Responding to America’s Iatrogenic Epidemic of Prescription Opioid Addiction and Overdose

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The United States is experiencing what is arguably the greatest iatrogenic epidemic in the history of American medicine. From 1999 to 2014, almost 200,000 prescription opioid overdose deaths have occurred in the United States.1 Most fatal overdoses have affected patients receiving medically prescribed opioids.2 An unprecedented decline in life expectancy has occurred among working-age white Americans, partially attributable to rising drug overdose deaths.3 Among the 9–11 million Americans using medically prescribed opioids long term,4 10%–40% of chronic opioid therapy (COT) patients may have prescription opioid use disorder.5–7 If so, several million COT patients may now be addicted to medically prescribed opioids. Meager evidence supports COT benefits and safety.8 Whether analgesic efficacy is sustained long term for most COT patients has been questioned.9 The practice of long-term opioid prescribing in the United States is inconsistent with the basic precepts of evidence-based medicine.

LOWERING OPIOID DOSE

Bohnert et al10 shed light on one possible approach to reducing opioid overdose risks. Confirming previous studies, they found that opioid dose predicts overdose risk. They estimated that 60% of overdose fatalities received daily doses of 50 mg morphine equivalent dose or greater, whereas only 25% of all COT patients received doses this high. They did not find an unambiguous dose threshold for overdose risk—many deaths occurred at low prescribed doses. They concluded that “lowering the recommended dosage threshold below the 100 [morphine equivalent dose] used in many recent guidelines would affect proportionately few patients not at risk for overdose while potentially benefitting many of those at risk for overdose.” As evidence suggests that neither high opioid dose8 nor dose escalation11 improves patient outcomes, there is a compelling rationale for keeping COT doses low. States that have encouraged low doses appear to have reduced opioid overdose fatalities.12,13

Surveys of COT patients find that most continue to report moderate to severe pain and significant pain-related activity limitations, whereas only 1 in 5 report low pain intensity with few pain-related activity limitations.14 By emphasizing patient safety, physicians can find common ground with chronic pain patients considering COT. Physicians can avoid unnecessary opioid prescribing and unsafe dose escalation while working collaboratively with their patients.15,16

RESPONDING TO THE EPIDEMIC

Although limiting opioid doses of COT patients is a step in the right direction, it is unlikely to end the current epidemic without broader actions to protect patient safety. The last major iatrogenic epidemic of opioid addiction and overdose, in the late 19th

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Avoid ill-advised and unplanned initiation of COT: The number of patients initiating long-term opioid use can be reduced by more selective and cautious initial prescribing. Clinicians should limit prescribing narcotics to the most severe acute pain. When opioids are indicated, clinicians should limit the number of pills initially prescribed (10 or fewer pills is usually sufficient). Prescription Drug Monitoring Program (PDMP) data should be consistently checked. Patients should be explicitly informed that opioids are for time-limited use. Among injured workers with acute low back pain, those who received just 2 prescriptions or 7 days of opioids were twice as likely to be disabled 1 year later. Beyond initial use, before considering refills, clinicians should carefully consider whether decisive benefits are being realized and whether there are early warning signs of addiction. Too often, patients are physically and/or psychologically dependent on opioids before doctor and patient consider whether COT is an appropriate option. Patients should be fully informed of the significant risks involved. After-the-fact assent to unplanned long-term opioid use is not appropriate. Unfortunately, initiation of long-term opioid use is more often than not unplanned and COT patients are often inadequately informed of addiction and overdose risks. Many COT patients prefer intermittent opioid use at low doses, offering more control over the timing of opioid use and reducing risks of tolerance, physical dependence, and side-effects. As time-scheduled use of long-acting opioids increases opioid dose, it may also increase overdose risks. There is no evidence that time-scheduled opioid regimens with extended-release formulations reduce addiction risks.

Change policies and regulations: The historical record suggests that unsubstantiated claims were made in terms of COT safety. For example, the 1996 consensus statement of the American Academy of Pain Medicine and the American Pain Society on the use of opioids for chronic pain concluded that:

The trend is to adopt laws or guidelines that specifically recognize the use of opioids to treat intractable pain. These statements... help clarify that the use of opioids for the relief of chronic pain is a legitimate medical practice.

