# The Relationship Between Medically Self-Sabotaging Behaviors and Borderline Personality Disorder Among Psychiatric Inpatients

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**Objective:** In this study, we hypothesized and explored a relationship between medically self-sabotaging behaviors and borderline personality disorder.

Method: Using a cross-sectional self-report survey methodology, we examined 120 psychiatric inpatients, who were not psychotic, demented, medically ill, or cognitively impaired, being treated in an urban community hospital located in a midsized, midwestern city (sample of convenience) for medically self-sabotaging behaviors (author-developed survey) and borderline personality disorder. Borderline personality disorder was assessed with the following 3 measures: the borderline personality scale of the Personality Diagnostic Questionnaire-4 (PDQ-4), the Self-Harm Inventory (SHI), and the McLean Screening Inventory for Borderline Personality Disorder (MSI-BPD). Data were collected from May 2006 to November 2007.

**Results:** For the 76 respondents (63.3%) who reported having engaged in at least 1 medically self-sabotaging behavior, the mean number of different medically self-sabotaging behaviors was 4.11 (SD = 3.93). With regard to the most commonly endorsed behaviors, approximately one quarter of participants acknowledged damaging self on purpose and seeking medical treatment; not going for medical treatment, despite needing it, to purposefully hurt self; not taking a prescribed medication to hurt self; and gravitating toward a dangerous situation hoping to be physically hurt. As hypothesized, greater numbers of self-reported medically self-sabotaging behaviors were related to higher scores on the PDQ-4 (r = 0.28, p < .01), the SHI (r = 0.55, p < .001), and the MSI-BPD (r = 0.41, p < .001).

**Conclusions:** Medically self-sabotaging behaviors are commonly encountered in psychiatric inpatients with borderline personality disorder.

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edical self-sabotage, i.e., the intentional yet surreptitious creation of illusionary or bonafide medical symptoms, among patients has undergone very limited study. However, the presence of medically selfsabotaging behaviors in a primary care population has been previously confirmed. Specifically, in a prior study, <sup>1</sup> we examined the prevalence of medically self-sabotaging behaviors in a large sample (N = 411) of family medicine outpatients. In this study, we used a 19-item survey; each item was preceded by the qualifier, "Have you ever, intentionally or on purpose." According to this measure, the lifetime rate for medically self-sabotaging behaviors was 7%. The most common behaviors in this primary care sample were "not gone for medical treatment, despite knowing that you need it, to purposefully hurt yourself" (37.2%) and "not taken a prescribed medication to hurt yourself" (25.1%). These initial findings confirmed the existence of medically self-sabotaging behaviors among a small percentage of primary care patients.<sup>1</sup>

We next hypothesized about the diagnostic association of such behaviors. According to Gunderson,<sup>2</sup> one of the fundamental psychodynamics of borderline personality disorder is the elicitation of caring responses from others described as being accomplished through overt self-destructive behavior such as self-mutilation and/or suicide attempts. However, we hypothesized that the illusion/induction/exacerbation of physical symptoms might be used by such individuals in a similar manner to elicit emotional and caring responses from others, including health care professionals.

With this hypothesis in mind, we developed a second study to examine a possible relationship between medically self-sabotaging behaviors and borderline personality disorder. In this study, among a sample of internal medicine outpatients,<sup>3</sup> we confirmed a correlation between the 3 specific medically self-sabotaging behaviors examined (prevented wounds from healing, made medical situations worse on purpose, and intentionally, or on purpose, abused prescription medication) and borderline personality disorder.

We next wondered if the observed relationship between medically self-sabotaging behaviors and borderline personality disorder might be evident among psychiatric patients. Therefore, in a third study,<sup>4</sup> we explored these same 3 medically self-sabotaging items among a sample

of psychiatric inpatients. Again, we confirmed a relationship between the greater endorsement of medically self-sabotaging behaviors and borderline personality symptomatology.<sup>4</sup>

In the present study, we sought to expand upon our previous work and explore among a new sample of psychiatric inpatients the relationship between a number of medically self-sabotaging behaviors (i.e., the original 19 behaviors that we examined in the initial family medicine sample) and borderline personality disorder. If confirmed, these data would augment our current impression that medically self-sabotaging behaviors may be characteristic of or represent a somewhat distinct subgroup among those with borderline personality disorder—an impression that we have previously broached in the literature.<sup>5</sup>

### **METHOD**

This cross-sectional study entailed a survey methodology in a convenience sample of psychiatric inpatients using a measure of medically self-sabotaging behaviors and 3 measures of borderline personality disorder. Data were collected from May 2006 to November 2007.

