Characterization of Depression in War-Related Posttraumatic Stress Disorder

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Objective: *Many patients with posttraumatic stress disorder (PTSD) have symptoms of depression, but operationalized psychological constructs related to depression have not been used extensively in characterizing affective symptoms of PTSD. The authors' objective is to better characterize the affective component of PTSD.* *Method:* *The subjects were 45 male psychiatric inpatients at a Veterans Administration medical center; 28 met* DSM-III-R *criteria for PTSD and 17 met Research Diagnostic Criteria (RDC) for major depressive disorder. All of the subjects with PTSD were Vietnam veterans. The 21-item Hamilton Rating Scale for Depression was used to assess state measures of symptom severity, and the Depressive Experiences Questionnaire was used to measure dimensions of dependency, self-criticism, and self-efficacy.* *Results:* *The mean total Hamilton scale score of the patients with PTSD was nonsignificantly higher than that of the patients with major depressive disorder; patients with PTSD had higher scores on almost all individual Hamilton symptoms, particularly insomnia, somatic anxiety, and diurnal variation. Patients with PTSD had significantly higher scores on the self-criticism scale but not on the dependency and self-efficacy scales of the Depressive Experiences Questionnaire. The scores of patients with PTSD on the dependency and self-criticism scales were negatively correlated. No significant differences between patients with PTSD with and without concurrent major depressive disorder were observed.* *Conclusions:* *Characterization of such depressive dimensions of PTSD as dependency and self-criticism may have important clinical implications.*

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Many combat veterans with war-related posttraumatic stress disorder (PTSD) report feeling depressed or have depression-related symptoms such as sleep disturbance, social withdrawal, suicidal ideation, decreased appetite, and low self-esteem (1–4). In fact, a substantial proportion of combat veterans with PTSD meet the full *DSM-III* or *DSM-III-R* criteria for dysthymia (5, 6) or major depressive disorder (7, 8).

Despite high rates of depression in PTSD, antidepressants as well as psychotherapeutic approaches targeted at reducing affective distress are not as effective in depressed patients with PTSD as they are in patients who have major depressive disorder without PTSD (5, 6, 9–12), suggesting that the nature of depression in PTSD differs from that in major depressive disorder. Further support for this idea comes from biological studies that have demonstrated marked neuroendocrinological differences between PTSD and major depressive disorder (13–15). It appears, then, that depressive symptoms in PTSD, although frequent, are not simply manifestations of a concurrent major depressive disorder. Rather, the depressive component of PTSD may reflect either secondary, characterologic, or atypical depressions, and as such may require different treatment interventions. For example, various subtypes of depression without PTSD have differential responses to treatment: some are more responsive to medications and others to psychotherapy.

To date, the phenomenology of depression in patients with PTSD has been studied by using primarily descriptive symptom assessment. Operationalized psychological constructs related to depression have not been used extensively in characterizing affective symptoms of PTSD. To better characterize the affective component of PTSD, we assessed not only diagnostic and state measures of depression using the Schedule

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for Affective Disorders and Schizophrenia (SADS) (16) and the Hamilton Rating Scale for Depression (17) but also subjective experiences thought to reflect more enduring dimensions of depression. Specifically, we measured dimensions of dependency (anaclitic), self-criticism (introjective), and self-efficacy using the Depressive Experiences Questionnaire (18).

METHOD

The subjects for the study were consecutively admitted male psychiatric inpatients at a Veterans Administration medical center who met *DSM-III-R* criteria for PTSD and/or Research Diagnostic Criteria (RDC) for major depressive disorder and who provided written informed consent to their participation. All subjects with PTSD were Vietnam veterans. PTSD was assessed by using the Structured Clinical Interview for DSM-III-R (SCID) (19). RDC diagnoses for major depressive disorder were made by using the SADS. Patients with schizophrenia, schizoaffective disorder, organic disorder, anxiety disorder, and antisocial personality disorder were not included in the group with major depressive disorder. Patients with borderline personality disorder (assessed by using clinical ratings based on *DSM-III-R* criteria) were also excluded from the group with major depressive disorder. The final study group consisted of 45 subjects: 28 patients with PTSD and 17 with major depressive disorder.

