Posttraumatic Stress Disorder and Comorbidity: Recognizing the Many Faces of PTSD

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Posttraumatic stress disorder (PTSD) commonly occurs with other psychiatric disorders. Data from a recent epidemiologic survey indicate that approximately 80% of individuals with PTSD meet criteria for at least one other psychiatric diagnosis. PTSD is particularly likely to be comorbid with affective disorders, other anxiety disorders, somatization, substance abuse, and dissociative disorders. Comorbidity may affect the presentation and clinical course of PTSD. Because of the relative frequency of traumatic events and the heterogeneity of presentation of PTSD, screening for traumatic events and PTSD should be standard in both psychiatric and primary care practice. Additionally, individuals with PTSD should be screened for psychiatric comorbidity. Accurate assessment of comorbidity may be important in determining optimal psychotherapeutic and pharmacotherapeutic treatment options for individuals with PTSD. *(J Clin Psychiatry 1997;58[suppl 9]:12–15)*

Individuals with posttraumatic stress disorder (PTSD) commonly meet criteria for other psychiatric disorders. A recent epidemiologic survey indicates that approximately 16% of patients with PTSD have one other psychiatric diagnosis, 17% have two other psychiatric diagnoses, and nearly 50% have three or more additional psychiatric diagnoses.[1] These data indicate that for individuals with PTSD, comorbidity with other psychiatric diagnoses is the rule rather than the exception.

The relative frequency of comorbidity in individuals with PTSD has led to the conceptualization that, perhaps, comorbidity in PTSD is a misnomer. Some believe that PTSD and its comorbid conditions should be seen not as separate disorders, but as "complex somatic, cognitive, affective and behavioral effects of psychological trauma."[2] Regardless of the conceptual framework used to understand the complex nature of PTSD, evaluation of patients with PTSD must include assessment of a wide range of psychological as well as somatic symptom areas.

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EPIDEMIOLOGY OF COMORBIDITY

Many studies have focused on the comorbidity of other psychiatric diagnoses in individuals with PTSD. As can be seen in Table 1, it has been consistently noted that individuals with PTSD are more likely than those without PTSD to have substantial psychiatric comorbidity.[1,3,4]

Kessler and colleagues[1] reviewed data from an epidemiologic survey involving face-to-face interviews with 6000 individuals aged 15–54. In this study, multiple psychiatric diagnoses were commonly found in individuals with PTSD. More than two of every five women and almost three of every five men with PTSD had at least three other psychiatric diagnoses. In nearly all groups, the PTSD group had a significantly higher number of psychiatric diagnoses than the group without PTSD ($p = .05$).

Figure 1 illustrates the incidence of affective disorder in persons with and without PTSD. As can be seen, all types of affective disorder were two to three times more likely to occur in those with PTSD than in those without PTSD. In calculating the odds ratio for these figures, Kessler and colleagues[1] found that men with PTSD were six to ten times more likely to have affective disorders than men without PTSD, and women with PTSD were four to five times more likely to have an affective disorder than women without PTSD.

As with affective disorders, persons with PTSD are two to four times more likely to have other anxiety disorders than those without PTSD. Men with PTSD are three to seven times more likely to have another anxiety disorder, and women with PTSD are two to four times more likely to have another anxiety disorder.

Table 1. PTSD and Lifetime Prevalence of Comorbidity

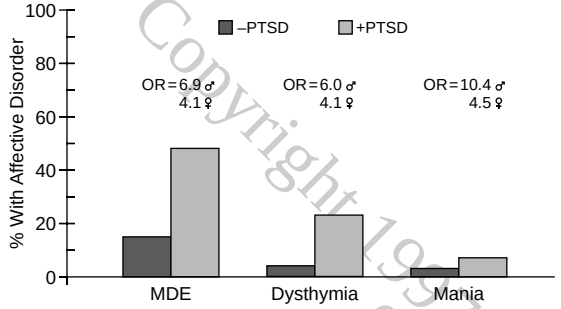
Study	% With Other Disorders	
	With PTSD	Without PTSD
Kessler et al[1]		
Men[a,b]	88.3	54.8
Women[a,b]	79.0	46.2
Kulka et al[3]	98.8	40.6
Breslau et al[4]	82.8	44.3

[a]$p < .05$ by two-tailed test.
[b]Approximate percentages.

