



PSYCHOLOGICAL AND PHYSICAL DISTRESS OF SHELTERED BATTERED WOMEN

Janice Humphreys, PhD, RN, and Kathryn Lee, PhD, FAAN

Department of Family Health Care Nursing, School of Nursing,
University of California, San Francisco, California, USA

Thomas Neylan, MD, and Charles Marmar, MD

Department of Psychiatry, School of Medicine, University of California,
San Francisco, California, USA

We explored the physical and psychological distress of sheltered battered women. A convenience sample of 50 ethnically diverse women was obtained from women who had resided in two shelters for at least 21 days. Participants had experienced multiple traumatic events (8.1 ± 4.6); however, only 19 (38.8%) of the participants were diagnosed with posttraumatic stress disorder (PTSD). When we analyzed biopsychosocial variables, we saw beneficial effects of support (financial, social, spiritual). These findings reinforce the need to enhance the resources of battered women, to help them identify existing opportunities, and to fortify self-caring strategies that give them strength.

Battering of women is defined as deliberate and repeated physical aggression or sexual assault inflicted on a woman by her partner with whom she has or has had an intimate relationship (Campbell, 1989). Estimates

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Address correspondence to Janice Humphreys, PhD, RN, Assistant Professor, Department of Family Health Care Nursing, Box 0606, University of California, San Francisco, San Francisco, CA 94143-0606, USA. E-mail: janice.humphreys@nursing.ucsf.edu

are that 95% to 99% of all battering is committed by males against females (Campbell & Fishwick, 1993). The prevalence of battering is difficult to determine. Most authorities estimate that from 20% to 40% of all women have suffered abuse by their partners (Gin, Rucker, Frayne, Cygan, & Hubbell, 1991; Shalala, 1994). Approximately 1 in every 10 women encountered in health care settings who are in intimate heterosexual relationships is a victim of abuse by her male partner (Sampsel, 1991).

Many women suffer both immediate and long-term physical and psychological distress as a result of the abuse. Battering of women has been associated with consequences ranging from bruising and lacerations to fatalities (Emergency Preparedness and Injury Control, 1995). Forty percent to 60% of battered women are abused during pregnancy and 8% of pregnant battered women experience obstetrical complications as a direct result of their abuse (Fagan, Stewart, & Hansen, 1983). Chronic pain, physical injuries, eating disturbances, anxiety, low self-esteem (Campbell, 1989), depression (Plichta & Weisman, 1995), listlessness, fatigue, sleep disturbances (Humphreys, Lee, Neylan, & Marmar, 1999), and memory loss have been reported as responses to abuse.

Posttraumatic stress disorder (PTSD) has been suggested as a possible model for the symptoms humans experience in response to traumatic events such as battering. According to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (*DSM-IV*; American Psychiatric Association, 1994), characteristic symptoms of PTSD include: (1) persistent reexperiencing of the traumatic event, (2) persistent avoidance of associated stimuli, and (3) increased arousal. For a diagnosis of PTSD, symptoms must be present for more than a month and must cause difficulty in the person's ability to function. The severity of symptoms can vary over time. Severity, duration, and proximity of an individual's exposure to the traumatic event are believed to be the most important factors in the development of PTSD (Astin, Ogland-Hand, Coleman, & Foy, 1995; Houskamp & Foy, 1991; Saunders, 1994; Silva, McFarlane, Soeken, Parker, & Reel, 1997).

Research has addressed PTSD in women veterans, survivors of incest (Goodwin, 1985), and rape victims (Hartman & Burgess, 1988), but only six studies have addressed PTSD in battered women (Astin et al., 1995; Silva et al., 1997). Sample sizes have varied from 26 (Houskamp & Foy, 1991) to 192 (Saunders, 1994). The incidence of PTSD in three of the studies ranged from 33% (Astin, Lawrence, & Foy, 1993) to 60% (Saunders, 1994). One study (Kemp, Rawling, & Green, 1991) reported that 84% of their study sample demonstrated symptoms of PTSD. However, data collection occurred within the first 3 days after a woman's arrival

in the battered women's shelter and diagnosis may have reflected the temporary crisis of flight rather than an accurate assessment of PTSD.

