

VA/DoD CLINICAL PRACTICE GUIDELINE FOR MANAGEMENT OF POST-TRAUMATIC STRESS

Department of Veterans Affairs

Department of Defense

Prepared by:

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With support from:

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QUALIFYING STATEMENTS

The Department of Veterans Affairs (VA) and The Department of Defense (DoD) guidelines are based on the best information available at the time of publication. They are designed to provide information and assist in decision-making. They are not intended to define a standard of care and should not be construed as one. Also, they should not be interpreted as prescribing an exclusive course of management.

Variations in practice will inevitably and appropriately occur when providers take into account the needs of individual patients, available resources, and limitations that are unique to an institution or type of practice. Every healthcare professional who is making use of these guidelines is responsible for evaluating the appropriateness of applying them in any particular clinical situation.

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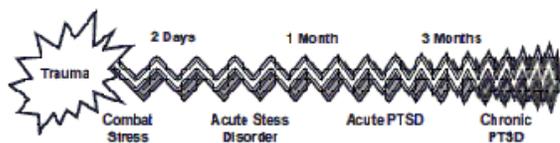
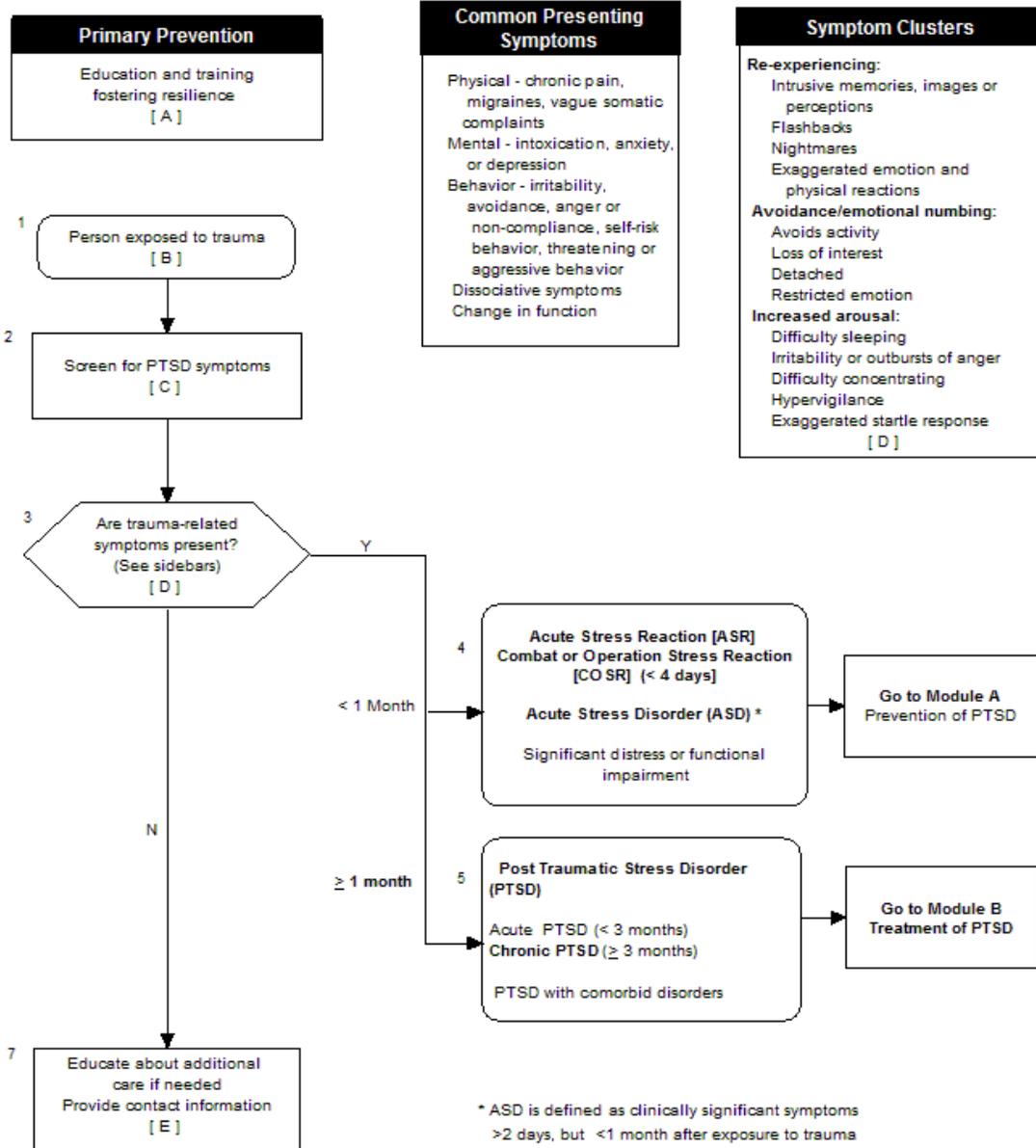
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CORE MODULE: ALGORITHM

VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress

Core Module Initial Evaluation and Triage



10/21/2010

CORE MODULE: ANNOTATIONS

1. PRIMARY PREVENTION

A. Education and Training to Foster Resilience

OBJECTIVE

Prepare individuals and groups for exposure to potentially traumatic experiences in ways that minimize the likelihood of development of Post-Traumatic Stress Disorder (PTSD) and other trauma-related problems.

BACKGROUND

Because exposure to traumatic stressors is part of the expected work experience of some occupations (e.g., military personnel and emergency services workers), it is sensible to make efforts to prepare individuals in these professions for their encounters with traumatic events. This preparation is not explicitly undertaken in most workplaces, with some exceptions (e.g., some military training environments). To date, research has not examined our capacity to prepare individuals or communities for trauma exposure. However, general principles of preparation can be outlined that are consistent with theoretical models of the development of PTSD, research on risk factors for development of PTSD, and emerging concepts of resilience and hardiness.

RECOMMENDATIONS

1. In high-risk occupations, for which the probability of trauma exposure is moderate or high, efforts should be undertaken to increase the psychological resilience of workers to the negative effects of trauma exposure.

DISCUSSION

Although little is directly known about our capacity to prepare individuals or communities for trauma exposure, it is possible to identify principles of preparation that are consistent with empirical research on risk and resilience factors and with current theories of PTSD development. Such pre-trauma preparation can include attention to both the ability to cope during the trauma itself and shaping the post-trauma environment so that it will foster post-trauma adaptation.

Some influential theories of PTSD posit that a process of classical fear conditioning can lead to development of chronic PTSD symptomatology. In this process, stimuli associated with the traumatic experience can elicit responses similar to those experienced during the trauma itself (e.g., intense anxiety). Other theories suggest that individuals who develop negative trauma-related beliefs (e.g., about personal guilt) will be more likely to experience continuing trauma reactions, because such beliefs will maintain a sense of threat and personal incompetence. Research on risk factors for PTSD indicates that post-trauma social support and life stress affect the likelihood of development of the disorder. Protective factors have also been identified that mitigate the negative effects of stress. Research is beginning to delineate the psychological processes that moderate an individual's response to stress and to explore training programs for increasing resilience to stress. Hardiness (Kobasa et al., 1982) is one personality factor that has been demonstrated to buffer against traumatic stress and PTSD in military veterans (King et al., 1998; Bartone, 2000). Zach, Raviv & Inbar (2007) found that hardiness levels increased for Special Forces

trainees over the course of a stressful training/selection program in which challenges were gradually more difficult, and leaders were consistently supportive and encouraged trainees to view failures as learning opportunities. Hardiness is characterized by three key attributes: ability to perceive *control* over life's events; ability to make strong *commitment* to tasks; and ability to see stressful experiences as a *challenge* to be overcome. Training programs, personnel policies, and leadership strategies that promote hardiness may thereby increase an individual's ability to resist the negative effects of traumatic stress.

