

# Acute Pain Management for Inpatients with Opioid Use Disorder

Overcoming misconceptions and prejudices.

**OVERVIEW:** Like most hospital inpatients, those with opioid use disorder (OUD) often experience acute pain during their hospital stay and may require opioid analgesics. Unfortunately, owing to clinicians' misconceptions about opioids and negative attitudes toward patients with OUD, such patients may be inadequately medicated and thus subjected to unrelieved pain and unnecessary suffering. This article reviews current literature on the topic of acute pain management for inpatients with OUD and dispels common myths about opioids and OUD.

**Keywords:** acute pain, addiction, evidence-based practice, opioid, opioid use disorder, pain, pain management, substance use disorder

nna Barrett, a seasoned RN in the medicalsurgical unit of a busy urban hospital, is providing orientation training to Brian Jackson, an RN who is new to the unit. (This scenario is a composite based on actual events one of us, ZP, has observed in clinical practice.) Mr. Jackson has been assigned to Beth Somers, a patient recovering from shoulder surgery. Her medical record includes a note about heroin abuse. Twice in the past she was prescribed methadone maintenance therapy, but she relapsed both times, and she was actively using heroin prior to hospitalization. Ms. Somers, who is unemployed, currently lives with a friend, but she has been homeless on several occasions. On a scale of 0 to 10, with 0 signifying no pain and 10 signifying the worst pain, she reports her pain as 8. Her vital signs are stable and she is crying softly.

Mr. Jackson notes that Ms. Somers has an order for morphine 10 mg IV every four hours as needed for pain relief, in addition to a daily dose of morphine 100 mg IV by continuous infusion (4.2 mg per hour). Her last PRN dose was two hours ago. Since she is not due for another for two hours, Mr. Jackson asks his colleague, Ms. Barrett, whether they can contact the prescriber to increase the PRN dosage or the scheduled morphine coverage. "No! She's an addict," Ms. Barrett says. "And she's already getting more morphine than any other patient on this unit. She can't be in pain. She's just drug seeking. It's our responsibility to make sure we don't worsen her addiction."

It's estimated that more than 50% of general medical inpatients experience significant acute pain during hospitalization.<sup>1,2</sup> An estimated 86% of patients experience acute pain following surgery; of these,

43% describe their pain as moderate, 24% as severe, and 23% as extreme.<sup>3</sup> Given that nearly 2 million Americans ages 12 or older either abused or were dependent on opioid painkillers in 2013,<sup>4</sup> it's likely that a proportion of general medical and surgical inpatients will have opioid use disorder (OUD), though their admission may be entirely unrelated to drug use. During hospitalization, such patients are as likely to experience acute pain from surgery, injury, or disease as any other inpatient, and in many cases opioids may be the most effective and appropriate means by which to manage their pain. Such patients, however, may receive insufficient analgesia as a result of clinician misconceptions about opioids or prejudice toward patients with OUD.<sup>5</sup>

The American Nurses Association describes nursing as the "prevention of illness and injury, alleviation of suffering . . . , and advocacy in the care of individuals, families, communities, and populations." Nurses have a moral and professional obligation to all patients who experience acute pain, including those with OUD. Similarly, the 2012 American Society for Pain Management Nursing position statement on pain management in patients with substance use disorders affirms that "every patient with pain, including those with substance use disorders, has the right to be treated with dignity, respect, and high-quality pain assessment and management."

Unfortunately, patients with OUD who ask for pain medication may be perceived as seeking drugs to support an addiction. In such cases, rather than relying on evidence-based recommendations for pain management, clinicians may be guided by a fear of causing overdose or fueling addictive behaviors, or they may be inappropriately adhering to a "tough love" approach. The patients' pain may then remain undertreated, which can place them at risk for significant physical and psychological consequences. To counteract such often well-intentioned but uninformed and potentially harmful pain management practices, it's necessary for nurses, NPs, and physicians to understand how to knowledgeably assess acute pain in hospitalized patients with OUD.

