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Opioid Prescribing in the Midst of Crisis — Myths and Realities

Michael L. Barnett, M.D.

The once-simple act of writing an opioid prescription has become fraught. Physicians must check prescription monitoring databases to review patients' histories, make sure their prescription complies with state limits on dose or number of days' supply, and consider any practice-quality measures that might be affected. Beyond regulatory requirements, physicians must contend with growing stigma in the medical community against using opioids for pain management. Not surprisingly, there can be a palpable chill when a discussion about managing pain drifts toward opioids. Should I really start them? What if the patient demands more? What if I end up prescribing them long-term? Years of relaxed attitudes toward opioids have given way to an atmosphere of apprehension.

In many ways, this caution is a positive development since 2011, when prescribing opioids for pain seemed as routine as giving antibiotics for a urinary tract infection. According to the data science firm IQVIA, the volume of opioids prescribed per year quadrupled between 1991 and 2011. Many patients took only a fraction of the supply they received, and substantial quantities of opioids were diverted for nonmedical use. Opioid-related overdose deaths soon began increasing exponentially, a trend that evolved into a crisis fueled by intravenous heroin and fentanyl use. The consequences of overprescribing continue to reverberate.

The medical community has since reversed course. As of 2018, the total volume of opioid prescriptions nationally had fallen by more than 40% from "peak opioid" around 2011. Undoubtedly, much of this decrease has come from shedding avoidable use, but stories are emerging of prescribers abandoning opioids indiscriminately, particularly for the millions of U.S. patients with chronic pain. Like many other public debates, the opioid-prescribing debate seems hopelessly polarized: either opioids are industrially sponsored weapons of mass addiction or they're a misunderstood last hope for alleviating suffering. The optimal use of these medications lies between these two poles — but where, exactly? There's no definitive answer, but there are persistent myths and misunderstandings that contribute to overprescribing or underprescribing (see table).

Perhaps the most durable myth leading to overprescribing is that opioids are uniquely effective for pain control — they are special, powerful analgesics that are sometimes held back until others don't work, just as the most powerful antibiotics are reserved for especially severe, resistant infections. This belief was codified in the World Health Organization's analgesic "ladder" for cancer-pain treatment, which placed nonsteroidal antiinflammatory drugs (NSAIDs) on the bottom rung for mild pain and opioids on higher rungs for persistent moderate-to-severe pain.

I encounter this myth frequently in caring for patients, who may believe they're being denied the "real thing" if they are offered only NSAIDs for severe pain. In reality, although opioids do treat pain, there is little evidence that they have a clear advantage over NSAIDs,[1] muscle relaxants,[2] or other alternative pain treatments such as tricyclic antidepressants[3] for many conditions. A less generous interpretation of the evidence is that opioids are inferior to NSAIDs because of their less favorable side-effect profile for either short- or long-term treatment. The clinical implication is that there is no reason to give opioids a special, privileged status in pain control. They are simply another therapeutic option, best tried after NSAIDs and other alternatives if

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Myths That May Lead to Overprescribing or Underprescribing of Opioids.*

Myth	Reality	Translation into Practice
Beliefs that could drive overprescribing		
Opioids are uniquely powerful medications for pain control.	There is little evidence that opioids consistently outperform nonopioid pain treatment such as NSAIDs.	Opioids are simply an additional, noninferior, option when other therapies for pain are ineffective or contraindicated.
Opioids are particularly effective for acute pain.	Randomized trials have found no advantage of opioids over NSAIDs for multiple types of acute pain.	Even for common, acute painful conditions, opioids do not provide superior pain control as compared with other options.
Short courses of opioids carry negligible risk of long-term use or opioid use disorder.	Any opioid prescription is associated with a meaningfully elevated risk of long-term use or opioid use disorder.	For any opioid prescription, patients should be educated about the potential risk of dependence or opioid use disorder to make an informed decision.
Beliefs that could drive underprescribing		
Long-term opioid therapy has no role in treating chronic pain.	Many therapies for chronic pain offer modest benefit at best. For carefully selected patients, opioid therapy remains one option among many often ineffective alternatives.	Opioid therapy for chronic pain is not forbidden. Opioids may be a viable option for a small group of patients as part of a comprehensive pain-management strategy.
The side-effect profile of opioids poses unacceptable risk.	All therapies have side effects. Like every other clinical judgment, the choice to use opioids requires weighing risks and benefits together with the patient.	Opioids are rarely absolutely contraindicated. If a patient remains in pain despite other therapies, opioids should be tried and continued if needed.