Patients completed the Depressive Experiences Questionnaire within the first 2 weeks of hospitalization. The Depressive Experiences Questionnaire is a 66-item questionnaire that measures the respondent's subjective feelings about himself and about relationships with others. These feelings are thought to be relevant to depression despite the fact that they are not overt symptoms of depression per se. Three highly stable scales on this questionnaire, dependency, self-criticism, and self-efficacy, have been identified in several independent samples (18, 20). Following completion of the Depressive Experiences Questionnaire, the 21-item Hamilton Rating Scale for Depression was administered by an experienced clinician for the purpose of determining more objective, state depressive symptoms. Diagnostic interviews (the SADS and the SCID) took place within 1 month of this evaluation.

Responses of the patients with PTSD and the patients with major depressive disorder on both the Hamilton scale and the Depressive Experiences Questionnaire were tabulated, and differences in means were analyzed by using Student's t test, two-tailed. The patients with PTSD were also subdivided into those who did or did not meet criteria for a concurrent major depressive disorder; the means of these two groups were compared by using the t test. Relationships between Depressive Experiences Questionnaire scores and Hamilton scale scores were determined by using Pearson's correlation coefficient.

TABLE 1. Scores on the Hamilton Rating Scale for Depression of Patients With PTSD and Patients With Major Depressive Disorder

	Patients With PTSD (N=28)		Patients With Major Depressive Disorder (N=17)		
Hamilton Scale Item	Mean	SD	Mean	SD	t (df=43)
Somatic anxiety	1.83	1.15	0.50	1.00	3.37[a]
Insomnia	4.56	1.08	3.33	2.01	2.37[b]
Insight	1.22	1.00	1.92	0.29	−2.36[b]
Diurnal variation	2.35	1.61	1.00	1.60	2.35[b]
Hypochondriasis	0.78	1.08	0.17	0.39	1.89[b]
Psychic anxiety	2.13	1.01	1.42	1.24	1.83[b]
Libido	0.56	0.94	0.25	0.45	1.09
Depersonalization	0.74	1.21	0.17	0.39	1.58
Guilt	2.09	1.12	1.50	0.90	1.56
Suicide	1.61	1.23	1.00	0.85	1.52
Paranoia	0.91	0.87	0.50	0.67	1.41
Somatic gastrointestinal symptoms	0.65	0.88	0.25	0.62	1.40
Agitation	1.04	1.11	0.58	0.90	1.24
Retardation	0.39	0.65	0.58	0.79	0.76
Functional impairment	2.39	1.16	2.17	1.40	0.51
Weight loss	0.43	0.66	0.33	0.65	0.43
Obsessive-compulsive	0.32	0.57	0.25	0.62	0.32
Depressed mood	2.30	1.29	2.33	1.50	0.06
Total	28.42	9.90	24.33	6.30	1.29

[a]Significant difference between groups ($p<0.05$ after Bonferroni correction applied).
[b]Nonsignificant trend for a difference between groups ($p<0.10$).

RESULTS

Patients with major depressive disorder were significantly older than those with PTSD (47.5±14.0 years versus 40.3±5.6 years, respectively; $t=2.36$, $df=43$, $p<0.03$). However, correlational analysis failed to reveal any relationship between age and Hamilton scale scores or scores on any of the Depressive Experiences Questionnaire scales. The two groups were similar with respect to demographic factors such as race, marital status, and socioeconomic status.

The mean total Hamilton scale score for patients with PTSD was 17% higher than that for the patients with major depressive disorder; this difference was not statistically significant (see table 1). Results of individual item analysis revealed that patients with PTSD had slightly higher scores on almost all individual symptoms, particularly insomnia, somatic anxiety, diurnal variation, and, to a lesser extent, psychic anxiety and hypochondriasis.