Such findings and theories are consistent with the following principles of preparation:

1. *Provide realistic training* that includes vicarious, simulated, or actual exposure to traumatic stimuli that may be encountered. Examples of application of this principle in military training include exposure to live weapons fire, survival training, or, for subgroups of military personnel, mock captivity training. This principle can be applied to many work roles—for example, those likely to be involved in body handling might be trained in mortuary environments. It is consistent with classical conditioning theories, in that this can help reduce arousal or anxiety associated with particular traumatic stimuli.
2. *Strengthen perceived ability to cope* during the trauma and with the aftermath. Realistic training contributes to this goal. Instruction and practice in the use of a variety of coping skills (e.g., stress inoculation training, problem-solving, assertion, and cognitive restructuring) may be helpful in enabling workers to tolerate stressful work environments. In addition, individuals can be trained to cope with acute stress reactions that are common following trauma exposure. Such training experiences help to maximize expectations of mastery of traumatic situations and their physical and emotional sequelae. Use of positive role models (leaders and peers) is also an effective tool for building up the sense of ability to cope. The training must include specific, practical actions to change the threatening or horrifying situation for the better. Without such positive action learning, "simulated" terrifying or horrifying situations and stimuli can induce feelings of helplessness that make the training itself traumatizing.
3. *Create supportive interpersonal work environments* that are likely to provide significant social support during and after traumatic events. Efforts to build teams and establish group cohesion among work group members are important in this regard. Identification and training of peer stress management consultants and training and practice in the provision of peer social support may also be useful. Families are crucial in post-trauma support and can be given information about, and training in, ways of providing social support. Finally, competent, ethical leadership at all levels of the organization helps protect against traumatization.
4. *Develop and maintain adaptive beliefs* about the work role and traumatic experiences that may be encountered within it. Key beliefs will be related to realistic expectancies about the work environment, confidence in leadership, confidence in the meaningfulness or value of the work role, positive but realistic appraisals of one's coping ability, and knowledge about the commonness and transitory nature of most acute stress reactions. It may be useful to identify and discuss negative beliefs that sometimes arise in the specific work environment in order to "inoculate" against such beliefs.
5. *Develop workplace-specific comprehensive traumatic stress management programs.* Such programs can be a significant source of post-trauma support (e.g., via Chaplains or mental health professionals) that can minimize trauma-related problems among workers. It is important to take steps to increase

awareness of such services and to de-stigmatize and reduce the potential negative consequences of their use. For example, employees should be helped to understand that seeking help in confronting symptoms and problems early in their development is likely to be more effective than avoiding them or keeping them secret from others but that even long-hidden or persisting PTSD can be treated.

Comprehensive preparation programs that target and incorporate these principles and that are integrated themselves into existing unit/community programs and support systems may be expected to be most helpful (Gist & Lubin, 1999).

2. POPULATIONS AT-RISK FOR DEVELOPING PTSD

B. Person Exposed to Trauma

OBJECTIVE

Assess the nature of the traumatic event and other potential stressors.

BACKGROUND

A number of sufferers with PTSD may recover with no or limited interventions. However, without effective treatment, many people may develop chronic problems over many years. The severity of the initial traumatic response is a reasonable indicator of the need for early intervention. Families and care-givers have a central role in supporting people with stress symptoms. Depending on the nature of the trauma and its consequences, many families may also need support for themselves.

RECOMMENDATIONS

1. Persons exposed to trauma should be assessed for the type, frequency, nature, and severity of the trauma. [B]
 - a. Assessment should include a broad range of potential trauma exposures in addition to the index trauma.
 - b. Trauma Exposure Assessment Instruments may assist in evaluating the nature and severity of the exposure.
 - c. Assessment of existing social supports and ongoing stressors is important.

DISCUSSION

Although exposure to trauma is common, several risk factors for the development of PTSD have been identified. *Trauma*-related risks include the nature, severity, and duration of the trauma exposure. For example, life-threatening traumas, such as physical injury or rape, pose a high risk of PTSD (Kilpatrick, 1989). A prior history of trauma exposure conveys a greater risk of PTSD from subsequent trauma (Breslau et al., 1999).

Post-trauma risks include poor social support and life stress (Brewin et al., 2000). A greater risk for developing PTSD may be conveyed by post-trauma factors (e.g., lack of social support and additional life stress) than pre-trauma factors.

3. SECONDARY PREVENTION

C. Screen for PTSD Symptoms

OBJECTIVE

Identify possible cases of post-traumatic stress

BACKGROUND

Patients do not often self-identify as suffering with PTSD, and patients with unrecognized PTSD are often difficult to treat because of poor patient/provider rapport, anger and distrust, a focus on somatic symptoms, and other trauma-related problems. Research supports the utility of brief screening tools for identifying undiagnosed cases of PTSD. Identification of PTSD may help facilitate development of rapport, suggest treatment options, and potentially improve outcomes for these patients.

RECOMMENDATIONS

1. All new patients should be screened for symptoms of PTSD initially and then on an annual basis or more frequently if clinically indicated due to clinical suspicion, recent trauma exposure (e.g., major disaster), or history of PTSD. [B]
2. Patients should be screened for symptoms of PTSD using paper-and-pencil or computer-based screening tools. [B]
3. There is insufficient evidence to recommend one PTSD screening tool versus another. However, the following screening tools have been validated and should be considered for use. For example: (See Appendix C)
 - Primary Care PTSD Screen (PC-PTSD)
 - PTSD Brief Screen
 - Short Screening Scale for DSM IV PTSD.
 - PTSD Checklist (PCL)
4. There is insufficient evidence to recommend special screening for members of any cultural or racial group or gender. [I]

DISCUSSION

The benefit of screening is well established for diseases with high prevalence. In one study (Taubman et al., 2001), 23 percent of patients presenting in the primary care setting reported exposure to traumatic events, and 39 percent of those met criteria for PTSD. Screening strategies should, however, balance efficacy with practical concerns (e.g., staffing, time constraints, and current clinical practices). Brevity, simplicity, and ease of implementation should encourage compliance with recommended screening. Care should be exercised in implementing screening in ways that avoid social stigmatization and adverse occupational effects of positive screens.

Brewin (2005) reviewed published screening instruments for civilian PTSD, consisting of 30 items or fewer, that were validated against structured clinical interviews. Thirteen instruments were identified as meeting these criteria, all consisting of symptoms of traumatic stress. The review concluded that the performance of some currently available instruments is near their maximal potential effectiveness and that instruments with fewer items, simpler response scales, and simpler scoring methods perform as well as, if not better, than longer and more complex measures.

Screening Tools: (See Appendix C)

Primary Care PTSD Screen (PC-PTSD): This is a 4-item screen that was designed for use in primary care and other medical settings and is currently used to screen for PTSD in veterans at the VA. The screen includes an introductory sentence to cue respondents to traumatic events. The authors suggest that in most circumstances, the results of the PC-PTSD should be considered "positive" if a patient answers "yes" to any 3 items. Those who screen positive should then be assessed with a structured interview for PTSD. The screen does not include a list of potentially traumatic events (Prins et al., 2003). Internal consistency (KR20=.79) and test-retest reliability ($r=.84$) of the PC-PTSD were found to be good (Prins et al., 1999). The operating characteristics of the screen suggest that the overall efficiency (i.e., optimal sensitivity and specificity =.87) is best when any two items are endorsed. The PC-PTSD screen has been validated in a military population (Bliese et al., 2008) and has been used extensively in post-deployment screening efforts (Hoge, 2004).

PTSD Brief Screen: The PTSD Brief Screen was developed using the rationally derived approach, based on data from the National Co-morbidity Survey. Construct validity has generally been adequate. The overall efficiency of this screen was good (.78), whereas the correlations were significantly lower or negative for other mental disorders, indicating good construct validity (Leskin et al., 1999).

PTSD Checklist (PCL): The PCL has been used extensively in military and civilian populations, and there are numerous validation studies, including studies in military populations (Terhakopian et al., 2008).

Special Screening of Cultural or Racial Groups:

Research has centered on three broadly defined groups—Hispanics, Blacks/African-Americans, and Whites/Caucasians—in the attempt to answer two questions: First, are members of one or more groups more susceptible to developing PTSD? Second, are the symptoms shown by members of any group more severe or otherwise different from symptoms shown by other veterans with PTSD?

There are data to suggest that Blacks/African-Americans and Hispanics experience higher rates of PTSD than do Whites/Caucasians (Frueh et al., 1998; Ortega & Rosenheck, 2000). But, as Frueh and his colleagues note in a systematic review, "secondary analyses within the existing epidemiological studies suggest that differential rates of PTSD between racial groups may be a function of differential rates of traumatic stressors and other pre-existing conditions. This finding, in combination with the general paucity of empirical data and certain methodological limitations, significantly moderates the conclusions that should be reached from this body of literature." Studies in military samples have generally shown no or minimal race/ethnic differences in PTSD prevalence.

In terms of symptom severity and clinical course, the evidence is also mixed. Among the studies reviewed here, the following conclusions were reached:

- Two studies found Black/African-American veterans to be more severely affected than Hispanics or Whites/Caucasians (Frueh et al., 1996; Penk et al., 1989)
- The National Vietnam Veterans Readjustment Study (NVVRS) found higher PTSD prevalence among Hispanic veterans than among Whites or Blacks after controlling for combat exposure (Kulka et al., 1990; Schlenger et al., 1992).
- One study found Hispanics to be more severely affected than Whites/Caucasians but not to suffer from higher functional impairment levels than Whites/Caucasians (Ortega and Rosenheck, 2000).

- Three studies found no significant clinical differences between Black/African-American veterans and White/Caucasian veterans (Frueh et al., 1997; Rosenheck and Fontana, 1996; Trent et al., 2000).
- One review found no clinical differences among Hispanics, Blacks/African-Americans, and Whites/Caucasians (Frueh et al., 1998)
- One study found that American-of-Japanese Ancestry Vietnam Veterans had lower PTSD prevalence than Caucasians (Friedman et al., 2004).
- Among Vietnam Veterans, American Indians and Native Americans have higher rates than Caucasian veterans whereas American of Japanese ancestry have lower PTSD prevalence than Caucasians (Beals et al., 2002; Friedman et al., 2004).