* NSAID denotes nonsteroidal antiinflammatory drug.

possible, given their side-effect profile.

A related myth is that opioids are particularly effective for acute pain — an idea that may derive from a belief that opioids are indeed uniquely powerful at treating pain, just not chronic pain. Though the literature on the comparative effectiveness of treatments for acute pain has many gaps, a recent comprehensive National Academy of Sciences report on opioid prescribing guidelines found little evidence that opioids provide better pain control than NSAIDs or other nonopioid alternatives in several acute pain conditions, including dental procedures, renal colic, headache, and low back pain.[4] For postsurgical pain, growing evidence suggests that opioid prescribing can be drastically reduced without negatively affecting pain or patient satisfaction. There may be clinical scenarios in which opioids are still preferred, particularly conditions with severe pain such as major surgery or trauma, but the list is shrinking.

Overprescribing may also be promoted by the myth that short courses of opioids carry negligible risks for side effects such as dependence, substance use disorder, or overdose. In reality, any opioid prescription carries a meaningful risk of these adverse effects. Though we lack randomized trials to quantify the long-term risk, observational studies have found that of patients who receive a single opioid prescription in the emergency department, after surgery, or at the dentist's office, 1% to 6% end up using opioids for at least 12 months or being diagnosed with opioid use disorder. It may be arguable whether these rates constitute a "meaningful" risk, but in other therapeutic settings, side effects with similar incidence substantially affect clinical decision making — such as major bleeding with warfarin therapy, which can affect 1% to 3% of patients per year. Given that as recently as 2017, about 17% of the U.S. population received at least one opioid prescription, an incidence of 1% would mean adverse effects in hundreds of thousands of Americans.[4]

The issue of side effects also supports a myth that could lead to opioid *under*prescribing: the belief that the incidence of long-term sequelae makes opioids too risky to prescribe except in extreme cases. Given ubiquitous messaging about opioid overprescribing, some clinicians may understandably want to run in this direction, but they can go too far. Although opioids carry risks, they should still be used

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when necessary and if prescriber and patient agree that the benefit is worth the risk. For patients with acute pain who either cannot take or have had little response to NSAIDs, there are few other options.

A myth that frequently crops up in reports of patients abandoned by their prescribing physicians[5] is that opioids no longer have a role in chronic pain management — sometimes even for patients already receiving long-term opioid therapy. There is clear evidence that opioids have a very limited role in treating chronic pain given their modest effectiveness and poor safety profile. But that does not imply that long-term opioid therapy is now forbidden. Many appropriately treated patients can take opioids for years without any misuse. Moreover, in a recent randomized trial of long-term opioid versus nonopioid pain management, the two treatment groups had similar levels of pain reduction.[1] The impact simply wasn't superior to that of NSAID-based management, and the opioid group had twice as many medication-related adverse effects. These results imply that opioid pain management could help patients in whom other approaches have failed, if they accept and can safely manage the risk of opioid-related side effects, including dependence or addiction. However, determining which patients will benefit from long-term opioid therapy remains challenging.

This myth also deepens stigma against patients receiving long-term opioid therapy. The fact that someone has been taking opioids for years does not mean the person has opioid use disorder, but many people make that stigma-driven assumption. Patients with chronic pain are particularly vulnerable to being stigmatized because of the controversy over opioid therapy; they often face traumatic experiences in the medical system, including humiliation, abandonment, and refusal of care.[5] Of course, even if a patient does have opioid use disorder, there is no excuse for judgmental attitudes or behavior from medical professionals.

In the face of the overdose crisis, it can be difficult to remain neutral on the clinical appropriateness of opioid use. A key role for clinicians is to take responsibility for dispelling myths and for understanding the nuances of deploying these medications within appropriate bounds. Otherwise, polarizing misinformation will continue to carry the day. Opioids should neither be embraced as a cure-all nor shunned as universally dangerous and inappropriate. Like much of medicine, using opioids well is both an art and a science, requiring clinical judgment, shared decision making, and compassion.

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From the Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, and the Division of General Internal Medicine and Primary Care, Department of Medicine, Brigham and Women's Hospital — both in Boston.

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