

Association Between Physical Partner Violence, Posttraumatic Stress, Childhood Trauma, and Suicide Attempts in a Community Sample of Women

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Our objective was to estimate the prevalence of intimate partner violence (IPV) and to explore its association with childhood maltreatment, substance misuse, posttraumatic stress, and suicidal behavior in a representative community sample of women. IPV was operationalized as a "physical attack or beating by a spouse, boyfriend, or live-in partner." We surveyed 637 women in Memphis, Tennessee, by telephone survey. Sixteen percent reported ever experiencing IPV by a male partner, and 75% endorsed multiple assaultive acts. Of abused women, 5.9% met current PTSD diagnostic criteria, and an additional 11.8% were assessed with subthreshold symptoms. Abused women were more likely than other women to be divorced, to have less than 13 years education, to endorse high levels of childhood victimization, to have abused drugs and alcohol, and to have attempted suicide. Twenty-three percent of IPV+ (abused) women reported a suicide attempt at some time in their lives compared with 3% of IPV- (nonabused) women ($p < .0001$). Further, multiple logistic regression analysis showed that childhood sexual and emotional abuse and low educational attainment were the only significant predictors of IPV. These results suggest that in women who endorse IPV, careful inquiry of past abuse, trauma-related symptoms, suicidal behavior, and drug use may be important, so that interventions can be both timely and appropriate.

Keywords: partner violence; childhood abuse; alcohol; suicide; posttraumatic stress; survey; women

Intimate partner violence (IPV) in women is known to be associated with poor health behaviors, compromised mental and physical status, and increased use of health care services (Campbell, 2002; Coker et al., 2002; Hathaway et al., 2000; Hegarty, Gunn, Chondros & Small, 2004; Lown & Vega, 2001; Nicolaidis, Curry, McFarland, & Gerrity, 2004). It has been suggested that repeated physical assault by an intimate partner may directly increase the risk of injury and chronic disease, while chronic psychological abuse may affect physical health indirectly (Coker, Smith, Bethea, King, & McKeown, 2000; Kramer, Lorenzon, & Mueller, 2004). Population-based surveys estimate that between 10% and 50% of women who have ever had an intimate male partner have suffered IPV at some time in their lives (Jewkes, Penn-Kekana, Levin, Ratsaka, & Schrieber, 2001; Watts & Zimmerman, 2002). The Commonwealth Fund's 1998 Survey of Women's Health (Plichta & Falik, 2001), a nationally representative sample of women in the US ($n = 2,850$), found a lifetime prevalence of 35%. In data from 8,005 women in the National Violence Against Women Survey, the lifetime prevalence of physical IPV alone was 13.3% and the strongest risk factor for IPV was physical assault as a child (Coker et al., 2002).

Not surprisingly, a growing literature suggests that women who suffer physical and sexual abuse in childhood are at an increased risk for abuse in adulthood. For example, in a population-based telephone survey, women who reported childhood physical abuse or the witnessing of interparental violence were at a four- to six-fold higher risk of physical IPV (Bensley, Van Eenwyk, & Wynkoop Simmons, 2003). In women attending primary care practices in the UK, Coid and colleagues (2001) found a significant association between childhood experiences and IPV, namely unwanted sexual intercourse (adjusted odds ratio = 3.5) and severe beatings on more than one occasion (adjusted odds ratio = 3.6). Emerging data also support an association between the number of different types of victimization experiences (physical partner violence, child sexual assault, and adult sexual assault) and trauma symptom severity (Follette, Polusny, Bechtle, & Naugle, 1996). While childhood trauma may confound the relationship between IPV and health outcomes, a recent study by McNutt, Carlson, Persaud, and Postmus (2002) found that women with recent IPV had physical symptoms and risky health behaviors that were not wholly explained by the effects of child abuse, past IPV, and economic disadvantage. Further, a meta-analysis of predominantly U.S. studies (Golding, 1999) estimated that the risk of posttraumatic stress disorder (PTSD) and depression from IPV alone was higher than the risk from childhood sexual assault.