These results support Frueh et al. (1998) in their conclusion that “despite the prevailing zeitgeist and clinical lore, the limited extant empirical evidence suggests that veterans of different races are more similar to each other than they are different when it comes to the clinical manifestation and response to treatment of combat-related PTSD and associated features.”

EVIDENCE

	Evidence	Sources	LE	QE	SR
1	Screening all patients for PTSD symptoms.	Breslau et al., 1999a Leskin & Westrup, 1999 Prins et al., 1999 Taubman et al., 2001	II-2	Fair	B
2	Screening tools: Primary Care PTSD Screen PTSD Brief Screen Short Screening Scale for DSM IV PTSD Checklist (PCL)	Breslau et al., 1999a Leskin & Westrup, 1999 Prins et al., 1999 Terhakopian, et al 2008	II-2	Fair	B
3	Special screening for members of any cultural or racial group	Frueh et al., 1996, 1997, 1998 Ortega & Rosenheck, 2000 Penk et al., 1989 Rosenheck & Fontana, 1996 Trent et al., 2000 Friedman 2004	III	Poor	I

LE – Level of Evidence; QE = Quality of Evidence; SR = Strength of Recommendation (see Appendix A)

D. Are Trauma-Related Symptoms Present?

OBJECTIVE

Identify people exposed to trauma who are at risk for developing acute stress reactions (ASR), acute stress disorder (ASD), or Post-Traumatic Stress Disorder (PTSD).

BACKGROUND

Warning Signs of Trauma-Related Stress (APA)

Individuals who have experienced a traumatic event often experience psychological stress reactions related to the incident. In most instances, these are common normal reactions to extreme situations. Individuals who feel they are unable to regain control of their lives or who experience the following symptoms for more than a

month should consider seeking outside professional mental health assistance. Some symptoms to watch out for include:

- Recurring thoughts, mental images, or nightmares about the event
- Having trouble sleeping
- Changes in appetite
- Experiencing anxiety and fear, especially when exposed to events or situations reminiscent of the trauma
- Feeling on edge, being easily startled, or becoming overly alert
- Feeling depressed or sad and having low energy
- Experiencing memory problems, including difficulty in remembering aspects of the trauma
- Feeling "scattered" and unable to focus on work or daily activities
- Having difficulty making decisions
- Feeling irritable, easily agitated, or angry and resentful
- Feeling emotionally "numb," withdrawn, disconnected, or different from others
- Spontaneously crying, feeling a sense of despair and hopelessness
- Feeling extremely protective of, or fearful for, the safety of loved ones
- Not being able to face certain aspects of the trauma and avoiding activities, places, or even people that remind you of the event.

RECOMMENDATIONS

1. Individuals who are presumed to have symptoms of PTSD or who are positive for PTSD on the initial screening should receive a more detailed assessment of their symptoms.
2. Useful symptom-related information may include details, such as time of onset, frequency, course, severity, level of distress, and degree of functional impairment.
3. The elapsed time since the exposure to trauma should be considered when assessing the risk of developing PTSD and determining the diagnosis and appropriate intervention.

The following definitions will help providers select the appropriate treatment algorithm:

Stress-Related Disorders and Syndromes Definitions

Trauma

An extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury or another threat to one's physical integrity; witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate. According to DSM-IV-TM criteria, the person's response to the event must involve intense fear, helplessness, or horror. However, there is evidence that military personnel do not always respond in the same way as civilian victims of traumatic events, and the criteria for "fear, helpless, or horror" are being reconsidered in the proposed future DSM criteria (Adler, 2008).

Acute Stress Reaction (ASR)

Acute stress reaction is a transient condition that develops in response to a traumatic event. Onset of at least some signs and symptoms may be simultaneous with the trauma itself or within minutes of the traumatic event and may follow the trauma after an interval of hours or days. In most cases, symptoms will disappear within days (even hours). Symptoms include a varying mixture of the following:

A broad group of physical, mental, and emotional signs and symptoms that result from heavy mental and emotional work during exposure to difficult potentially traumatic conditions.

Symptoms may include depression, fatigue, anxiety, decreased concentration/memory, hyperarousal, or any of the four categories of reactions (See [Table CORE - 1](#)) that have not resolved within four days after the event, after a rule-out of other disorders.

The traumatic events that can lead to an acute stress reaction are of similar severity to those involved in post-traumatic stress disorder.

Combat and Operational Stress Reaction (COSR) during an Ongoing Military Operation

COSR is the term used to describe an acute stress reaction in the combat environment and can include virtually any symptom and sign, including physical and neurological symptoms, resulting from exposure to extremely stressful events or combat experiences. It may result from specific traumatic experiences in combat or exhaustion due to the cumulative effects of one or more factors, including sleep deprivation, extreme physical stress, poor sanitary conditions, limited caloric intake, dehydration, or extremes of environmental conditions.

Acute Stress Disorder (ASD)

ASD refers to clinically significant (causing significant distress or impairment in social, occupational, or other important areas of functioning) symptoms >2 days but <1 month after exposure to a trauma, as defined above (may progress to PTSD if symptoms last >1 month). Criteria for diagnosis include:

- Exposure to trauma, as defined above
- Either while experiencing or after experiencing the distressing event, the individual has at least three of the following dissociative symptoms:
 - A subjective sense of numbing, detachment, and/or absence of emotional responsiveness
 - A reduction in awareness of his/her surroundings (e.g., "being in a daze").
 - Derealization (the feeling that familiar surroundings or people are unreal or have become strange)
 - Depersonalization (the feeling in an individual that (s)he is no longer him/herself. His/Her personality, body, external events, and the whole world may no longer appear to be real)
 - Dissociative amnesia (i.e., the inability to recall an important aspect of the trauma).
- The traumatic event is persistently re-experienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience or distress on exposure to reminders of the traumatic event.

- Marked avoidance of stimuli that arouse recollections of the trauma (e.g., thoughts, feelings, conversations, activities, places, people, sounds, smells, or others).
- Marked symptoms of anxiety or increased arousal (e.g., difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, and motor restlessness).

Post-Traumatic Stress Disorder (PTSD)

Clinically significant symptoms that are causing significant distress or impairment in social, occupational, or other important areas of functioning and occur more than one month after exposure to a trauma. Symptoms may include:

The traumatic event is **persistently re-experienced** in one (or more) of the following ways:

- Recurrent and intrusive recollections of the event, including images, thoughts, or perceptions
- Recurrent distressing dreams of the event
- Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated)
- Intense psychological distress on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
- Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

Persistent **avoidance** of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three or more of the following:

- Efforts to avoid thoughts, feeling, or conversations associated with the trauma
- Efforts to avoid activities, places, or people that arouse recollections of the trauma
- Inability to recall an important aspect of the trauma
- Markedly diminished interest or participation in significant activities
- Feeling of detachment or estrangement from others
- Restricted range of affect (e.g., unable to have loving feelings)
- Sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).

Persistent symptoms of increased **arousal** (not present before the trauma), as indicated by at least two of the following:

- Difficulty falling or staying asleep
- Irritability or outbursts of anger
- Difficulty concentrating
- Hypervigilance
- Exaggerated startle response.

Acute PTSD

The clinically significant symptoms above continue to cause significant distress or impairment in social, occupational, or other important areas of functioning, lasting more than one month but less than 3 months after exposure to trauma.

Chronic PTSD

The clinically significant symptoms above cause significant distress or impairment in social, occupational, or other important areas of functioning. The symptoms last more than 3 months after exposure to trauma. Chronic PTSD is unlikely to improve without effective treatment.

- Some PTSD patients may exhibit persistent difficulties in interpersonal relations, mood, somatization, and profound identity problems. Such presentation may be often associated with sustained or repeated trauma during childhood or adolescence (such as longstanding incest or physical abuse), but it may also be associated with sustained trauma in later life or may appear as a late consequence of chronic PTSD, even if the original traumatic stressor was a single event.
- Co-morbid – also meeting DSM criteria for another disorder, such as substance use disorder, major depression disorder, other anxiety disorder, and mTBI among military personal.

PTSD with Delayed Onset

Onset of the clinically significant symptoms above, causing significant distress or impairment in social, occupational, or other important areas of functioning at least 6 months after exposure to trauma.

Figure 1. Stress Reaction Timeline.