Analysis of the three Depressive Experiences Questionnaire scales revealed that patients with PTSD had significantly higher scores on the self-criticism scale than did patients with major depressive disorder ($t=2.24$, $df=43$, $p<0.05$). No significant differences were observed on the dependency ($t=0.34$, $df=43$, n.s.) and self-efficacy ($t=0.54$, $df=43$, n.s.) scales. The three scales also appeared to measure three distinct dimensions; i.e., there were no correlations between scores on these scales when the entire study group was con-

sidered, nor were any significant correlations observed in the patients with major depressive disorder. When patients with PTSD were considered separately, however, scores on the dependency and self-criticism scales were found to be negatively correlated ($r=-0.47$, $df=27$, $p<0.01$).

To determine the extent to which the overall group differences observed were due to the superimposition of a major depressive disorder on PTSD, we subdivided the patients with PTSD into those with (N=15) and those without (N=13) major depressive disorder. The mean total Hamilton score for patients with PTSD and concurrent major depressive disorder was a nonsignificant 27% higher than that of patients with PTSD without concurrent major depressive disorder. However, results of individual item analyses revealed that patients with PTSD and concurrent major depressive disorder had slightly higher scores on most of the individual items. These 15 patients showed nonsignificant trends for higher scores only on suicidality and insight. Importantly, no significant differences between patients with PTSD with and without concurrent major depressive disorder were observed on any of the three Depressive Experiences Questionnaire scales. The scores of the patients with PTSD with and without concurrent major depressive disorder were 0.39 ± 0.82 versus -0.18 ± 1.3, 1.43 ± 0.79 versus 1.39 ± 0.80, and -0.35 ± 1.2 versus -0.46 ± 1.6 on dependency, self-criticism, and self-efficacy scales, respectively.

DISCUSSION

Our results suggest both similarities and differences in the affective component of PTSD compared with major depressive disorder. Patients with PTSD and patients with major depressive disorder were comparable with respect to overall severity of depression, generally in the moderate to severe range, as indicated by similar overall Hamilton scale scores. Both groups showed similar scores on the dependency and self-efficacy scales of the Depressive Experiences Questionnaire. However, differences in specific Hamilton scale items were observed between patients with PTSD and patients with major depressive disorder. Moreover, patients with PTSD had significantly higher scores on the self-criticism scale of the Depressive Experiences Questionnaire.

Patients with PTSD scored significantly higher on the Hamilton item of somatic anxiety and showed nonsignificant trends for higher scores on insomnia, diurnal variation, psychic anxiety, and hypochondriasis. However, higher scores on these specific items may be related to PTSD symptoms rather than measuring the affective component of the disorder per se. For example, it is well-known that severely traumatized individuals frequently complain of marked insomnia, which may be related to the occurrence of nightmares (21, 22). A greater amount of somatic anxiety may be related to the increased arousal symptoms in PTSD. These symptoms and the trend toward significantly higher scores on psychic anxiety are consistent with the *DSM-III-R* classification of PTSD as an anxiety disorder. Additionally, hypochondriacal fixation, although not a specific PTSD symptom, has been found to be related to combat traumatization (23). Nonetheless, it is important to note that all other depressive symptoms that are unrelated to the presence of an anxiety disorder, including depressed mood, were equally endorsed by patients with PTSD and patients with major depressive disorder. Furthermore, when the patients with PTSD were subdivided into those with and those without major depressive disorder, the patients with PTSD alone still demonstrated a level of depression comparable to that of the inpatients with major depressive disorder without PTSD. The fact that patients with PTSD and concurrent major depressive disorder were significantly more suicidal may be important from a clinical perspective.

The Depressive Experiences Questionnaire measures more subjective, enduring dimensions of depression by asking about life experiences rather than symptoms. Specifically, two types of depression are thought to be identifiable with this instrument: an anaclitic, dependent type where the individual feels helpless and weak, fears abandonment, and longs for protection and love; and an introjective or guilty type of depression where the individual is highly self-critical and feels worthless, guilty, and inferior (24).

