opioid use disorder treatment. Providing this additional training will create a large and well-trained provider pool on the front line of care to treat this chronic disease. ACEP similarly offered medications for opioid use disorder training at their meetings and in 15 states to also enhance this opportunity, a measure we applaud. We encourage emergency physicians and trainees to undergo Drug Addiction Treatment Act of 2000 waiver training to prescribe buprenorphine for opioid use disorder treatment. Even in the absence of such a waiver or a separate

registration as an opioid treatment program, any physician may urgently administer buprenorphine or other medications for up to 72 hours (not more than 1 day of medication administered to a patient at one time) to relieve acute withdrawal symptom. In accordance with the concept of a warm handoff (transfer of care between 2 members of the care team), arrangements must be made for referral to ongoing treatment.[9] At the Grady Memorial Hospital in Atlanta, GA, patients with moderate or severe opioid use disorder and an interest in medications for opioid use disorder are transferred to the observation unit for induction. Their experiences showed that 12 of 19 patients (63.2%) went to their initial follow-up appointment in a clinic; 9 were still in the clinic at 30 days and 4 at 6 months.[10] Others noted that ED-initiated buprenorphine compared with brief intervention and referral to treatment increased treatment engagement and reduced self-reported illicit opioid use.[11] In part because of issues of stigma and negative experiences with the health system, the ED encounter may be one of the few contacts patients with opioid use disorder have with the health system, underscoring the importance of using this encounter to start individuals on the path to recovery. We must broaden our recognition of patients in need of treatment for opioid use disorder to include not just those presenting after an overdose but also those with cellulitis or endocarditis from intravenous drug use, or those with other comorbid conditions from illicit drug use, such as viral hepatitis.

Third, ED care provides an important opportunity to equip individuals at risk for experiencing or responding to an overdose and getting the reversal agent naloxone in the hands of those who can help. Recent efforts to expand overdose prevention education and naloxone distribution in the community and in pharmacies resulted in distribution of naloxone from many more community-based programs[12] and an increase in the number of prescriptions for naloxone that were dispensed from retail pharmacies.[13] Despite progress, naloxone remains underprescribed and underused, often in a variable pattern; the recently released CDC "Vital Signs" report found that naloxone dispensing ranged 25-fold between counties with the highest naloxone prescribing and those with the lowest.[14] Furthermore, CDC researchers found that only 1 naloxone prescription was dispensed for every 69 high-dose opioid prescriptions. Clinicians with higher rates of naloxone prescribing relative to high-dose opioid prescribing included addiction medicine, psychiatry, and pediatrics. Despite being the most likely physicians to treat an overdose, emergency physicians prescribed naloxone at a rate of only 2.8 per 100 high-dose opioid prescriptions. This is stark evidence of the opportunity in emergency care.

The Surgeon General raised awareness about the role of community members, family members, and friends of patients receiving high-dose opioids or at risk for overdose, and the need for health care professionals to know how to use naloxone and to keep it available.[15] More recently, the US Department of Health and Human Services released guidance on coprescribing of naloxone[16] consistent with CDC guideline[8] recommendations but also included recommendations on prescribing of naloxone to patients with mental health issues, those using other illicit substances, or individuals with excessive alcohol use. Expanding the use of naloxone is important, given the continued proliferation of illicitly manufactured fentanyl and fentanyl analogues in the illicit drug supply in communities, and recent data on psychostimulant- and cocaine-related overdoses showing that 50% of psychostimulant-related overdose deaths and 73% of cocaine-related overdose deaths involved opioids.[4] To support these efforts, emergency physicians should prescribe naloxone at discharge to patients with risk factors for overdose, and EDs should facilitate naloxone dispensing at discharge to at-risk patients or their families and loved ones.

Recognition, ED care, and naloxone distribution are first steps, but these alone are not enough. Using a clear and available "warm handoff" to transition to ongoing treatment is key. For example, in Indianapolis, Project POINT (Planned Outreach, Intervention, Naloxone, and Treatment) is a collaboration between local emergency medical services, EDs, and the local crisis intervention unit. Project POINT connects trained outreach workers with ED patients who have experienced a near-fatal overdose.[17] Another innovative community response has EDs in hard-hit places such as Huntington, WV, partnering with public safety and public health to ensure that people receive follow-up and are linked to treatment after an overdose.[18]

Recognizing and addressing the individual, family, and community dynamics that enabled the crisis to take root and grow is essential for solving it in the long term. Fundamental to this work is recognizing, mitigating, and ideally preventing childhood trauma such as adverse childhood experiences, potentially traumatic events that occur in childhood and can have profound effects on development, health, well-being, and opportunity throughout the life span. A study of greater than 8,000 patients in California found that experiencing adverse childhood experiences was associated with earlier initiation of drug use and that people with 5 or more adverse childhood experiences were 7 to 10 times more likely to report illicit drug use problems, addiction to illicit drugs, and intravenous drug use.[19] Although addressing this may seem tangential in the ED, it is not. We must recognize

that the youth in whom abuse or neglect is suspected, the child with an ear infection who has a parent experiencing violence or using substances in the home, and the young teen treated after a rape or a physical fight are all experiencing adverse childhood experiences. Adverse childhood experiences can be prevented or effects lessened by focusing on safe, stable, nurturing relationships and environments; building resiliency in individuals, families, and communities through implementation of programs and policies based on the best available evidence; and using trauma-informed approaches when treating patients to lessen the harms of adverse childhood experiences.

Emergency physicians have been and always will be the all-too-necessary safety net for many individuals, and an especially important partner in combating the opioid overdose epidemic. Great strides have been made in a short time, but we cannot become complacent in our fight against an evolving enemy. America's patients and communities need emergency physicians to redouble their efforts, challenge their colleagues and institutions to do more, and partner to work upstream, now more than ever.

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