## **Participants**

Participants were male and female psychiatric inpatients who were being treated in an urban community hospital located in a midsized, midwestern city. All participants were under the care of 1 attending psychiatrist and aged ≥ 18 years. Exclusion criteria were cognitive (i.e., psychosis, dementia), medical, or intellectual impairment that would preclude the successful completion of a survey. Of the 145 individuals approached, 120 agreed to participate for a response rate of 82.8%.

Respondents (N = 120) consisted of 47 men and 73 women ranging in age from 18 to 74 years (mean age = 38.69 years, SD = 11.74 years). With regard to race/ethnicity, most participants indicated either white (81.5%) or black (15.1%); the remainder indicated Native American (N = 2), Asian (N = 1), or other (N = 1). As for the highest level of education, 12.7% had not graduated high school, 35.6% had earned a high school diploma, 35.6% had completed some college coursework but not a degree, 9.3% had earned an undergraduate degree, and 6.8% had earned a graduate degree.

## **Procedure**

A single investigator (J.S.M.) approached and recruited all participants during a weekly visit to the psychiatric inpatient unit (sample of convenience). During this visit, the investigator queried nursing staff and approached newly admitted patients who were not psychotic, demented, medically ill, or cognitively impaired. The investigator was not directly involved in the psychiatric care of any of

the participants. In addition, nursing staff was not informed of the nature of the research project.

Following an explanation of the project by the investigator, each participant was asked to complete a 5-page research booklet that took approximately 15 minutes. The research booklet contained (1) a demographic query (age, sex, marital status, level of completed education), (2) an author-developed measure to assess medically self-sabotaging behaviors, and (3) 3 measures for borderline personality symptomatology.

Medically self-sabotaging behaviors. We assessed medically self-sabotaging behaviors with the Medical Sabotage Survey, a 19-item, author-developed (R.A.S.) measure that was used in a previous study. Items in the survey are preceded by the statement, "Have you ever, intentionally or on purpose" and include "not taken a prescribed medication to hurt self"; "exposed self to an infected person with the hope of getting infected"; "damaged self, on purpose, and sought medical treatment"; "not gone for medical treatment, despite needing it, to purposefully hurt self"; "created additional symptoms to attract the attention of a health care provider"; and "exaggerated physical symptoms to attract the attention of a health care provider." Individual items are seemingly face valid.

Borderline personality disorder. We utilized 3 measures for the detection of borderline personality symptomatology. The first measure was the borderline personality scale of the Personality Diagnostic Questionnaire-4 (PDQ-4).<sup>6</sup> The borderline personality scale of the PDQ-4 is a 9-item, true/false, self-report measure that consists of the diagnostic criteria for borderline personality that are listed in the DSM-IV.<sup>7</sup> A score of 5 or higher is highly suggestive of borderline personality disorder. Earlier versions of the PDQ have been confirmed as useful screening tools for borderline personality disorder in both clinical<sup>8,9</sup> and nonclinical samples,<sup>10</sup> including the use of the free-standing borderline personality scale of the PDO-4.<sup>11</sup>

The second measure for the assessment of borderline personality disorder was the Self-Harm Inventory (SHI). 12 The SHI is a 22-item, yes/no, self-report inventory that explores participants' histories of self-harm behavior. Each item in the inventory is preceded by the statement, "Have you ever intentionally, or on purpose" and include "overdosed, cut yourself on purpose"; "burned yourself on purpose"; and "hit yourself." Each endorsement is in the pathologic direction, and the SHI total score is the summation of "yes" responses. SHI total scores  $\geq 5$  are highly suggestive of the diagnosis of borderline personality disorder. Indeed, in comparison with the Diagnostic Interview for Borderlines, <sup>13</sup> the gold standard for the diagnosis of borderline personality disorder in research settings, the SHI demonstrates an accuracy in diagnosis of 84%.12

Table 1. Percentage of Psychiatric Inpatient Respondents (N = 120) Indicating Having Intentionally Engaged in Each Form of Medically Self-Sabotaging Behavior