This article reviews current literature on acute pain management for inpatients with OUD, dispels common myths about opioids and OUD, and discusses common misconceptions among nurses about acute pain management in patients who have addictive disorders. Since inpatient and outpatient pain management differs significantly in terms of opportunities to closely monitor vital signs, assess patients for sedation or respiratory depression, and ensure that medications are taken as directed, this article focuses exclusively on the use of opioids to treat acute pain in the inpatient setting.



#### **LITERATURE SEARCH**

To identify relevant literature, we performed a keyword search of the Ovid, MEDLINE, and CINAHL databases, using the following words and phrases in various combinations: inpatients, opioid, opioid analgesics, opioid use disorder, opioid-related disorders, substance-related disorders, addiction, pain, acute pain, pain management, nursing care, nurse attitudes, and attitude of health personnel. We limited our database search to peer-reviewed articles written in English between 2000 and 2015. We then searched through reference lists of relevant journal articles. To this, we added several works written by authorities on the subject of pain management (some written before 2000), guidelines and position statements developed by national organizations concerned with pain management, and a seminal work on the nature of suffering.

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#### THE IMPORTANCE OF PAIN MANAGEMENT

A number of organizations, including the Joint Commission and the American Pain Society, have published pain management standards and recommendations that underscore patients' right to pain relief, the importance of conscientious pain assessment, and the need to reassess and adjust the pain management plan as appropriate. Pain management is evaluated through the use of quality indicators, such as the frequency of pain assessment and the degree to which pain is prevented and controlled. Effective pain management is critical to patient comfort and healing. 10

#### Prevalence and consequences of unrelieved pain.

Acute pain is frequently undertreated.<sup>3,11,12</sup> Studies suggest that more than 60% of inpatients experience incomplete or inadequate pain relief.<sup>12,13</sup> Proposed explanations for the undertreatment of pain include <sup>12,14</sup>

- infrequent or inappropriate pain assessment.
- underprescription of pain medication.
- underadministration of as-needed pain medication.
- inadequate instruction in nursing and medical schools in pain management.
- inadequate clinician knowledge of opioid dose titration.
- time constraints.
- poor adherence to pain management guidelines.
- concerns about opioid-related adverse effects, such as respiratory depression, sedation, tolerance, and addiction.
- the lack of an efficient means by which to request new or changed analgesic orders.

defines OUD—a specific subset of substance use disorder—as a "problematic pattern of opioid use leading to clinically significant impairment or distress," as indicated over the course of a year by the occurrence of at least two of 11 criteria, including, for example, craving, use of increasing amounts of the drug over time, repeated unsuccessful attempts to control use, and continued use despite social or interpersonal harm. (For all 11 criteria, see http://bit. ly/1HQyThD.) A diagnostic feature of OUD is that it reflects "compulsive, prolonged self-administration of opioid substances that are used for no legitimate medical purpose or, if another medical condition is present that requires opioid treatment, that are used in doses greatly in excess of the amount needed for that medical condition."17 Once OUD has been diagnosed, its treatment may include addiction counseling, cognitive behavioral therapy, support groups, and maintenance therapy with an opioid agonist, such as methadone.18

Despite certain crucial differences, patients who use opioids to treat chronic pain and people with OUD share some similarities. Both may become physically dependent on opioids and develop a high opioid tolerance, and both are at risk for stigmatization by health care professionals.<sup>15, 19, 20</sup> Physical dependence on opioids may manifest in a withdrawal syndrome produced by "abrupt cessation, rapid dose reduction, decreasing blood level of the drug... or administration of an antagonist." Whether opioid dependence and tolerance are owing to long-term use for chronic pain or to an addictive disorder, acute pain should be treated similarly in the inpatient setting.

# Some maintain that addiction is a choice and not a disease. OUD is thus often seen not as a disease to be treated but as a behavior to be punished.

Unrelieved pain is a health problem with potentially far-reaching consequences. Inadequately managed acute pain can cause neural changes that precipitate chronic pain and its attendant risks of anxiety, depression, social isolation, poor health outcomes, and mistrust of the medical system (see Figure 1). <sup>15,16</sup> Undertreating acute pain can also lead to atelectasis, poor wound healing, respiratory infection, sleep disturbances, impaired mobility, thromboembolism, prolonged recovery time, and extended hospital stays.

