

# Self-Inflicted Bodily Harm Among Victims of Intimate-Partner Violence

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**In this study, we surveyed 113 women psychiatric inpatients with regard to histories of intimate-partner violence and six self-harm behaviours related to the intentional damage of one's body (e.g., cutting, hitting, scratching self). Multiple regression analysis revealed that a history of domestic violence was a statistically significant predictor of bodily self-harm even after controlling for age and having ever been married. Among some victims of domestic violence, this statistical relationship may indicate an underlying common psychodynamic theme such as a high threshold for body maltreatment and/or low body esteem. Regardless, these data suggest that mental health clinicians need to explore among women victims of intimate-partner violence the presence of self-initiated bodily self-harm. Copyright © 2007 John Wiley & Sons, Ltd.**

## VICTIMS OF INTIMATE-PARTNER VIOLENCE AND SELF-INFLICTED BODILY HARM

Both intimate-partner violence and non-suicidal self-harm behaviour are relatively common occurrences. With regard to intimate-partner violence, the prevalence rates described in the empirical literature are staggering. For example, in a literature review, Marshall, Panuzio, and Taft (2005) found rates of intimate-partner violence between 13.5 and 58.0%. Among 2415 women in a managed care organization, 13.5% reported verbal aggression and 6.7% reported physical aggression from a significant other (Tollestrup et al., 1999). Among active duty women in the military, 30% reported

adult lifetime intimate-partner violence, defined in this study as physical and/or sexual assault (Campbell et al., 2003). In an ethnic study of women being treated in primary care clinics, McFarlane, Groff, O'Brien, and Watson (2005) found that 8.9% of White, 6.0% of Black and 5.3% of Hispanic women disclosed histories of intimate-partner violence. In a multi-ethnic study, Ficek (2005) found the 12-month prevalence of intimate-partner physical violence among women to be 14.6% for Native Americans, 7.5% for Hispanics and 6.3% for Whites. Among psychiatric inpatients with suicidal ideation, Heru, Stuart, Rainey, Eyre, and Recuperio (2006) found that over 90% reported intimate-partner violence. Finally, in a study of Chinese-American women, 14% reported a lifetime history of intimate-partner violence (Hicks, 2006). These data suggest that minimally, 5% of adult women report intimate-partner violence, with most studies clearly indicating considerably higher rates.

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As for non-suicidal self-harm behaviour, the estimated prevalence rate in the general population is around 1% (Greenberg, 2004). However, there are meaningfully higher prevalence rates of non-suicidal self-harm behaviour among psychiatric populations, with self-mutilation being the most studied. For example, among individuals with a diagnosis of borderline personality disorder, various investigators have found prevalence rates of self-mutilation as high as 80% (Dubo, Zanarini, Lewis, & Williams, 1997; Joyce et al., 2003; Shearer, Peters, Quaytman, & Wadman, 1988). Among women in treatment for alcohol and/or substance abuse, the prevalence rate of self-cutting is around 25% (Evans & Lacey, 1992; Matsumoto et al., 2003; Swift, Copeland, & Hall, 1996). Among those with eating disorders, Sansone and Levitt (2002) found that the prevalence of self-mutilation ranges from 1 to 35%, with hair pulling (35%) and non-specific self-injury (20–60%) reported as well. Finally, Greenspan and Samuel (1989) describe three cases of self-cutting associated with post-traumatic stress disorder.

Given the fact that both intimate-partner violence and self-harm behaviour entail the violation of body and the disruption of body boundaries, we wondered if there might be any correlation between the two phenomena. Specifically, would the physical mistreatment reported by victims correlate with histories of bodily self-harm behaviour by victims? If so, this might suggest in some victims a common psychodynamic theme between the two forms of maltreatment.

## METHOD

### *Participants*

Study candidates were women psychiatric inpatients, ages 18 or older, who were hospitalized in an urban community hospital in a mid-sized, mid-western city. All participants were unaccompanied by an intimate partner at the time of recruitment. Exclusion criteria for this study were cognitive, intellectual, or medical impairment that would preclude the successful completion of a survey booklet. A total of 131 study candidates were approached by the physician recruiter; 113 agreed to participate, for a response rate of 86.3%.

In the study sample, 80 (70.8%) participants indicated White as their race, 24 (21.2%) African American, 7 (6.2%) Native American, 1 Asian and 1 'Other'. Participants ranged in age from 18 to 57 years ( $M = 35.98$ , Standard Deviation [SD] = 10.43).

The majority was either divorced (32.7%) or never married (29.2%); 15.9% were married, 15.9% were separated, 2.7% were widowed and 3.5% did not indicate marital status. With regard to level of completed education, 18.8% did not graduate from high school, 45.5% graduated from high school, 27.7% had some college experience, 4.5% had a bachelor's degree and 3.6% had a graduate degree.

### *Procedure*

All study candidates were under the care of a university-affiliated psychiatrist (J.C.). Each was approached as time permitted (i.e., a sample of convenience). After an introduction to the project by the recruiting psychiatrist, each participant was given a research booklet to complete. The research booklet contained a measure of intimate-partner violence as well as a measure of self-harm behaviour.