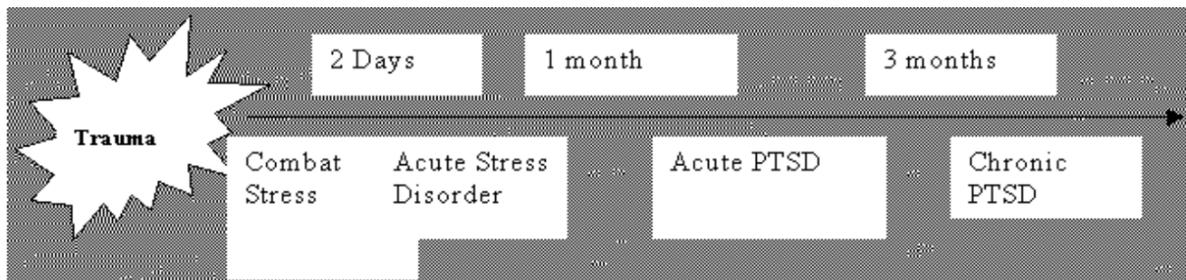


Table CORE - 1 Common Signs & Symptoms Following Exposure to Trauma

Physical	Cognitive/Mental	Emotional	Behavioral
<ul style="list-style-type: none"> • Chills • Difficulty breathing • Dizziness • Elevated blood pressure • Fainting • Fatigue • Grinding teeth • Headaches • Muscle tremors • Nausea • Pain • Profuse sweating • Rapid heart rate • Twitches • Weakness 	<ul style="list-style-type: none"> • Blaming someone • Change in alertness • Confusion • Hyper-vigilance • Increased or decreased awareness of surroundings • Intrusive images • Memory problems • Nightmares • Poor abstract thinking • Poor attention • Poor concentration • Poor decision-making • Poor problem solving 	<ul style="list-style-type: none"> • Agitation • Anxiety • Apprehension • Denial • Depression • Emotional shock • Fear • Feeling overwhelmed • Grief • Guilt • Inappropriate emotional response • Irritability • Loss of emotional control 	<ul style="list-style-type: none"> • Increased alcohol consumption • Antisocial acts • Change in activity • Change in communication • Change in sexual functioning • Change in speech pattern • Emotional outbursts • Inability to rest • Change in appetite • Pacing • Startle reflex intensified • Suspiciousness • Social withdrawal

E. Educate About Additional Care If Needed; Provide Contact Information

OBJECTIVE

Provide normalization for survivors and responders whose reactions are not clinically significant

BACKGROUND

Trauma survivors and responders who are NOT experiencing signs or symptoms or who are experiencing few symptoms should receive education. It should emphasize that the observed reactions in the symptomatic survivors are common in the aftermath of trauma and do not signify personal inadequacy, health problems, mental illness, or other enduring negative consequences.

Contemporary approaches to early intervention following trauma exposure emphasize the importance of “normalization” of acute stress reactions. Survivors or responders who show distressing symptoms or disturbed behavior should be educated to understand that their reactions are common, normal responses to the extreme events. Such an approach follows from the common clinical observation that individuals experiencing acute stress reactions often interpret their reactions as signs of “personal weakness” or evidence that they are “going crazy,” which increases their demoralization and distress. Normalization is undermined if survivors or responders who are not experiencing disruptive distress show a derogatory or punitive attitude to others who are.

Also, the persons with distress who most strongly deny or dissociate from their distress may be at increased risk for developing acute stress disorder (ASD) and subsequent PTSD. The education and normalization may therefore help them recognize how to protect themselves better and to seek care early if symptoms do interfere with their “self-control.” Even those who go on to develop PTSD may benefit from an understanding that their symptoms do not represent “personal weakness”

and that although their symptoms may be severe and painful, they are not losing control of their minds.

RECOMMENDATIONS

1. Pre- and post-trauma education should include helping the asymptomatic trauma survivor or responder understand that the acute stress reactions of other people are common and probably transient and do not indicate personal failure or weakness, mental illness, or health problems.
2. Education should include sufficient review of the many ways that post-traumatic problems can present, including symptoms in the ASD/PTSD spectrum, behavioral problems with family and friends, occupational problems, and the potential impact of alcohol or other substance misuse/abuse.
3. Education should also include positive messages by identifying and encouraging positive ways of coping, describing simple strategies to resolve or cope with developing symptoms and problems, and setting expectations for mastery and/or recovery.
4. Provide contact information, should post-traumatic symptoms emerge later.
5. Routine debriefing or formal psychotherapy is not beneficial for asymptomatic individuals and may be harmful. [D]

DISCUSSION

Individuals who do not exhibit symptoms may have family members or close friends who are symptomatic. The clinician should educate them about their role in supporting their loved ones and emphasize that normalization is a concept that can incorporate helping asymptomatic survivors to:

- View other people's (and their own possible future) stress reactions as normal, common, and expectable responses to trauma
- Recognize that sometimes peoples' inadequate attempts to cope with their reactions are also within the range of "normal" for the strange situation
- See that it is natural for them to wonder how they are doing and to be surprised or upset by the intensity, duration, or uncontrollability of their reactions.

The evidence base for the utility of normalization is weak. Few studies have attempted to assess the degree of normalization of survivor attitudes and establish a relationship with PTSD and other outcomes. Also unstudied is whether reassurance of normality and likely recovery, provided by co-survivor peers or helpers, actually serves to promote normalization. Nonetheless, the concept of normalization is consistent with theories of the development and maintenance of PTSD and with research showing a relationship between negative reactions to symptoms and PTSD (Steil & Ehlers, 2000).

Recent literature in the area of trauma has highlighted the potential for interventions to exacerbate trauma reactions. Asymptomatic survivors should not be offered services that extend beyond delivery of Psychological First Aid and education. Psychotherapy intervention may actually cause harm in persons not experiencing symptoms of acute stress (Roberts, Kitchiner et al., 2009b). The general rule of "do no harm" should apply not only to professionals but volunteers alike.

EVIDENCE

	Recommendation	Sources	LE	QE	SR
1	Providing pre- and post-trauma education can help individuals understand and cope with exposure experiences.	Working Group Consensus	III	Poor	I
2	Routine single, or multiple, psychological interventions for asymptomatic trauma survivors are NOT effective and may be harmful	Roberts, Kitchiner et al., 2009b	I	Good	D
	Psychological debriefings are not effective	See module I-1: Early Interventions			

LE =Level of Evidence; QE = Quality of Evidence; SR = Strength of Recommendation (see Appendix A)

1

**MODULE A: ACUTE STRESS REACTION (ASR)
and
PREVENTION OF POST-TRAUMATIC STRESS DISORDER (PTSD)**

Although acute stress reaction (ASR) is not defined in the DSM-IV, there has long been recognition among mental health professionals that individuals who experience a traumatic event react in certain predictable ways. A key point in the World Health Organization definition (WHO, 1992) of ASR is the assertion that “the symptoms usually appear within minutes of the impact of the stressful stimulus or event and disappear within 2-3 days (often within hours).” This view is echoed in a Guideline for Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence, released in 2002 by a collaborative group of Federal Departments and the American Red Cross: “a sensible working principle in the immediate post-incident phase is to expect normal recovery” (NIMH, 2002).

Screening and needs assessments for individuals, groups, and populations are important for the provision of informed early intervention following a major incident or traumatic event. Initial reactions following trauma are varied, complex, and unstable.

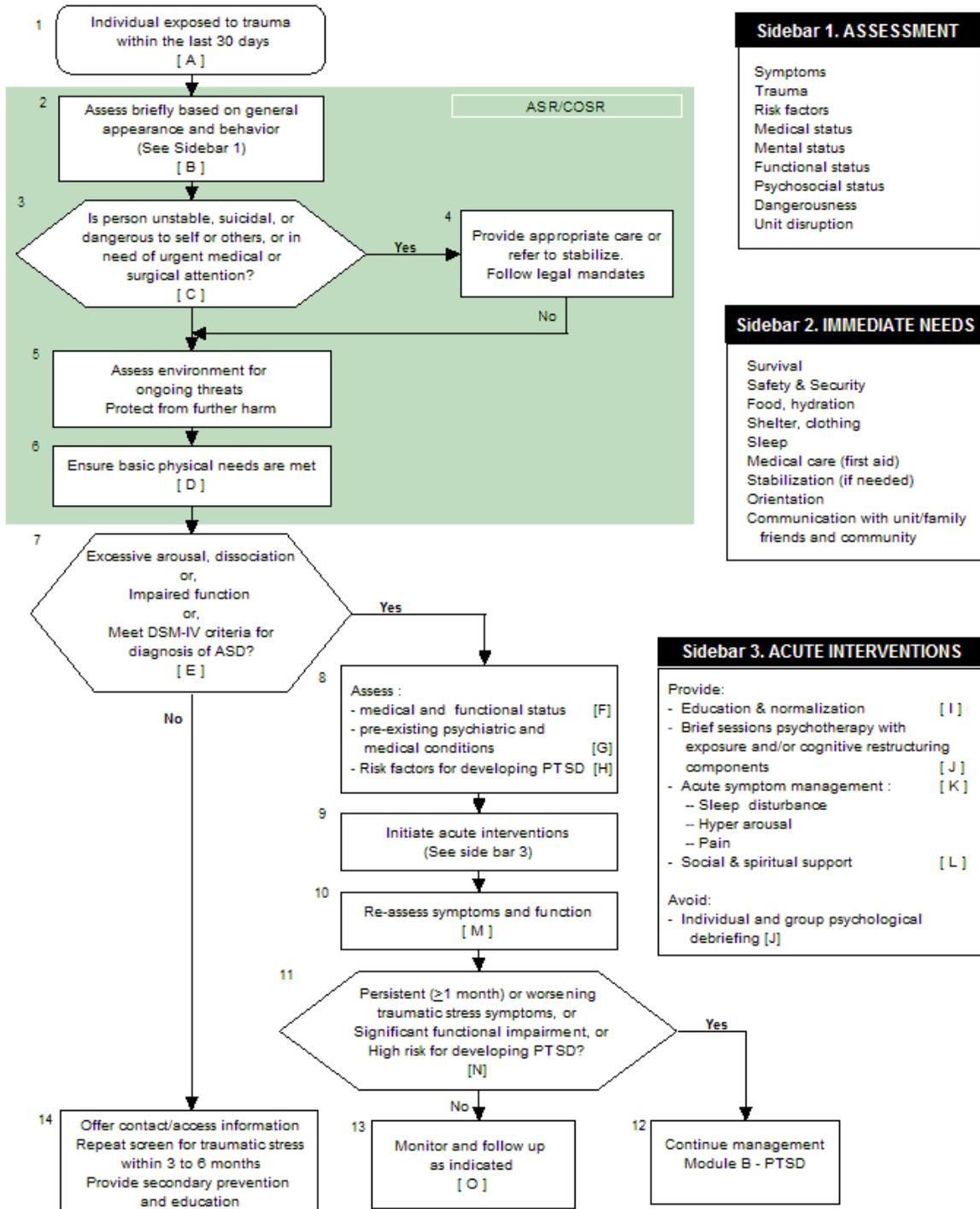
The authors of this guideline have formulated the recommendations discussed below for the management of persons with acute stress reaction (ASR) following a traumatic event. Most of the recommendations in this module are based on group consensus. When available, the evidence and supporting research are presented in evidence tables.