#### **DIFFERENTIATING OUD FROM LONG-TERM OPIOID USE**

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, published in 2013,

### ADMINISTERING OPIOIDS TO INPATIENTS WITH OPIOID TOLERANCE

The first step in managing pain for all patients should be to validate and acknowledge the existence of their pain and assure them they will receive adequate analgesia.<sup>22</sup> The second step should be to perform a thorough pain assessment, addressing<sup>15, 23</sup>

- pain intensity (using a numeric or visual analog scale, for example).
- pain quality ("stabbing" or "aching," for example).
- pain location.
- aggravating factors.
- alleviating factors.

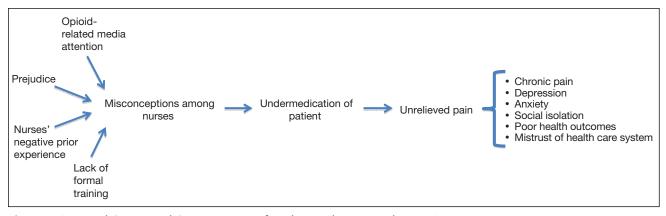


Figure 1. Potential Causes and Consequences of Inadequately Managed Acute Pain

- associated factors (such as nausea, vomiting, or constipation).
- timing of the pain (onset, duration, and frequency).
- goals for pain level and function.

Opioids, if an appropriate treatment choice, should not be withheld from a patient on the basis of a comorbid addictive disorder.<sup>15, 24</sup>

Opioid dosing. When caring for patients who are physically dependent on opioids—whether dependence stems from prior chronic pain treatment or OUD—it is necessary to know the type and quantity of opioid they were consuming prior to hospitalization so that an equivalent (equianalgesic) dose can be administered by an appropriate route to cover their baseline opioid requirement. 15,25 Several equianalgesic conversion calculators for opioids can be found online and on the Web sites of pain programs, such as the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins Center for Cancer Pain Research (www.hopweb.org). The calculator can be used, for example, to determine the postoperative dosage of IV morphine that would cover the baseline requirement of a surgical patient who had been taking oxycodone 280 mg by mouth daily prior to hospitalization. A 20-mg dose of oxycodone by mouth is equivalent to a 10-mg dose of morphine IV. Following surgery, therefore, the patient should be given a baseline dose of morphine 140 mg IV, and additional opioid analgesia would be required on top of that to control acute postsurgical pain.15

As far as we know, there are no evidence-based guidelines for determining inpatient opioid dosage in an opioid-tolerant patient based on the opioid dosage followed prior to hospitalization; however, several pain experts have made recommendations. Drew and St. Marie suggest that it's reasonable to begin titrating opioids at a level that is 50% to 100% greater than baseline use, but they also stress that precise medication reconciliation—in which the timing, formulation, and dosage are verified—is essential; reviewing prescription

information alone is insufficient.<sup>15</sup> Carroll and colleagues note that postoperative opioid requirements may be two to four times greater for an opioid-tolerant patient than for an opioid-naive patient.<sup>26</sup> While these suggestions provide a useful frame of reference, it's important to remember that opioid doses must be individualized and titrated to analgesic effect.<sup>25,27</sup> There is no one dose that is safe and effective for every patient.

Although opioid analgesics are often indicated for acute pain management, they are not without risk. In addition to nausea and constipation, opioids can cause over-sedation and respiratory depression. In overdose, they may be lethal. Careful titration is required to maximize pain relief while minimizing adverse effects.

