Editorial

The Other Epidemic

Bruce Deighton, PhD1

Abstract

Description

The epidemic level of opioid abuse in the U.S. population continues to present a major challenge to our society and to the medical profession. Medical education has a significant role in improving screening, diagnosis, appropriate treatment and management of opioid use disorder. Addressing the problem of overprescribing opioids through physician education, surveillance and opioid management has resulted in significant improvement, translating to fewer overdose deaths from prescription opioids. Graduate medical education can increase access to care by training more addiction medicine specialists, and training other physicians to prescribe buprenorphine and provide access to medically assisted care.

Author affiliations are listed at the end of this article.

Correspondence to:
Bruce Deighton, PhD
HCA Healthcare Graduate
Medical Education
2000 Health Park Drive
Brentwood, TN 37027
(Bruce.Deighton@hcahealthcare.com)

Keywords

opioid-related disorders; opioid-related disorders/diagnosis; behavior, addictive/chemically induced; drug overdose/epidemiology; analgesics, opioid/adverse effects; inappropriate prescribing

Drug overdose is one of the leading causes of death in the United States, and the number of nonfatal drug overdoses is multiple times higher than the number of deaths from drug overdose.¹

The Centers for Disease Control and Prevention (CDC) reported that 769,937 Americans died from drug overdoses from 1999 to 2018.² There was an accelerating upward trend in drug overdose deaths during this period, reaching a peak in 2017, with 70,237 drug overdose deaths in that one year.² About two thirds of these deaths were attributed to opioid overdoses, both illicit and prescribed opioids.³ Overdose deaths from synthetic opioids—illicitly manufactured fentanyl (IMF), fentanyl analogs and counterfeit drugs laced with fentanyl—have increased at a dramatic rate since 2013, with another 10% increase in deaths reported from 2017 to 2018.3 The extent of the problem is well described in the literature, including challenges with opioid misuse, overprescribing, unauthorized distribution and lack of access to treatment.⁴ By any measure, 70,000 deaths in a year from drug overdose is a catastrophic problem.

Drug addiction and drug overdose deaths remain a major public health crisis in the United States.

The Surgeon General's 2018 Report, "Facing Addiction in America: The Surgeon General's Spotlight on Opioids" outlines prevention, screening, early intervention and treatment strategies to address the opioid epidemic.⁵ A number of these strategies are particularly relevant to the role and responsibility of the medical education community.

Education of physicians on the prevalence of opioid misuse and opioid disorder in the population is essential. Building the knowledge and skill base that medical students, residents and fellows need in order to recognize the importance of screening, risk assessment, diagnosis and treatment options for their patients is an important goal. Medical students should have an understanding of the neurobiology of substance abuse and stages of addiction development. Clinical interview skills and knowledge of assessment instruments for diagnosis of substance abuse disorder are also important



www.hcahealthcarejournal.com

© 2020 HCA Physician Services, Inc. d/b/a Emerald Medical Education HCA Healthcare
Journal of Medicine

HCA Healthcare Journal of Medicine

educational objectives. Medical education is very good at developing knowledge of risk factors, screening protocols, diagnostic approaches and treatment plans for patients with cardiac conditions, neurological and musculoskeletal problems, and the many other acute and chronic diseases, as well as common physical conditions seen in practice. Perhaps there is room for improvement in education on opioid misuse and opioid disorder, given the significant impact on health and loss of life from these conditions.

Screening for opioid misuse is a key responsibility of physicians, and should be emphasized in residency. The problem presents across the board in primary care practice, hospital-based medicine services, emergency medicine, obstetrics, neonatal and pediatric services, surgical services, anesthesiology, infectious disease, psychiatry and in virtually every other practice. Screening and diagnosis provide opportunity for early intervention, appropriate treatment and management, and referral, when indicated. Hersher and colleagues published a recent report on the need to provide education to hospitalists, laborists and other hospital-based physicians to recognize and appropriately treat patients with opioid use disorder.

"The diagnosis of opioid use disorder (OUD) is often overlooked or inadequately managed during the inpatient admission. When recognized, a common strategy is opioid detoxification, an approach that is often ineffective and can be potentially dangerous because of loss of tolerance and subsequent risk for overdose. Medication for addiction treatment (MAT), including methadone and buprenorphine, is effective and can be dispensed in the hospital for both opioid withdrawal and initiation of maintenance treatment. Hospitalists should be knowledgeable about diagnosing and managing patients with OUD, including how to manage acute pain or MAT during the perioperative setting."6

Education of physicians on best practices in pain management, together with surveillance and opioid management programs, has demonstrated significant results in reducing the problem of overprescribing opioids. The CDC reported a 13.5% reduction in overdose deaths

from prescribed opioids from 2017-2018.3 HCA Healthcare's Physician Services Group, which operates 1,300 medical practices in the United States, has emphasized appropriate prescribing practices for opioids through its opioid management program. Implementation of the program sharply limited the number of practices that stock opioids, enrolled 2,100 providers in electronic prescribing of controlled substances, and embedded NarxCheck monitoring in the outpatient electronic health record. There has been an overall reduction in opiate prescribing, and a 27% year over year reduction in prescribing of >90 morphine equivalents. (C.Ott, personal communication, December 2020) A new acute pain service was established as a component of the anesthesiology residency at HCA Healthcare's MountainView Hospital in Las Vegas, Nevada last year. In addition to meeting educational objectives of the residency, the acute pain service has the goal of eliminating the use of opioids for postoperative pain management altogether. Implementation of the service in August, 2019 showed promising early results in reducing total morphine equivalent administrations per case from August-December, 2019. (F. Puskas, personal communication, January 2020) See Figure 1.

