

Pain in the United States: Time for a Culture Shift in Expectations, Messaging, and Management

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Opioid prescribing has dramatically increased in the United States (US) over the past two decades, fueling the current crisis of opioid-related adverse events and deaths.¹ Understanding the potential contributors to this increased prescribing is paramount to developing effective strategies for preventing propagation. In this issue of the *Journal of Hospital Medicine*, Burden et al. report the results of a cross-sectional observational study investigating the rates of opioid receipt, patient satisfaction with pain control, and other perceptions of pain management in a sample of patients from geographically diverse US hospitals compared with patients hospitalized in seven other countries.² Although cultural influences on pain perceptions have been demonstrated by others previously, this is the first study to measure opioid receipt and patient satisfaction with pain control across an international sample of hospitalized patients. This study provides crucial insights into key differences in the culture of prescribing and patient expectations between the US and other countries and, in doing so, begins to shed light on potential targets ripe for further investigation and intervention.

First, they found that US patients reported greater levels of pain severity than patients hospitalized in other countries, especially among those not taking opioids before admission. However, even after adjusting for these differences in pain severity, opioids were still prescribed more frequently in the US than in other countries. These findings suggest differences in both patients' experience of pain and physicians' propensity to prescribe opioids in the US compared with other countries. Furthermore, beliefs and expectations about pain control differed between hospitalized patients in the US versus other countries. For example, patients in other countries were more likely to endorse the statement "Good patients avoid talking about pain" than patients in the US. This may, in part, contribute to the difference in reported pain severity between the US and other countries.

Finally, and perhaps most interestingly, although US patients who were opioid-naïve before hospitalization did report greater satisfaction with pain control than patients in other countries, this difference was not attributable to greater opioid receipt. In fact, opioid receipt was not associated with increased

satisfaction with pain control, regardless of country. Studies in other settings, such as the emergency department³ and post-operative settings,⁴ have similarly failed to demonstrate an association between opioid receipt and patient satisfaction. This is not entirely surprising given that studies comparing pain relief between opioid and nonopioid analgesics routinely demonstrate similar efficacy of the two approaches across several conditions.^{5,6}

This study clearly demonstrates differences in opioid prescribing patterns and patients' expectations of pain control in sampled hospitals in the US compared to those in other countries; however, there are noteworthy limitations. First, not all regions were sampled within the United States; hospitals in the northeast regions, previously demonstrated to have lower opioid prescribing rates,⁷ were notably absent. Second, the small number of non-US hospitals and the small sample size in those hospitals limit the ability to draw firm conclusions. The results are nonetheless consistent with anecdotal experience. For example, a recent opinion article in the *New York Times* describes the experience of a US patient undergoing surgery in Germany,⁸ the differences the author observes in terms of expectations around pain control, associated messaging, and ultimately, prescribing practices between the two countries are striking.

In response to studies demonstrating underassessment and undertreatment of pain in hospitalized patients in the late 20th century,⁹ well-intentioned initiatives have promoted more frequent pain assessment and more aggressive pain control. In the context of the current opioid crisis, Burden et al. provide compelling data supporting the idea that the pendulum has swung too far in the US. This international study suggests that curbing the US opioid crisis will require a true culture shift, not just in providers' analgesic prescribing patterns but also in messaging around pain and patient expectations.

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References

- Okie S. A flood of opioids, a rising tide of deaths. *N Engl J Med*. Nov 18 2010;363(21):1981-1985. <https://doi.org/10.1056/NEJMp1011512>.
- Burden M, Keniston A, Wallace MA, et al. Opioid utilization and perception of pain control in hospitalized patients: a cross-sectional study of 11 sites in 8 countries. *J Hosp Med*. 2019;14(12):737-745. <https://doi.org/10.12788/jhm.3256>

3. Schwartz TM, Tai M, Babu KM, Merchant RC. Lack of association between Press Ganey emergency department patient satisfaction scores and emergency department administration of analgesic medications. *Ann Emerg Med*. 2014;64(5):469-481. <https://doi.org/10.1016/j.annemergmed.2014.02.010>.
4. Maheshwari K, Cummings KC, 3rd, Farag E, Makarova N, Turan A, Kurz A. A temporal analysis of opioid use, patient satisfaction, and pain scores in colorectal surgery patients. *J Clin Anesth*. 2016;34:661-667. <https://doi.org/10.1016/j.jclinane.2016.07.005>.
5. Chang AK, Bijur PE, Esses D, Barnaby DP, Baer J. Effect of a single dose of oral opioid and nonopioid analgesics on acute extremity pain in the emergency department: a randomized clinical trial. *JAMA*. 2017;318(17):1661-1667. <https://doi.org/10.1001/jama.2017.16190>.
6. Holdgate A, Pollock T. Nonsteroidal anti-inflammatory drugs (NSAIDs) versus opioids for acute renal colic. *Cochrane Database Syst Rev*. 2005:CD004137. <https://doi.org/10.1002/14651858.CD004137.pub3>.
7. Herzig SJ, Rothberg MB, Cheung M, Ngo LH, Marcantonio ER. Opioid utilization and opioid-related adverse events in nonsurgical patients in US hospitals. *J Hosp Med*. 2014;9(2):73-81. <https://doi.org/10.1002/jhm.2102>.
8. Dumas F. After Surgery in Germany, I Wanted Vicodin, Not Herbal Tea. *The New York Times* 2018; <https://www.nytimes.com/2018/01/27/opinion/sunday/surgery-germany-vicodin.html>. Accessed June 24, 2019.
9. Max MB. Improving outcomes of analgesic treatment: is education enough? *Ann Intern Med*. 1990;113(11):885-889. <https://doi.org/10.7326/0003-4819-113-11-885>.