Considerably enhance population surveillance of opioid prescribing and safety: The Food and Drug Administration’s (FDA’s) recently mandated postmarketing surveillance program for extended-release opioids needs to be extended to the larger number of COT patients using immediate-release opioids. Using methods already developed for assessing prescription opioid misuse and addiction, the prevalence of prescription opioid use disorder and opioid misuse among COT patients could be determined by a survey of representative COT patients from diverse practice settings. This could clarify how common opioid addiction and misuse are among patients using opioids long term. If a large percentage of COT patients have a prescription opioid use disorder, then untested assumptions on the relative benefits and risks of COT will need to be reconsidered. Population surveillance initiatives on opioid prescribing and safety of the CDC, FDA, and National Institute on Drug Abuse can be better coordinated. Large pharmacovigilance databases developed for FDA studies and state PDMP data can be used to assess opioid-related risks of addiction, overdose, and other adverse health effects. The drug abuse surveys and surveillance systems of the CDC and National Institute on Drug Abuse have already made enormous contributions toward clarifying opioid-related risks. As there is not a strong evidence base for initiatives to reduce opioid risks among COT patients, population surveillance and available electronic databases need to be used strategically to guide changes in opioid prescribing. Surveillance of opioid prescribing
trends in states and health plans could determine whether changes are accompanied by reductions in opioid-related morbidity and mortality as well as assessing effects on patient-reported chronic pain outcomes. For example, a large proportion of overdose deaths are in Medicaid programs, regulated by both states and the Center for Medicare and Medicaid Services. Steps should be taken to monitor changes in opioid prescribing and progress in reducing opioid overdose mortality in Medicaid populations. COT patients already physically and/or psychologically dependent on long-term opioid use cannot be abandoned as medical opinion on the role of opioids in long-term chronic pain care shifts. We propose 3 additional actions to protect chronic pain patients currently using opioids long term.

(4) Step up clinical monitoring: If risks of addiction and serious opioid misuse are high among COT patients, then prescribing opioids long term without close monitoring is ill-advised. Close monitoring of whether patients are deriving benefit, misusing drugs, or becoming addicted to opioids should include checking PDMP data and random urine drug screening guided by risk. In addition, clinicians need to ask direct, nonjudgmental questions about prescription opioid use disorder (eg, opioid craving/preoccupation, loss of control, opioid-related harms, unsuccessful efforts to quit or cut-back). Assessment of opioid addiction should not be left to guesswork when patients and family members can be asked direct questions about opioid-related problems. Patients are often willing to report opioid-related problems when asked. At every prescribing visit, the total daily morphine equivalent dose (estimated by an online conversion calculator), as well as pain severity and pain interference with function and quality of life (assessed by 3 item scale) should be documented. For patients whose function is poor and pain inadequately controlled, tapering off opioids should be carefully considered. Unfortunately, monitoring of long-term opioid use is usually sporadic. As many clinicians do not check PDMP data, some states have passed legislation requiring PDMP checks. Other states have made technological enhancements to PDMP systems to facilitate use of PDMP data in routine patient care. Consistently offer taper as an option: Even among the subset of COT patients who find opioids helpful for controlling pain, almost half state that they would like to cut down their dose or quit completely. Clinicians should consistently offer a trial of a gradual taper off opioids or to a lower dose as an option. Many patients are afraid of tapering because they are fearful that their pain will worsen. Experience with gradual tapers suggests that pain usually does not worsen, and function often improves. Patient-physician trust and collaboration are essential in caring for patients struggling to manage chronic pain. Skilled clinicians have achieved success in supporting patients tapering off opioids or in transitioning to medication-assisted addiction treatment when indicated.

(6) Ensure treatment options for addicted COT patients: Addicted COT patients unable or unwilling to gradually taper off opioids should be offered addiction treatment, including medication-assisted therapy. Buprenorphine treatment, which can reduce overdose risks, needs to be much more widely available. It can also provide a safer option for patients who feel that pain is unmanageable without opioids. Costs of medication-assisted addiction treatment (including drugs and physician training/certification to ensure widespread availability) might be defrayed by state taxes on opioid analgesics. As societal costs of prescription opioid addiction are directly linked to opioid analgesic sales, it would be appropriate to tax opioid analgesics to ensure accessibility of urgently needed addiction treatments. Unsubstantiated claims misled a generation of physicians into believing that COT could be prescribed without untoward risks of addiction and overdose among chronic pain patients. They led many physicians to believe that chronic pain patients are benefited by long-term opioid use more than data and clinical experience suggest. Two decades later, claims that opioids are effective for long-term use among chronic pain patients remain unproven, whereas epidemiologic data have shown significant harms. We are facing the worst man-made epidemic in modern medical history. Iatrogenic drug addiction and overdose have resulted from well-intentioned but ill-advised efforts to care for chronic pain patients by indiscriminate long-term prescribing of opioid analgesics. We need health care leaders, state and Federal regulatory bodies, and professional societies to act immediately and forcefully to address this epidemic.

REFERENCES