These initial reports on battered women indicate that they experience a variety of symptoms, many consistent with PTSD. Yet while PTSD provides a useful framework for understanding the psychological trauma *some* women experience by living with repeated violence under chaotic and uncertain conditions, such a narrow view of women's responses to battering may at best identify women in the most severe distress and at worst unnecessarily force another unwanted and inappropriate label on already stigmatized women. A broader approach may be needed to explain the symptom experience of sheltered battered women. For example, although much has been written about the psychological consequences of battering, little is known about characteristics that may mediate battered women's responses to traumatic events. Astin, Lawrence, and Foy (1993) noted that positive factors accounted for more of the variance in posttrauma distress than did negative factors. Also, beginning research suggests that some battered women find their spiritual beliefs to be a source of support (Astin et al., 1993; Humphreys, 1995, 2000). Battered women's friend and family resources may also affect their symptom experience. Women's responses to battering also are influenced by education, employment (Strube & Barbour, 1983), financial (Hofeller, 1982; Stacey & Shupe, 1983), and community resources (Sullivan, Basta, Tan, & Davidson, 1992). Thus, sheltered battered women's experience appears to occur at the intersection between the woman's biopsychosocial characteristics and her trauma history. The consequent physical and psychological distress may be compounded by the situational characteristics of the woman's environment (UCSF School of Nursing Symptom Management Faculty Group, 1994). To explore the effects of these multiple factors and determine the adequacy of PTSD in explaining these women's symptoms, we examined the physical and psychological distress of sheltered battered women in the context of their trauma history, environment, and personal characteristics.

METHOD

Sample

A convenience sample of battered women in the San Francisco Bay Area was obtained from those residing in two battered women's shelters, one urban and one suburban. To minimize findings of psychological distress because of the immediate crisis of moving to a shelter, participants were required to have resided in the battered women's shelter at least

21 days at the time they began the study. Permission was obtained from shelter directors for a flyer announcing the study to be read by shelter staff at regular weekly meetings and posted in common areas. Eligible residents were asked to sign up at their convenience. At the times specified on the flyer the principal investigator (PI) or a research assistant (RA) contacted interested women, explained the study, and obtained informed consent. All data were collected with consideration for the rights of human subjects.

The PI or RA administered the study instruments and conducted an open-ended interview. Upon completion of the instruments and interview, the women were paid \$25.

Instrumentation

Instruments included the Trauma History Questionnaire (THQ), the Conflict Tactics Scale (CTS), and the Post-Traumatic Stress Disorder module of the Structured Clinical Interview for *DSM-III-R* (SCID)—Non-Patient Version. Participants also were asked to complete the Brief Symptom Inventory (BSI), the Impact of Event Scale—Revised (IES-R), and an investigator-developed demographic sheet.

Sheltered battered women's biopsychosocial characteristics were assessed using a demographic sheet that included age, health status, whether they had children, number of children, pregnancy status, resources (spiritual, family, and financial), ethnicity, educational preparation, employment status, and shelter situation. The latter included living arrangements in the shelter, accompanying children (number of people in the shelter and in the bedroom and their relationship), and length of stay in the shelter in days.

The THQ (Green, 1995), a 24-item self-report inventory, was used to assess participants' exposure to traumatic life events. Participants were asked to report their experience with traumatic life events, including crime, disasters, and sexual and physical experiences. Participants then were asked to indicate the extent and timing of any exposures. The THQ items are scored 0 for the absence of the experience and 1 if present. Points are totaled for an overall score of trauma experience. Test-retest with 25 female college students ranged from .47 at T₁, for "other unwanted sex," to 1.0, for "seen dead bodies," 3 months later at T₂ (Green, personal communication, 1995).

The CTS (Straus & Gelles, 1990) was used to specifically assess battering. The CTS contains a list of 19 different strategies for conflict resolution. Participants were asked to indicate which of the strategies they had experienced in the past year during times of conflict with their intimate partners and how often each strategy was used. A question about

sexual assault and four questions about physical injury and the severity resulting from conflicts were added to the CTS as suggested by Saunders (1994). The CTS has established reliability for measures of physical aggression that ranges from 0.88 to 0.95 in samples of husbands and wives. Construct validity of the CTS is based on a large number of studies using the instrument whose findings are consistent regardless of gender of respondent, consistent with other research, and theoretically meaningful (Straus & Gelles, 1990).

Physical injury severity was scored for both the type of injury (mild, moderate, severe, permanent) (Saunders, 1994) and frequency, such that even mild or moderate injuries that occurred repeatedly were weighted more heavily than injuries that happened less often. This resulted in 7 categories ranging from no injuries of any kind (category 1) to more than 10 mild or moderate injuries and more than 10 severe or permanent injuries (category 7).

