

# A Primary Care Perspective of Posttraumatic Stress Disorder for the Department of Veterans Affairs

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Posttraumatic stress disorder (PTSD) is a major mental disorder associated with significant morbidity, psychosocial impairment, and disability. The diagnosis of PTSD can be missed in a primary care setting, as patients frequently present with somatic complaints or depression and are often reluctant to discuss their traumatic experiences. As recent studies of veterans returning from the Gulf War and the Iraqi War suggest high rates of PTSD, the U.S. Department of Veterans Affairs (VA) Hospitals are gearing up to face this challenge. It is important to screen these veterans for symptoms of PTSD and make an appropriate referral if required. In this article, we attempt to review PTSD with a special focus on the VA population. In addition to discussing the epidemiology, diagnosis, and treatment options for PTSD, we also suggest screening questions for both combat-related and military sexual trauma-related PTSD.

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**P**osttraumatic stress disorder (PTSD) is a common and often severe mental disorder, with symptoms manifesting after exposure to a traumatic event. Initially in this article, we briefly review the history, definition, and causes of PTSD for the benefit of our primary care colleagues. We also discuss the prevalence of PTSD in the general population as well as specifically among veterans and thereafter provide an overview of the recent data on the prevalence of PTSD among U.S. military personnel in Iraq and Afghanistan. Finally, we discuss the diagnosis and management of PTSD.

## HISTORICAL PERSPECTIVE

While the diagnostic term *posttraumatic stress disorder* has been adopted only recently, descriptions suggestive of the syndrome have been found in ancient Greek literature, including Homer's *The Iliad*.<sup>1</sup> "Cardiorespiratory syndrome" (characterized by postwar palpitations, shortness of breath, chest pain, and easy fatigue) was described by Dr. DaCosta in 1872 among veterans of the Battle of Gettysburg in the American Civil War.<sup>1</sup>

Possibly the first "molecular" theory of PTSD arose after World War I, when survivors of the trench warfare were found to develop neurologic symptoms, such as tremor, amnesia, stuttering, and ataxia, after combat. It was then believed that explosions drove molecules of air through the skull and caused brain damage termed "shell shock."<sup>1</sup>

The first psychological theories of PTSD were developed during and after World War II when the term *combat neurosis* was used to describe these symptoms.<sup>1</sup> In 1957, the "rape trauma syndrome"<sup>2</sup> was described, which emphasized the common symptomatology of PTSD, whether caused by civilian trauma, such as rape, or by combat trauma. Finally, in 1980, the American Psychiatric Association, in the DSM-III, published the first diagnostic criteria for PTSD and introduced the term *posttraumatic stress disorder* as the official term used to identify this condition.

## DEFINITION AND CLASSIFICATION

PTSD is characterized by exposure to a traumatic event followed by reexperiencing of the traumatic event, avoid-

ance of stimuli associated with the trauma, and symptoms of increased arousal for at least 1 month.<sup>3</sup> Stress occurs whenever there is change or “a challenge to homeostasis”<sup>4,5</sup> that forces adaptation to that change. While stress has a neutral emotional valence (adaptive versus maladaptive; good versus bad), “traumatic stress” is qualitatively different and is always potentially harmful. Traumatic stress is a catastrophic, unexpected, uncontrolled event of extreme negative valence, capable of creating fear or horror in anyone. Examples of traumatic stress include combat, child abuse or neglect, domestic violence, rape and sexual assault, life-threatening accidents, torture, criminal assault, natural disasters (fires, floods, tornados, hurricanes), and man-made disasters (terrorism, bombing).

The response to the traumatic stress is the key to determining whether an individual develops PTSD later. The reason some individuals are resilient or resistant to traumatic stress, while others are not, is a focus of intense research. Animal models of stress reaction such as “learned helplessness” are shedding light on the underlying psychophysiology of stress susceptibility.<sup>6,7</sup>

Traumatic stress is a fairly common life event. Estimates from the National Comorbidity Survey (NCS)<sup>8</sup> showed that 60.7% of men and 51.2% of women reported exposure to at least 1 lifetime traumatic event. The same study highlighted that 20% of the women and 8% of the men exposed to trauma developed PTSD. Similarly, Breslau et al.<sup>9</sup> reported that about 10% of men and 17% of women go on to develop severe PTSD after exposure to traumatic stress. However, if moderate and milder cases of PTSD are also included, about one third of individuals will develop PTSD after experiencing traumatic stress.