The approach to triage in the immediate response to traumatic exposure for service members with symptoms during Ongoing Military Operations may vary from the management of civilians exposed to traumatic events. Combat and Operational Stress Reaction (COSR) management is targeted to preserve the fighting force and return the service member (SM) to functional status. The annotations for this Module include, when appropriate, specific recommendations addressing the service members with COSR.

MODULE A: ALGORITHM

VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress
Module A - Acute Stress Reaction/Disorder Prevention of PTSD

A



Sidebar 1. ASSESSMENT

- Symptoms
- Trauma
- Risk factors
- Medical status
- Mental status
- Functional status
- Psychosocial status
- Dangerousness
- Unit disruption

Sidebar 2. IMMEDIATE NEEDS

- Survival
- Safety & Security
- Food, hydration
- Shelter, clothing
- Sleep
- Medical care (first aid)
- Stabilization (if needed)
- Orientation
- Communication with unit/family friends and community

Sidebar 3. ACUTE INTERVENTIONS

Provide:

- Education & normalization [I]
- Brief sessions psychotherapy with exposure and/or cognitive restructuring components [J]
- Acute symptom management : [K]
 - Sleep disturbance
 - Hyper arousal
 - Pain
- Social & spiritual support [L]

Avoid:

- Individual and group psychological debriefing [J]

10/21/2010

MODULE A: ANNOTATIONS

1. ASSESSMENT & TRIAGE

A. Trauma Exposure (within the past 30 days)

Acute Stress Reaction (ASR) is a transient condition that often develops in response to a traumatic event. Traumatic events are events that cause a person to fear that he/she may die or be seriously injured or harmed. These events also can be traumatic when the person witnesses them happening to others. Such events often create feelings of intense fear, helplessness, or horror for those who experience them. The traumatic events that can lead to an acute stress reaction are of similar severity to those involved in post-traumatic stress disorder (PTSD).

Combat or Operational Stress Reaction (COSR) is an acute stress reaction of service members during Ongoing Military Operations. COSR specifically refers to a reaction to high-stress events and potentially traumatic event exposure. This reaction is not attributed to an identified medical/surgical condition that requires other urgent treatment (a service member can have COSR concurrent with minor wounds/illnesses).

Among the common types of traumatic events are:

- Combat in a war zone
- Ongoing military operations
- Rape, sexual, or other physical assault
- Natural disaster (e.g., hurricanes, floods, or fires)
- Child physical and/or sexual abuse
- Domestic violence (battering)
- Motor vehicle accidents (MVAs)
- Exposure to the sudden or unexpected death of others
- Sudden life-threatening physical illness (e.g., heart attack or cancer)
- Continuous or reoccurring exposure to traumatic event(s).

Events specific to COSR:

- Intense emotional demands (e.g., rescue personnel and caregivers searching for possibly dying survivors or interacting with bereaved family members)
- Extreme fatigue, weather exposure, hunger, sleep deprivation
- Extended exposure to danger, loss, emotional/physical strain
- Exposure to environmental hazards, such as toxic contamination (e.g., gas or fumes, chemicals, radioactivity)
- While a COSR can result from a specific traumatic event, it generally emerges from cumulative exposure to multiple stressors.

Onset of at least some signs and symptoms may be simultaneous with the trauma itself or may follow the trauma after an interval of hours or days. Symptoms may include depression, fatigue, anxiety, decreased concentration/memory, irritability, agitation, and exaggerated startle response.

B. Assess Briefly Based on General Appearance and Behavior

OBJECTIVE

Identify individuals who may be at risk for endangering themselves or others due to emotional distress or functional incapacity.

BACKGROUND

The transient symptoms or problems that often develop in response to exposure to trauma begin within minutes of the traumatic event and disappear within days (even hours). Symptoms vary greatly but can include a mixture of:

- Anxiety symptoms (e.g., sweating, increased heart rate, and flushing)
- An initial state of 'daze' - narrowing of attention
- Reduced levels of consciousness - disorientation
- Agitation or over-activity
- Depression
- Withdrawal.

There are a number of possible reactions to a traumatic situation, which are considered within the "norm" for persons experiencing traumatic stress. These reactions are considered 'normal' in the sense of affecting most survivors, being socially acceptable, psychologically effective, and self-limited. In the early stage (the first four days after the trauma exposure), it is important not to classify these reactions as "symptoms" in the sense of being indicative of a mental disorder.

RECOMMENDATIONS

1. Identification of a patient with ASR symptoms is based on observation of behavior and function; there is insufficient evidence to recommend a specific screening tool.
2. Individuals exhibiting the following responses to trauma should be screened for ASR:
 - a. Physical: exhaustion, hyperarousal, somatic complaints (GI, GU, MS, CV, Resp, NS), or symptoms of conversion disorder
 - b. Emotional: anxiety, depression, guilt/hopelessness
 - c. Cognitive/mental: amnesic or dissociative symptoms, hypervigilance, paranoia, intrusive re-experiencing
 - d. Behavioral: avoidance, problematic substance use.
3. Individuals who experience ASR should receive a comprehensive assessment of their symptoms to include details about the time of onset, frequency, course, severity, level of distress, functional impairment, and other relevant information.
4. Assess for capability to perform routine functions.

Assessment specific to COSR:

5. Assess service member's functional status, to include:
 - a. Any changes in productivity
 - b. Co-worker or supervisor reports of recent changes in appearance, quality of work, or relationships

- c. Any tardiness/unreliability, loss of motivation, or loss of interest
 - d. Forgetful or easily distracted
 - e. Screening for substance use.
6. Document symptoms of COSR and obtain collateral information from unit leaders, coworkers, or peers about stressors, function, medical history, and absence or impairment in operation or mission.
 7. Consider the service member's role and functional capabilities and the complexity and importance of his/her job.

DISCUSSION

An acute stress reaction (ASR/COSR) may appear concurrent with other wounds or illnesses. Providers should confirm that the symptoms are not due to identified medical/surgical conditions requiring other urgent treatment. ASR may result from a specific traumatic event or from series of events.

In the aftermath of any extreme stressful event, most of those suffering from acute traumatic stress reactions will be easy to spot. Those who have been injured will be obvious. Among the uninjured there will also be many who look stunned, appear pale and faint, or can be seen to be shaking. Some of those who appear to be suffering from trauma may not even be the actual victims of the disaster but witnesses or rescuers who may be deeply affected by what they are seeing. Some may not be immediately identifiable as traumatized, because they may be highly active - looking for others or looking after others and organizing help and rescue. A percentage of these may, in the next days or weeks, develop post-traumatic stress disorder (PTSD).

Practitioners who are managing service members suffering from stress reactions or COSR should consider a variety of factors when deciding when a service member is ready to return to duty including the severity of the condition, the level of occupational impairment, nature and complexity of the occupation and level of social support.

C. Unstable, Dangerous to Self or Others, or Need for Urgent Medical Attention

OBJECTIVE

Protect individuals who may be at risk for endangering themselves or others due to emotional distress or functional incapacity.

BACKGROUND

Emergency treatment, administered to an injured person before professional medical care is available, can be applied to stress reactions of the mind as well as to physical injuries of the body. Acute interventions can be envisioned as the mental health correlate of physical first aid, with the goal being to "stop the psychological bleeding." The first, most important measure should be to eliminate (if possible) the source of the trauma or to remove the victim from the traumatic, stressful environment. Once the patient is in a safe situation, the provider should attempt to reassure the patient, encourage a professional healing relationship, encourage a feeling of safety, and identify existing social supports. Establishing safety and assurance may enable people to get back on track, and maintain their pre-trauma stable condition.

