Pain as a Predictor for Opioid Use Disorder

TO THE EDITOR: We read with interest the article by Blanco et al. (1), titled, "Pain as a Predictor of Opioid Use Disorder in a Nationally Representative Sample," published in the December 2016 issue of the *Journal*. The authors examined the relationship between moderate and more severe pain and prescription opioid use disorders in the noninstitutionalized U.S. population. The authors found that pain and prescription opioid use disorders were significantly associated with one another at baseline and at 3-year follow-up. The path for pain interference was associated with a 41% relative increase in the risk of developing a prescription opioid use disorder. Blanco and colleagues conclude that painful conditions contribute to the risk of prescription opioid use disorder (1).

However, it appears Blanco et al. might be confused with the terms "nonmedical use of prescription opioids" and "opioid use disorder." For instance, in a section of the introduction, Blanco et al. stated: "Several cross-sectional studies have indicated that pain is associated with an increased risk of prescription opioid use disorders, and concerns have been raised that individuals with opioid use disorders may develop abnormal pain sensitivity or hyperalgesia." The authors include several citations in this sentence; their reference 10 is an article by Fischer and colleagues (2), in which the prevalence of mental health and pain symptoms in a general population sample is reported as the "nonmedical use of prescription opioids" rather than as "prescription opioid use disorder." Furthermore, their reference 11 is an article by Chu et al. (3), titled, "Opioid-Induced Hyperalgesia in Humans: Molecular Mechanisms and Clinical Considerations," where no opinion is expressed to the extent that "individuals with opioid use disorders may develop abnormal pain sensitivity or hyperalgesia" (1). Chu and colleagues did not mention "nonmedical use of prescription opioids" or "opioid use disorder."

The nomenclature related to addiction is often inconsistent, inaccurate, and confusing, partially reflecting the diverse perspectives of those working in the related fields of health care, law enforcement, regulatory agencies, and reimbursement and payer organizations. Changes over time in the fundamental understanding of addiction have also contributed to the persistent misuse of obsolete terminology (4).

Definitions and use of terms describing opioid analgesic misuse, abuse, and addiction have also changed over time, and their current correct use is inconsistent not only among health care providers but also among federal agencies reporting epidemiological data, such as the prevalence of opioid analgesic misuse, abuse, or addiction. Misuse and misunderstanding of these concepts and their correct definitions have resulted in misinformation and have led to impediments in proper patient care (5).

Prior to the release of DSM-5 in 2013, previous versions eschewed the term "addiction" in favor of "substance dependence," with a separate diagnostic entity of "substance abuse" representing a lower-grade, less severe version of substance dependence (5). In addition, in earlier DSM versions, physiological dependence, manifesting as substance tolerance and withdrawal, was considered a diagnostic criterion of substance dependence.

Clearly, the diagnosis of dependence has caused much confusion. Most people link dependence with addiction when in fact dependence can be a normal body response to a substance (6). The result has been the perpetuation of patient and health care professional confusion between physical and psychological dependence and the belief that tolerance and withdrawal mean addiction.

We applaud the authors for their work. However, based on these very important points, we wonder whether the present investigation by Blanco et al. might be compromised by the use of data collected a decade ago, using the Alcohol Use Disorder and Associated Disabilities Interview Schedule–DSM-IV version.

REFERENCES

- Blanco C, Wall MM, Okuda M, et al: Pain as a predictor of opioid use disorder in a nationally representative sample. Am J Psychiatry 2016; 173:1189–1195
- 2. Fischer B, Lusted A, Roerecke M, et al: The prevalence of mental health and pain symptoms in general population samples reporting nonmedical use of prescription opioids: a systematic review and metaanalysis. J Pain 2012; 13:1029–1044
- Chu LF, Angst MS, Clark D: Opioid-induced hyperalgesia in humans: molecular mechanisms and clinical considerations. Clin J Pain 2008; 24:479–496
- Oliver J, Coggins C, Compton P, et al: American Society for Pain Management nursing position statement: pain management in patients with substance use disorders. Pain Manag Nurs 2012; 13:169–183
- NetCE: Prescription Opioids: Risk Management and Strategies for Safe Use. Accessed July 26, 2016. Available at: http://www.netce.com/ courseoverview.php?courseid=1085
- American Psychiatric Association: Substance-Related and Addictive Disorders Fact Sheet. 2013. https://www.psychiatry.org/File% 20Library/Psychiatrists/Practice/DSM/APA_DSM-5-Substance-Use-Disorder.pdf