### *Intimate-Partner Violence Measure*

The *Severity of Violence Against Women Scale* (SVAWS; Marshall, 1992) was used to assess a history of intimate-partner violence. The SVAWS is a 46-item, self-report measure that explores three elements of such violence: (a) threats (19 items); (b) acts (21 items); and (c) sexual aggression (six items). We modified the SVAWS in the following ways: (1) we eliminated the items on sexual aggression due to the sensitive nature of these queries, which resulted in a 40-item scale; (2) we reduced the Likert-style response options from 10 to 5, with 1 = never, 2 = rarely, 3 = on occasion, 4 = often and 5 = very often; and (3) we revised the qualifier, 'over the past 12 months', to 'throughout adulthood' to capture the lifetime prevalence of such experiences. The Cronbach's alpha for the Threats Subscale was 0.97, the Acts Subscale 0.97, and the overall total scale 0.98.

### *Self-Harm Behaviour Measure*

We used the *Self-Harm Inventory* (SHI; Sansone, Wiederman, & Sansone, 1998) to measure self-harm behaviour. The SHI is a 22-item, yes/no, self-report questionnaire that explores respondents' histories of self-harm behaviour. Each item in the inventory is preceded by the phrase, 'Have you ever intentionally, or on purpose', and items include, 'over-dosed, cut yourself on purpose, burned yourself on purpose' and 'hit yourself'. Each endorsement on the SHI is scored in the pathological direction. Six SHI items relate to self-injury that entails an overt violation of body self (i.e., the SHI Bodily Self-

Harm Subscale): (1) cut self, (2) burned self, (3) hit self, (4) banged one's head, (5) scratched self and (6) prevented wounds from healing. Scores on this subscale range from 0 to 6.

Completion of the booklet by participants was assumed to be an informed consent. The Institutional Review Boards of both the community hospital and the university approved this project.

## RESULTS

### SVAWS Responses

Scores on the SVAWS Threats and Acts Subscales exhibited the full range of possible scores from 19 to 95 ( $M = 48.02$ ,  $SD = 21.32$ ) and from 21 to 105 ( $M = 43.84$ ,  $SD = 22.18$ ), respectively. Because scores on these two subscales were highly correlated ( $r = 0.84$ ,  $p < 0.001$ ), we combined them for further analyses. In doing so, the possible score on the overall measure could range from 40 to 200, but actual scores ranged from 40 to 187 ( $M = 91.85$ ,  $SD = 41.67$ ). Scores on the SVAWS were not statistically significantly related to age ( $r = 0.12$ ,  $p < 0.24$ ), education ( $r = -0.08$ ,  $p < 0.42$ ), being ever married ( $r = 0.12$ ,  $p < 0.24$ ), or being currently married ( $r = -0.04$ ,  $p < 0.69$ ).

### SHI Bodily Self-Harm Subscale Responses

Scores on the Bodily Self-Harm Subscale of the SHI exhibited the full range of possible scores. In examining response patterns, 40 (35.4%) participants endorsed none of the items, 21 (18.6%) endorsed one item, 12 (10.6%) endorsed two items, 15 (13.3%) endorsed three items, 16 (14.2%) endorsed four items, five (4.4%) endorsed five items and four (3.5%) endorsed all six items. Scores on the SHI Bodily Self-Harm Subscale were not statistically significantly related to education ( $r = -0.07$ ,  $p < 0.50$ ) or being currently married ( $r = -0.07$ ,  $p < 0.48$ ). However, scores on the SHI Bodily Self-Harm Subscale were statistically significantly related to age ( $r = -0.24$ ,  $p < 0.02$ ) and having ever been married ( $r = -0.22$ ,  $p < 0.03$ ). In other words, bodily self-harm was reported more frequently by women who were younger and never married compared to older and ever married.

### *The Relationship between SVAWS Scores and the SHI Subscale Scores*

Scores on the SHI Bodily Self-Harm Subscale demonstrated statistically significant positive

correlations with scores on the SVAWS Threats Subscale ( $r = 0.20$ ,  $p < 0.05$ ), Acts Subscale ( $r = 0.21$ ,  $p < 0.04$ ) and Total Scale ( $r = 0.21$ ,  $p < 0.04$ ).

In addition, we performed a multiple regression analysis in which we entered as predictors of bodily self-harm those variables that had demonstrated a statistically significant correlation with bodily self-harm (i.e., age, ever married and SVAWS scores). The overall regression equation was statistically significant:  $F(3, 93) = 4.10$ ,  $p < 0.01$ , Multiple  $R = 0.34$ . However, with all three predictors in the equation, age (Standardized Coefficient =  $-0.15$ ,  $t = -1.39$ ,  $p < 0.17$ ) and ever married (Standardized Coefficient =  $-0.18$ ,  $t = -1.67$ ,  $p < 0.10$ ) were no longer statistically significantly related to bodily self-harm. Only SVAWS scores were uniquely predictive of bodily self-harm (Standardized Coefficient =  $0.23$ ,  $t = 2.31$ ,  $p < 0.03$ ).

