

## LETTER TO THE EDITOR

### **PAIN MEDICATION PRESCRIPTION AND BORDERLINE PERSONALITY DISORDER: A PILOT STUDY**

Dear Editor:

Borderline personality disorder (BPD) is a personality dysfunction characterized by longstanding self-regulation deficits, which may include difficulties in regulating pain. According to some investigators, during acute acts of intentional self-injury, patients with BPD may deny experiencing pain or report attenuated responses to pain<sup>1,2</sup> (for a review, see Ref. 3). Other investigators report that patients with BPD over-experience pain. For example, Harper stated, "it [is] particularly difficult for...[the borderline patient]...to endure prolonged acute pain" and their tolerance "will typically be of shorter duration than other individuals."<sup>4</sup> As for empirical data, in a small sample of primary care patients with various chronic pain syndromes,<sup>5</sup> we found through a semistructured interview that nearly 50 percent met the criteria for BPD. The purpose of this study was to explore relationships between analgesic prescription, an indirect measure of pain, and BPD among primary care outpatients.

The participants were both males and females, between the ages of 18 and 65 years, who presented for routine medical care in an internal medicine outpatient clinic in which residents are the providers. The sample was one of the convenience (ie, participants were solicited by two internal medicine residents as time allowed). Exclusion criteria were cognitive, medical, psychiatric, and/or intellectual impairment that would preclude the successful completion of a survey booklet as well as patients who had not been registered in the clinic during the preceding 4 weeks. A total of 82 patients were approached; 80 agreed to participate, for a response rate of 97.6 percent.

The final sample consisted of 21 men and 59 women ( $N = 80$ ), who ranged in age from 17 to 74 years ( $M = 45.58$ ,  $SD = 14.74$ ). The majority was Caucasian (89.9 percent), followed by African-American (6.3 percent), Hispanic (2.5 percent), and Native-American (1.3 percent). In relation to educational achievement, 20.3 percent had not graduated high school, 41.8 percent had graduated high school but had not attended college, 21.5 percent attended some college but had not earned a degree, 8.9 percent had achieved a bachelor's degree, and 7.6 percent had attained a graduate degree.

Each participant completed a survey booklet that explored demographics (eg, age, sex, race, and completed education) as well as BPD using three self-report mea-

ures: the Borderline Personality Scale of the Personality Diagnostic Questionnaire-4 (PDQ-4),<sup>6</sup> the Self-Harm Inventory (SHI),<sup>7</sup> and the McLean Screening Inventory for Borderline Personality Disorder (MSI-BPD).<sup>8</sup> In addition to the preceding assessments, we examined each participant's current prescription (ie, past 4 weeks) of analgesics according to the medical record, including narcotic and non-narcotic analgesics. All narcotic analgesic doses were converted to morphine equivalents to enable comparison. The project was approved by the institutional review boards of both the community hospital and university.

The point-biserial and Pearson's correlation coefficients representing the relationship between pain medication prescription and scores on each of the three measures of BPD are presented in Table 1. Note that none of the correlation coefficients approach statistical significance. Of the 80 respondents, 17 exceeded the clinical cutoff score indicative of BPD on the PDQ-4, 11 on the SHI, and 13 on the MSI-BPD. These subgroups were too small to warrant reliable comparisons; however, we calculated the total number of different BPD measures on which each respondent exceeded the clinical cutoff score (from 0 to 3). The relationships between this total clinical BPD index and pain medication prescription are presented in Table 1. Again, there were no statistically significant correlations.

Our findings did not show any relationship between BPD and amounts or types of analgesics prescribed over a 4-week study period. This finding proffers two tentative conclusions: (1) there is no relationship between BPD and analgesic prescriptions, eg, perhaps prescribers naturally limit amounts of prescribed analgesics so that no differences are evident between BPD and non-BPD patients (ie, we are measuring prescribers' behavior); or (2) the relationship between BPD and analgesic prescription will only emerge when a longer duration of analgesic exposure is taken into account (ie, the factor of chronicity). In relation to the latter possibility, those with acute pain syndromes (and acute analgesic use) may have confounded our anticipated results.

This pilot study has a number of limitations including the self-report nature of a portion of the data, the use of a sample of convenience (ie, a risk of sampling bias, which is less likely with internal medicine recruiters), and the small sample size. However, given that we used three distinctly different measures for BPD and there were no associations with analgesic prescription, we believe this finding to be valid and convincing. Only further research will determine if long-term (greater than 4 weeks) analgesic prescription will predict BPD characteristics in patients with pain.

**Table 1. Correlations between pain medication prescription and scores on three measures of borderline personality disorder (N = 80)**

| Pain medication prescription               | PDQ-4 | SHI   | MSI-BPD | BPD index |
|--|-------|-------|---------|-----------|
| NSAIDs (0 = no, 1 = yes)                   | 15    | 0.08  | 0.14    | 0.16      |
| Narcotic analgesics (morphine equivalents) | −0.03 | −0.05 | 0.02    | −0.04     |
| Total number of pain medications           | 0.09  | 0.15  | 0.17    | 0.08      |

Note: BPD index = total number of the three measures of borderline personality disorder on which the respondent exceeded the clinical cutoff score indicative of disorder; MSI-BPD, McLean Screening Inventory for Borderline Personality Disorder; NSAID, nonsteroidal anti-inflammatory drug; PDQ-4, Borderline Personality Scale of the Personality Diagnostic Questionnaire-4; SHI, Self-Harm Inventory.

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