Patients with PTSD and patients with major depressive disorder were not significantly different on the anaclitic scale in this study. However, both groups of patients had substantially higher scores than those reported by Blatt et al. (18) for depressed hospitalized male psychiatric patients in the same geographic area who were not war veterans. This finding raises the possibility that psychiatric inpatients who are war veterans are more dependent in general than psychiatric patients who are not war veterans. In contrast, the patients with PTSD had significantly higher scores on the self-criticism scale than did hospitalized patients who were not war veterans (18). It appears that for many combat veterans with PTSD an overwhelming sense of self-criticism and guilt may play a central role in their depression.

The guilt experienced by patients with PTSD may have many sources related to actions and feelings experienced in response to war trauma (25). The present findings in Vietnam veterans suggest that guilt and self-criticism in patients with PTSD may be even more pervasive and nonspecific, affecting multiple areas of life rather than just those related to their experiences in Vietnam. The introjective scale of the Depressive Experiences Questionnaire, for example, contains items like, "I often find that I don't live up to my own standards and ideals" and, "Often I feel that I have disappointed others." Thus, it may be that after years of feeling guilty about experiences in Vietnam, some veterans with PTSD begin to generalize these feelings to other areas of their lives and even to their view of self.

Interestingly, among the patients with PTSD, there was a significant negative correlation between scores on the dependency scale and scores on the self-criticism scale. This was not the case among the patients with major depressive disorder. Examination of the data revealed that the four patients with the highest scores on the dependency scale had the lowest scores on the self-criticism scale, and two of the four patients with the lowest scores on the dependency scale had the highest scores on the self-criticism scale. This relationship led us to examine informally the clinical characteristics of patients scoring in the extreme ranges. Our clinical impression is that many of the patients with the highest scores on the anaclitic scale are deeply invested in their identities as Vietnam veterans. They tend to dress in Vietnam-related clothing with multiple medals and reminders of the war. Many are strongly committed to their fellow Vietnam veterans and find much support from belonging to a closely knit group. Adherence to the group may have helped to protect against fears of abandonment and satisfy wishes to be cared for and protected. Veterans with low scores on the anaclitic scale, however, seemed less invested in their identities as Vietnam veterans and less attached specifically to groups of other such veterans. It is possible that the more anaclitically predisposed recruit had a greater tendency to incorporate a military identity while in the service. It is also possible that some soldiers experiencing massive trauma become increasingly anaclitic and preoccupied with loss and mechanisms to prevent loss.

It appears that there may be a particularly troubled and depressed subgroup of patients with PTSD who scored relatively high on both dependency and self-criticism scales. These veterans seemed both deeply invested in the identity of Vietnam veterans and markedly distressed by their sense of guilt and self-criticism. As noted by one veteran with high scores on both scales, "I love being with my Vietnam brothers. Without them I don't know where I would be. They are the only ones who hold me up when I'm down." The same patient, however, reported an exacerbation of symptoms such as flashbacks and nightmares whenever he increased his participation in Vietnam veteran groups. As he put it, "It's like I can't win. I really love being with these guys, but it reminds me too much of all the bad stuff, and I start getting the nightmares." Blatt et al. (18) found that nonveteran psychiatric patients with high scores on both dependency and self-criticism scales also had particularly severe forms of depression.

Characterization of depressive dimensions of PTSD such as dependency and self-criticism may have important clinical implications. For the individual who is highly anaclitic and invested in his identity as a Vietnam veteran, requests for treatment in a specialized PTSD program may in fact confirm or solidify this basic identity rather than rid the self of the aftereffects of Vietnam. When this is the case, attempts to rapidly reduce PTSD symptoms may fail. In these cases, it may make more sense to help the individual to channel his identity as a Vietnam veteran in a constructive direction. Highly introjective patients, however, may be more amenable to therapies aimed at removing long-standing war-related preoccupations, memories, and symptoms. On the basis of more precise characterization of subtypes and dimensions of depression in patients with PTSD, it may then be possible to develop more specific psychotherapeutic and psychopharmacological interventions.

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