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EDITORIAL

The opioid overdose epidemic: opportunities for pharmacists

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The USA is experiencing an opioid overdose epidemic. It has been driven largely by prescription opioids and intensified by a surge of illicit opioids (e.g., heroin and fentanyl).[1,2] Drug-involved overdose, mainly opioids (e.g., prescription opioids and heroin), is a leading cause of accidental death in the USA. The opioid overdose epidemic has been escalating consistently for over a decade.[2] Every day, an estimated 91 Americans die from opioid-related overdose.[3] Opioid overdose appears to have disproportionally affected men, adults aged 25–64 years, and non-Hispanic whites.[2]

The opioid overdose epidemic is related partly to an increase in the availability of both licit and illicit opioids as well as the current "suboptimal" system for pain management and related prescribing.[2,4] The latter may be related to a lack of sufficient knowledge of behavioral and biological issues to treat chronic noncancer pain, overreliance on potentially high-risk treatments for pain such as prescribing opioids, inadequate tailoring of pain therapies to individuals, or insufficient reimbursement of non-opioid pain management strategies.[4] Of note, pain is among the most common reasons for health care visits. Various data sources suggest that approximately 11%–40% of the US population report symptoms of chronic pain, with millions suffering from disabling pain.[4] In an attempt to improve treatment for pain, there had been a pattern of broader prescribing of opioids for pain conditions over the past 2 decades. Availability of US Food and Drug Administration (FDA)-approved opioid medications, pharmaceutical companies' marketing campaigns, and inadequate education or knowledge about risks of prescribing opioids for managing chronic noncancer pain may have contributed to increases in prescribed opioids, opioid sales, and opioid prescriptions dispensed.[4–6]

Overall, primary sources of nonmedical opioid use or misuse are friends or family members, followed by physician's prescriptions or drug dealers.[7] Approximately 20% of the patients who are prescribed opioids have received high quantities by either one or more physicians, and these are the type of patients likely at elevated risk for opioid-related overdoses.[8] Opioid sharing and diversion contribute to misuse and overdose. Research data also suggest that approximately 25%–66% of individuals who die of prescription drug overdoses use opioids which were prescribed to someone else.[8] Therefore, pharmacists who dispense prescription medications and may have a regular contact with patients at risk for prescription opioid sharing, diversion, misuse, or overdose can play a vital role in prevention efforts and in the application of medication therapy management to improve patient care and avert medication-related problems.[9,10]

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Earlier projects have demonstrated that pharmacist patient care services as part of health care teams were associated with improved clinical outcomes and lower health care costs in the management of chronic medical conditions.[11]

Pharmacists are often the last line of defense in monitoring for prescription drug misuse. Community pharmacies are ubiquitous. Over 90% of Americans live within 5 miles of a community pharmacy, thus providing residents with steady access to pharmacists' services.[12] Adults with chronic pain or other chronic illnesses, opioid-using doctor shoppers, and individuals who may obtain opioids for sharing or diversion are likely to be visitors of community pharmacies. Hence, pharmacists are ideally positioned to engage in health care efforts and programs aimed at preventing or reducing prescription opioid misuse and overdose while also working to ensure access to medications for patients with legitimate chronic pain needs. A pharmacist has a corresponding responsibility with a prescriber to assure that prescriptions for controlled substances are issued for a legitimate medical purpose. As "gatekeepers," pharmacists assess controlled substance prescriptions and use prescription drug monitoring programs (PDMPs) or other tools to help identify red flags (e.g., diversion and improper prescribing). Pharmacists also actively educate patients about the proper use of medications, side effects, medication storage, and disposal; provide counseling for opioid-related health risk; and offer coordinated care and management of chronic illness.[10,13]

To date, community pharmacists are arguably underutilized and understudied health care professionals in the prevention of prescription drug misuse and overdose, and they can offer significant help in the management and treatment of opioid use disorder. While pharmacists across the nation have engaged in community- or pharmacy-based naloxone distribution programs to help reduce opioid-involved overdose mortality, research is still needed to understand the barriers to expanding naloxone distribution into rural or underserved areas and to evaluate both clinical and substance use treatment outcomes of those who received naloxone for opioid overdose reversal.[10,14]

In addition, there is limited research on opioid misuse prevention or interventions for opioid use disorder administered by pharmacists to patients in the pharmacy setting. Pharmacists are well aware of the existence of prescription drug problems in their patient populations and the community. Research data suggest that pharmacists are interested in engaging in activities to reduce opioid misuse/overdose and helping patients with opioid use problems through the provision of medication therapy education, addiction treatment information, counseling, or brief intervention.[15–17] However, substantial barriers exist regarding the lack of substance misuse-related training or resources (e.g., information, staffing or infrastructure support, and financial incentive) to effectively engage pharmacists in prevention efforts and care coordination for treatment. There is a need to develop and test strategies and resources for enhancing pharmacists' willingness, skills, and confidence in communicating with patients regarding opioid misuse, collaborating with physicians to improve pain management and prevent opioid misuse, conducting screening for substance misuse, and referring patients to substance use treatment.

Further, the PDMP is a vital tool for pharmacists to help identify patients at risk for opioid prescription drug misuse or overdose, but it is vastly underutilized. A 2013 report estimated that only approximately 36% of licensed pharmacists register to use the PDMP.[18] Although this number is increasing due to state laws enacted to increase PDMP enrollment and reporting, more research is needed to better understand barriers and facilitators for more effective utilization of PDMPs. Some research data also reveal the need for rigorous studies to better understand the impact of using the PDMP on the change of pharmacy practices (e.g., communicating with patients or prescribers when red flags are identified and dispensing opioid prescriptions).[19]

Finally, having real-time access to patients' electronic health records (EHRs) along with the PDMP would provide the community pharmacist with important information to assist in clinical decision-making and may help identify patients at risk for opioid use problems or overdose, thereby improving the provision of patient-centered services. Future research should investigate the linkage of EHRs with the PDMP and identify means to successfully integrate the PDMP and other decision support tools into pharmacy practices.[20] Access to safe, high-quality, and effective care for people suffering from chronic pain is a high priority that requires team-based, person-centered care strategies to minimize inappropriate opioid prescribing and dispensing as well as opioid sharing and diversion. Pharmacists can play a vital role in these efforts.

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