EDITORIAL

Increasing Evidence for the Limited Role of Opioids to Treat Chronic Noncancer Pain

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In 2017, an estimated 11 to 12 million people in the United States (4.2% of the total population) misused opioids (including heroin).[1] What most physicians do not recognize is that 92% of people who misuse opioids do so by taking prescription opioids,[1] and that 75% of individuals who use heroin report that they started misusing opioids through the misuse of prescription opioids.[2]

Physicians and other prescribers have an important role as a source of misused opioids. According to the National Survey on Drug Use and Health, 34.6% of the individuals who misused prescription opioids reported that they obtained the drug they misused via prescription from 1 prescriber.[1] Overprescribing opioids to treat acute pain is associated with increased risk of long-term opioid use[3] and is also associated with increased misuse of opioids within the community. Frequently, unused opioids are not properly discarded and become available for nonmedical use. One report suggested that 53.1% of individuals who misused prescription opioids obtained these opioids from a friend or relative.[1]

Many institutions across the country are making efforts to prescribe opioid prescriptions more rationally. These efforts include implementing opioid stewardship, improving opioid prescribing to treat chronic noncancer pain, and better screening and treatment for opioid use disorder. These efforts may be making a difference. The number of individuals who misused prescription opioids decreased by an estimated 400 000 in 2017, and the number of individuals who initiated heroin use also decreased significantly from an estimated 170 000 in 2016 to 81 000 in 2017.[1]

Opioids have a role in treating pain associated with advanced cancer. However, opioids also continue to be widely used to treat chronic noncancer pain even though a growing body of evidence has demonstrated the harms associated with this type of treatment.[4]

In this issue of *JAMA*, Busse and colleagues[5] provide important information on patient outcomes when opioids are used to treat chronic noncancer pain. In this systematic review and meta-analysis, the authors included 96 randomized clinical trials involving more than 26 000 patients who received opioids or a nonopioid control and for whom outcomes were documented for at least 1 month. Compared with patients who received placebo, patients who received opioids reported very modest improvements in pain and physical functioning, and these modest improvements decreased over time.

For patient-reported pain intensity, the weighted mean difference between the opioid group and the placebo group was −0.69 cm (on a 10-cm visual analog scale) with a risk difference of 11.9% (95% CI, 9.7% to 14.1%) for achieving the minimally important difference of 1 cm. For physical functioning, the weighted mean difference was an improvement of 2.04 points (95% CI, 1.41 to 2.68 points) on the 100-point 36-item Short Form physical component score with a risk difference of 8.5% (95% CI, 5.9% to 11.2%) for achieving the minimally important difference of 5 points. The study also included a wide range of opioid doses (from a daily oral morphine equivalent of 7.5 mg to 242.7 mg) and the analysis documented no differences in outcomes related to opioid dose.

Additional analysis involving 9 randomized clinical trials that included 1431 patients showed no difference in the reported pain relief between patients who received opioids or nonsteroidal anti-inflammatory drugs. No difference in the modest improvement of physical functioning was found between opioids and nonsteroidal anti-inflammatory drugs in an analysis of a smaller number of studies.

The outcomes reported in the study by Busse et al[5] are likely to represent the best-case scenario because 72% of the included studies excluded patients with current or prior substance use disorder and 47% of the studies excluded patients who had a diagnosed mental illness or who were taking a psychotropic medication. However, this often is not the case in the clinical setting. Many patients with chronic pain also have other conditions including depression, anxiety disorders, and sleep-disordered breathing that increase the risk of harm when opioids are administered. Physicians must screen for these common conditions and consider whether prescribing opioids is safe for patients at increased risk of harm.

The findings reported by Busse et al[5] illustrate that most patients who are prescribed opioids for the treatment of chronic noncancer pain will not benefit from those drugs. However, when opioids fail to provide pain relief, a common response by clinicians may be dose escalation rather than reconsidering use of the drug. Given the clear risk of serious harm, opioids should not be continued without clear evidence of a clinically important benefit.

The outcomes selected by Busse et al[5] included measures of pain intensity as well as physical and mental functioning. Although the authors reported only a limited number of outcomes, their assessment included standardized quality-of-life assessment from a patient-oriented perspective. As reported in this study, if a pain treatment such as long-term opioid therapy is effective, then the patient should report

improvement in patient-reported pain intensity as well as in physical and mental functioning. However, in clinical practice, most clinicians do not routinely collect and document patient outcomes using validated measures for these domains. Periodic collection of patient-reported pain outcomes could allow clinicians and patients to observe the effect of treatment and use this information to guide clinical decision making.

Opioid dose matters with regard to risk of harm.[6] The data supporting improved efficacy with increasing dose is far less robust. Physicians should calculate, document, and track opioid dose in oral morphine equivalents. Extreme care should be used when considering opioid dose increases given the data that suggest increased opioid dose may not improve efficacy, but is associated with increased risk of harm.

Although it takes the clinician just a few minutes to prescribe an opioid, it may take 30 minutes or longer to explain to the patient the reasons for declining to prescribe an opioid. This may be due in part to the lack of access to nonopioid treatment options. There are many options to consider when offering treatment for chronic pain that go beyond pharmacological management such as physical therapy, cognitive behavioral therapy, mindful meditation, yoga, and tai chi. However, explaining these options to patients can be difficult and time-consuming for clinicians and helping patients access these treatment options even more difficult. Regardless, it is time for physicians to properly prescribe opioids when treating acute and chronic pain and to carefully avoid overprescribing. In addition, physicians need to continue to advocate for the availability of integrated interdisciplinary pain care for their patients with complex chronic pain conditions.

Health systems have an opportunity to improve patient outcomes by helping physicians and other clinicians facilitate patient access to nonopioid pain treatment options. Likewise, health systems can improve outcomes through monitoring clinician adherence with best practices and by helping clinicians improve their skills in pain and addiction treatment through educational opportunities. Optimal patient outcome metrics should be developed to guide efforts to improve patient care at a local, health system, and national level.

The management of chronic noncancer pain deserves increased attention. Effective, appropriate treatment can make a difference in the lives of individuals with chronic pain. Opioid therapy can be safe and effective in carefully selected patients when proper ongoing monitoring is integrated into patient care. However, it is time for physicians to redouble efforts to improve the process of care when prescribing opioids. Diligent opioid prescribing to carefully selected patients will lower the risk of harm to patients, their families, and the community.

ARTICLE INFORMATION

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