## ETIOLOGY AND VULNERABILITY

PTSD may be unique among psychiatric disorders since it usually has a known etiology, is potentially preventable, and has a predominately environmental cause. While most other major psychiatric disorders have a strong genetic component (50%–80%),<sup>10,11,12</sup> PTSD has a less frequent genetic association (30%).<sup>13</sup> The cause of PTSD, obviously, is exposure to traumatic stress. However, as noted above, not everyone develops PTSD after exposure to traumatic stress. Thus, there are vulnerability factors. Among veterans of the Vietnam War, the strongest predictor of PTSD after combat was believed to be the duration of exposure to combat.<sup>14</sup> Another study showed that Vietnam veterans with a history of childhood abuse and those who experienced a greater number of traumatic events prior to joining the military were more likely to have PTSD.<sup>15</sup> Other vulnerability factors include a history of another mental illness, a family history of psychiatric disorders, borderline personality disorder, history of prior PTSD, and female gender. A recent meta-

analysis of predictors of PTSD or of its symptoms showed that peritraumatic psychological processes (and not prior characteristics), including amnesia and hyperarousal, are the strongest predictors of PTSD.<sup>16</sup>

Ample data exist that PTSD has a well defined biology. One interesting finding is that persons with PTSD appear to have a smaller hippocampus than persons without PTSD,<sup>17,18</sup> which implies a dysregulation in the formation and registration of memories. The hippocampus is also highly sensitive to stress hormones, suggesting that high levels of these hormones may have caused brain damage. Recent studies have linked the decreased hippocampal volumes to a history of childhood trauma.<sup>19,20</sup> Other brain imaging studies have found that amygdaloid activity is increased in persons with PTSD when they are reminded of the trauma.<sup>21,22</sup> The amygdala is the region of the brain where emotions are regulated and is considered to be the anxiety center of the brain.

Another interesting biological finding in PTSD is low levels of the stress hormone cortisol. Several studies have reported low levels of cortisol in persons with PTSD.<sup>23,24</sup> Initially, this was interpreted as a depletion effect, thinking that the severity of the stress experience in PTSD had “used up” the cortisol. Another explanation for this finding may be that individuals, who are unable to mount a normal stress response by increasing cortisol, are more vulnerable to developing PTSD after exposure to traumatic stress. This alternate hypothesis is supported by studies demonstrating that low cortisol levels immediately following trauma is a risk factor for developing PTSD at a later date.<sup>25,26</sup>

## HOW COMMON IS PTSD?

While in the past, there has been an unfortunate bias among some researchers about the validity of the diagnosis of PTSD, we now know that not only is PTSD real, but it is also common. The NCS, a large-scale epidemiology study using DSM-III-R criteria, found that the lifetime population prevalence of PTSD in the United States is 8%, with a prevalence of 10% in women and 5% in men.<sup>8</sup> However, studies using DSM-IV criteria have reported higher lifetime prevalences for PTSD.<sup>27,28</sup> This disorder is particularly common in primary care settings<sup>29</sup> and is associated with significant morbidity, psychosocial impairment, and distress. In these settings, PTSD is a persistent illness,<sup>30</sup> and it is unfortunate that substantial proportions of primary care patients go untreated or receive inadequate treatment.<sup>31</sup>

## PTSD IN VETERANS

Among veterans of the Vietnam conflict, 14% of males had current PTSD at the time of survey, and 30% had lifetime PTSD.<sup>32</sup> In female veterans of Vietnam, 8% had cur-