Other variables to consider when managing acute pain in patients with OUD include formulation, route, and timing of opioid medications. Although the choice of formulation and route depends on multiple factors, Drew and St. Marie suggest starting with long-acting opioid analgesics, using the oral route when possible. <sup>15</sup> If pain is persistent throughout the day, opioids should be given on a scheduled basis (fixed, round-the-clock dosing). <sup>15, 23, 25</sup> Breakthrough pain can be managed with an additional short-acting opioid analgesic prescribed on an as-needed basis or by patient-controlled analgesia. <sup>20, 23, 25</sup>

The addition of nonopioid medications. When managing pain in patients with OUD, experts recommend using a multimodal approach—incorporating local anesthetics, nonsteroidal antiinflammatory drugs, acetaminophen, and anticonvulsants into the opioid regimen as appropriate.<sup>23,25</sup> Multimodal analgesia involves multiple classes of analgesics that target pain in the peripheral and central nervous systems, thus yielding greater pain relief with fewer adverse effects.<sup>23</sup>

#### **SUFFERING IN OUD**

Suffering can be physical, psychological, or spiritual. It may occur when pain is severe or chronic, and

may be exacerbated by the feeling of having little control over pain.<sup>28</sup> As with other chronic diseases, OUD causes suffering. The disease is associated with a severe disruption of roles and relationships, as well as with depression, anxiety, deterioration of overall health, and chronic pain.<sup>22, 29</sup> Both OUD and chronic pain are neurobiologic conditions that disrupt central nervous system functioning, and the existence of one may influence the existence of the other.<sup>15, 29</sup> The complex interaction between chronic pain and addiction is an area of active research.

also associated with more positive and nuanced attitudes toward patients with OUD.<sup>34</sup>

Other findings are less consistent. Chang and Yang found total years of nursing experience to be positively associated with nurses' regard for patients with OUD,<sup>34</sup> whereas Gilchrist and colleagues found that nurses with fewer than 10 years' experience had a higher regard for those patients than nurses with 10 to 20 years' experience.<sup>36</sup> While Chang and Yang found a correlation between continuing education training in substance use and tolerant attitudes,<sup>34</sup> a

## To our knowledge, no research to date has linked inpatient use of opioid analgesics for acute pain to worsening addiction.

People with addictive diseases such as OUD may be unable to avoid maladaptive behaviors even in the face of adverse outcomes. Unfortunately, as McLellan and colleagues have pointed out, many members of the general public as well as health care professionals continue to view drug dependence as "primarily a social problem that requires interdiction and law enforcement rather than a health problem that requires prevention and treatment." 30 Some clinicians and commentators maintain that addiction is a choice and not a disease. OUD is thus often seen not as a disease to be treated but as a behavior to be punished. Patients with OUD risk having their pain and suffering discredited.31 According to Cassell's seminal work, a patient's suffering is worsened when pain is not validated, such as when a clinician suggests that the pain is "psychological" in origin or implies that the patient is "faking" it.28

#### ATTITUDES TOWARD PATIENTS WITH OUD

Several studies have attempted to analyze and characterize nurses' attitudes toward patients with OUD. In dealing with patients who have an addiction, there's often an underlying false assumption of controllability. A systematic review by van Boekel and colleagues found that "high perceived controllability over a disease cause[s] more intolerant judgments and attitudes towards [that] disease."32 Similarly, Kelly and Westerhoff draw parallels between perceived controllability and blame.<sup>33</sup> Personal exposure to substance use disorders among friends or family members appears in many cases to be associated with a higher regard for patients with OUD.32,34,35 According to Monks and colleagues, this personal experience may help nurses "see the person behind the patient."35 Working in a psychiatric setting is

literature review by Skinner and colleagues found that, though education and training support sympathetic attitudes toward patients with substance use disorders, they are often insufficient to counteract ingrained negative attitudes.<sup>37</sup>

Together, this literature suggests that formal nursing education and in-service training related to managing pain in patients with OUD may support positive attitudes, but other factors are also at play. Judgmental attitudes may stem from misunderstanding certain aspects of pain management and substance use disorders<sup>38</sup>; in addition, nurses frustrated by caring for patients with OUD often experience a lack of role support.<sup>31, 39</sup>

In recent years, opioid abuse has received considerable media attention, much of it depicting a "war on drugs" that pits "junkies" and "kingpin" dealers in violent struggle with police. Such depictions serve to propagate the notion that addiction is a crime rather than a public health problem. Fictional television often reinforces this notion. In an episode of *Grey's Anatomy*, a surgical resident is bitten by "a delusional, psychotic drug addict" and waits tearfully for the man's HIV test results. As a result of such portrayals, clinicians may view patients with OUD "as bad people rather than focusing on addiction as a bad disease that requires treatment."