Psychological distress was measured by the BSI, the IES-R, and the SCID. The BSI, a shorter, 53-item version of the 90-item Symptom Checklist (Derogatis, 1993; Derogatis & Melisaratos, 1983), assesses the occurrence of and intensity of distress related to a variety of symptoms, including somatic symptoms (for example, pain, nausea, feeling faint/dizzy, poor appetite, feeling hot/cold, weakness, or numbness). Items are rated on 5-point scales from 0 (not at all) to 4 (extremely) for a time frame that includes the "past week and today." The BSI is scored and interpreted in terms of 9 primary symptom dimensions: somatization, obsessive-compulsiveness, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The primary dimensions are combined into three global indices: (a) the Global Severity Index (GSI), a combination of symptoms and intensity of distress; (b) the Positive Symptom Total (PST), which gives the overall sum of symptoms; and (c) the Positive Symptom Distress Index (PSDI), which is an intensity measure adjusted for the number of symptoms present. Reported test-retest reliabilities over a 2-week interval have ranged from .68 to .91. Internal consistency reliability estimates (Cronbach's alphas) for the BSI subscales with a normative community sample of 719 individuals ranged from .71 to .85. Female norms for the instrument were determined with 570 women psychiatric outpatients and 480 women nonpatients (Derogatis, 1993). The BSI had high internal consistency reliability in this sample (Cronbach's alpha coefficient ∇ .97).

The IES-R (Weiss & Marmar, 1997) is a 22-item self-report measure of responses to stressful life events. Participants are asked to rate the degree of intensity of each item on a 5-point scale from "not at all" to "often." Item scores are averaged to obtain 3 scores: intrusion (7 items), avoidance (8 items), and hyperarousal (7 items). These subscales reflect

the *DSM-IV* diagnostic criteria for PTSD. High internal consistencies, as measured by Cronbach's alphas, have been reported for the IES-R: intrusion ∇ .78, avoidance ∇ .80 (Horowitz, Wilner, & Alvarez, 1979), and hyperarousal ∇ .79 (Weiss & Marmar, 1997). The IES also has demonstrated divergent validity in distinguishing between victims of different types of traumatic events (Zilberg, Weiss, & Horowitz, 1982). Cronbach's alpha coefficients for this sample were: intrusion ∇ .82, avoidance ∇ .70, and hyperarousal ∇ .83.

The SCID (Spitzer, Williams, & Gibbon, 1987) is a clinical interview guide. The PTSD module of the SCID surveys all the diagnostic criteria of PTSD and has been used successfully in prior research with battered women (Houskamp & Foy, 1991). This module was administered after the CTS, and subjects were asked to consider the totality of their battering experience rather than one incident. They then were asked to reflect on the time when "things were the worst" (lifetime experience) as well as "how they are now" (current experience).

RESULTS

Fifty-four women met the study criteria and volunteered to be in the study; however, 4 participants were dropped from the analyses because of missing data. The remaining 50 participants were ethnically diverse (2 Native Americans, 3 Asians, 13 African Americans, 6 Hispanics, 18 European Americans, 8 mixed or unknown). Nearly all (87.8%) of the women had children, but only 19 (44.2%) had their children with them in the shelter. Six women were pregnant at the time of their participation. Of those who had children with them in the shelter, the number of children ranged from 1 to 6, with the majority having 1 or 2 children. All accompanying children were lodged in the same room with their mother. The number of people sleeping in the participants' room ranged from 1 to 6 (2.5 ± 1.1). Only 10 (20%) women had single rooms.

Thirty-six (73.5%) participants had completed high school and 7 women were employed at the time of the study. The mean reported annual household income was \$15,641.84. However, when asked how much of the household income they actually had access to, the women reported a mean of \$6,189.77 per year. When asked to identify resources and sources of support, the majority of women cited the shelter and staff (52%), a few family members (20%), and themselves (23%). The total number of resources ranged from 0 to 6, with most participants identifying 2 or 3.

Participants' scores on the THQ ranged from 0 to 19 traumatic events over the course of their lives. The mean (8.1 ± 4.6) and median (8.0) were essentially identical, suggesting a normal distribution across the sample. Battered women reported traumas in which they were seriously

injured (28%) or feared they might be killed or seriously injured (66%), personal attacks by family members or friends both with weapons (34%) and without weapons (40%), and beatings (48%). They also reported muggings (32%), robberies (36%), and home burglaries while away from home (38%). (Review of the subjects' written comments indicated that these latter events were *not* associated with battering or their abusive partners.)

Trauma History

CTS scores were calculated by determining the frequency with which each participant had experienced mild assaults, severe assaults, and severe assaults that included sexual assault. The majority of women had experienced a combination of assaults. Twenty-eight (55%) participants had experienced at least three minor assaults (for example, threw something at me, pushed, grabbed, shoved me, or slapped me). Only 4 (8%) participants did not report severe assaults and 63% of the women reported 4 severe or sexual assaults. The THQ and total CTS score were moderately correlated ($r \nabla .46$, $p \nabla .001$).

