Who receives opioids for acute pain in emergency departments? Considering evidence, patient and provider preferences

In this issue of Pain, Platt-Mills et al. in a multicenter study of non-Hispanic whites report that there is a correlation between educational level and likelihood of receiving opioids in emergency departments (EDs) following minor motor vehicle collisions (MVC)[1]. In a well controlled study, patients who had not graduated from at least high school received opioids 54% of the time compared to only 10% of the time in post college graduate educated individuals. Why did more educated patients receive opioids less frequently than their less well educated counterparts? How can we interpret the data and what are the implications for patient management?

John Wennberg and his associates have written for decades about variation in health care utilization and have tried to understand factors that might impact decision making[2]. His framework is useful in trying to understand decision making surrounding physicians administering opioids in EDs. Wennberg defined three categories of care that impact which treatments patients receive. The first category, effective care or treatment must be supported by reasonable scientific evidence, with proven value in a clinical situation. The benefits must clearly outweigh the risks and all patients with specified conditions should receive these treatments. Wennberg’s second category is preference-sensitive care. This is care selected or requested by the patient for conditions where there are treatment options. Lastly, supply-sensitive care is treatment where the supply of a specific resource influences utilization rates. I will revise this category and call this provider-sensitive care or care where the provider influences what treatment to give. We thus have treatment based on the evidence, based on what patients want, and on what providers recommend.

1. Evidence

If providers believe that there is evidence that use of opioids in an acute care setting is inherently safe, then this influences their decision making. The authors minimize the risk of addiction in this population citing, once again, Jane Porter and Herschel Jick’s 1980 letter to the editor published in the New England Journal of Medicine [3]. Without criticizing either Platt-Mills et al. or Porter and Jick personally, this letter continues to be misrepresented as a scientific study and to misinform providers who treat patients with opioids. This letter does not prove, even remotely, that “the actual likelihood of addiction to opioids resulting from short term treatment of acute pain is extremely low” [1]. This has not been shown to be true. Looking at evidence, it can be stated that providers prescribing opioids for acute pain do so, with reasonable support for efficacy from the medical literature, but with minimal support for safety.

2. Preference-sensitive care

Patients decide what they want and this reflects their personal values, beliefs or desire to obtain opioids. Shared decision making, offering sufficient objective data to the patient to enable them to make an informed decision, requires time and skill and it may be that patients are not provided adequate information. This may be particularly true for less well educated populations who may require extra time and effort in order to understand the complex issues surrounding the use of opioids.

Information can help the patient decide whether benefits outweigh risks or not but the ultimate decision may still be based on entirely different biases or desires. The authors report that the relationship between opioid administration and educational level did not change when smoking status and measures of alcohol or drug use were added to the model, but they did not present these data. Furthermore, the data are self-report data and dissimulation is common in subjects who are addicted to or abusing drugs. Patients addicted to, diverting, or already abusing prescription opioids can influence care choices especially in a situation that involves actual injury.

3. Provider-sensitive care

The risk of harm, notably addiction, abuse, misuse or diversion, from short-term use of opioids in an acute setting is unknown. Not all patients seen in the acute care setting should receive opioids. Belief in the safety of opioid use in this population may reduce levels of scrutiny compared for example to the chronic pain population as well as reduced efforts at risk stratification. If the providers had questioned patients about prior history of alcoholism or drug abuse, family history, comorbid psychiatric illness, obtained a urine toxicology specimen, and looked for objective evidence of a painful disorder, one might have seen greater discrimination and different patient selection for treatment with opioids.

Providers must be aware that patients frequently underreport prescription opioid use. Truthful reporting of alcohol or illicit drug use at the time of a motor vehicle collision might even be less frequent. There is no mention of the use of illegally obtained licit drugs nor are we informed who reported using less than 30 mg of morphine equivalents per day. The authors properly note that they did not assess which patients requested opioids. We harm our patients when we believe that opioids are not highly desirable and that our patients will not misrepresent themselves in order to acquire them.

It takes time to provide information to patients that would enable them to make an informed decision. This may be particularly
true in a less well educated population. One must consider the expanding imperative for and measurement of patient satisfaction, increasing volumes of patients being seen per time unit in EDs, and diminishing or negative reimbursement for care. It does not justify but perhaps rationalizes why providers want to give patients what they want, quickly. Physicians are pressed for time, which impedes their ability to practice shared decision making with their patients, and providers may be inappropriately confident in the inherent safety of short term opioid use. Patients should be given the information they need to make an informed decision.

4. Why things are?

The authors have shown us the epidemiology or as they describe it “how things are” but not “why things are” [1]. How can we better understand why less well educated patients are receiving opioids more frequently in EDs? We can only hypothesize. The evidence surrounding the use of opioids is poor, with benefits being generally touted and risks being minimized. Providers do not understand the evidence so how could patients? We should consider purely whether benefits exceed risks or if risks exceed benefits. The risk in this setting is unknown, probably not “extremely low”, and it may even be high [1].

The authors hypothesize that more highly educated patients’ greater fear of addiction may contribute to reduced receipt of opioids among them. Less well educated patients require commitments of time enabling shared decision making. It is possible that less well educated patients do not appreciate the risk as well as more highly educated individuals and that if they did, they might decline treatment with opioids.

Patients addicted to, abusing, misusing, or diverting opioids are highly prevalent in an ED population, even those with acute trauma. We need to collect more individual data helping providers and patients weigh risks and benefits. What are the risk stratification signatures of different educational groups? Perhaps more rigorous screening and stratification would help to explain more of the discrepancy.

Platt-Mills et al. have added elegant new material to the epidemiological foundation of acute pain management with opioids. Inadequate evidence base, patient bias, opioid seeking, provider stress, and less than optimal management paradigms may be at least part of the “Why”.

Conflict of interest statement

The author has no conflicts of interest in relation to this commentary.

References


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