## DISCUSSION

In this study, we observed statistically significant positive correlations between the SHI Bodily Self-Harm Subscale and the SVAWS Acts and Threats Subscales as well as SVAWS total score. In a regression analysis, age and ever married were not unique predictors; rather, SVAWS scores were uniquely predictive of bodily self-harm. These findings *may* indicate a psychodynamic commonality between the two phenomena—intimate-partner violence and bodily self-harm. From a purely speculative standpoint, it may be that some victims of domestic violence harbour very high tolerances for body maltreatment, which may subsequently manifest as both other-initiated as well as self-initiated maltreatment of the body. If such a dynamic is present, it might be explained in several different ways.

First, the correlation between these phenomena may be explained by histories of childhood abuse. Empirical studies indicate that treatment-seeking victims of childhood abuse appear to have substantial rates of re-victimization in adulthood (Horowitz, 1999; Whitfield, Anda, Dube, & Felitti, 2003; Woody, 1997). For example, Noll, Horowitz, Bonanno, Trickett, and Putnam (2003) found that women with confirmed histories of childhood abuse were 1.6 times more likely to experience physical affronts including domestic violence, compared to women without such histories. A possible mediating variable between childhood trauma and re-victimization may be the phenomenon of somatoform dissociation, which has empirically been associated with physical punishment in

childhood (Maaranen et al., 2004) as well as early trauma involving physical contact or injury (Waller et al., 2000).

In addition to re-victimization in adulthood, childhood trauma has also been associated with subsequent self-harm behaviour (Low, Jones, MacLeod, Power, & Duggan, 2000). In this regard, we found that among 147 women in a primary care setting, childhood abuse was associated with an increased likelihood of bodily self-harm (Wiederman, Sansone, & Sansone, 1999). Kiesel and Lyons (2001) confirmed a relationship between sexual abuse and self-mutilation in children and adolescents. In a Turkish study, Yanik and Ozmen (2002) found a relationship between childhood abuse and self-mutilation in adulthood, indicating that this relationship is likely to transcend culture. On a side note, both Kiesel and Lyons (2001) and Brodsky, Cloitre, and Dulit (1995) found statistically significant levels of dissociation in their study samples, which may be a mediating variable. Thus, according to empirical data, it is evident that childhood trauma may contribute to both intimate-partner violence as well as bodily self-harm behaviour, and that these dynamics may be mediated by somatoform as well as psychological dissociation.

Are there other explanations for the observed relationship? It is possible that a very low body esteem could explain the relationship between intimate-partner violence and bodily self-harm behaviour. A low body esteem might be an outgrowth of body image disturbances, which are also empirically associated with childhood trauma. For example, a number of studies confirm a relationship between childhood sexual abuse and body-image disturbances (Brown, 1998; Corbett, 1998; Hunter, 1991; Truppi, 2001; Wenninger & Heiman, 1998). Empirical studies also indicate that physical abuse (Treuer, Koperdak, Rozsa, & Furedi, 2005), emotional abuse (Meston, Heiman, & Trapnell, 1999) and verbal abuse (O'Toole, 2001) may contribute to body-image disturbances. Disturbances in body image could readily lower body esteem and thereby facilitate the toleration of body violation or damage.

These data may be explained in other ways as well. For example, we cannot exclude sadomasochistic psychodynamics, a chronic Axis I disorder such as dysthymia, and/or Axis II psychopathology such as borderline personality disorder. All of the preceding factors might be examined in future studies.

While we cannot conclude from these data the precise substance of the correlation encountered in this study, these findings strongly support our rec-

ommendation that among women who are victims of intimate-partner violence, it is relevant for mental health clinicians to routinely assess for self-initiated bodily harm. This could be done through a direct query as well as through the use of a screening measure such as the SHI (Sansone et al., 1998).

Note that this study sample consists of women psychiatric inpatients. We do not know if these data can be generalized to other populations (e.g., women seen in shelters, outpatient settings, emergency rooms, crisis centers, social service agencies). Exploring this correlation in these other populations seems highly relevant, as this finding may only emerge in more psychologically disturbed populations (i.e., psychiatric inpatients), rather than being a general characteristic of victims of intimate-partner violence. Indeed, given the contemporary psychiatric admission requirements for inpatient treatment (i.e., danger to self/others, unable to take care of self), certain types of psychopathology (e.g., borderline personality) may be over-represented in this study sample and account for this correlation.

This study has several potential limitations. First, the sample was one of convenience rather than a randomized sample, which may have resulted in an unintended bias with regard to participant selection. Second, all data were self-report in nature (i.e., without objective external corroboration). As a result, disclosure may have been compromised by difficulties with participant recall (e.g., suppression, denial, repression), subjective interpretation and/or embarrassment. Third, we do not have any Axis I or II diagnoses for participants. Therefore, we cannot determine the potential role of psychiatric diagnoses in explaining the observed correlations. Despite these potential limitations, to our knowledge, this is the first study to indicate a correlation between intimate-partner violence and intentional bodily self-harm by victims. Further study is needed to explore the underlying meaning of this association. The explanation(s) for this correlation may ultimately promote more effective treatment strategies in this vulnerable population.

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