**Table 1. Soldiers and Marines Who Met Screening Criteria for a Mental Disorder After Deployment to Iraq<sup>a</sup>**

Mental Disorder	Army Group, % (N/N)	Marine Group, % (N/N)
Depression	7.9 (66/840)	7.1 (55/775)
Anxiety	7.9 (66/839)	6.6 (51/776)
Posttraumatic stress disorder	12.9 (114/881)	12.2 (99/811)
Any of the above	17.1 (151/882)	15.6 (127/813)
Alcohol misuse	20.6 (168/815)	29.4 (219/744)

<sup>a</sup>Adapted with permission from Hoge et al.<sup>38</sup>**Table 2. Combat Experiences Reported by Soldiers and Marines After Deployment to Iraq<sup>a</sup>**

Traumatic Stress	Army Group, % (N/N)	Marine Group, % (N/N)
Being attacked or ambushed	89 (789/883)	95 (764/805)
Receiving incoming artillery, rocket, or mortar fire	86 (753/872)	92 (740/802)
Being shot at or receiving small arms fire	93 (826/886)	97 (779/805)
Seeing dead bodies or human remains	95 (832/879)	94 (759/805)
Knowing someone seriously injured or killed	86 (751/878)	87 (693/797)
Responsible for death of an enemy combatant	48 (414/871)	65 (511/789)

<sup>a</sup>Adapted with permission from Hoge et al.<sup>38</sup>

rent and 25% had lifetime PTSD.<sup>32</sup> These surveys were conducted upon return from Vietnam. After the first Gulf War, 10% of combat veterans developed PTSD.<sup>33</sup> After the conflict in Somalia, 8% of service members developed PTSD.<sup>34</sup>

The U.S. Department of Veterans Affairs (VA) operates the United States' largest health care delivery system, providing comprehensive care to more than 5 million veterans through a network of 160 hospitals and 850 affiliated clinics.<sup>35,36</sup> Approximately 600,000 veterans are affected by PTSD, and more than 200,000 have applied for VA service-connected benefits on the basis of PTSD.<sup>37</sup> PTSD thus is the most common psychiatric condition for which veterans seek VA service-connected benefits.

Recently, a survey was conducted in 4 U.S. combat infantry units before and after deployment to Iraq and Afghanistan.<sup>38</sup> The results of this survey were of great interest. Table 1 lists the percentage of service members deployed to Iraq who reported depression, anxiety, and/or PTSD or alcohol misuse. It is interesting how similar the results were in the Army and Marine study groups, except for perhaps more alcohol misuse among the Marines. Note that about 1 soldier or Marine in 6 endorsed a problem with depression, anxiety, and/or PTSD. These are, indeed, high rates of mental disorder and psychological distress.

Table 2 illustrates the kinds of traumatic stress to which the soldiers and Marines in Iraq were exposed.<sup>38</sup> As can be seen, virtually all of these combat infantrymen had

**Table 3. Perceived Need for and Use of Mental Health Services Among Soldiers and Marines Who Met Criteria for Depression, Anxiety, or PTSD After Deployment to Iraq<sup>a</sup>**

Outcome	Army Group, % (N/N)	Marine Group, % (N/N)
Acknowledged a problem	78 (104/133)	86 (91/106)
Interested in receiving help	43 (58/134)	45 (47/105)
Received professional help in past year		
Overall (from any professional)	40 (56/140)	29 (33/113)
From a mental health professional	27 (37/138)	21 (24/112)

<sup>a</sup>Adapted with permission from Hoge et al.<sup>38</sup>**Table 4. Perceived Barriers to Seeking Mental Health Services Among Soldiers and Marines Who Met Criteria for a Mental Disorder<sup>a</sup>**

Perceived Barrier	% (N/N)
I would be seen as weak	65 (413/640)
My unit leadership might treat me differently	63 (403/637)
Members of my unit might have less confidence in me	59 (377/642)
There would be difficulty getting time off for treatment	55 (354/643)
It would harm my career	50 (319/640)

<sup>a</sup>Adapted with permission from Hoge et al.<sup>38</sup>

been exposed to severe traumatic stress. From the combined data, we can conclude that about 1 service member in 8 developed PTSD. The survey also included questions regarding the perceived need for and use of mental health services by these soldiers and Marines. Table 3 illustrates the results.