Victimized women are more than four times as likely to suffer from anxiety and depression than nonvictims (Plichta & Falik, 2001). In particular, rates of PTSD (although largely gleaned from sheltered battered women and women seen in primary care settings) are high (Marais, de Villiers, Moller, & Stein, 1999; Mertin & Mohr, 2000; Stein & Kennedy, 2001) and correlate positively with the severity of abuse (Kemp, Green, Hovanitz, & Rawlings, 1995; Mertin & Mohr). In a recent study of physically abused women recruited from local domestic violence agencies and shelters, rates of PTSD and major depressive disorder were 75% and 54%, respectively (Nixon, Resick, & Nishith, 2004). High rates of suicidality and substance abuse are additional negative consequences of IPV (Danielson, Moffitt, Caspi, & Silva, 1998; Gleason, 1992; West, Fernandez, Hillard, Schoof, & Parks, 1990).

In the light of these findings, the purpose of this study was to examine the prevalence of physical partner violence in a representative community sample of women and to explore its associations with childhood maltreatment, substance misuse, posttraumatic stress symptoms, and suicidal behavior. Considering that most previous reports of this kind have been conducted in women attending clinics or in shelters, this study adds to existing literature by assessing these associations in a community-based sample.

METHOD

Subjects

Women ($n = 637$) who participated in the Memphis Area Study, a random-digit-dial telephone survey in Memphis and Shelby County in 1997 ($n = 1,007$: 370 male, 637 female), were included. Overall response rate to the survey was 71%. The Memphis Area Survey used a broad thematic questionnaire to assess the effects of criminal victimization and traumatic stress in male and female respondents who were between 18 and 65 years of age.

Procedure

The survey was approved by the University of Memphis Institutional Review Board on Human Subjects Research. As is standard operating procedure for telephone surveys, verbal consent to participate was provided by respondents at the start of the survey after explanation of the goals and risks involved. Telephone interviews were conducted by trained interviewers. Interview questions covered childhood and adult victimization, perceptions of crime, posttraumatic stress, dissociative experiences, substance use and suicide attempts. We focus here on women's responses to questionnaire items relating to IPV. IPV, defined as beatings, assaults, or attacks by an intimate partner, was screened for with the question: "Did your partner ever beat up or attack you?" A partner was defined as a current or former spouse, boyfriend, or live-in partner. Follow-up questions included items on the number of beatings, age at first beating, and age at most recent beating. Female respondents who responded positively to the question "Are you still troubled a lot by the abuse you experienced from your partner?" were also screened for current PTSD symptoms using a symptom checklist (comprising DSM-IV criteria) (American Psychiatric Association [APA], 1994). The Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) was used to screen all women for child abuse and neglect. This 28-item inventory has five scales (emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect) with multiple items used to capture each trauma type. The Alcohol Use Disorders and Identification Test [AUDIT], a 10-item questionnaire, was used to screen for hazardous alcohol intake (Saunders, Asland, Amundsen, & Grant, 1993). See Scher, Stein, Asmundson, McCreary, & Forde (2001) for a more detailed description of study methodology.

Statistical Analysis

Data were analyzed using SPSS 10.0 for Windows. Frequencies and means were computed for demographic and abuse characteristics, and abused and nonabused groups were compared using Student t tests and χ^2 analyses. Both simultaneous and stepwise logistic regression analyses were conducted to take into account collinearity among the predictor variables that could cause problems when trying to draw inferences about their relative contribution. In the simultaneous method, all predictor variables were entered simultaneously to look at the relative contribution of each predictor variable (marital status, educational level, alcohol use, type of childhood trauma) on IPV. In the stepwise analysis, each of the predictor variables was entered in sequence and its value assessed. If adding the variable contributed to the model, it was retained, and all other variables were retested to see if they still contributed. Variables that did not contribute significantly were removed. In the stepwise model, marital status, low education, severity of childhood trauma, and previous alcohol abuse were examined as predictors of IPV.

