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Brief Report

Female Partners' Estimations of Male Veterans' Combat-Related PTSD Severity

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This study investigated concordance between male Vietnam veterans' and their female partners' reports of veterans' posttraumatic stress disorder (PTSD) symptoms. Fifty male Vietnam combat veterans and their partners rated the severity of their own PTSD symptoms. Also, partners rated the severity of veterans' symptoms. Results indicated modest levels of agreement in reports of symptom presence/absence. Partner ratings of veterans' PTSD severity were positively correlated with veteran reports and partners' own self-reported PTSD symptoms. After controlling for veterans' self-reported symptoms, partners' symptoms significantly predicted their estimates of veterans' avoidance symptoms, but not veterans' reexperiencing or hyperarousal symptoms. Theoretical and practical implications of these findings are discussed.

KEY WORDS: PTSD; couples; assessment; concordance; veterans.

The assessment of combat-related posttraumatic stress disorder (PTSD) is a complex and difficult process. Veterans with chronic PTSD often present a complicated clinical picture that requires consideration of comorbid psychological disorders, and impairment of functioning across many psychosocial domains (Litz, Penk, Gerardi, & Keane, 1991; Litz & Weathers, 1994). Therefore, investigators have advocated a multisource, multimethod approach to the assessment of PTSD that includes data obtained from collaterals (Keane, Wolfe, & Taylor, 1987; Litz & Weathers, 1994; Wolf, Keane, Lyons, & Gerardi, 1987).

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One source of information, utilized clinically but not well investigated, are the reports of veterans' intimate partners. Because partners can observe veterans' PTSD symptoms across a range of contexts, their reports may help clarify veteran reports, especially when veterans are reluctant or unable to describe their own symptoms. It is important to understand the extent to which partner and veteran ratings concur, and factors that may influence partner estimates of veterans' PTSD symptoms. In the absence of research in this area, however, clinicians are left with little guidance in understanding discordant data provided by veterans and their partners.

A female partner has two potential sources of information upon which to base her estimations of a veteran's PTSD symptoms: the veteran's verbal report, and her observation of his behavior. Some PTSD symptoms, however, are less apparent than others. For example, avoidance and emotional numbing symptoms (e.g., foreshortened future, diminished interest in activities) have less conspicuous behavioral referents than reexperiencing symptoms (e.g., nightmares, flashbacks) or hyperarousal symptoms (e.g., irritability, hypervigilance). In the case of less observable symptoms, we would expect partners' estimates to be less accurate and to depend more on veterans' verbal disclosures.

It is also likely that partner observations of veterans' symptoms are affected by partners' own psychological status. In particular, female partners' own PTSD symptoms may influence their perception of veterans' symptoms. If this is the case, we would expect this biasing to be particularly evident in partners' ratings of symptoms with less overt manifestations, such as the avoidance and numbing symptoms.

The present study examined the concordance between partner and veteran reports of veterans' PTSD symptoms. Further, we investigated three predictions about variables that might influence partner estimates of veteran's PTSD. First, we predicted that partner ratings would correspond less with veteran reports of the less observable avoidance symptoms, than with veteran reports of the more overt reexperiencing and hyperarousal symptoms. Second, we predicted that partner ratings of veterans' symptoms would be positively associated with their own PTSD symptoms as well as veterans' self-reported symptom severity. Finally, we predicted that partner estimations would be associated with veterans' verbal disclosure.

Method

Participants

Participants were fifty male Vietnam veterans and their female partners. Couples were included if the veteran served in Vietnam between 1964

and 1973, and the couple had been married or co-habitating for at least one year. Couples were excluded if either member was actively psychotic or could not refrain from alcohol or drug use for 24 hr prior to participating. (Demographic characteristics are presented in Table 1.)

Measures

The PTSD Checklist-Military (PCL-M) and PTSD Checklist-Civilian (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) are self-report measures containing 17 items that correspond to DSM-IV criteria for PTSD. The checklists provide a dichotomous PTSD diagnosis and a continuous PTSD severity score. Respondents indicate the extent to which they have been bothered by each symptom during the previous month using a 5-point scale (1 = "Not at all;" 5 = "Extremely"). The checklists appear to be valid measures of PTSD symptomatology (Weathers et al., 1993). Vet-

Table 1. Demographic Characteristics of Veterans and Partners

Characteristic	Male Veterans (n = 50)	Female Partners (n = 50)
Mean age	48.7 (4.9)	44 (5.8)
Mean months in VN	12.4 (5.5)	N/A
Race		
Caucasian	90%	90%
African American	6%	4%
Other	4%	6%
Religion		
Catholic	45%	55%
Protestant	18%	22%
Jewish	4%	10%
Other	15%	9%
None	18%	4%
Education		
H.S. Diploma/GED	13%	31%
Some post-H.S.	57%	37%
B.A./post-college	9%	11%
M.A./post-graduate	21%	21%
Income		
0–10,000	30%	34%
10,000–20,000	14%	20%
20,000–30,000	12%	12%
30,000–40,000	14%	16%
>40,000	30%	18%

erans' responded to the PCL-M, while female partners' completed the PCL-C. In both cases, items with ratings of 3 (moderate) or greater were included as a symptom toward a PTSD diagnosis.