The vast majority of the service members acknowledged a psychiatric problem,<sup>38</sup> which is a striking finding and illustrates a major challenge for the VA. However, less than half were interested in receiving help. Only about a third had received professional help of any kind, which could include, for example, counseling with a chaplain. Only about a fourth had received help from a mental health professional, which would include psychologists, psychiatric social workers, psychiatric nurses, and psychiatrists. The most common barriers to seeking mental health services as perceived by soldiers and marines are summarized in Table 4.

In the study, only 25% endorsed "mental health care doesn't work."<sup>38</sup> Thus, these service members are generally aware that they have a significant mental health problem, and they generally believe that mental health care is effective, but they do not seek help for fear that it would have a negative impact on their relations with peers and leaders and on their career. Mental health professionals, both in the armed forces and in the VA, clearly have a major challenge in decreasing the stigma associated with mental health care.

PTSD can also result from military sexual trauma. Military sexual trauma refers to both sexual harassment and sexual assault that occurs in military settings. In a survey, at least 23% of women using the VA health care system reported experiencing at least 1 sexual assault during

**Table 5. The 3 Symptom Clusters of PTSD<sup>a</sup>**

Intrusive Category	Avoidant Category	Hyperarousal Category
Recurrent and intrusive distressing memories of the trauma	Avoiding thoughts, feelings, or conversations about the trauma	Difficulty falling or staying asleep Irritability or outbursts of anger
Recurrent and distressing dreams of the trauma (nightmares)	Avoiding activities, places, or people that remind of the trauma	Difficulty concentrating Feeling alert or watchful when there is no need to be
Acting or feeling as if the traumatic event was recurring (flashbacks)	Difficulty remembering important aspects of the trauma	Exaggerated startle response
Intense psychological distress at exposure to reminders of the trauma	Loss of interest or pleasure in normal activities	
Physical distress (heart racing, shaking, etc) when reminded of the trauma	Feeling distant or cut off from others	
	Difficulty experiencing normal feelings such as love and happiness	
	Feeling that the future will be cut short	

<sup>a</sup>Adapted with permission from the American Psychiatric Association.<sup>3</sup>

their military service.<sup>39</sup> Another survey of Persian Gulf War military personnel found that rates of sexual assault (7%), physical sexual harassment (33%), and verbal sexual harassment (66%) were higher than those typically found in peacetime military samples.<sup>39</sup> There is also evidence that sexual trauma is a powerful contributor to the development of PTSD among female Vietnam veterans.<sup>40</sup> Sexual trauma associated with military service has some unique characteristics. It most often occurs in settings where the victim lives and works. In most cases, the victim must live and work closely with the perpetrators, which often leads to increased feelings of helplessness, powerlessness, and being at risk of additional victimization. The traumatic experience can cut short the career goals of the victims, and they frequently experience difficulties after being discharged from the military.<sup>39</sup>

### DIAGNOSIS OF PTSD

Considering that PTSD is a common psychiatric, and therefore medical, condition and that it causes great suffering and a high health care cost, it is surprising that the diagnosis of PTSD is often missed, especially in primary care settings.<sup>41</sup>

In PTSD, comorbidity is the rule, not the exception. The most common psychiatric comorbidities seen in patients with PTSD are substance use disorders; mood disorders, such as major or minor depressive disorders and bipolar disorder; other anxiety disorders, such as obsessive-compulsive disorder, panic disorder, or generalized anxiety disorder; and personality disorders, such as borderline personality disorder.<sup>8</sup> Also, general medical conditions, such as anemia, arthritis, asthma, back pain, diabetes, eczema, kidney disease, lung disease, and ulcer are common among patients with PTSD.<sup>42</sup> Usually it is the comorbid condition that prompts medical attention or requests for treatment, particularly in primary care settings.