RESULTS

Demographic Characteristics

Six hundred thirty-seven women participated. This constituted 63% of all 1,007 participants in the Memphis Area Study (male and female). The racial composition of the sample (52.7% White, 45.9% African American) was representative of Memphis and Shelby county. Table 1 compares the demographic characteristics of IPV+ (abused) and IPV- (nonabused) women. The majority of IPV+ women were White, married, at least high school educated, and employed. Of note, IPV+ women were more likely than IPV- women to be divorced (24% vs. 9%, $\chi^2 = 18.9$, $df = 1$, $p < .001$) and to have less than 13 years education (46% vs. 35%, $\chi^2 = 4.3$, $df = 1$, $p < .05$).

TABLE 1. Demographic Characteristics of IPV+ and IPV- Women

Demographic Variables	IPV+ Women (<i>n</i> = 102)	IPV- Women (<i>n</i> = 517)	IPV+ vs. IPV-
Age in years (mean \pm <i>SD</i>)	37.9 \pm 10.4	40.3 \pm 14.6	<i>ns</i>
Marital status			
Married/common-law	44.4%	54.4%	<i>ns</i> (married/common law vs. single/divorced/widowed)
Single	20.2%	27.6%	
Divorced	24.2%	9.0%	
Separated	7.1%	3.7%	
Widowed	4.1%	5.3%	
Ethnicity			
Hispanic/Asian	2.0%	1.6%	<i>ns</i>
African American	44.6%	45.8%	(White vs. non-White)
White	53.4%	52.6%	
Education			
1–4 years	1.0%	—	<i>p</i> = .039 (< 13 years education vs. \geq 13 years)
5–8 years	4.9%	1.2%	
Some high school	13.7%	8.9%	
Technical/trade school	5.9%	6.1%	
Completed high school	26.5%	23.7%	
1–3 years college	28.4%	27.2%	
Completed college	14.7%	21.4%	
Advanced degree	4.9%	11.5%	
Employment status			
Unemployed	6.9%	5.2%	<i>ns</i>
Full-time employment	59.8%	56.0%	(employed vs. unemployed)
Part-time employment ^a	22.5%	14.9%	
Retired	3.9%	11.6%	
Residence			
Owned	63.4%	69.6%	<i>ns</i>
Rented	36.6%	30.4%	(rent vs. owned)

^aIncludes women employed full-time and part-time.

Abuse Characteristics

Sixteen percent of women ($n = 102$) endorsed having been attacked or beaten by a partner (defined as boyfriend or spouse) at some time in their lives. The weighted rate for the population was 16.2%. The nonresponse rate to this question was 3.0% ($n = 18$). Seventeen percent of women reported a single assault, while 75% reported multiple assaults (nonresponse rate = 8%). On further inquiry, 78.9% reported 1 to 40 beatings by an intimate partner in their lifetime, and 13.2% reported more than 40 beatings (nonresponse rate = 7.9%). The mean age of first battering was 21.8 years ($SD = 6.1$ years). The mean age of most recent battering was 27.5 years ($SD = 7.7$ years). The mean number of reported batterings was 22.6 ($SD = 43.9$, range 1 to 300). Four percent of abused women ($n = 27$) reported that they were currently "troubled" by their experiences. There were no significant ethnic differences between IPV+ and IPV- women.

