Self-Harm Behaviors in Borderline Personality

An Analysis by Gender

Randy A. Sansone, MD,† Charlene Lam, BS,* and Michael W. Wiederman, PhD‡*

Abstract: A number of authors have examined gender differences in patients with borderline personality disorder. Current data suggest that for some clinical features, there appear to be genuine gender differences, whereas for other clinical features, there are not apparent differences. In this study, we examined by gender 22 self-harm behaviors in 61 internal medicine outpatients with borderline personality symptomatology. We found that only 2 self-harm behaviors were statistically significantly more common in one of the sexes—head-banging and losing a job on purpose, with both being more common in men. These findings appear to mirror the existing literature—i.e., that there may be some genuine gender differences with regard to specific self-harm behaviors, but the majority of self-harm behaviors overlap between the sexes.

Key Words: Borderline personality, borderline personality disorder, gender, males, females, self-harm behavior, Self-Harm Inventory.

(*J Nerv Ment Dis* 2010;198: 914–915)

A number of studies have examined gender differences in borderline personality disorder (BPD). As examples, researchers have explored differences between men and women with BPD with regard to prevalence rates (e.g., Grant et al., 2008), personality traits (e.g., Barnow et al., 2007), Axis I comorbidity (e.g., Grant et al., 2008; Johnson et al., 2003; Tadic et al., 2009; Zanarini et al., 1998a; Zlotnick et al., 2002), Axis II comorbidity (Tadic et al., 2009; Zanarini et al., 1998b), and treatment utilization patterns (Goodman et al., 2010). In addition, one study examined gender differences with regard to a single type of self-harm behavior—such as self-cutting (Marchetto, 2006). Specifically, in this study of nontraumatized self-cutters, 36 participants were diagnosed with BPD, and of these, 58% were women (i.e., there was no statistically significant difference with regard to gender). However, the sample size was relatively small and the exclusion criterion of trauma may have resulted in an unintended sampling bias. The purpose of the present study was to further examine possible gender differences with regard to self-harm behavior in a sample of individuals with borderline personality symptomatology from an internal medicine outpatient setting.

METHOD

Participants

Potential participants were males and females, ages 18 to 65 years, who were being seen at an outpatient internal medicine clinic for nonemergent medical care. Exclusion criteria were cognitive (e.g., dementia), medical (e.g., pain), intellectual (e.g., mental retardation), or psychiatric impairment (e.g., psychotic) that would preclude the completion of a research booklet. A total of 492 people were invited to participate; 419 agreed, for a response rate of 85.2%. Of these, 130 were male and 287 were female (2 failed to indicate sex). Respondents ranged in age from 18 to 65 years (M = 49.48, SD = 15.26). Most were White/Caucasian (358; 85.4%); 35 were African American, 8 Native American, 2 Hispanic, 4 Asian, 11 "other," and 1 failed to indicate race/ethnicity. With regard to education, most (92.1%) had at least graduated high school, with 159 (37.9%) having attended some college and 110 (26.3%) having earned at least a 4-year college degree.

Procedure

During clinic hours, one of the authors (C.L.) approached consecutive incoming patients in the lobby of the outpatient center, informally assessed exclusion criteria, and invited candidates to participate. In this survey project, the elements of informed consent were incorporated into the cover page of the research booklet and completion of the research booklet was assumed to be implied consent. All participants completed a 4-page research booklet, placed completed research booklets into sealed envelopes, and then placed the envelopes into a collection box in the lobby. The research booklet queried participants about demographics, borderline personality symptomatology, and lifetime self-harm behaviors.

Borderline personality symptomatology was assessed using the borderline personality scale of the Personality Diagnostic Questionnaire-4 (PDQ-4; Hyler, 1994), which is a 9-item, true/false, self-report measure that consists of the diagnostic criteria for BPD that are listed in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV; American Psychiatric Association, 1994). A score of 5 or higher on this measure is highly suggestive of BPD. Previous versions of the PDQ have been found to be useful screening tools for BPD in both clinical settings (Dubro et al., 1988; Hyler et al., 1990) and nonclinical settings (Johnson and Bornstein, 1992), including the use of the freestanding borderline personality scale (Patrick et al., 1995).