Thus, in attending to the presenting problem, the health care provider often does not recognize, diagnose, or treat the underlying PTSD. Often, the trauma survivor may not be aware that the symptoms of PTSD are related to a dis-

ease process, and may have lived in quiet suffering for years. Thus, it is important for all health care professionals, not only in mental health, but also in primary care, internal medicine, and gynecology, to ask about trauma history when examining patients and incorporate some screening questions about PTSD into the medical evaluation. Health care professionals should remember that, depending on the treatment setting, 20% to 50% of patients either have PTSD or are at high risk for developing PTSD.

According to DSM-IV-TR,<sup>3</sup> the diagnosis of PTSD requires (1) exposure to traumatic stress; (2) an initial reaction of horror, fear, or helplessness; and (3) symptoms in the 3 symptom clusters (Table 5). To have a diagnosis of PTSD, a person must have at least 1 intrusive symptom, at least 3 avoidant symptoms, and at least 2 arousal symptoms. Also, the symptoms need to last for 1 month or more and cause significant impairment.

### SCREENING FOR PTSD

Screening for psychological illness, and especially PTSD, is based on symptom reporting.<sup>43</sup> While the U.S. Preventive Services Task Force currently does not recommend routine screening for PTSD, researchers have attempted to find short, validated tools for early detection and assessment of PTSD among veterans, especially in view of the ongoing events in Iraq, Afghanistan, and the Middle East. In a recent study<sup>44</sup> focusing on PTSD among soldiers returning from the Iraqi War, only about 3% of soldiers showed evidence of traumatic stress. The authors found 4 of the items on the U.S. Department of Defense Form 2796 (DD FORM 2796)<sup>45</sup> (Table 6) as being an effective screen and stated that the 17-item PTSD Checklist<sup>46</sup> was no better than the DD Form 2796 in terms of sensitivity and specificity. Interestingly, in screening done 3 to 6 months postdeployment, Hoge et al.<sup>38</sup> found rates of PTSD around 15% (as compared to 3% in the study by Bliese et al.<sup>44</sup>), which questions when the most effective timing for screening is.

We suggest that health care professionals can perform a preliminary screen for PTSD by asking 2 questions (follow-up questions are in parentheses).

**Table 6. Posttraumatic Stress Disorder Screening Questions From the Department of Defense Form 2796<sup>a</sup>**

Have you ever had any experience that was so frightening, horrible, or upsetting that, IN THE PAST MONTH, you...

NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	Have had any nightmares about it or thought about it when you did not want to?
<input type="checkbox"/>	<input type="checkbox"/>	Tried hard not to think about it or went out of your way to avoid situations that remind you of it?
<input type="checkbox"/>	<input type="checkbox"/>	Were constantly on guard, watchful, or easily startled?
<input type="checkbox"/>	<input type="checkbox"/>	Felt numb or detached from others, activities, or your surroundings?

<sup>a</sup>Adapted from U.S. Department of Defense Form 2796.<sup>45</sup> This material is in the public domain.

**Question 1.** “What’s the worst thing that ever happened to you?” (“Has there ever been a time when your life was in danger, you were seriously injured or harmed, you were threatened with death or serious injury, or you saw this happen to someone else?”)

If the person has not had traumatic stress exposure, or if the answer to the follow-up to question 1 is “no,” then the person cannot have PTSD, and the examiner may move on. If the person has had traumatic stress exposure, or if the answer to the follow-up to question 1 is “yes,” then the examiner should ask question 2.

**Question 2.** “Do memories of (the traumatic stress event) still bother you?” (“Do you have nightmares or flashbacks about the event? Do you think about it when you don’t want to? Do you get upset if something reminds you about it?”)

If the patient has a positive response to question 2, they should have additional evaluation for PTSD. This might take the form of a consultation request to a mental health service provider. Alternately, if the examiner wishes to ask screening questions about the other symptom clusters, we suggest the following:

**Avoidant symptoms.** “Do you avoid situations that might remind you of (the traumatic stress event)? Have your relationships suffered because of (the traumatic stress event)?”

**Arousal symptoms.** “Have you become more nervous since (the traumatic stress event)? Is it hard for you to relax because of (the traumatic stress event)? Do you have trouble sleeping because of (the traumatic stress event)?”