Relationship of Abuse to Childhood Trauma

Overall, 4% of women ($n = 41$) reported an incident of sexual molestation in childhood or adolescence. The majority of these women (80%) had been sexually assaulted on two or more occasions. Table 2 compares CTQ scores for IPV+ and IPV- women. IPV+ women endorsed more severe childhood trauma than IPV- women on all types of maltreatment. Twenty-five percent of IPV+ women endorsed at least one incident of sexual molestation prior to age 18 (defined as unwanted sexual contact by force, pressure, or threat to harm) compared with 5% of IPV- women ($\chi^2 = 44.9$, $p < .001$). In addition, IPV+ women with a diagnosis of PTSD had significantly higher mean CTQ total scores than IPV+ women without a PTSD diagnosis (54.8 ± 25.8 vs. 32.3 ± 8.8 , $t = -3.35$, $df = 23$, $p < .004$); women with subthreshold PTSD had intermediate scores (47.4 ± 22.4 vs. 30.4 ± 7.8 for women without subthreshold symptoms, $t = -2.88$, $df = 25$, $p < .009$).

Suicide Attempts

Twenty-three percent of IPV+ women reported a suicide attempt at some time in their lives compared with 3% of IPV- women ($p < .0001$, OR = 4.07 [CI = 2.84-5.83]). The mean age of first attempted suicide was 22.5 ± 8.7 years. Among IPV+ women, there was no significant association between a lifetime suicide attempt and a full/subthreshold PTSD diagnosis ($p = 0.42$, OR [full PTSD] = 1.68 [CI = .33-8.49]; $p = 0.48$, OR [subthreshold PTSD] = 1.26 [CI = .37-4.29]).

TABLE 2. Childhood Trauma in Women With and Without IPV

CTQ Mean Scores and Standard Deviations	IPV+ women ($n = 102$)	IPV- women ($n = 516$)	p
Emotional abuse	8.8 ± 4.9	6.6 ± 3.3	< .001
Emotional neglect	8.8 ± 5.3	6.5 ± 3.1	< .001
Physical abuse	8.2 ± 3.7	6.2 ± 2.2	< .001
Physical neglect	7.2 ± 3.7	5.8 ± 1.7	< .001
Sexual abuse	7.3 ± 4.6	5.5 ± 1.9	< .001

Alcohol and Drug Use

We used a cutoff score of 8 on the AUDIT (Conigrave, Hall, & Saunders, 1995) to discriminate women with hazardous drinking. Ten percent of IPV+ women were characterized with harmful drinking compared with 6% of IPV- women. These differences were not statistically significant ($p < .20$). However, 24% of IPV+ women reported regular consumption of more than 12 alcoholic drinks per week at some time in their lives (an indicator of probable previous alcohol abuse) (Sareen et al., 2001) compared with 7% of IPV- women (Fisher's exact test [FET], $p < .001$, OR = 3.2). Seventeen percent of IPV+ women reported ever using cocaine versus 3% of IPV- women ($\chi^2 = 34.8$, $df = 2$, $p < .001$), while 9% reported ever using methamphetamines versus 0.3% of IPV- women ($\chi^2 = 34.7$, $df = 1$, $p < .001$).

PTSD Symptoms

The rate of current DSM-IV-diagnosed PTSD (APA, 1994) in women still troubled by the abuse was 5.9%. The rate of subthreshold/partial PTSD (defined as having at least one symptom in each DSM-IV criterion category) in women who were still troubled was 11.8%. Table 3 shows the frequency of PTSD symptoms among women still troubled by their experiences. The most frequently reported symptoms were recurrent distressing thoughts of the abuse (58%), psychological distress when reminded of the abuse (55%), being watchful or on guard (52%), and feeling jumpy or easily startled (41%). IPV+ women with PTSD had significantly higher levels of avoidance symptoms than abused women without PTSD (4.0 ± 1.1 in PTSD+ group vs. 1.6 ± 1.9 in PTSD- group, $t = -2.89$, $df = 20$, $p = .002$); however,

TABLE 3. Frequency of PTSD Symptoms in Women "Still Troubled" by IPV Experience(s)