#### TREATING ACUTE PAIN IN OUD: RELYING ON EVIDENCE

Undertreatment of acute pain in hospitalized patients with OUD is not solely the result of negative clinician attitudes. There are many misconceptions about the nature of OUD and the best way to approach pain management in this patient population. Here we will review evidence-based principles of managing acute pain in hospitalized patients with OUD.

Accept the patient's self-reported pain. Because the experience of pain is subjective, there is no true litmus test to detect its presence. Among pain management specialists, however, the overwhelming consensus is that the most reliable indicator of pain intensity is the patient's self-report. Pain is "whatever the experiencing person says it is, existing whenever the experiencing person says it does."41 While some have questioned the motivations underlying the widespread dissemination of this approach to treating chronic pain in outpatients,42 such concerns are for the most part not applicable in the inpatient setting. Nurses caring for hospitalized patients in acute pain have the ability to monitor patient safety and response. Considering the serious consequences of untreated pain, such an approach is simply good pain management.

Pain behaviors vary widely and may not reflect the patient's self-report of pain intensity. 43,44 Vital signs are also an unreliable indicator of pain intensity. 9,38 Variables such as heart rate and blood pressure may be affected by physiologic state (by volume depletion or hypothermia, for example) and certain medications. While vital signs may be elevated during an initial episode of severe pain, they often normalize over time as the body restores equilibrium, even if the acute pain has not resolved. It is the responsibility of nurses to act on the patient's self-report. All patients, including patients with OUD, should be treated according to their self-reported pain intensity. 45

A systematic review by von Boekel and colleagues found that health care professionals, including nurses, often perceive patients with OUD as manipulative,<sup>32</sup> which may explain why some discount the patient's self-report of pain intensity. Instead, they base decisions about opioid analgesics on patients' behavior or on assumptions about what pain should "look" like (grimacing or guarding rather than talking and moving freely, for example).<sup>12, 44, 46</sup> When this occurs, pain management may be compromised (see *What Does Pain Look Like?*<sup>44)</sup>.

Be aware of the distinction between addiction and pseudoaddiction. Addiction is not a diagnosis to be assigned lightly; it needs to be made by a qualified clinician. Pseudoaddiction, on the other hand, refers to "drug-seeking behaviors [that] arise when a patient cannot obtain tolerable relief with the prescribed dose of analgesic and seeks alternate sources or increased doses. Upon observing such behavior from a patient, a nurse may wrongly assume that the patient is addicted to opioids and subsequently provide inadequate pain management.

## Do not withhold opioid analgesics, if required, from inpatients who have an addictive disease. When working with inpatients who have OUD.

When working with inpatients who have OUD, some health care workers are concerned that prescribing opioids will exacerbate addictive disease. While the concern is reasonable, to our knowledge

#### What Does Pain Look Like?

Results from a survey of nurses.

McCaffery and colleagues used a vignette survey to identify trends in nurses' pain management choices over several years.<sup>44</sup> In 2006, their vignettes were incorporated into a longer reliable, validated survey tool, the "Knowledge and Attitudes Survey Regarding Pain" (available at http://bit.ly/100VKY7).

The vignettes included in the survey concerned two 25-year-old men, Andrew and Robert. Both patients experienced acute pain on the first day following abdominal surgery, and after having received morphine 2 mg  $\nu$  two hours previously, both rated their pain as 8 on a 10-point numeric pain scale. The vignettes were identical except that Andrew was smiling and joking, whereas Robert was quiet and grimacing. The nurses surveyed were asked to record the patients' pain intensity on a numeric scale and to make a decision about each patient's next opioid dose based on a physician order of "morphine  $\nu$  1–3 mg q 1 hr PRN pain relief." For both vignettes, the correct response was to record a pain intensity of 8 out of 10 (as reported by the patients) and to administer morphine 3 mg  $\nu$ .