Screening all veterans for sexual trauma is also important. This should be done with compassion and sensitivity, recognizing the stigma associated with the experience while preserving confidentiality at all times. The National Center for Posttraumatic Stress Disorder has suggested asking the following questions: “While you were in the military did you experience any unwanted sexual attention, like verbal remarks, touching, or pressure for sexual favors?” and “Did anyone ever use force or the threat of force to have sex with you against your will?”<sup>47</sup>

The importance of a sensitive approach by the providers doing the screening cannot be overstated. We are aware of cases in which veterans, male and female, denied any military sexual assault history for years. They

have told us one of the reasons they ultimately acknowledged the past sexual assault was because the screening providers, through their patience, eye contact, voice tone, and nonjudgmental demeanor, appeared to genuinely care for them and desire to refer them to the specialty services they required.

## CLINICAL COURSE

The clinical course of PTSD has been studied in both combat veterans and rape trauma survivors. An acute stress disorder may follow a traumatic event. The diagnosis of acute stress disorder includes the criteria for PTSD but adds and emphasizes dissociative symptoms. Current research suggests that acute stress disorder is a predictor of subsequent PTSD.<sup>1</sup> There is some evidence that pharmacologic intervention shortly after trauma exposure may prevent the development of PTSD.<sup>48,49</sup>

Once PTSD is diagnosed, recovery occurs most frequently in the first year; at 2 years, one half of the cases have remitted; and over the next 5 years, another 20% or so recover. Up to a third of survivors of traumatic stress may go on to develop chronic PTSD.<sup>1</sup> Once PTSD becomes chronic, spontaneous recovery is unusual, and symptoms tend to persist for years or decades. There is some evidence in veterans of the first Gulf War that symptoms can actually worsen over the course of time. Even when symptoms have disappeared, they can return, even years later, particularly if there is a new stress. The new stress need not be anything like the traumatic stress. For example, among veterans of World War II, symptoms of PTSD often returned after retirement. Stressors such as the death of a loved one, a heart attack, or job loss can bring back the symptoms of PTSD. It is important for individuals suffering from PTSD to realize that they are particularly sensitive to stress.

## TREATMENT OF PTSD

Ideally, treatment of PTSD should be comprehensive and multidisciplinary. Counseling, education, and psychotherapy are important aspects of this treatment. The VA Medical Centers provide a network of specialized PTSD programs that offer veterans education, evaluation, and treatment conducted by mental health professionals

from a variety of disciplines. The outpatient PTSD programs include 3 basic types of clinics: (1) PTSD Clinical Teams provide one-to-one evaluation, education, and psychotherapy; (2) Substance Use PTSD Teams offer outpatient education, evaluation, and counseling for comorbid PTSD and substance abuse; and (3) Women's Stress Disorder Treatment Teams provide similar services to female veterans. The inpatient PTSD programs provide 24-hour nursing and psychiatric care. Finally, day treatment PTSD units provide one-to-one case management and counseling, group therapy, education, and activities to help clients live successfully with PTSD.<sup>50</sup>

As mentioned, psychological treatment of PTSD is important and may be the treatment of first choice. Counseling and psychotherapy should be done by an experienced and skilled therapist because of the risk of "retraumatization." Often symptoms may worsen for a while during the therapy process as a person remembers the traumatic event.

Exposure therapy aims to disrupt the link between a trauma-related cue and the intense anxiety and avoidance that are typical for PTSD. The technique often stimulates the patient to experience a traumatic memory to modify the response to that memory. Repeated exposure helps patients learn to master their fear. In the hands of experienced therapists, it is a safe and effective treatment for PTSD<sup>51</sup> and has the most empirical support.<sup>52</sup>

Treatment issues in the case of military sexual trauma should address immediate health concerns, validate feelings, support existing adaptive coping strategies, promote development of new coping skills, and explore affective and cognitive reactions like fear, self-blame, anger, and disillusionment.