DSM-IV Diagnostic Criteria for PTSD	Prevalence ($n = 27$)
Reexperiencing of the abuse	
Repeated, disturbing memories, thoughts, images of abuse	58%
Repeated, disturbing dreams	23%
Flashbacks	26%
Upset by reminders of abuse	55%
Physical reactions when reminded of abuse	36%
Persistent avoidance and numbing	
Avoiding thinking or talking about abuse	39%
Avoiding activities or situations	36%
Trouble remembering important aspects of abuse	23%
Loss of interest in activities	19%
Feeling distant or cut off from others	33%
Feeling emotionally numb	19%
Feeling as though future will somehow be cut short	30%
Persistent symptoms of increased arousal	
Trouble falling or staying asleep	30%
Feeling irritable or having angry outbursts	33%
Having difficulty concentrating	37%
Being "superalert," watchful, or on guard	52%
Feeling jumpy or easily startled	41%

no specific differences were observed between the groups in the level of intrusive and hyperarousal symptoms. The number of beatings was significantly correlated with intrusive symptoms ($r = .537, p = .006$) and hyperarousal symptoms ($r = .535, p = .012$), in particular trouble falling/staying asleep ($r = .497, p = .026$) and irritability/aggression ($r = .553, p = .012$). There was no correlation between number of beatings and the level of avoidance symptoms ($r = .270, p = .237$).

Predictors of IPV

We used a logistic regression model predicting IPV from marital status, education (< 13 years or ≥ 13 years), childhood abuse, and alcohol consumption. For the purpose of the regression, CTQ subscale scores were defined dichotomously in categories of "minimal/low" (≤ 7 for sexual abuse, ≤ 9 for physical abuse and physical neglect, ≤ 12 for emotional abuse, and ≤ 14 for emotional neglect) and "moderate/high" (≥ 8 for sexual abuse, ≥ 10 for physical abuse and physical neglect, ≥ 13 for emotional abuse, and ≥ 15 for emotional neglect) (Bernstein & Fink, 1998). In the simultaneous regression model, low educational attainment, childhood sexual abuse, childhood emotional abuse, and alcohol abuse significantly predicted IPV. The resulting stepwise model showed that childhood sexual abuse ($p < .009$, OR = 2.94, 95% CI = 1.33-6.52), childhood emotional abuse ($p < 0.008$, OR = 2.96, CI = 1.35-6.49) and low educational attainment ($p < .001$, OR = 3.79, 95% CI = 1.86-7.71) were the only significant statistical predictors of IPV. Other forms of childhood abuse and alcohol abuse were excluded from the model as they did not contribute significantly.

DISCUSSION

The lifetime prevalence of IPV in this sample (16%) is low compared with estimates obtained in other studies; the National Violence Against Women Survey conducted by Tjaden and Thoennes (2000) found that 28.9% of 6,790 women had experienced physical, sexual, or psychological IPV during their lifetime. This may, to some extent, be explained by the way in which IPV was operationalized in the present survey to exclude threatened physical violence, actual/threatened sexual violence, and psychological/emotional abuse. In the above-named study by Tjaden & Thoennes, when physical IPV alone was considered, the lifetime prevalence was 13.3% (Coker et al., 2002). Prevalence rates are known to vary considerably depending on the definition of IPV, the sampling method, and the population sampled (Watts & Zimmerman, 2002). For example, a population-based, random-digit-dialed telephone survey found that approximately 25% of women had experienced some type of IPV in their lifetime (MMWR, 2000), while a self-administered questionnaire survey in a primary care sample of women ($n = 1,207$) documented a 41% lifetime prevalence of physical violence from a partner or former partner and a 12-month prevalence of 17% (Richardson et al., 2002). However, lower rates of physical partner abuse have been documented in other studies, namely, a face-to-face interview study of 1635 couples across all 48 states found the rate of lifetime male-to-female partner violence in the range of 5 to 13% (Schafer, Caetano, & Clark, 1998).

