EDITORIAL AND COMMENT

Opioids and Substance Abuse: Education or Just Regulation?

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Hardly a week passes without a headline decrying opioid deaths, opioid addiction, new opioid prescribing laws, lawsuits against pharmaceutical companies for opioids, or some other dimension of the "opioid epidemic." This term reflects the pervasive and ubiquitous nature of the issue. Each time a physician sees a patient with a pain or addiction issue, there is some fear. However, physicians are not the only ones who are afraid; patients with acute and chronic pain also wonder with considerable anxiety whether their pain will be appropriately treated.

The current situation did not arise overnight. A recent perspective succinctly documents the path to our current situation.[1] During the 1970s, physicians typically prescribed opioids only when patients were "on the cusp of death." In the 1980s, several publications, based on small sample sizes, reported a low incidence of addiction in patients.[1] These articles focused the conversation on the very real problem of under-treatment of pain, but led most physicians to assume that there would be few adverse consequences of aggressive use of opioids. However, the debate over the proper use of opioids has resurfaced in light of recent revelations surrounding opioid overuse and abuse. There are many diverse and conflicting voices that are part of the debate regarding the use of long-term opioid therapy (LTOT), including advocates for patients receiving palliative care, patients with chronic pain, families who have lost members to overdoses, and physicians.

Amidst the turmoil, many possible solutions are being discussed. As highlighted in the 2011 Institute of Medicine (IOM) report, "recommendation[s] for improving overall pain care [fall]… in six key areas: population research; prevention and care; disparities; service delivery and payment; professional education and training; and public education and communication." The report describes moving away from opioid-focused treatments by "improving provider education on pain management practices and team-based care."[2] In addition, the recent Centers for Disease Control and Prevention (CDC) guidelines, routine prescription monitoring, and regulations to curb inappropriate prescribing may also be part of the solution; however, they are far from the complete answer.[3]

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In this month's *Journal of General Internal Medicine*, Nugent and colleagues examine another aspect of LTOT.[4] They focus on patients receiving LTOT who were found to have concurrent substance use disorder (SUD) and on their SUD-related outcomes. Using data from the Department of Veterans Affairs (VA) national health care system, the authors examined the rates of patients on LTOT and SUD referred for SUD treatment, as well as the reasons affecting both the referral to, and completion of, SUD treatment. They examined 600 patients receiving LTOT who were also identified as using alcohol, cannabis, illicit substances, or non-prescribed controlled substances. A total of 223 of these patients had their LTOT discontinued for aberrancy: either a urine drug test (UDT) identifying a non-prescribed/illicit substance or a UDT not detecting the prescribed opioid. After those with previous SUD treatment were excluded, 169 patients qualified as "new SUD." The characteristics of the group are representative of what many would expect, with 82% of the patients taking LTOT for musculoskeletal pain and more patients with alcohol use disorder (21%) than cocaine (9%) and cannabis (8%) combined. Surprisingly, opioid use disorders were found in only 5% of patients with newly diagnosed SUD, and sedatives were the lowest, at 1%. Overall, the majority of the 169 patients identified with new SUD were non-Hispanic whites (66%), male (99%), and living in urban settings (72%).

Despite the intense attention currently focused on LTOT, there is a dearth of evidence examining current SUD among individuals with LTOT. Prior studies have focused almost exclusively on identifying concurrent opioid use disorders in patients on LTOT with no history of SUD.[5] Data on coexisting SUDs such as cannabis, cocaine, and alcohol have been lacking. This study provides important insights into a "real-world" population that many primary care physicians see frequently. Additional research is sorely needed to further examine both incident and coexisting SUDs in those receiving LTOT.

This paper also examined the relationship between specific SUD and referral patterns for treatment. Of the patients identified with both LTOT and SUD, only 43% were referred for SUD treatment. Those with a UDT positive for cocaine were more likely to be referred than those with other SUDs. Patients who had a UDT positive for cocaine and who received a SUD referral, were also more likely to attend treatment. Interestingly, patients who had a UDT positive only for cannabis were less likely to be referred for SUD treatment, despite this being the reason for LTOT discontinuation. Overall, 47% of those referred for an SUD had at least one visit for SUD therapy in

the year they were followed (median of 24 treatment encounters). More than half declined any treatment.

One of the suggested reasons for poor adherence to SUD therapy was lack of access to such treatment, which has been a widely recognized issue. Sadly, the VA system is probably among the best in the nation at providing access to SUD treatment, as the VA sponsors training programs in pain psychology and rehabilitation.[6] Also, large integrated health systems, such as the VA, have the ability to provide services such as SUD treatment across clinical sites. If the VA is struggling, what is the recourse for the average physician?

This paper also highlights the use of UDT as a means of identifying concurrent SUD and opens the discussion of treatment. The article cites evidence that concurrent treatment of chronic pain and SUD improves pain functioning and outcomes for SUD and that clinician-delivered motivational intervention can improve a patient's willingness to attend treatment. For these reasons, referral for treatment is recommended when discontinuing LTOT for an identified SUD, especially an opioid SUD.[3] Given that fewer than half of the patients received such referrals, improving the rates of referral for substance abuse treatment is an area for further interventions.

One important component that may have been underappreciated in the debate on opioids is a more comprehensive approach to educating medical professionals on opioid use and chronic pain. This article illustrates that even in a setting with access to SUD treatment, comprehensive physician training is paramount if we are to succeed in reducing accidental opioid adverse affects and deaths. Training and education are mentioned repeatedly throughout the IOM report, but it is unclear whether we have significantly improved education in these areas. While our knowledge and treatment of pain and substance use disorders have evolved over the last several decades, there is still a large education gap. As of 2015, most medical schools included at least some curricula on SUD and pain management, but the amount and depth of the content varied widely.[7, 8] Moreover, physicians already in practice have had limited training in safe opioid prescribing.[9] Research demonstrates that clinicians who have had adequate training are more likely to provide appropriate and safe care for patients suffering from chronic pain.[10]

Taking a step back, it would seem that appropriate education is lacking at every point. While increased education would benefit all health care professionals involved in those with chronic pain, physician education is particularly important as we are the prescribers of these therapies. Medical schools must work to buttress the education of pain physiology and behavioral medicine. Residents and practicing physicians require concentrated education on motivational interviewing, safe opioid prescribing, identification of concurrent SUD, and SUD therapy options. Appropriate education is an essential component for stemming the tide of the ongoing opioid crisis.

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Compliance with Ethical Standards:

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