Only 9 (18%) participants reported sustaining no injuries of any kind due to battering. Eight (16%) participants reported severe and permanent injuries occurring more than 6 times. Physical injury severity was highly correlated with the CTS ($r \nabla .55$, $p < .001$) but not with the THQ.

Psychological Distress

Sheltered battered women's psychological distress was measured using the BSI. When compared with a normative sample of female nonpatients (Derogatis, 1993) of similar ages (33.1 ± 14.85), the sheltered battered women sample reported significantly more frequent and distressful symptoms on each of the 9 dimensions and 3 global indices (see Table 1). Nine women had scores greater than 2.2 on the 4-point scale. There were no significant correlations between BSI scores and indices of trauma history.

The IES-R (Weiss & Marmar, 1997) is a 22-item self-report measure of human responses to stressful life events. The mean responses for the subscales of the IES-R were intrusion $2.34 \pm .88$, avoidance $2.15 \pm .78$, and hyperarousal $2.18 \pm .99$. The intrusion, avoidance, and hyperarousal subscales were all highly correlated with the BSI (see Table 2). However, only the intrusion subscale was correlated with the THQ ($r \nabla .36$, $p \nabla .01$), and there were no significant correlations between the IES and the CTS or the physical injury severity scale.

The PTSD module of the SCID was used to measure both current and lifetime PTSD. Using this module, at the time of participation, 19 (38.8%)

Table 1. Psychological distress (BSI) scores of sheltered battered women compared with normative female data (one sample *t* test)

Measure	Sheltered battered women (<i>N</i> = 50)		Normative sample* (<i>N</i> = 480)		<i>t</i>	<i>df</i>	<i>p</i>
	Mean	SD	Mean				
Primary dimensions							
Somatization	.99	(0.94)	.35	4.77	49	< .0005	
Obsessive-compulsive	1.78	(1.05)	.48	8.75	49	< .0005	
Interpersonal sensitivity	1.64	(1.16)	.40	7.58	49	< .0005	
Depression	1.57	(1.04)	.36	8.27	49	< .0005	
Anxiety	1.59	(1.07)	.44	7.62	49	< .0005	
Hostility	1.00	(0.95)	.36	4.72	49	< .0005	
Phobic anxiety	1.48	(1.17)	.22	7.56	49	< .0005	
Paranoid ideation	1.33	(0.91)	.35	7.66	49	< .0005	
Psychoticism	1.48	(1.04)	.17	8.92	49	< .0005	
Global indices							
PST	30.50	(16.02)	12.86	8.09	49	< .0005	
PSDI	2.25	(0.74)	1.32	8.84	49	< .0005	
GSI	1.47	(0.88)	.35	9.02	49	< .0005	

*Derogatis, 1993.

of the participants were diagnosed with PTSD. However, 77.6% ($n = 38$) had PTSD at some prior time. There were no significant differences between sheltered battered women who currently had PTSD and those who did not have current PTSD on the THQ, CTS, or Physical Injury Severity Scale (see Table 3). However, sheltered battered women who had PTSD at the time of their participation reported more physical and psychological symptoms and more intense symptoms than did women who did not have PTSD.

Table 2. Intercorrelations between the BSI and IES scores

Scale	1	2	3	4	5	6
1. PST	—	.36**	.85***	.35*	.51***	.50***
2. PSDI		—	.75***	.33*	.35*	.33*
3. GSI			—	.49***	.48***	.58***
4. Intrusion				—	.15	.82***
5. Avoidance					—	.34*
6. Hyperarousal						—

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. Trauma experience and psychological distress in participants with ($n = 19$) and without PTSD ($n = 30$)

Measure	<i>t</i>	<i>p</i>
THQ	-.49	.63
CTS	.59	.56
Physical injury severity scale	.85	.40
BSI		
Positive symptom total	-4.40	< .001
Positive symptom distress	-2.08	.04
Global severity index	-3.95	< .001
IES		
Intrusive subscale	-2.53	.02
Avoidance subscale	-2.56	.01
Hyperarousal subscale	-4.4	< .001

Table 4 shows the correlations between BSI scores and age, number of people in the participant's room, educational preparation, household income, accessible income, and rating of importance of spiritual beliefs. Sheltered battered women who were younger and less educated, had less household and accessible income, and did not value spiritual beliefs experienced more symptoms of distress than did women who were older, more educated, and more financially secure, and who placed a higher value on spiritual beliefs. Women who shared a room with more people and had less household income experienced more intense symptoms than their counterparts who lived with fewer people and had more household income. The GSI also was inversely correlated with household and accessible income as well as the importance of spiritual beliefs.