Between 1990 and 2006, the vignette survey was administered four times, each time to a convenience sample of RNs attending a U.S. pain conference. In 2006, among a sample of 615 nurses, 94.6% and 86% recorded pain intensity correctly for grimacing Robert and smiling Andrew, respectively; 64.3% increased grimacing Robert's opioid dose to the full 3 mg, but only 50.6% increased smiling Andrew's dose. Although results show improvement from nurses' 1990 responses (when only 71.6% and 40.7% of 465 nurses correctly recorded pain intensity for Robert and Andrew, respectively, and only 54% and 32.8% increased their respective opioid dosages), both surveys suggest that even nurses actively seeking information about pain management at pain conferences are often misinformed about how to assess and manage pain.

no research to date has linked inpatient use of opioid analgesics for acute pain to worsening addiction. There is, however, evidence that withholding opioids in this patient population may lead to withdrawal or even worsen addictive disease, as unrelieved pain is associated with increased cravings and stress in patients with active OUD.<sup>7</sup>

Two small studies also suggest that there is no correlation between inpatient use of opioid analgesia and relapse among patients with a history of OUD who are currently in recovery. One study of patients in a New York City methadone maintenance program found no difference in relapse indicators between those who were hospitalized for surgery and received post-surgical opioid analgesics in addition to maintenance methadone and a matched control group receiving maintenance methadone who were not hospitalized.<sup>47</sup> A second study found no relapse among patients receiving methadone maintenance therapy who were treated with opioid analgesics for cancer pain.<sup>48</sup> Just

as undertreated and unrelieved pain is a risk factor for worsening addiction among patients with active OUD, it is also a risk factor for relapse among OUD patients in recovery.<sup>7,49</sup>

**Opioid tolerance significantly affects analgesic requirements.** Tolerance is "a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time." <sup>21</sup> Tolerance is the reason patients with OUD require higher doses of opioids to obtain the same degree of analgesia as opioid-naive patients. <sup>49</sup>

Risk of opioid-related respiratory depression is lower in patients with OUD than in opioid-naive patients. The incidence of opioid-related respiratory depression in postsurgical patients is estimated to be about 1%. Patients who are opioid naive are at the greatest risk. Although the incidence of opioid-related respiratory depression is lower in patients with OUD than in opioid-naive patients, OUD patients are still at risk, especially if doses are rapidly increased. Respiratory depression and excessive sedation may be prevented through titration of the opioid dose and frequent patient monitoring.

Opioid-related respiratory depression is preceded by an increasing level of sedation. To prevent respiratory depression, monitor patients receiving opioids using a sedation scale, such as the Pasero Opioid-Induced Sedation Scale.<sup>51</sup> If the patient is asleep but easily aroused ("S"), awake and alert ("1"), or slightly drowsy but easily aroused ("2"), then supplemental opioid may be administered if needed for pain. A patient who is frequently drowsy and drifts off to sleep during conversation ("3") should have their opioid dose decreased. A somnolent patient who cannot be aroused ("4") requires an opioid antagonist.

# Opioid-related respiratory depression is preceded by an increasing level of sedation.

Opioid agonist therapy is meant to treat addiction, not pain. Opioid agonist therapy, a treatment option for OUD, helps prevent opioid cravings and withdrawal symptoms through maintenance doses of the opioid agonist methadone or the partial opioid agonist buprenorphine. Patients who use this therapy are at a particularly high risk for undertreatment of acute pain because many health care workers erroneously believe that the treatment itself provides adequate analgesia. Methadone and buprenorphine, when dosed for opioid agonist therapy, do not have

## Caring for Inpatients with Opioid Use Disorder

- Treat all patients with compassion and respect, including those with opioid use disorder (OUD).
- Consider pain assessment and management a priority.
- Accept and act on patients' self-reports of pain intensity.
- Correct colleagues' misconceptions about pain management in OUD.
- Educate colleagues on the unique pain management needs of patients with OUD.
- Challenge negative attitudes directed toward patients with OUD.