Behavior	Intentionally Engaged in Self-Sabotaging Behavior, %
Not taken a prescribed medication to hurt self	24.2
Exposed self to an infected person with the hope of getting infected	6.7
Damaged self, on purpose, and sought medical treatment	28.3
Not gone for medical treatment, despite needing it, to purposefully hurt self	27.5
Created additional symptoms to attract the attention of a health care provider	10.8
Exaggerated physical symptoms to attract the attention of a health care provider	15.8
Gravitated toward dangerous situations hoping to be physically hurt	23.3
Not followed directions of a health care provider to intentionally prolong physical illness	12.5
Purposefully misused medications to worsen a physical illness	12.5
Lied about symptoms to purposefully confuse a health care provider	12.5
Lied about the cause of physical symptoms to hide self-injury	18.3
Tampered with medical equipment to cause false readings	5.0
Lied about medical treatment recommendations to family to prolong illness	9.2
Caused fights with health care providers to complicate medical treatment	4.2
Been hard to deal with so that health care providers would abandon you	6.7
Mixed prescription drugs with the intent to harm self	16.7
Prevented wounds from healing	13.3
Come into contact with an allergen to purposefully hurt self	3.3
Mixed drugs that you were told by health care providers not to mix	10.8

The third measure for borderline personality disorder was the McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD). <sup>14</sup> The MSI-BPD is a 10-item, yes/no, self-report questionnaire that explores borderline personality symptomatology. All endorsements are in the pathologic direction, and scores ≥ 7 are suggestive of this disorder. The MSI-BPD has undergone limited clinical study and is recommended by the authors as a screening measure for borderline personality disorder.

Participants were not paid for their participation in this project. Because of the survey methodology, written consent was not obtained; rather, completion of the survey was assumed to be implied consent. This project was approved by the institutional review boards of both the community hospital and the affiliated university.

### **RESULTS**

## Prevalence of Medically Self-Sabotaging Behaviors

Table 1 reports the percentage of respondents who indicated having engaged in each form of medically selfsabotaging behavior. Possible scores on the overall measure of medically self-sabotaging behaviors ranged from 0 (no such behaviors) to 19 (endorsement of all such behaviors). Actual scores also ranged from 0 to 19; however, the mean number of such behaviors endorsed was 2.60 (SD = 3.70). The incidence of such behaviors ranged from a low of 3.3% for having purposively come into contact with a substance the respondent was allergic to, to a high of 28.3% for having intentionally damaged oneself and subsequently sought medical treatment. Most respondents (63.3%) reported having engaged in at least 1 medically self-sabotaging behavior. For these 76 respondents, the mean number of different medically self-sabotaging behaviors was 4.11 (SD = 3.93).

## **Borderline Personality Disorder Profiles**

Scores on each of the 3 measures of borderline personality symptomatology ranged from the minimum (0) to the maximum possible scores. Mean scores on the PDQ-4 (5.39, SD = 2.25), SHI (7.41, SD = 4.82), and MSI-BPD (6.54, SD = 2.92) all indicated substantial variation in degree of self-reported borderline personality symptomatology. With regard to exceeding the clinical cut-off score indicative of borderline personality disorder, 69.7% of respondents did so with the PDQ-4, 70.6% did so with the SHI, and 74.2% did so with the MSI-BPD. As expected, scores on the measures of borderline personality symptomatology were moderately correlated with one another (PDQ-4/SHI: r = 0.47, p < .001; PDQ-4/MSI-BPD: r = 0.73, p < .001; and SHI/MSI-BPD: r = 0.66, p < .001).

## Relationship of Borderline Personality Disorder Scores to Medically Self-Sabotaging Behaviors

Greater numbers of self-reported medically self-sabotaging behaviors were related to higher scores on the PDQ-4 (r = 0.28, p < .01), the SHI (r = 0.55, p < .001), and the MSI-BPD (r = 0.41, p < .001).

#### DISCUSSION

In our opinion, the most important finding in this study is that medically self-sabotaging behaviors demonstrated a statistically significant relationship with all 3 measures of borderline personality disorder. Importantly, these 3 measures have slightly different item constructs. For example, while the PDQ-4 and MSI-BPD explore more psychological aspects of borderline personality disorder, the SHI limits queries to past self-harm behaviors. Yet, despite differing constructs, all 3 measures for borderline personality disorder demonstrated statistically significant

correlations to the number of endorsed medically selfsabotaging behaviors. We interpret this finding to be strong evidence of an association between these 2 phenomena (i.e., many patients with borderline personality disorder engage in medically self-sabotaging behaviors).

The SHI demonstrated the highest correlation with self-reported medically self-sabotaging behaviors. This high correlation is likely due to the fact that both measures may be assessing the same behavioral phenomenon, self-harm. What is particularly interesting is that both measures assess different types of behaviors, but all behaviors in both measures represent self-harm behavior.

In comparison with our findings in a primary care setting, in which 7% of participants acknowledged at least 1 medically self-sabotaging behavior, the prevalence of at least 1 such behavior in the present sample was 63%—a notable difference. So, an additional conclusion from this study is that medically self-sabotaging behaviors may be far more prevalent among psychiatric patients than primary care patients.