Effective evidenced-based treatment is available for OUD, specifically medically assisted treatment (MAT) with buprenorphine and other opioid agonists. MAT combined with behavioral therapies and support services over an extended period has demonstrated success in treatment of OUD.

Graduate medical education has an essential role in improving access to care for patients with OUD. The critical need to expand addiction medicine training programs was the focus of a 2019 White House summit convening more than 70 federal leaders, health system executives, medical educators and addiction medicine experts. One of the outcomes of this conference was broader recognition of the significant workforce deficit in addiction medicine, and specific steps and resources needed to begin expansion of the addiction medicine workforce.

Currently, access to specialized care is significantly limited by a shortage of physicians with

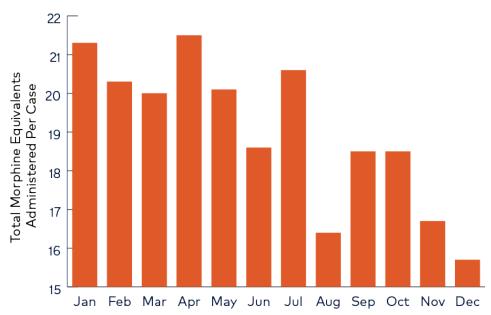


Figure 1. Total morphine equivalents administered per case at MoutainView Hospital, Las Vegas, NV from January-December 2019.

board certification in addiction medicine. Of the approximately 21,245,000 persons aged 12 or older who needed treatment for substance abuse disorder in 2018, only 2,359,000 or 11.1% received specialty care. In 2019, there were 2,416 addiction psychiatrists and 1,928 other physicians certified in addiction medicine in the U.S.7 Establishing new addiction medicine fellowships is one of the key steps to improving access to specialty care. In 2019, there were 70 ACGME accredited addiction medicine fellowships, but the country needs closer to 125 programs to begin meeting the need for specialists in this field. HCA Healthcare established four new addiction medicine fellowships in 2020 and plans to add several more fellowships over the next five-year period. This year, the Health Resources Services Administration (HRSA) awarded \$20,337,564 to 44 grantees to establish new addiction medicine fellowships.8

Beyond building more addiction medicine fellowships, providing specialized education to primary care physicians required to obtain a federal waiver to prescribe buprenorphine will expand patient access to medically assisted treatment. Programs such as the Mountain Area Health Education Center in Asheville, North Carolina, are doing an excellent job in expanding access to care through education of primary care physicians to provide medically assisted treatment.

The epidemic level of opioid and other substance abuse disorders in the U.S. population continues to present a major challenge to our society and to the medical profession. The astonishing number of deaths from drug overdose demands our attention and requires a comprehensive strategy, better coordination, and increase in resources. Medical education has a significant role in improving screening, diagnosis, appropriate treatment and management of opioid use disorder. Medical schools should assure that students have knowledge of the neurobiology of substance abuse and stages of development of addiction. Addressing the problem of overprescribing opioids through physician education, surveillance and opioid management has resulted in significant improvement, translating to fewer overdose deaths from prescription opioids. Continued attention is warranted. Graduate medical education can increase access to care by training more addiction medicine specialists, and training other physicians to prescribe buprenorphine and provide access to medically assisted care.

Conflicts of Interest

The author declares he has no conflicts of interest.

Dr. Deighton is an employee of HCA Healthcare Graduate Medical Education, a organization affiliated with the journal's publisher. This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

Author Affiliation

 HCA Healthcare Graduate Medical Education

References

- Overdose Death Rates. National Institute on Drug Abuse. March 10, 2020. Accessed June 29, 2020. https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates
- Hedegaard H, Miniño AM, Warner M. Drug overdose deaths in the United States, 1999–2018.
 NCHS Data Brief, no 356. Hyattsville, MD: National Center for Health Statistics. 2020. https://www.cdc.gov/nchs/data/databriefs/db356-h.pdf
- Wilson N, Kariisa M, Seth P, Smith H 4th, Davis NL. Drug and Opioid-Involved Overdose Deaths - United States, 2017-2018. MMWR Morb Mortal Wkly Rep. 2020;69(11):290-297. Published 2020 Mar 20. https://doi.org/10.15585/mmwr.mm6911a4
- 4. Stoicea N, Costa A, Periel L, Uribe A, Weaver T, Bergese SD. Current perspectives on the opioid crisis in the US healthcare system: A comprehensive literature review. *Medicine (Baltimore)*. 2019;98(20):e15425. https://doi.org/10.1097/MD.00000000000015425
- U.S. Department of Health and Human Services (HHS), Office of the Surgeon General. Facing Addiction in America: The Surgeon General's Spotlight on Opioids. Washington, DC: HHS, September 2018. https://www.addiction. surgeongeneral.gov/sites/default/files/Spotlight-on-Opioids 09192018.pdf
- Herscher M, Fine M, Navalurkar R, Hirt L, Wang L. Diagnosis and Management of Opioid Use Disorder in Hospitalized Patients. *Med Clin North Am.* 2020;104(4):695-708. https://doi.org/10.1016/j.mcna.2020.03.003
- Sivilli, J Brennan, TK, Ryan, SA. Building the Addiction Medicine Workforce to Deliver the Services Americans Need. Symposium presented at: Rx Drug & Heroin Summit: 2020 Virtual Experience; April 2020; Online. https://www.rx-summit.com/
- Addiction Medicine Fellowship FY 2020 Awards. Bureau of Health Workforce. Published June 2, 2020. Accessed June 26, 2020. https://bhw.hrsa.gov/grants/medicine/addiction/fellow-ship-awards-fy20