Inability to Feel Pleasure Could Influence Opioid Addiction Treatment, Scientists Say

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Scientists have been racing to identify individual features that influence the treatment outcomes for people addicted to opioids. A team of clinical scientists is now examining a possible psychological symptom, anhedonia, that may heighten craving and the risk of relapse for people in recovery from opioid dependence.

In a review published in Clinical Psychological Science, psychological scientist Brian D. Kulik and colleagues at Yale University School of Medicine examine the role of anhedonia, commonly defined as an inability to experience pleasure, in addiction. Anhedonia is a hallmark symptom of schizophrenia and major depression, but is also prevalent in individuals with substance use disorders, the scientists note. But research on anhedonia and opioid dependence is limited.

“Given that opioids temporarily bring pleasure and relievepain and withdrawal from opioids is essentially characterized by reducedpleasure and increased pain, anhedonia may be an important yet overlookedaspect of opioid use disorder (OUD) maintenance and treatment,” the researcherswrite.

In a literature search, the group identified 11 studies that evaluated anhedonia in opioid-dependent individuals. The sample sizes in these studies ranged from 10 to 90, with healthy controls ranging from 10 to 50. The studies included a wide range of abstinence duration; participants in one study were evaluated during their first day of detoxification, for example, while another study included individuals who had abstained for 3 months or longer. In general, individuals both currently dependent on opioids or in remission scored higher on measures of anhedonia compared with healthy control subjects.

The researchers cite limitations in the available literature on anhedonia and OUD, noting that more diverse samples are needed. (All but one of the studies they reviewed originated outside the United States, leaving the understanding of anhedonia in OUD populations largely unknown in a country facing an opioid epidemic.) They also call for more research on the duration of anhedonia after abstinence, and behavioral treatments and medications that might target anhedonia in individuals recovering from opioid addiction.

Kiluk's co-authors on the review are psychological scientist Kathleen M. Carroll and psychiatric researchers Sarah W. Yip, Elise E. DeVito, and Mehmet Sofuoglu.

Reference

Kulik, B.D., Yip, S.W., DeVito, E.E., Carroll, K.M., & Sofuoglu, M. (2019). Anhedonia as a key clinical feature in the maintenance and treatment of opioid use disorder. *Clinical Psychological Science*, doi.org/10.1177/2167702619855659

For more research on opioid addiction, see the report *"A Neurobehavioral Approach to Addiction: Implications for the Opioid Epidemic and the Psychology of Addiction," published in* Psychological Science in the Public Interest.