Women with IPV reported more severe childhood maltreatment experiences and were more likely to meet PTSD criteria than women without IPV. IPV was predicted by the severity of sexual abuse in childhood. This is consistent with previous studies that have demonstrated an increased risk of IPV and mental health difficulties in women who have

experienced abuse in childhood (Coid et al., 2001; Maker, Kimmelmeier, & Peterson, 2001). A study of battered women ($n = 87$) (Astin, Ogland-Hand, Coleman, & Foy, 1995) found that women with PTSD were significantly more likely to have experienced self-reported child sexual abuse than women without PTSD. In fact, in the aforementioned study, exposure to battering and childhood sexual abuse predicted 37% of the variance in overall PTSD intensity levels.

Several studies have documented ethnicity, low income, divorce, and separation as risk factors for IPV (Coid et al., 2001; Cunradi, Caetano, & Schafer, 2000). The National Comorbidity Survey (Kessler, Molnar, Feurer, & Appelbaum, 2001) found that severe physical violence was inversely related to education, age, and family income, and was significantly more likely to be present in Black and Hispanic couples than in non-Hispanic White couples. In the assessment of risk factors for IPV, several studies have confirmed an association of IPV, in particular physical abuse, with low educational attainment (Kramer et al., 2004; Marais et al., 1999; Vogel & Marshall, 2001). This is consistent with our findings: lesser educated women (< 13 years of education) were at higher risk of IPV. Nevertheless, the relationship between IPV and educational status appears to be complex, with some data suggesting that women at the lowest and highest educational rungs are the most protected (Jewkes, 2002; Straus, Gelles, & Steinmetz, 1980).

The rate of current PTSD in the present study is expectedly lower than rates obtained in studies of female victims who are resident in shelters (prevalence range: 33% to 84%) (Astin, Lawrence & Foy, 1993; Astin et al., 1995; Kemp et al., 1995). Astin and coworkers (1993) reported a 58% prevalence in battered women, compared with 19% in nonbattered maritally distressed women. Although only 6% of abused women in our sample fulfilled criteria for PTSD, approximately 12% met criteria for partial PTSD. In line with these findings, rates of partial PTSD in community samples have been shown to far exceed rates of full PTSD. For example, a recent survey found the rate of partial PTSD was twofold that of full PTSD (Marshall et al., 2001). As with PTSD, subthreshold symptoms tended to be associated with significant levels of occupational and social impairment (Marshall et al.; Stein, Walker, Hazen, & Forde, 1997). A significant association between the frequency of beatings and a full or partial PTSD diagnosis was not found in the present study. The frequency of beatings did, however, correlate with intrusive and hyperarousal symptoms, but not with avoidance or numbing symptoms.

The lack of a relationship between ethnicity and abuse, and ethnicity and PTSD in this study is consistent with findings of Vogel and Marshall (2001). No ethnic influence on the rate or severity of PTSD was found in their community sample of abused women after controlling for socioeconomic status (SES). In contrast, Sorenson, Upchurch, and Shen (1996), after controlling for SES, found the highest rate of PTSD among Black women who endorsed abuse, a lower rate in Whites, but the lowest rate among Hispanics. Other studies have also documented higher rates of abuse in African American and Hispanic women than in Whites after controlling for the effects of sociodemographic factors (Caetano, Cunradi, Clark, & Schafer, 2000; Cunradi et al., 2000). Recently, Kramer and colleagues (2004), in their report on the prevalence of IPV and associated health problems in women using emergency departments and primary health care clinics, found that non-White women as a group had similar rates of abuse to White women with the exception of higher rates of past-year physical abuse (which was higher in non-White women).