Because we wanted to directly compare data, we utilized in the present study the original survey from our study of primary care patients. It could be argued that some of the items on this survey are not specific to medical self-sabotage but rather reflect the general behaviors encountered in borderline personality disorder (i.e., "damaged self, on purpose, and sought medical treatment"; "gravitated toward dangerous situations hoping to be physically hurt"; "lied about the cause of physical symptoms to hide self-injury"; and "mixed prescription drugs with the intent to harm self"). However, the remaining and majority of items in this survey are highly specific to medical self-sabotage.

In our initial survey of family medicine patients, the most common behaviors reported were intentionally or on purpose "not gone for medical treatment, despite knowing that you need it, to purposefully hurt yourself" (37.2%) and "not taken a prescribed medication to hurt yourself" (25.1%). In the present study, "damaged self, on purpose, and sought medical treatment" (28.3%) and "not gone for medical treatment, despite needing it, to purposefully hurt self" (27.5%) were the most common behaviors. This finding suggests that there may be different medical self-sabotage patterns in different types of study populations. Also, in our study of family medicine patients,<sup>1</sup> there were some items that were left unendorsed by the entire sample. This was not the case in the present study, in which each item was endorsed by at least some participants.

Some might argue that several of the items in the medically self-sabotaging survey represent factitious-disorder behaviors. Factitious disorders, which are designated as Axis I disorders in the DSM-IV,<sup>7</sup> are characterized by (1) the intentional production or feigning of symptoms, either psychological or physical; (2) an underlying motivation to

assume the sick role; and (3) the absence of external incentives such as economic gain, avoidance of legal responsibility, or improvement of physical well-being. Previously known as Munchausen's syndrome, a term coined by Asher in 1951,<sup>15</sup> few systematic studies exist on these patients. Available studies<sup>16,17</sup> suggest that patients with factitious disorder are likely to be unmarried women in the fourth decade of life affiliated to some degree with the health care field; unexplainable laboratory results are the most commonly reported complaint.

According to Plassmann,<sup>18</sup> patients with factitious disorder tend to come from broken homes, suffer early losses, be preoccupied with physician figures, and be victims of physical or sexual abuse. There are a number of clinical variations of factitious disorder, and some investigators have suggested a subclassification based on lifelong stressors<sup>19</sup> or adjunctive psychiatric syndromes such as borderline personality disorder, atypical psychotic disorders, and dissociative states.<sup>20</sup> Therefore, if several items on the medically self-sabotaging survey overlap with the symptoms encountered in factitious disorder, this by no means excludes a diagnosis of borderline personality disorder.

Note that the medically self-sabotaging behaviors explored in this study entail several types of behavior. Explicitly, some items involve the overt "creation" of physical symptoms that do not actually exist (e.g., "created additional symptoms to attract the attention of a health care provider," "lied about symptoms to purposefully confuse a health care provider," and "tampered with medical equipment to cause false readings"), while others entail the induction (e.g., "exposed self to an infected person with the hope of getting infected" and "come into contact with an allergen to purposefully hurt self") or exacerbation (e.g., "not followed directions of a health care provider to intentionally prolong physical illness" and "prevented wounds from healing") of physical symptoms. We suspect that regardless of the context of the medical symptom (i.e., illusion, induction, exacerbation), what unites these behaviors is the individual's attempt to generate physical symptoms.

We wish to clarify that medically self-sabotaging behaviors are the outcome of complex motivations on behalf of patients with borderline personality disorder. These symptoms may be the culmination of attempts to elicit caring responses from health care professionals, to reorganize following a quasi-psychotic episode, to reaffirm a negative self-image, and/or to punish someone else. These data do not provide any sense of the underlying reasons for these behaviors.

This study has a number of potential limitations including the use of a sample of convenience, the use of self-report measures and their inherent limitations, and a modest sample size. However, the strengths of this study include a novel area of investigation and the use of 3

measures for borderline personality disorder. In addition, the finding of a consistent positive correlation between the number of medically self-sabotaging behaviors and the borderline personality disorder measures is evidential.

#### **CONCLUSION**

In this study, we found statistical correlations between a greater number of endorsements on the measure for medical self-sabotage and each of 3 measures of borderline personality disorder. These findings strongly suggest that medical self-sabotage is a behavioral characteristic of those suffering from borderline personality disorder. Indeed, this behavioral pattern may be more prevalent among psychiatric rather than primary care populations. Given the finding of a prevalence rate for medically self-sabotaging behaviors of 63% among psychiatric inpatients, one wonders if this phenomenon warrants consideration as an additional diagnostic item in the DSM.

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