RECOMMENDATIONS

1. Address acute medical/behavioral issues to preserve life and avoid further harm by:
 - a. Providing appropriate medical/surgical care or referring to stabilize
 - b. Evaluating the use of prescribed medications
 - c. Preventing possible biological or chemical agent exposure
 - d. Managing substance intoxication or withdrawal
 - e. Stopping self-injury or mutilation
 - f. Addressing inability to care for oneself.
2. Arrange a safe, private, and comfortable environment for continuation of the evaluation:
 - a. Assess danger to self or others (e.g., suicidal, or homicidal behavior)
 - b. Establish a working treatment alliance with the patient
 - c. Maintain a supportive, non-blaming, non-judgmental stance throughout the evaluation
 - d. Assist with the removal of any ongoing exposure to stimuli associated with the traumatic event
 - e. Minimize further traumas that may arise from the initial traumatic event
 - f. Assess and optimize social supports
 - g. Secure any weapons and explosives.
3. Legal mandates should be followed:
 - a. Reporting of violence, assault
 - b. Confidentiality for the patient
 - c. Mandatory testing
 - d. Attending to chain of evidence in criminal cases (e.g., rape, evaluation)
 - e. Involuntary Commitment procedures if needed.
4. Carefully consider the following potential interventions to secure safety:
 - a. Find safe accommodation and protect against further trauma
 - b. Voluntary admission if suicidal
 - c. Restraint/seclusion only if less restrictive measures are ineffective
 - d. Provide medications managing specific symptoms as needed (e.g., sleep, pain).
5. Educate and “normalize” observed psychological reactions to the chain of command.
6. Evacuate to next level of care if unmanageable, if existing resources are unavailable, or if reaction is outside of the scope of expertise of the care provider.

DISCUSSION

Foa et al. (2000) rank “suicidality” among factors that will affect treatment decisions for PTSD. This factor must also be considered in the immediate post-trauma period: “self-destructive and impulsive behaviors, while not part of the core PTSD symptom complex, are recognized as associated features of this disorder that may profoundly affect clinical management. Therefore, the routine assessment of all patients

presenting with acute stress symptoms after exposure to a traumatic stressor should include a careful evaluation of current suicidal ideation and past history of suicidal attempts. Risk factors for suicide should also be assessed, such as current depression and substance abuse. If significant suicidality is present, it must be addressed before any other treatment is initiated.” Likewise, the patient must be assessed for any signs of violence toward others, or threat of violence in the home environment (e.g., ongoing battering), and any risk of violence should be an indication for immediate treatment.

While there is little research on these issues for acute stress reaction per se, the literature suggests some general trends for persons with PTSD that may inform clinical management of ASR. For example, individuals with sub-threshold PTSD are at high risk for suicidal ideation (Marshall et al., 2001) and, for women, suicide attempts (Breslau, 2001; Ferrada-Noli et al., 1998; Kaslow et al., 2000; Prigerson et al., 1999). For young adults, aggressive symptoms may be predictive of suicidality in men and elevated symptoms of PTSD and/or depression may be more predictive in women (Prigerson et al., 1999). Some individuals with stress reactions could be at risk for violence toward others. This can be manifested through explosivity and anger problems and may predict risk for violent behavior.

Optimizing existing social supports is helpful in settings of acute stress and may decrease risk of suicidality in PTSD (Kotler et al., 2001).

For extended discussion of dangerousness to self or others, [see Module B: Annotation C – Assessment of Dangerousness](#).

D. Ensure Basic Physical Needs Are Met

OBJECTIVE

Ensure that trauma-exposed persons with acute stress symptoms have their basic needs met.

BACKGROUND

Trauma victims often have significant disruption to their routines for sleep, nutrition, exercise, access to finances, and healthcare. Their normal shelter, clothing, and other basic resources may be destroyed or inaccessible. These disruptions can be additionally traumatizing.

Early interventions should typically seek to address the needs of the individual person, with the aim of promoting normal recovery, resiliency, and personal growth and avoiding additional harm (see [Table A1-Early Interventions](#)).

Individual persons who were exposed to trauma as members of a group/unit that existed prior to the trauma event (e.g., police units, firefighters, or military units), may also benefit from interventions addressing the collective outcomes such as social order and community or unit cohesion. Some of the acute interventions, such as psychoeducation, may be provided in a group format to maintain unit integrity and promote continuity with established relationships.

Table A - 1 Early Interventions after Exposure to Trauma (<4 days after exposure)

SR	Balance of Benefit and Harm			
	Significant Benefit	Some Benefit	Unknown Benefit	No Benefit Potential Harm
I	--	Psychological First Aid Psychoeducation and normalization Social support	Spiritual support	--
D				Psychological debriefing

SR = Strength of recommendation (see Appendix A)

RECOMMENDATIONS

1. Acute intervention should ensure that the following needs are met:
 - a. Safety/security/survival
 - b. Food, hydration, clothing, hygiene, and shelter
 - c. Sleep
 - d. Medications (i.e., replace medications destroyed/lost)
 - e. Education as to current status
 - f. Communication with family, friends, and community
 - g. Protection from ongoing threats/toxins/harm. If indicated, reduce use of alcohol, tobacco, caffeine, and illicit psychoactive substances.

2. Provide Psychological First Aid to:
 - a. Protect survivors from further harm
 - b. Reduce physiological arousal
 - c. Mobilize support for those who are most distressed
 - d. Keep families together and facilitate reunion with loved ones
 - e. Provide information and foster communication and education
 - f. Use effective risk communication techniques.

Interventions Specific for Members of Pre-existing Group (e.g., COSR):

3. Treat according to member's prior role and not as a "patient."
4. Assure or provide the following, as needed:
 - a. Reunion or ongoing contact with group/unit
 - b. Promote continuity with established relationships (e.g., primary group)
 - c. Respite from intense stress
 - d. Comfortable environment (e.g., thermal comfort)
 - e. Consider psychoeducation and discussion in a group format
 - f. Assign job tasks and recreational activities that will restore focus and confidence and reinforce teamwork (limited duty).

DISCUSSION

Psychological first aid should be envisioned as the mental health correlate of physical first aid, with the goal being to “stop the bleeding.” The patient should be removed from the traumatic situation. When the patient is in a safe situation, the clinician should attempt to reassure the patient and encourage a feeling of safety.

In their Disaster Mental Health Response Handbook (Raphael, 2000), a group of PTSD experts propose three stages of care:

Protect:

Find ways to protect survivors from further harm and from further exposure to traumatic stimuli. If possible, create a “shelter” or safe haven for them, even if it is symbolic. The fewer traumatic stimuli people see, hear, smell, taste, or feel, the better off they will be.

Direct:

Kind and firm direction is needed and appreciated. Survivors may be stunned, in shock, or experiencing some degree of dissociation. When possible, direct ambulatory survivors:

- Away from the site of destruction
- Away from severely injured survivors
- Away from continuing danger.

Connect:

Survivors who are encountered will usually have lost connection to the world that was familiar to them. A supportive, compassionate, and nonjudgmental verbal or nonverbal exchange between you and survivors may help to give the experience of connection to the shared societal values of altruism and goodness. Help survivors connect:

- To loved ones
- To accurate information and appropriate resources
- To locations where they will be able to receive additional support
- To unit comrades and mission, fostering vertical and horizontal cohesion.

Triage:

A majority of survivors experience normal stress reactions. However, some may require immediate crisis intervention to help manage intense feelings of panic or grief. Signs of panic are trembling, agitation, rambling speech, and erratic behavior. Signs of intense grief may be loud wailing, rage, or catatonia. In such cases, attempt to quickly establish therapeutic rapport, ensure the survivor's safety, acknowledge and validate the survivor's experience, and offer empathy. Medication may be appropriate and necessary, if available.

Psychological First Aid: (See Table A-2)

Psychological first aid was coined in Raphael's book, 'When Disaster Strikes: How Individual and Communities Cope with Catastrophe' (1986). It is included as part of the *Fundamental Criteria for First Aid* knowledge and skills that soldiers should be trained in order to save themselves or other soldiers in casualty situations.

Table A - 2 Key Elements of Psychological First Aid (PFA)

1. *Contact and Engagement* - Respond to contacts initiated by affected persons, or initiate contacts in a non-intrusive, compassionate, and helpful manner
2. *Safety and Comfort* - Enhance immediate and ongoing safety, and provide physical and emotional comfort
3. *Stabilization (if needed)* - Calm and orient emotionally overwhelmed or distraught survivors
4. *Information Gathering - Current Needs and Concerns* - Identify immediate needs and concerns, gather additional information, and tailor PFA interventions
5. *Practical Assistance* - Offer practical help to the survivor in addressing immediate needs and concerns
6. *Connection with Social Supports* - Help establish opportunities for brief or ongoing contacts with primary support persons or other sources of support, including family members, friends, and community helping resources
7. *Information on Coping* - Provide information (about stress reactions and coping) to reduce distress and promote adaptive functioning
8. *Linkage to Collaborative Services* - Link survivors with needed services and inform them about available services that may be needed in the future.