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Distinguishing Between Physiological Dependence and Substance Use Disorder: Response to Ruan et al.

TO THE EDITOR: We thank Dr. Ruan and colleagues for their interest in our article (1). They raise two important issues. First, they point out that the terminology used to refer to substance use disorders is inconsistent, particularly when referring to opioids. We agree. We have previously addressed differences between nonmedical opioid use and opioid use disorder, including trends (2), correlates (3), and relationships between them (4). We also agree that clinicians, researchers, and policy makers often mistakenly conflate the concepts of physiological dependence, which includes tolerance and withdrawal, and substance use disorder. We are pleased to see this key distinction being taken seriously by medical specialties beyond psychiatry. We hope that this will contribute to improved assessment and treatment of patients with pain, reduced risk of nonmedical opioid use, and a lower incidence of opioid use disorder. To minimize confusion, we chose in our article to use DSM-IV criteria, which was the official classification system when the data were collected.

The second issue raised by Dr. Ruan and colleagues is whether use of DSM-IV, rather than DSM-5, compromises our results. Clinical and epidemiological samples have demonstrated a high degree of concordance between DSM-IV and DSM-5 opioid use disorder diagnoses (5, 6). The robustness of our analyses to analytic method suggests that the results are unlikely to be sensitive to these changes in nomenclature. We are not aware of nationally representative samples that have been longitudinally evaluated to assess the relationship between pain and prescription opioid use disorder using DSM-5 criteria. We agree with Dr. Ruan and colleagues that, given the importance of this topic, such a study would be an important contribution.

REFERENCES

 Blanco C, Wall MM, Okuda M, et al: Pain as a predictor of opioid use disorder in a nationally representative sample. Am J Psychiatry 2016; 173:1189–1195

- Blanco C, Alderson D, Ogburn E, et al: Changes in the prevalence of non-medical prescription drug use and drug use disorders in the United States: 1991–1992 and 2001–2002. Drug Alcohol Depend 2007; 90:252–260
- Martins SS, Fenton MC, Keyes KM, et al: Mood and anxiety disorders and their association with non-medical prescription opioid use and prescription opioid-use disorder: longitudinal evidence from the National Epidemiologic Study on Alcohol and Related Conditions. Psychol Med 2012; 42:1261–1272
- Blanco C, Rafful C, Wall MM, et al: The latent structure and predictors of non-medical prescription drug use and prescription drug use disorders: a national study. Drug Alcohol Depend 2013; 133:473–479
- Boscarino JA, Rukstalis MR, Hoffman SN, et al: Prevalence of prescription opioid-use disorder among chronic pain patients: comparison of the DSM-5 vs. DSM-4 diagnostic criteria. J Addict Dis 2011; 30: 185–194
- Goldstein RB, Chou SP, Smith SM, et al: Nosologic comparisons of DSM-IV and DSM-5 alcohol and drug use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions–III. J Stud Alcohol Drugs 2015; 76:378–388

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CORRECTION

The article "Neural Predictors of Initiating Alcohol Use During Adolescence" by Lindsay M. Squeglia, Ph.D., et al. (doi:10.1176/appi.ajp.2016.15121587) is being extensively revised from the version initially published online August 19, 2016. This revision is being undertaken as it has been pointed out to the authors the error in using the same data set to extract predictor values and then validate their predictive power. The corrected version will omit the claim of validation.