Table 2. Prevalence of PTSD in Treatment-Seeking Substance Abusers

Study	Prevalence of PTSD (%)	Comment
Grice et al[5]	36.0	Lifetime or current
Triffleman et al[6]	58.0	Lifetime
	38.0	Current
Recupero et al[7]	25.0	Possible
Dansky et al[8]	56.2	Lifetime
	42.5	Current

Figure 1. Comorbidity of Affective Disorders and PTSD*†



*Data from Kessler et al.[1]
†$p < .05$ by two-tailed test for all three mood disorders. Abbreviations: MDE = major depressive episode, OR = odds ratio.

Drug and alcohol use disorders also commonly occur in persons with PTSD. In the Kessler epidemiologic study, individuals with PTSD were two to three times as likely as those without PTSD to have a substance use disorder.[1] Another perspective on the prevalence of this particular comorbidity comes from surveys of those seeking treatment for substance use disorders, which reveal that between 25% and 58% of these individuals have comorbid PTSD (Table 2).[5–8]

Another common feature of PTSD is dissociation. In the DSM-IV field trial, dissociation was found to be the most frequent symptom of PTSD; it was present in 82% of individuals with current PTSD and 52% of those with lifetime PTSD.[9] Dissociation is more common in victims of childhood abuse than in victims of other types of trauma. Comparisons of dissociative symptoms in individuals with PTSD in the general population with those in individuals with PTSD seeking mental health treatment show no differences in prevalence. This implies that individuals with PTSD are just as likely to seek treatment from medical as from mental health professionals, demonstrating the importance of screening for PTSD in a primary care setting.[9]

In an investigation of the prevalence and comorbidity of dissociative disorder in psychiatric inpatients, 110 patients consecutively admitted to a state psychiatric hospital were evaluated using the Dissociative Experiences Scale. Fifteen percent scored over 25 and met DSM-III criteria for a dissociative disorder. These patients had significantly higher ($p \leq .05$) rates of major depression, PTSD, substance abuse, and borderline personality than did a group of psychiatric inpatients, matched for age and gender, who scored below 5 on the scale. Of the group with dissociative disorders, 90% (9/10) had PTSD according to DSM-III criteria. Chart review revealed that dissociative and related symptoms were largely unrecognized: only 21% of these patients received a diagnosis of PTSD at either admission or discharge.[10]

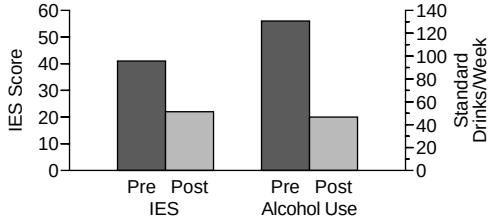
Somatization is also very common in patients with PTSD. In a sample of 99 female psychiatric outpatients with a history of somatic complaints, over 90% of women with Briquet's syndrome (somatization disorder) reported some form of abuse (sexual abuse as a child or as an adult, physical or emotional abuse as a child), and 80% reported sexual abuse as a child or as an adult.[11] In a similar study, Walker et al.[12] found a history of childhood abuse in 18 (82%) of 22 women with chronic pelvic pain, compared with 9 (41%) of 22 randomly selected women without pain ($p < .02$).

The order of onset of PTSD relative to other comorbid conditions is an important issue in further exploring the nature of the relationship between PTSD and other psychiatric diagnoses. Kessler and colleagues[1] analyzed the ages of earliest and most upsetting lifetime trauma and found that PTSD generally preceded the comorbid affective and substance use disorders; in women, PTSD also preceded the onset of conduct disorder. They found, however, that PTSD was less likely than other anxiety disorders to be the primary disorder.[1]

DIAGNOSTIC IMPLICATIONS

Because PTSD can have an extremely heterogeneous presentation and comorbidity with other psychiatric disorders is common, PTSD may be the underlying psychiatric diagnosis in patients with a variety of clinical presentations. Diminished interest, restricted range of affect, sleep difficulties, and poor concentration are all overlapping symptoms of PTSD and depression. Irritability, hypervigilance, and increased startle reflex are symptoms of PTSD that overlap with generalized anxiety disorder. When exposed to reminders of the trauma, individuals with PTSD also have physiologic reactivity that may

Figure 2. Efficacy of Sertraline in Comorbid PTSD and Alcoholism*†



*Data from Brady et al.[23]
†Abbreviation: IES = Impact Event Scale.

present as panic attacks. As previously described, numerous somatic complaints are also seen in persons with PTSD.

