The Opioid Epidemic: Physicians on Front Line in War against Addiction

By Ashley Brenton, Ph.D.

The opioid epidemic is changing the way doctors and lawmakers view treating patients in pain. According to the National Institute on Drug Abuse, nearly 2.1 million Americans are suffering from prescription-related opioid abuse. With the spike in abuse, comes a four-fold increase in the number of deaths associated with prescription opioid overdoses since 1999—and that is making many physicians uncomfortable with prescribing potentially addictive medication. In a recent survey, for example, primary care physicians reported feeling additional stress regarding the decision to prescribe opioids.¹

As the opioid epidemic continues to capture the attention of policy makers and prominent persons in the media, doctors are scrutinized more closely than ever before. In Current Regulations Related to Opioid Prescribing, the authors underscored the necessity of physicians to think about protecting themselves from prescribing opioids to at-risk patients. As a result, physicians must keep abreast of state and federal laws surrounding opioid prescribing while looking for new ways to determine patient treatment compliance.²

But it is not that simple. The dilemma often occurs as part of “the struggle to balance pain relief for patients who benefit from opioids against the potential harm from opioids to individuals and society takes place against a backdrop of increasing legislative and regulatory focus on eliminating the societal problems of opioid misuse, addiction, and overdose.”³ So then, how can opioid-prescribing physicians protect themselves while delivering the best care possible?

Recently, the Centers for Disease Control and Prevention (CDC) released the CDC Guideline for Prescribing Opioids for Chronic Pain in order to provide greater clarity for prescribing opioids to chronic pain patients. In addition, a number of studies have attempted to answer this question, which included responses that range from increasing regulation⁴ to using evidence-based strategies in opioid prescribing. The latter of which involves referrals to specialists, use of opioids as a second line of defense, and intent of building better relationships with patients.⁵ Despite the wide range of sentiments, however, nearly all agree that further research into specific treatments and responses—along with an understanding of comorbidities—is desperately

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¹ Jamison et al. 2014
² Webster and Grabois, 2015
³ Webster and Grabois, 2015
⁴ Twillman et al. 2016
⁵ (Currow et al. 2016; Buchman et al. 2016)
While the challenges associated with prescribing opioids in the future is unclear, it is imperative that physicians know what to do today. A recent web-based study revealed one potential answer by implementing policies that focus on prescription monitoring of at-risk patients. The ability to categorize patients into groups based on risk is certainly valuable. The question, however, is centered on how to determine which patients are most likely at risk of opioid misuse using evidence-based evaluation.

The answer is likely found in taking a closer look at how both genetic variations and environmental factors contribute to risk. According to the National Institute on Drug Abuse, around 50% of addiction is due to genetic factors. But how are doctors able to use genetic and environmental data points in a private practice setting? A decision tool called the Proove Opioid Risk Profile represents one example of a tool that integrates genetic data with clinical information to stratify patients into low, moderate, and high-risk categories. Developed by Proove Biosciences, the company uses a proprietary algorithm to combine genetic risk factors, including variants in the mesolimbic reward pathways along with well-established phenotypic factors such as age and prior illicit drug use to stratify the risk of opioid use disorder in patients.

One of the benefits of using stratification decision tools is to protect both the patient from addiction and the physician from possible legal consequences. Additionally, for patients in the low risk category, it provides a physician with the confidence to prescribe opioids for pain relief. Most common opioid addiction screening tools rely on subjective information provided by the patient. Today, however, there are predictive algorithm provides objective information that can be used as an evidence-based tool in the physician’s arsenal against prescription opioid abuse.

As physicians look to confront the opioid epidemic, it is important to gain an understanding of all new laws and regulations, stay informed on recent discoveries into the science of opioid addiction, and continue to look for new tools that can help improve the decision-making process. Policy makers and the media alike are attempting to confront the crisis with good intentions, but demonizing opioids altogether is not the solution as opioids provide effective pain relief for those at low risk of opioid use disorder. The key is to balance effective pain management with reducing the burden of opioid use disorder on patients, physicians, and the healthcare system. It is every physician’s responsibility to understand that he or she is standing on the front line on the war against prescription opioid abuse. With emerging tools and a better understanding of the changing landscape, however, physicians are able to equip themselves with the

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6 (Brady et al. 2016; Tetrault and Butner, 2015)  
7 (Kennedy-Hendricks et al. 2016).
information they need to win the fight against the opioid epidemic.