Self-harm behavior was assessed with the Self-Harm Inventory (SHI; Sansone et al., 1998), which is a 22-item, yes/no, self-report inventory for BPD that explores participants' lifetime histories of self-harm behavior. Each item in the inventory is preceded by the statement, "Have you ever intentionally, or on purpose, …" and items include, "overdosed," "cut yourself on purpose," "burned yourself on purpose," and "hit yourself." Each endorsement is in the pathological direction and the SHI total score is the summation of "yes" responses.

This project was approved by the Institutional Review Boards of the hospital site as well as the university. Data were collected in April 2009.

RESULTS

Of the women in the sample, 43 scored above the clinical cut-off score on the PDQ-4 whereas 19 of the men did so. One of these 19 males did not complete the SHI. Male-female comparison of endorsement rates of specific self-harm behaviors is presented in Table 1. With the exception of head-banging and losing a job on purpose, both more common in males, there were no other statistically significant differences in self-harm behaviors.

*Wright State University School of Medicine, Dayton, OH; †Kettering Medical Center, Kettering, OH; and ‡Columbia College, Columbia, SC.
Send reprint requests to Randy A. Sansone, MD, Sycamore Primary Care Center, 2115 Leiter Rd, Miamisburg, OH 45342. E-mail: Randy.sansone@khnetwork.org.

ISSN: 0022-3018/10/19812-0914
DOI: 10.1097/NMD.0b013e3181fe75c8

TABLE 1. Comparison of Specific Self-Harm Behaviors in Males (n = 18) and Females (n = 43) Who Scored Above the Clinical Cut-Off for Borderline Personality Disorder on the PDQ-4

Harm Behavior	% of Males	% of Females	χ^2	p
Overdosed	29.4	30.2	0.00	<0.96
Cut yourself on purpose	11.1	23.8	1.27	<0.27
Burned yourself on purpose	16.7	7.3	1.20	<0.28
Hit yourself	44.4	26.8	1.78	<0.19
Banged your head on purpose	55.6	23.8	5.71	<0.02*
Abused alcohol	42.9	50.0	0.26	<0.62
Driven recklessly on purpose	44.4	38.1	0.21	<0.65
Scratched yourself on purpose	11.1	20.0	0.69	<0.41
Prevented wounds from healing	5.6	12.2	0.60	<0.44
Made medical situations worse on purpose (e.g., skipped medication)	23.5	26.8	0.07	<0.80
Been promiscuous (i.e., had many sexual partners)	38.9	39.0	0.00	<1.00
Set yourself up to be rejected in a relationship	33.3	31.7	0.02	<0.92
Abused prescription medications	27.8	26.2	0.02	<0.92
Distanced yourself from God as punishment	35.3	30.0	0.16	<0.70
Engaged in emotionally abusive relationships	50.0	58.5	0.37	<0.56
Engaged in sexually abusive relationships	5.6	26.8	3.49	<0.07
Lost a job on purpose	50.0	21.4	4.90	<0.03*
Attempted suicide	52.9	38.1	1.09	<0.30
Exercised an injury on purpose	16.7	7.3	1.20	<0.28
Tortured yourself with self-defeating thoughts	58.8	54.8	0.08	<0.79
Starved yourself to hurt yourself	22.2	14.6	0.51	<0.48
Abused laxatives to hurt yourself	0.0	2.4	0.45	<0.52

*Statistically significant gender difference.

PDQ-4 indicates borderline personality disorder scale of the Personality Diagnostic Questionnaire-4 (Hyler, 1994).

DISCUSSION

Previous research on gender differences in individuals with BPD has yielded both positive and negative findings. For example, Grant et al. (2008) found no gender differences in prevalence rates. Barnow et al. (2007) found that men with BPD evidenced more explosive temperaments and higher levels of novelty seeking than women with BPD. A number of authors have found differences in Axis I comorbidity patterns, with males generally having higher rates of substance abuse and females generally having higher rates of eating, mood, anxiety, and post-traumatic stress disorders (Grant et al., 2008; Johnson et al., 2003; Tadic et al., 2009; Zanarini et al., 1998a; Zlotnick et al., 2002). With regard to Axis II comorbidity, investigators have encountered more antisocial features in males (Tadic et al., 2009; Zanarini et al., 1998b; Zlotnick et al., 2002) than in females. As for self-harm behaviors, Marchetto (2006) found no differences between the sexes with regard to self-cutting. Finally, Goodman et al. (2010) reported differences in treatment utilization, with men having more lifetime substance abuse treatment and women having more pharmacology and psychotherapy treatment, although both sexes were high utilizers of mental health services. In this study, we found few gender-related differences with regard to self-harm behavior—only that men with BPD features are more likely to engage in head-banging and to have lost a job on purpose, compared with women with BPD features. Therefore, our findings appear to be in keeping with the general findings of others who have explored gender differences—i.e., that there are some differences, but not many.