These core goals of PFA constitute the basic objectives of providing early assistance (e.g., within days or weeks following an event). The amount of time spent on each goal will vary from person to person and with different circumstances, according to need.

The complete document describing PFA components can be found at:

<http://www.vdh.state.va.us/EPR/pdf/PFA9-6-05Final.pdf>

The FM 21-11 First Aid for Soldiers document (1991) states:

(www.medtrng.com/Fm21_11/fm211_8.htm)

"The psychological first aid is most needed at the first sign that a soldier can not perform the mission because of emotional distress. Stress is inevitable in combat, in hostage and terrorist situations, and in civilian disasters, such as floods, hurricanes, tornadoes, and industrial and aircraft catastrophes. Most emotional reactions to such situations are temporary, and the person can still carry on with encouragement. Painful or disruptive symptoms may last for minutes, hours, or a few days. However, if the stress symptoms are seriously disabling, they may be psychologically contagious and endanger not only the emotionally upset individual but also the entire unit. In such situations, you may be working beside

someone who cannot handle the impact of disaster. Even when there is no immediate danger of physical injury, psychological harm may occur.”

“Psychological first aid really means assisting people with emotional distress whether it results from physical injury, disease, or excessive traumatic stress. Emotional distress is not always as visible as a wound, a broken leg, or a reaction to pain from physical damage. However, overexcitement, severe fear, excessive worry, deep depression, misdirected aggression, or irritability and anger are signs that stress has reached the point of interfering with effective coping.”

“Psychological first aid should go hand in hand with physical first aid. The discovery of a physical injury or cause for an inability to function does not rule out the possibility of a psychological injury (or vice versa). A physical injury and the circumstances surrounding it may actually cause an emotional injury that is potentially more serious than the physical injury; both injuries need treatment. The person suffering from pain, shock, fear of serious damage to his body, or fear of death does not respond well to joking, indifference, or fearful-tearful attention. Fear and anxiety may take as high a toll on the soldier's strength as does the loss of blood.” (The Department of the Army; Washington, DC, 4 December 1991)

Specific Interventions for COSR:

Combat Operation Stress Control (COSC) utilizes the management principles of brevity, immediacy, contact, expectancy, proximity, and simplicity (BICEPS). These principles apply to all COSC interventions or activities throughout the theater, and are followed by COSC personnel in all BH/COSC elements. These principles may be applied differently based on a particular level of care and other factors pertaining to mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC).

The actions used for COSC (commonly referred to as the 6 Rs) involve the following actions:

- Reassure** of normality (normalize the reaction)
- Rest** (respite from combat or break from work)
- Replenish** bodily needs (such as thermal comfort, water, food, hygiene, and sleep).
- Restore** confidence with purposeful activities and talk
- Retain** contact with fellow soldiers and unit
- Remind / Recognize** emotion of reaction (specifically potentially life-threatening thoughts and behaviors).

For additional information see COSR protocols for DoD specific services.

E. Person has Trauma-Related Symptoms, Significant Impaired Function, or Diagnosis of ASD

Identify patients who have excessive post-traumatic stress symptoms or significant distress impaired function, or are diagnosed with ASD.

BACKGROUND

Since people who develop ASD are at greater risk of developing PTSD, they should be identified and offered treatment as soon as possible. Although ASD does not occur in all people who later develop PTSD, treatment should be considered for all acutely traumatized people with ASD, those with severe PTSD symptoms but do not meet ASD diagnostic criteria, and those with functional impairment because of acute physiological symptoms (e.g., hyperarousal).

Some patients with an acute stress reaction may benefit from augmentation of the acute intervention and additional follow-up. Because people vary in their reaction and in the rate that they recover from traumatic stress, some individuals may require more time or an adjustment of the treatment prior to improvement. Some want and feel a need to discuss the event, and some have no such need. Respect individual and cultural preferences in the attempt to meet their needs as much as possible. Allow for normal recovery and monitor.

RECOMMENDATIONS

1. Acutely traumatized people, who meet the criteria for diagnosis of ASD, and those with significant levels of post-trauma symptoms after at least two weeks post-trauma, as well as those who are incapacitated by acute psychological or physical symptoms, should receive further assessment and early intervention to prevent PTSD.
2. Trauma survivors, who present with symptoms that do not meet the diagnostic threshold for ASD, or those who have recovered from the trauma and currently show no symptoms, should be monitored and may benefit from follow-up and provision of ongoing counseling or symptomatic treatment.
3. Service members with COSR who do not respond to initial supportive interventions may warrant referral or evacuation.

DISCUSSION

Stress reactions produce biological, psychological, and behavioral changes. Biological alterations include disruptions in neurochemicals, sleep patterns, hyperarousal, and somatic symptoms (e.g., pain, gastrointestinal symptoms). Psychological changes include: mood disturbances (e.g., emotional lability, irritability, blunting, numbing), anxiety (e.g., increased worry, ruminations), and cognitive disturbances (e.g., memory impairment, confusion, and impaired task completion).

Not all individuals who are exposed to trauma or who have a COSR require a mental health referral. However, those service members who are deteriorating or who are not responding to acute supportive interventions need to be identified and evacuated to a more definitive level of care. Also, patients who have a high potential for dangerousness or the development of symptoms suggestive of a stress-related disorder (e.g., ASD) also need to be identified and referred to a facility that can provide appropriate mental healthcare.

Patients who do not respond to first-line supportive interventions may warrant treatment augmentation or a mental health referral. Clear indications for a mental health referral include: a worsening of stress-related symptoms, new onset of

dangerousness or maladaptive coping to stress, exacerbation of co-morbid psychiatric conditions, or deterioration in function. Because patients with new onset stressors, poor social supports, or inadequate coping skills may be at heightened risk to develop PTSD, a mental health referral is also indicated.

Acute Stress Disorder (ASD)

Different types of trauma can lead to ASD, from interpersonal assaultive violence to accidents to combat related trauma. As many as ninety percent of individuals, who experience sexual assault, will have acute stress symptoms but not ASD (Breslau, 1998). Additionally, surveys from the OIF/OEF combat theaters indicate that about 10 to 18 percent of deployed US combat forces experience trauma-related stress symptoms (as measured with PCL cutoff score of 50+).

Prior to DSM-IV (American Psychiatric Association, 1994), severe distress occurring in the month after a traumatic event was not regarded as a diagnosable clinical problem. Although this prevented the pathologizing of transient reactions, it hampered the identification of more severely traumatized individuals who might have benefited from early interventions. To address this issue, DSM-IV introduced the diagnosis of acute stress disorder (ASD) to describe those acute reactions associated with an increased likelihood of developing chronic PTSD (see Table A - 3). A diagnosis of ASD is given when an individual experiences significantly distressing symptoms of re-experiencing, avoidance, and increased arousal within 4 weeks of the trauma. These symptoms must be present for at least two days before the diagnosis of ASD can be made. The DSM-IV diagnosis of ASD requires that the victim report at least three of the following five symptoms labeled as indicators of dissociation: numbing, reduced awareness of surroundings, derealization, depersonalization, and dissociative amnesia. These requirements are based on evidence found in previous studies that dissociative symptoms at the time of (or shortly after) the traumatic event are predictive of the subsequent development of chronic PTSD (Bremner et al., 1992; Marmar et al., 1994; Koopman et al., 1994). Thus, the fundamental differences between PTSD and ASD involve time elapsed since the trauma and the relative emphasis on dissociative symptoms in the ASD diagnosis.

Table A - 3 Diagnostic criteria for 308.3 Acute Stress Disorder (DSM-IV)

- A. The person has been exposed to a traumatic event in which both of the following were present:
- the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
 - the person's response involved intense fear, helplessness, or horror
- B. Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms:
- a subjective sense of numbing, detachment, or absence of emotional responsiveness
 - a reduction in awareness of his or her surroundings (e.g., "being in a daze")
 - derealization
 - depersonalization
 - dissociative amnesia (i.e., inability to recall an important aspect of the trauma)
- C. The traumatic event is persistently re-experienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience; or distress on exposure to reminders of the traumatic event.
- D. Marked avoidance of stimuli that arouse recollections of the trauma (e.g., thoughts, feelings, conversations, activities, places, and people).
- E. Marked symptoms of anxiety or increased arousal (e.g., difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, motor restlessness).
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary task, such as obtaining necessary assistance or mobilizing personal resources by telling family members about the traumatic experience.
- G. The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event.
- H. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition, is not better accounted for by Brief Psychotic Disorder, and is not merely an exacerbation of a pre-existing Axis I or Axis II disorder.

F. Assess Medical and Functional Status

OBJECTIVE

Obtain complete history, physical examination, relevant laboratory tests, and assessment of functioning to determine course of treatment.

BACKGROUND

One of the key goals of ASR supportive care is to address immediate physical health problems and to assist the individual in beginning to return to a normal level of function. In order to do this, the clinician or caregiver must assess the individual's current state of health and functioning.