Because traumatic events are disturbingly common[13] and PTSD can have such a heterogeneous presentation, it is extremely important to screen for trauma during all general psychiatric evaluations as well as in the primary care setting. It is important to ask specifically about trauma because patients often will not volunteer information about it during an intake assessment. They may feel guilty or embarrassed or find it painful to talk about the event. In the primary care setting, the patient may feel that the trauma has no bearing on the present complaint.

TREATMENT

As explored in two articles in this supplement,[14,15] the treatment of PTSD by both psychotherapeutic and pharmacotherapeutic strategies is an area that is currently receiving much attention. Both approaches show promise; there may be certain symptom constellations and/or other patient characteristics that predict successful treatment and help in selecting treatment modality. Psychiatric comorbidity may be one important factor in specifically tailoring both psychotherapeutic and pharmacotherapeutic treatment because, for many of the comorbid conditions, successful treatments for one disorder may overlap substantially with successful treatments for the comorbid condition.

The treatment of comorbid substance use disorders and PTSD presents a particularly difficult problem. Traditional approaches to the treatment of this particular comorbidity have held that exploration of the trauma will precipitate relapse.[16] This theory, however, has never been tested empirically. In fact, a wealth of anecdotal clinical experience indicates that unresolved trauma-related symptoms may precipitate relapse. Symptoms of hyperarousal such as sleep disturbance, irritability, and difficulty concentrating can worsen as individuals remain abstinent, making it difficult for the clinician to avoid these issues.[17]

Evidence from a preliminary comparison of 30 women in a substance abuse program supports the notion that not addressing trauma in individuals with comorbidity may not be the most successful approach. In a 6-week intensive outpatient program that did not address issues of trauma, there was a significantly higher ($p < .05$) dropout rate in women with PTSD than in those without PTSD.[18] Other investigators have also indicated that PTSD predicts a worse outcome in substance abuse treatment settings, but appropriate treatment of these patients has not been explored.

NEW APPROACHES

One proposed psychotherapy, under development by Edna Foa and me, involves a combined cognitive behavioral psychotherapeutic approach in which the PTSD is treated in conjunction with the substance use disorder. A manual is being developed that integrates Dr. Foa's prolonged exposure techniques[14] with relapse prevention strategies as outlined in the manual used in the National Institute on Alcohol Abuse & Alcoholism's collaborative treatment matching study.[19]

Both disorders are addressed as tolerated by the patient. Initial treatment emphasizes substance abuse issues and teaches relapse prevention techniques to enable patients to manage cravings, urges, and high-risk situations that might occur as they proceed through trauma-related therapy, which begins in the first several weeks of recovery. We plan to compare this with more traditional approaches that do not address trauma. Results should be available within the next several years.

Pharmacotherapeutic strategies represent another approach to the treatment of PTSD. These have been well reviewed elsewhere in this supplement.[15] As noted, the efficacy of serotonin selective reuptake inhibitors (SSRIs) has been demonstrated in the treatment of PTSD.[20] Animal models[21] and some clinical investigations[22] have also shown that SSRI administration modestly decreases alcohol consumption. The absence of abuse potential with SSRIs and their relatively low toxicity, both alone and in combination with drugs of abuse, led us to investigate the efficacy of SSRIs in PTSD and comorbid alcohol dependence.[23]

In a preliminary, open-label, 12-week study, nine patients with comorbid alcohol dependence and PTSD treated with the SSRI sertraline showed significant improvement in all three symptom clusters of PTSD and in Hamilton Rating Scale for Depression scores (both $p < .001$) during the follow-up period.[23] The mean (± standard deviation) dosage of sertraline was 110.4 (± 15.5) mg/day. Days of abstinence increased and the average number of drinks per day decreased significantly during the study period (Figure 2). Six of nine patients completed the 12-week program, and four of the six claimed total abstinence. Sertraline was well tolerated. Although the small sample and nonblinded design limit the conclusions that can be drawn from this study, these results suggest that sertraline may be useful in PTSD complicated by alcohol

abuse. A double-blind, placebo-controlled trial of treatment with SSRIs in this population is under way.

CONCLUSION

PTSD is very common. Its heterogeneous presentation and great variety of symptoms can easily complicate diagnosis, but clinicians should be aware that the vast majority of individuals with PTSD have at least one other lifetime DSM diagnosis. The likelihood of comorbidity with many other major psychiatric disorders is significantly increased in those with lifetime PTSD. Accurate assessment of comorbidity may lead to subtyping of PTSD for optimal psychotherapeutic and pharmacotherapeutic treatment.

Drug name: sertraline (Zoloft).

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