### Key:

#### J = Jason Cantone

D = Dr. Dunn

- J: Dr. Dunn, thank you for joining us. It's important for us all to better understand the psychological components of the opioid crisis. So, with that in mind, why do people misuse prescription drugs and opioids?
- D: People misuse prescription drugs and opioids for several reasons. These drugs act on the reward centers of the brain in the same way as other drugs of abuse and produce a positive feeling in some people. Many people who begin to use opioids, whether it's illicit or prescribed, find that it produces a positive effect -- so that can either be a high, or it could be the alleviation of pain. As time goes on, people develop a physical dependence on opioids, whether they take the medication as prescribed or illicitly -- and the removal of an opioid produces an aversive withdrawal syndrome that seems like a very extreme case of the flu. As time goes on, people begin to use opioids to avoid the withdrawal syndrome, and then that drives a lot of that continued opioid use behavior.
- J: There's been a long-standing debate as to whether people with opioid use disorder have a choice over their behaviors, and the American Society of Addiction Medicine recently changed their definition of addiction. Could you please help explain the difference between opioid use disorder and addiction, and provide your thoughts on this debate?
- D: Addiction is more of a colloquial term that's broadly used to describe drug use behavior in general. Often it refers to the compulsive nature of drug use. Opioid use disorder is a formal diagnostic category that is characterized by both the physiological responses to opioids, which include the tolerance and the withdrawal that occurs upon removal of the opioid, as well as the compulsive behavior that occurs in response to the opioids. So, for instance, this includes things like continuing to use the medication despite having negative consequences, continuing to use the medication despite problems with your work or your family, craving for opioids in general.

The American Society of Addiction Medicine emphasizes the term "opioid use disorder" because it represents a medical condition, and that's important because knowing that somebody has a medical condition suggests that we have opportunities to treat it.



- J: Is prescribing opioids still the best treatment method for those dealing with chronic pain?
- D: Opioids were the primary treatment for acute pain management, and they were naturally extended to the treatment of chronic pain. However, there were not studies to support their use for chronic pain management. Recently, in the context of the opioid epidemic, we realized that the longer people were exposed to opioids and the higher doses they had, the greater they were at risk for opioid use disorder, as well as opioid overdose. So, the CDC has actually come out recently and suggested that persons are no longer prescribed opioids chronically as a primary treatment for chronic pain. And recent meta-analyses have supported that, suggesting that opioids, on average, are not more effective for chronic pain management than things like Ibuprofen or Motrin. I should mention, however, that this is not true for every person. So, some people do very well on opioids for chronic pain management. But the average overall suggests that we should be looking into other forms of pain management.
- J: So, going beyond medication, what psychological treatment options are available for people with opioid use disorder?
- D: It's important to note that the ideal treatment for opioid use disorder would be a combination of medication, and psychological counseling. The medication is critical, because when patients come in for treatment for opioid use disorder, they generally are using opioids to avoid withdrawal. So, the medication can help us manage their withdrawal symptoms for them, and that frees them to be able to focus on the psychological counseling.

There are different forms of counseling that are generally used. Cognitive behavioral therapy is one version of counseling that works very well, and that has quite a bit of evidence behind it. Cognitive behavioral therapy helps the patient learn to manage negative thoughts. This is important, because one of the key features of opioids use disorder are persistent cravings that occur, whether or not the withdrawal is effectively managed. So cognitive behavioral therapy can help the patient learn to manage their cravings in such a way that they could try to avoid relapsing in the future.



- J: There has been recent research that mindfulness can help reduce opioid cravings in people with chronic pain. What are your thoughts on that research?
- D: There is early evidence that suggests that mindfulness may have value for the management of chronic pain. Mindfulness is similar to cognitive behavioral therapy, in the sense that it helps patients manage negative emotions, and that could include cravings and also focusing on pain. Mindfulness may have value in helping patients with chronic pain reduce their opioid use and their associated cravings. However, there is the evidence base supporting mindfulness is not as large as there is for cognitive behavioral therapy, and more research should be collected.
- J: Are there psychological risk factors that might help predict future opioid use disorder and overdose?
- D: What we can say now is that a lot of the risk factors generally overlap with what we see with other drug use disorders. And this includes things like poverty, extreme trauma, depression, anxiety, living in an environment where drug use is supported, not having access to other forms of treatment for things like pain management, or having exposure to chronic opioid therapy. Currently, we don't have any clear characteristics that definitively predict the likelihood of developing opioid use disorder.
- J: Is there a typical psychological profile for someone who misuses or abuses opioids?
- D: Opioid use disorder can affect anybody, because opioids are prescribed, and people have access to them through medical -- for medical purposes. They have the opportunity to use opioids and find them enjoyable and can go on to develop an opioid use disorder.
- J: Why is it important to research and understand not only opioids, but also other substances?
- D: Opioid use disorder is distinct from other forms of drug use disorder because of its prominent tolerance and withdrawal profile. However, there's a lot of similarities between opioid use disorder and other types of drug use disorder. From the field, we know that we can learn from other forms of drug use disorder and use that to improve



our treatments for opioid use disorder, and we also know that there's a lot of common risk factors across opioid use disorder and persons who are using other forms of substance use. In addition, very few people use only one substance. And so, it's important to understand both opioid use disorder, as well as other forms of drug use disorder, to be able to best help our patients.

## J: Could you explain a little bit about the current research going on in your lab?

D: I've mentioned that the management of opioid withdrawal is a key component of an effective treatment for opioid use disorder. Our lab is looking at the mechanisms of underling opioid withdrawal to be able to identify medications that may be more widely available for patients to be able to use. This is particularly important in rural areas, because they do not have sufficient access to opioid treatment providers currently, so if we can identify medications that patients could have access to outside of a traditional opioid treatment provider, perhaps from their primary care physician, we hope that we can expand access to treatment and help reduce the opioid crisis.

# J: How can psychologists work with members of the judiciary to address opioid use disorder?

D: Persons with opioid use disorder are 13 times more likely to interact with the criminal justice system. This can be a valuable touch point where we can identify persons who have need for opioid use disorder treatment. The justice system can provide referrals and work with psychologists to recommend comprehensive treatment programs that include both medication and psychological counseling.

# J: Is there anything else judges need to know about the role of psychology and psychologists in the opioid crisis?

D: I think the key takeaway points are that opioid use disorder is a chronic relapsing medical condition; that means it can be treated, but it also means that relapse is an expected part of the process. It's also important to know that opioid use disorder can happen to anybody. So, people can take opioids as prescribed and develop physical dependence and withdrawal as a function of their prescribed dose, and have that lead to misuse of opioids, and eventually opioid use disorder.