Female partners rated veterans' PTSD symptoms using the Partner PTSD Checklist (PCL-P), a 17-item questionnaire developed for the present study. Items on the PCL-P are nearly identical to the PCL-M, with minor wording modifications that ask partners to rate the extent to which veterans were bothered by each symptom during the previous month. In this study, the PCL-P demonstrated excellent internal consistency (alphas =.96, .89, .89, .86 for total score, reexperiencing, avoidance, and hyperarousal, respectively). Again, a score of 3 or greater was used to determine symptom presence.

The PTSD Disclosure Checklist (PDC), developed for the present study, includes the same 17 items contained in the PCL-M. Veterans indicated on the PDC how often they told their partner about their PTSD symptoms using a 5-point scale (1 = "Never;" 5 = "Very Often"). Each item also included a "not applicable" response option for symptoms that were not present. Disclosure scores for total PTSD, reexperiencing, avoidance, and hyperarousal were calculated as the mean of the applicable responses on the PDC.

The Traumatic Stress Survey (TSS) is a 23 item self-report questionnaire developed by the second author to assess a range of potentially traumatic events (e.g., disasters, physical/sexual abuse, combat) across the lifespan. Partners indicated whether they experienced each event by listing their age(s) during which an event occurred.

Procedure

Potential participants were screened by telephone, and appropriate couples were contacted by a masters- or doctoral-level researcher who described the study and scheduled an appointment. After signing informed consent forms, members of the couple were directed to separate rooms where they completed several questionnaires, including those described above. The experimenter remained available to answer any comprehension questions.

Results

Based on PCL responses, 52% (n = 26) of the veterans and 28% (n = 14) of their partners met criteria for PTSD. All the women who met PTSD criteria reported experiencing at least one potentially traumatic

event, and 57% reported multiple events. Veterans with PTSD were more likely than those without PTSD to have partners with PTSD, χ^2 (1, 50) = 8.8, $p < .01$.

Concordance Between Partner and Veteran Ratings

Kappa coefficients (Cohen, 1960) and percentage agreement were calculated for the presence or absence of: (a) sufficient symptoms to meet full PTSD criteria, (b) the required number of reexperiencing, avoidance and hyperarousal symptoms, and (c) the 17 individual symptoms (see Table 2). Percentage agreement between veterans' and partners' reporting of sufficient symptoms for veterans to meet PTSD criteria was 68%. Similar percent agreement figures were found for symptom clusters: reexperiencing 70%, avoidance 72%, hyperarousal 74%. These figures dropped dramatically when chance agreements were controlled (kappas = .36, .42, .45 and .39 for PTSD diagnosis, reexperiencing, avoidance and hyperarousal, respectively).

Table 2. Agreement Between Veterans' Self-Reported PTSD Symptoms and Partner Ratings of Their Symptoms

PTSD Symptom	Kappa	Percent Agreement
PTSD diagnosis	.36	68%
Reexperiencing symptoms	.42	70%
B1 Intrusive memories	.35	67%
B2 Nightmares	.32	67%
B3 Flashbacks	.38	76%
B4 Emotional reactivity	.50	76%
B5 Physiological reactivity	.33	67%
Avoidance symptoms	.45	72%
C1 Avoid. Thought/Feeling	.00	49%
C2 Avoid. of Reminders	.03	57%
C3 Psychogenic Amnesia	.40	72%
C4 Diminished Interest	.38	69%
C5 Interpersonal Detachment	.43	71%
C6 Emotional Numbing	.43	71%
C7 Foreshortened Future	.35	67%
Hyperarousal Symptoms	.39	74%
D1 Sleep disturbance	.43	73%
D2 Aggressive outbursts	.42	71%
D3 Impaired concentration	.49	76%
D4 Hypervigilance	.46	73%
D5 Startle reactions	.18	59%

Kappa coefficients between partner and veteran ratings of individual symptoms largely ranged between .32 and .50, with a mode of .43. Notably, there was little correspondence between partner and veteran reports of veterans' attempts to avoid trauma-related thoughts or feelings (kappa = .00), avoidance of traumatic reminders (kappa = .03), and increased startle reactions (kappa = .18).