This study has a number of potential limitations, including the self-report methodology for diagnosis and the reporting of self-harm behaviors, small sample size, and use of an internal medicine sample (i.e., findings may or may not generalize to psychiatric and/or community samples). However, to our knowledge, this is the only study to date to systematically examine gender differences with regard to types of self-harm behaviors encountered in individuals with borderline personality symptomatology; in addition, the sample was consecutive. Only further research will confirm if the sexes generally evidence differences in self-harm patterns, but our preliminary data suggest that there may be some subtle differences, but not many.

REFERENCES

American Psychiatric Association (1994) *Diagnostic and Statistical Manual of Mental Disorders* (4th ed). Washington (DC): American Psychiatric Association.

Barnow S, Herpertz SC, Spitzer C, Stopsack M, Preuss UW, Grabe HJ, Kessler C, Freyberger HJ (2007) Temperament and character in patients with borderline personality disorder taking gender and comorbidity into account. *Psychopathology*. 40:369–378.

Dubro AF, Wetzler S, Kahn MW (1988) A comparison of three self-report questionnaires for the diagnosis of DSM-III personality disorders. *J Pers Disord*. 2:256–266.

Goodman M, Patil U, Steffel L, Avedon J, Sasso S, Triebwasser J, Stanley B (2010) Treatment utilization by gender in patients with borderline personality disorder. *J Psychiatr Pract*. 16:155–163.

Grant BF, Chou SP, Goldstein RB, Huang B, Stinson FS, Saha TD, Smith SM, Dawson DA, Pulay AJ, Pickering RP, Ruan WJ (2008) Prevalence, correlates, disability and comorbidity of DSM-IV borderline personality disorder: Results from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions. *J Clin Psychiatry*. 69:533–545.

Hyler SE (1994) *Personality Diagnostic Questionnaire-4*. New York (NY): New York State Psychiatric Institute.

Hyler SE, Lyons M, Rieder RO, Young L, Williams JB, Spitzer RL (1990) The factor structure of self-report DSM-III Axis II symptoms and their relationship to clinicians' ratings. *Am J Psychiatry*. 147:751–757.

Johnson DM, Shea MT, Yen S, Battle CL, Zlotnick C, Sanislow CA, Grilo CM, Skodol AE, Bender DS, McGlashan TH, Gunderson JG, Zanarini MC (2003) Gender differences in borderline personality disorder: Findings from the Collaborative Longitudinal Personality Disorders Study. *Compr Psychiatry*. 44: 284–292.

Johnson JG, Bornstein RF (1992) Utility of the Personality Diagnostic Questionnaire-revised in a nonclinical population. *J Pers Disord*. 6:450–457.

Marchetto MJ (2006) Repetitive skin-cutting: Parental bonding, personality and gender. *Psychol Psychother: Theory Res Pract*. 79:445–459.

Patrick J, Links P, Van Reekum R, Mitton MJ (1995) Using the PDQ-R BPD scale as a brief screening measure in the differential diagnosis of personality disorder. *J Pers Disord*. 9:266–274.

Sansone RA, Wiederman MW, Sansone LA (1998) The Self-Harm Inventory (SHI): Development of a scale for identifying self-destructive behaviors and borderline personality disorder. *J Clin Psychol*. 54:973–983.

Tadic A, Wagner S, Hoch J, Baskaya O, von Cube R, Skaletz C, Lieb K, Dahmen N (2009) Gender differences in axis I and axis II comorbidity in patients with borderline personality disorder. *Psychopathology*. 42:257–263.

Zanarini MC, Frankenburg FR, Dubo ED, Sickel AE, Trikha A, Levin A, Reynolds V (1998a) Axis I comorbidity of borderline personality disorder. *Am J Psychiatry*. 155:1733–1739.

Zanarini MC, Frankenburg FR, Dubo ED, Sickel AE, Trikha A, Levin A, Reynolds V (1998b) Axis II comorbidity of borderline personality disorder. *Compr Psychiatry*. 39:296–302.

Zlotnick C, Rothschild L, Zimmerman M (2002) The role of gender in the clinical presentation of patients with borderline personality disorder. *J Pers Disord*. 16:277–282.