The number of sources of support and rating of health status also were inversely correlated with measures of distress. Participants who reported more sources of support and help also reported less intense symptoms. Women who reported more intense symptoms (although not more frequent symptoms) also rated their health lower. Finally, sheltered battered women with PTSD reported significantly less household income and accessible income than women who did not have PTSD at the time of their participation.

DISCUSSION

Clearly, sheltered battered women experience significant physical and psychological distress. Women in the current study had dimension and

Table 4. Intercorrelations between selected biopsychosocial and distress variables

Scale	1	2	3	4	5	6	7	8	9
1. PST	—	.36**	.85***	-.30*	.16	-.15	-.41**	-.37*	-.31*
2. PSDI		—	.75***	-.08	-.29*	-.15	-.40**	-.28	-.20
3. GSI			—	-.26	-.01	-.14	-.42**	-.34*	-.35*
4. Age				—	.01	.25	.26	.11	.22
5. Number of people in room					—	.03	.21	-.07	-.05
6. Last grade in school						—	.43**	.53***	.16
7. Household income							—	.73***	.16
9. Accessible income								—	.19
9. Spiritual beliefs									—

* p < .05. ** p < .01. *** p < .001.

global scores on the BSI remarkably similar to those of female psychiatric outpatients studied by Derogatis (1993) and distinctly different from female nonpatients in Derogatis's study! The findings on the phobic anxiety, paranoid ideation, and obsessive-compulsive dimensions require additional consideration within the context of sheltered battered women's experience. The phobic anxiety dimension on the BSI includes questions about whether and to what extent respondents feel afraid on the streets or on buses, avoid certain places, feel uneasy in crowds, or feel afraid or nervous when alone. The paranoid ideation dimension asks respondents if they feel others are to blame for their troubles, cannot trust people, feel they are being watched or not given credit, or that others will take advantage of them. When consideration is given to repeated, often life threatening episodes of violence experienced by battered women and the sudden flight to an emergency shelter for refuge for their children and themselves, it is not surprising that these women report frequent and intense symptoms. Rather than reflecting pathology, affirmative answers to such questions suggests reasonable human responses and survival strategies. As a case in point, one woman began the study but was unable to complete it because she was forced to leave the shelter when her abuser found its secret location and attempted to break in to continue his assaults on her. Anyone under such circumstances would feel the need to be vigilant and apprehensive.

Finally, symptoms in the obsessive-compulsive dimension include trouble remembering things, feeling blocked, repeated checking of tasks, difficulty making decisions, and trouble concentrating or going blank. Although these sheltered battered women reported frequent and intense symptoms in this dimension, the findings may reflect lack of sleep and daytime fatigue rather than a clinical syndrome (Humphreys, Lee, Marmar, & Neylan, 1999).

As expected, the sheltered battered women in this study had experienced repeated physical assaults at the hands of their abusers, often resulting in significant physical injuries. A surprising finding was the lack of a relationship between the frequency/intensity of symptoms, including a diagnosis of PTSD, and the severity/frequency of abuse experienced by the participants. This conflicts with the findings of at least three other studies of battered women's distress (Astin, Lawrence, & Foy, 1993; Houskamp & Foy, 1991; Saunders, 1994) but is consistent with Norman, Getek, and Griffin's (1991) study of posttrauma distress in patients seen in an urban emergency department. The lack of relationship between the severity and frequency of violence and the frequency and intensity of distress in this study is particularly surprising given the multiple measures of both trauma history and psychological and physical distress used. This finding

suggests the need for a broad approach to the assessment of physical and psychological distress in battered women. A diagnosis of PTSD alone is inadequate to explain the full range of women's human responses to violence.

Astin, Lawrence, and Foy (1993) noted that positive factors influence posttrauma distress. In the current study, sheltered battered women who had more support (financial, social, spiritual) and who were older and more educated experienced fewer and less intense symptoms than did their counterparts. The women reported an appallingly low accessible income of \$6,000 per year. Most participants could think of only two or three places where they could go for help when needed and the most often mentioned source was the battered women's shelter. Many women, however, cited spiritual beliefs as an important source of hope, strength, and guidance. Sheltered battered women who reported more intense symptoms also perceived themselves to have poorer health.

These findings suggest a need to consider battered women's biopsychosocial characteristics and living context when looking at stress responses. In addition, the findings suggest a need to enhance the resources of battered women, help them identify existing opportunities, and reinforce self-caring strategies that give them strength. These obvious but often-neglected interventions can offer important assistance under difficult circumstances.

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