IPV was a risk factor for suicide attempts but PTSD was not. In a nationally representative sample of 5,238 adults, victims of partner violence had a significantly higher risk of suicidal ideation and behavior (OR = 7.7, 95% CI = 2.7-22.5) than victims who were not injured or who were assaulted by a stranger (Simon, Anderson, Thompson, Crosby, & Sacks,

2002). A study by Kaslow and colleagues (2000) comparing partner abuse in African American women suicide attempters and nonattempters revealed higher rates of physical and nonphysical partner violence among women attempters than their demographically similar nonsuicidal counterparts. Results also showed that nonphysical partner abuse accounted for unique variance in the prediction of suicide attempt status beyond that attributable to childhood maltreatment. In contrast, Thompson and coworkers (2002) found significantly higher levels of both physical partner abuse and nonphysical abuse (as well as PTSD) in suicide attempters compared with nonattempters.

Although the nonresponse rate was comparable with other telephone survey prevalence studies (McNutt & Lee, 2000), the likelihood of response bias introduced by unreliable/inaccurate reporting of IPV, or reluctance to divulge exposure, cannot be excluded. Secondly, the use of a single screening question for the presence of IPV was admittedly not ideal. In addition to not detecting coexisting sexual/emotional abuse, the screening question was biased toward more severe forms of physical abuse. For example, some respondents may not have endorsed slapping by an intimate partner if they did not consider this to constitute a "beating." It is, therefore, conceivable that rates of IPV (alcohol abuse and attempted suicide) reported here represent a lower-bound estimate. There is also some evidence to suggest that physical abuse combined with sexual abuse (vs. physical abuse alone) may increase the risk of attempted suicide and alcohol misuse (Wingwood, DiClemente, & Raj, 2000). The use of a single screening item does not represent a standard approach for IPV assessment, where accepted screening instruments such as the Conflict Tactics Scale (which uses multiple violence-specific questions) are more commonly used (Newton, Connelly, & Landsverk, 2001). However, short screening measures like the Partner Violence Screen (PVS) (Feldhaus et al., 1997), consisting of one question to assess physical violence and two to assess perceived safety, have demonstrated utility in detecting IPV. For example, the physical violence question alone on the PVS has been shown to detect abuse almost as well as the three question combination (Sisley, Jacobi, Poole, Campbell, & Esposito, 1999).

Thirdly, the survey focused inquiry on acts of physical abuse only and excluded inquiry of sexual and emotional trauma, which often characterize the experience of women (Vitanza, Vogel, & Marshall, 1995). Emotional abuse may overlap heavily with physical and sexual abuse (Kramer et al., 2004) and has been found to be as strongly associated as physical IPV with the majority of physical and mental health outcomes (Coker et al., 2000). Additionally, there is a growing body of literature to suggest the importance of extending screening to encompass all forms of IPV (physical, sexual, and emotional) (Coker et al., 2000, 2002).

A fourth limitation concerns the assessment of PTSD symptoms by lay interviewers rather than trained clinicians, which may, to some extent, have affected the reliability and validity of the diagnosis. Fifthly, we did not gauge information on the time lapsed since the last battering. Because time since trauma may affect psychological outcomes, this could have contributed, to some extent, to our findings. Finally, as this was a cross-sectional study, we are not able to comment on the causal relationships between IPV, suicidality, and substance misuse.

In conclusion, this study extends previous research on the mental health characteristics of community-based women who endorse IPV. These data show that women with IPV are more likely to have PTSD, drunk heavily, attempted suicide, and suffered childhood trauma. More importantly, these associations are not all independently predictive of IPV. Only lower educational status and childhood abuse independently predicted the presence of IPV in the sample. Nonetheless, these findings underscore the importance of identifying women who might be at risk. Despite the many barriers that exist to the timely identification of this group

of women, it is encouraging to know that recent work suggests that the vast majority of women in the community would prefer to be routinely screened and questioned for the presence of IPV by their primary care practitioners (Caralis & Musialowski, 1997; Richardson et al., 2002). This observation illustrates the opportunity for caregivers to inquire about and detect IPV and, if appropriate, initiate interventions that may limit the detrimental impact on patients.

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