Partner PTSD and Her Estimates of Veteran Symptom Severity

Correlation coefficients were computed between veteran and partner continuous scores on the PCL-M and PCL-P. Partner ratings of veterans' PTSD severity were significantly correlated with veterans' self-reported symptoms: reexperiencing, $r(47) = .72, p < .001$, avoidance, $r(49) = .56$, $p < .001$, hyperarousal, $r(49) = .67, p < .001$, overall PTSD, $r(49) = .71$, $p < .001$. Partner ratings of veterans' symptoms were also significantly correlated with the partners' own symptoms: reexperiencing, $r(47) = .29, p < .05$, avoidance, $r(49) = .58, p < .001$, hyperarousal, $r(49) = .44, p < .001$, overall PTSD, $r(49) = .51, p < .001$.

We then regressed partner estimates of veterans' symptom severity (PCL-P) on veteran (PCL-M) and partner (PCL-C) reports of their own PTSD symptoms. Partner ratings of veterans' overall PTSD was significantly predicted by their own PTSD symptoms (beta = .24) and veterans' symptoms (beta = .59). Similar analyses examining each of the subscale scores indicated that partners' estimates of veteran avoidance symptoms were significantly predicted by their own (beta = .42), and veterans' (beta = .38) self-reported avoidance symptoms. In contrast, partner ratings of veterans' reexperiencing and hyperarousal symptoms were predicted by veterans' self-reported symptoms (betas = .71 and .59, respectively), but not the partners' own reexperiencing (beta = .05) or hyperarousal (beta = .19) symptoms.

Veteran Disclosure and Partner Estimates

We correlated veteran PDC and partner PCL-P scores. None of these correlations approached significance, ranging from $r(41) = -.00, p > .90$ (reexperiencing) to $r(46) = .05, p > .70$ (avoidance). Moreover, veterans' PDC scores were largely unrelated to their self-reported symptom severity (correlations ranged from $r(47) = -.03, p > .80$ for overall PTSD to $r(44) = -.19, p > 15$ for reexperiencing).

Discussion

In the present study, partner ratings of veterans' PTSD symptoms were only moderately associated with veteran reports. Further, when chance agreements were controlled, the correspondence between veteran and partner judgments decreased considerably. Moderate agreement was also found when symptom reports were combined to produce estimates of PTSD diagnosis or PTSD symptom clusters. These findings suggest that, when incorporated in an assessment of veterans' PTSD, partner reports should be weighed and critically evaluated in conjunction with other sources of clinical information (Keane et al., 1987; Litz & Weathers, 1994).

Notably, partners seemed largely unaware of veterans' attempts to avoid trauma-related thoughts and reminders. Because avoidance of trauma-related thoughts, by definition, involve internal processes, it is not surprising that partners are not sensitive to these efforts. With regard to avoidance of reminders, typically thought to include observable behaviors, it is possible that partners do not identify these behaviors as being avoidant in nature. Alternatively, partners may be unaware of the link between veterans' avoidant behaviors and combat reminders. In comparison to avoidance symptoms, partners were more accurate in detecting the presence or absence of more observable symptoms such as emotional reactivity to trauma-related stimuli, and hypervigilance.

A third symptom with particularly low concordance rates was exaggerated startle responses. Again, it is possible that veterans' startle reactions are largely unobserved by their partners, as they are of a short duration and may involve primarily internal physiological components. Alternatively, veterans may be less likely to exhibit startle reactions when their partners are present than when veterans are alone, perhaps because partners represent a safety cue. Recent research suggests that startle reactions are potentiated in negatively valenced emotional contexts and inhibited in positively emotional valenced contexts (Lang, 1995; Lang, Bradley, & Cuthbert, 1990). To the extent that partners serve as safety cues, their presence may represent a positive context in which veterans would be less likely to startle.

A second factor that appears to influence partner estimations of veterans' PTSD symptoms is the partners' own PTSD symptoms. Even when controlling for veterans' PTSD symptoms, partners' PTSD severity contributed significantly to their estimates of veterans' avoidance symptoms. Thus, when considering collateral data provided by intimate female partners of Vietnam veterans, it may be important to examine her trauma history and trauma-related symptoms; especially given that many veterans with PTSD in the present study had partners who also met PTSD criteria.

Several limitations to the present study should be noted. Our findings are based on a relatively small sample of volunteer participants. Thus, the extent to which these results may be generalized to the larger population of veterans or other traumatized populations is unclear. Also, reports of PTSD symptoms relied exclusively on self-report measures, and the inclusion of interview-based assessments against which to validate self-reports would strengthen our conclusions. Despite these limitations, the present results raise a number of issues that should be considered when using partner reports to augment the assessment of veterans' PTSD. Future research should examine the accuracy of partners' reports in larger and more diverse trauma populations. Also, the coincidence of PTSD in veterans and partners in the current sample argues for further investigation of how an individual's psychiatric symptoms influence his or her experience of their partner's symptoms.

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