sustained analgesic effects and are insufficient to treat acute pain.<sup>5, 15, 29</sup> Moreover, patients receiving opioid agonist therapy develop cross-tolerance (that is, a tolerance to other opioids) over time, causing them to require higher, more frequent doses of short-acting opioids to provide analgesia during episodes of acute pain.<sup>5</sup>

While methadone can be used for both pain management and addiction treatment, its usage in these two circumstances is very different. When dosed as opioid agonist therapy, methadone is usually given once daily, but when dosed for pain management, methadone may be given three to six times daily because the duration of its analgesic effect is very brief. 52 Additionally, whereas any clinician with a Schedule II Drug Enforcement Administration license may prescribe methadone for pain management, a special license is required to prescribe methadone for the treatment of addiction.

For patients using methadone maintenance therapy, acute pain management should include continuation of the maintenance methadone dose, plus short-acting opioids to cover acute pain.<sup>5, 15, 25</sup> To ensure a safe starting dose when initiating titration of the opioids, verify the patient's reported daily methadone dose with the prescribing physician in the methadone maintenance program. If the prehospitalization dosage cannot be confirmed, Drew and St. Marie recommend administering one-quarter of the patient's reported daily methadone dosage four times daily rather than administering the full daily dosage at once.<sup>15</sup>

For patients using buprenorphine maintenance therapy, pain management is more complicated because buprenorphine binds to  $\mu$  receptors with a much higher affinity than do other opioid agonists. <sup>5, 52</sup> Research in this area is ongoing, but current recommendations for managing acute pain in patients taking buprenorphine therapy include the following options<sup>5</sup>:

- Continue buprenorphine and administer additional short-acting opioid analgesics, titrating the doses as needed.
- Divide the daily dose of buprenorphine to allow for dosing at more frequent intervals and administer additional short-acting opioids as needed.
- Discontinue buprenorphine entirely and replace it with a scheduled opioid analgesic, such as morphine, titrating the dose as needed.
- Convert the patient from buprenorphine to methadone therapy and administer additional short-acting opioid analgesics, titrating the doses as needed.

Patients using opioid agonist therapy often require higher doses of opioids at shorter intervals as a result of cross-tolerance and enhanced sensitivity to pain.<sup>5</sup>

Nurses play an essential role in managing acute pain in patients with OUD. Nurses may be the first to know when a patient is in pain. How well and how quickly a patient's pain is treated depends in part on the nurse's ability to recognize and respond to the pain, and to advocate on the patient's behalf.

In addition to their role in pain assessment and pharmacologic management, nurses play an invaluable role in listening to and empathizing with patients, providing validation, and ensuring that patients feel heard. When nurses demonstrate compassion, respect, and responsiveness, patients tend to have more positive experiences—and positive patient experiences are associated with good self-rated and objectively measured health outcomes.53 Unfortunately, many patients with OUD report feeling that their needs and fears are not acknowledged.<sup>54</sup> It is therefore essential for nurses to consider and correct any personal biases or misconceptions they may have toward patients with OUD and ensure that they consistently manage acute pain in these patients in a way that reflects respect and empathy (see Caring for Inpatients with Opioid Use Disorder).

#### **AREAS FOR FUTURE RESEARCH**

To improve pain management in OUD and better direct resources, future research should address the source of negative attitudes toward patients with OUD and misconceptions about managing pain in these patients. Exploring questions such as whether negative provider attitudes engender the misconceptions or, conversely, whether the misconceptions produce negative provider attitudes may help us determine how best to address the issue of undertreatment of acute pain in OUD. Should we direct resources toward education (the correction of misconceptions) or focus on addressing clinicians' personal beliefs and attitudes? We should also explore how age, sex, race, and ethnicity affect the quality of pain assessment and management in inpatients with OUD. ▼

For 80 additional continuing nursing education activities on pain management, go to www. nursingcenter.com/ce.

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