The pharmacologic management of PTSD usually begins with a selective serotonin reuptake inhibitor (SSRI). These medications include sertraline, paroxetine, fluoxetine, citalopram, and escitalopram. Of these, sertraline and paroxetine are approved by the U.S. Food and Drug Administration for treatment of PTSD. This class of medications is safe, has few side effects, and has no addictive potential.

If there is a partial response to the SSRIs, with some symptoms persisting, other psychotropic medications may be added. Anticonvulsants and mood-stabilizing agents like carbamazepine, lamotrigine, topiramate, and lithium can be useful for mood swings, irritability, and impulsivity and violent behavior.<sup>53</sup> Benzodiazepines such as alprazolam, clonazepam, and temazepam may be useful for arousal symptoms and to promote sleep<sup>54,55</sup>; however, given the risk of promoting drug dependence and worsening PTSD by virtue of their dissociative and disinhibiting properties, benzodiazepines should be avoided in PTSD. If a hypnotic is necessary, the use of nonbenzodiazepines (e.g., zolpidem or zaleplon), antihistamines, or trazodone is recommended.<sup>54,55</sup> Adjunctive use of atypical

antipsychotic medications, such as risperidone,<sup>56</sup> olanzapine,<sup>57</sup> and quetiapine,<sup>58</sup> can be helpful in combat-related PTSD. It is not unusual for a patient being treated for PTSD to be taking several psychotropic medications. The treating practitioner should be an experienced psychopharmacologist. The goal of medication management of PTSD is symptom reduction and stabilization. Even if all the symptoms do not entirely disappear, a patient may derive great benefit from getting a good night's sleep and being less anxious and irritable. Acute PTSD responds better than chronic PTSD. The earlier treatment begins, the better the outcome.

Education is another important aspect of PTSD treatment. Persons with PTSD are often unaware of the cause of their symptoms. Just being able to understand that PTSD is a biological disease, often associated with irritability, insomnia, and so forth, can be helpful to the patient in understanding the symptomatology and associated behavior. Group therapy is helpful for many patients. Often, persons with PTSD feel isolated and alone and doubt that anyone else in the world can understand what they have gone through and how they feel. Group therapy helps provide peer support and can expedite the healing process. Obviously, as in the treatment of other mental illnesses and behavioral disorders, psychotherapy may be combined with medication management.

The treating clinician should project a positive attitude, since many persons with PTSD are demoralized and may doubt they will ever improve. The family should be involved in the treatment plan. Treatment should emphasize hope, spirituality, growth, and healing. In this regard, a chaplain can be very helpful. Many persons with PTSD are suffering guilt and asking questions such as "why did this happen to me?" A priest, minister, or spiritual counselor can be helpful in providing comprehensive care for these survivors of trauma.

## SUMMARY

PTSD is a serious and chronic mental illness that can cause severe psychosocial and functional impairment in the life of trauma survivors. It is characterized by intrusive, avoidant, and arousal symptoms after exposure to traumatic stress. PTSD affects more than 600,000 U.S. veterans and is the most common psychiatric condition for which veterans seek VA disability benefits. PTSD among veterans gains enormous significance especially in view of the ongoing events in Iraq and Afghanistan. Researchers are attempting to devise short, well-validated screening tools for early detection of this chronic illness. Treatment of PTSD usually involves both psychotherapy and medication. PTSD responds to treatment, sometimes with dramatic improvement, not only in the symptom profile, but also in the individual's overall quality of life.

*Drug names:* alprazolam (Xanax, Niravam, and others), carbamazepine (Tegretol, Carbatrol, and others), citalopram (Celexa and others), clonazepam (Klonopin and others), escitalopram (Lexapro), fluoxetine (Prozac and others), lamotrigine (Lamictal), lithium (Lithobid, Eskalith, and others), olanzapine (Zyprexa), paroxetine (Paxil, Pexeva, and others), quetiapine (Seroquel), risperidone (Risperdal), sertraline (Zoloft), temazepam (Restoril and others), topiramate (Topamax), trazodone (Desyrel and others), zaleplon (Sonata), zolpidem (Ambien).

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