RECOMMENDATIONS

1. Medical status should be obtained for all persons presenting with symptoms to include:
 - a. History, physical examination, and a neurological examination
 - b. Use of prescribed medications, mood or mind-altering substances, and possible biological or chemical agent exposure
 - c. A mini-mental status examination (MMSE) to assess cognitive function if indicated.
2. The history and physical examination findings should lead the provider to other assessments as clinically indicated. Based on the clinical presentation, assessment may include:
 - a. Screen for toxicology if the symptom presentation indicates
 - b. Radiological assessment of patients with focal neurological findings or possible head injury
 - c. Appropriate laboratory studies to rule out medical disorders that may cause symptoms of acute stress reactions (e.g., complete blood count [CBC], chemistry profile, thyroid studies, HCG, EKG, EEG).
3. A focused psychosocial assessment should be performed to include assessment of active stressors, losses, current social supports, and basic needs (e.g., housing, food, and financial resources).
4. A brief assessment of function should be completed to evaluate: 1) objectively impaired function based on general appearance and behavior; 2) subjectively impaired function; 3) baseline level of function (LOF) vs. current LOF; and 4) family and relationship functioning.

DISCUSSION

Whenever possible, providers should include assessment of any physical injuries, review of targeted H&P and laboratory results (if available), assessment of the individual's level of functioning, and level of family and relationship functioning. Ideally, the current clinical picture should be compared to the individual's pre-trauma state, but often this may not be possible in the immediate aftermath of a traumatic event. Evaluation of the patient's level of function is warranted, because evidence has shown that functional impairment after trauma is a predictor for later development of PTSD (Norris et al., 2002).

G. Assess Pre-Existing Psychiatric and Medical Conditions

OBJECTIVE

Identify patients at risk for complications.

BACKGROUND

Circumstances brought about by a traumatic event may complicate any existing psychiatric conditions or may exacerbate pre-existing pathology.

RECOMMENDATIONS

1. Assess patients for pre-existing psychiatric conditions to identify high-risk individuals and groups.
2. Assure access and adherence to medications that the patient is currently taking.
3. Refer patients with pre-existing psychiatric conditions to mental health specialty when indicated or emergency hospitalization if needed.

DISCUSSION

The NIMH (2002) guideline addresses the need to manage pre-existing psychiatric and medical conditions. The authors point to the “special needs of those who have experienced enduring mental health problems, those who are disabled, and other high-risk groups who may be vulnerable and less able to cope with unfolding situations.” They also call for additional attention to be paid to members of these groups in the immediate post-trauma period. However, they also emphasize that “the presumption of clinically significant disorders in the early post-incident phase is inappropriate, except for individuals with preexisting conditions.”

H Assess Risk Factors for Developing ASD/PTSD

BACKGROUND

Not all trauma survivors develop permanent stress disorders. Early identification of those at-risk for negative outcomes following trauma can facilitate prevention, referral, and treatment. Screening for those at greatest risk should address past and current psychiatric and substance use problems and treatment, prior trauma exposure, pre-injury psychosocial stressors, and existing social support.

RECOMMENDATIONS

1. Trauma survivors who exhibit symptoms or functional impairment should be screened for the following risk factors for developing ASD/PTSD:

Pre-traumatic factors

1. Ongoing life stress
2. Lack of social support
3. Young age at time of trauma
4. Pre-existing psychiatric disorders, or substance misuse
5. History of traumatic events (e.g., MVA)
6. History of post-traumatic stress disorder (PTSD).
7. Other pre-traumatic factors, including: female gender, low socioeconomic status, lower level of education, lower level of intelligence, race (Hispanic, African-American, American Indian, and Pacific Islander), reported abuse in

childhood, report of other previous traumatization, report of other adverse childhood factors, family history of psychiatric disorders, and poor training or preparation for the traumatic event.

Peri-traumatic or trauma-related factors

1. Severe trauma
2. Physical injury to self or others
3. Type of trauma (combat, interpersonal traumas such as killing another person, torture, rape, or assault convey high risk of PTSD)
4. High perceived threat to life of self or others
5. Community (mass) trauma
6. Other peri-traumatic factors, including: history of peri-traumatic dissociation.

Post-traumatic factors

1. Ongoing life stress
2. Lack of positive social support
3. Bereavement or traumatic grief
4. Major loss of resources
5. Negative social support (shaming or blaming environment)
6. Poor coping skills
7. Other post-traumatic factors, including: children at home and a distressed spouse.

DISCUSSION

Risk Factors for ASD

When evaluating risk factors for ASD, the clinician should keep in mind that ASD is no longer diagnosed later than four weeks after a traumatic event. Thus, not enough time will have passed following the trauma for many post-trauma factors to have had their full impact on the course of symptoms.

Risk Factors for PTSD

When evaluating risk factors for developing PTSD, the clinician should keep in mind that PTSD is defined as occurring only after four weeks have elapsed following a traumatic event. PTSD symptoms, however, may not appear until a considerable time has passed, sometimes surfacing years later.

For further discussion of risk factors for PTSD - See [Module B: Annotation F](#)

2. TREATMENT

I. Provide Education and Normalization / Expectancy of Recovery

OBJECTIVE

Help trauma survivors cope with ASR/COSR by providing information that may help them manage their symptoms and benefit from treatment.

BACKGROUND

Education for trauma survivors and their families may help normalize common reactions to trauma, improve coping, enhance self-care, facilitate recognition of significant problems and increase knowledge of, and access to, services. Individuals should be reassured about common reactions to traumatic experiences and be advised regarding positive and problematic forms of coping with them.

Information about social support and stress management is particularly important. Opportunities to discuss emotional concerns in individual, family, or group meetings can enable survivors to reflect on what has happened. Education regarding indicators that initial acute reactions are failing to resolve will be important. Signs and symptoms of PTSD, anxiety, depression, substance use disorders, and other difficulties should be explained. Survivors will need information about financial, mental health, rehabilitation, legal, and other services available to them, as well as education about common obstacles to pursuing needed services.

RECOMMENDATION:

1. All survivors should be given educational information to help normalize common reactions to trauma, improve coping, enhance self-care, facilitate recognition of significant problems, and increase knowledge of and access to services. Such information can be delivered in many ways, including public media, community education activities, and written materials.

DISCUSSION:

Immediate post-trauma distress will remit naturally for many patients (Blanchard et al., 1995), and provision of mental health services may be unnecessary. Hypothetically, it is even possible that too much focus on mental health issues may be iatrogenic for some survivors, centering their attention on symptoms and problems and making attention and caring contingent on needing such help.

J. Initiate Brief Intervention

OBJECTIVE

To lessen the physical, psychological, and behavioral morbidity associated with acute stress reaction (ASR), hasten the return to full function (duty), and reduce the risk for development of ASD or PTSD following a traumatic event.

BACKGROUND

It is likely that not all patients will require intervention immediately following a traumatic occurrence. Depending on the intensity and duration of the trauma, there will be people who will make it through unharmed. Often, if a person appears to be coping well and denies symptoms of ASD or PTSD, specialized care may not be needed.

For people who show symptoms of ASD or PTSD (including symptoms of intrusive recollections, avoidance, numbing, and physiological hyperarousal when confronted with reminders of the trauma), brief acute intervention may be indicated.

Early interventions may need to assist the individuals with anticipating problems in using their support system. This may be particularly important in light of the fact that the psychological aftermath of trauma may significantly disrupt a person’s capacity to use others to cope with and manage post-traumatic symptoms and daily demands. Table A-4 summarizes the interventions and their potential benefit in the first month after exposure to the trauma.

Table A-4 Early Interventions after Exposure to Trauma (4 to 30 days after exposure)

SR	Balance of Benefit and Harm			
	Significant Benefit	Some Benefit	Unknown Benefit	No Benefit
A	- Brief Cognitive Behavioral Therapy (4-5 sessions)			
B				
C		- Social support		
D				- Individual psychological debriefing ☉ - Formal psychotherapy for asymptomatic survivors ☉ - Benzodiazepines ☉ - Typical Antipsychotics ☉
I		- Psychoeducation and normalization	- Imipramine - Propranolol - Prazosin - Other Antidepressants - Anticonvulsants - Atypical Antipsychotics - Spiritual support - Psychological First Aid	- Group psychological debriefing

☉= Potential harm; SR = Strength of recommendation (see Appendix A)

RECOMMENDATIONS

The following treatment recommendations should apply for all acutely traumatized people who meet the criteria for diagnosis of ASD, and for those with significant levels of acute stress symptoms that last for more than two weeks post-trauma, as well as those who are incapacitated by acute psychological or physical symptoms.

1. Continue providing psychoeducation and normalization.
2. Treatment should be initiated after education, normalization, and Psychological First Aid has been provided and after basic needs following the trauma have been made available.

3. There is insufficient evidence to recommend for or against the use of Psychological First Aid to address symptoms beyond 4 days following trauma. [I]
4. Survivors who present symptoms that do not meet the diagnostic threshold of ASD or PTSD should be monitored and may benefit from follow-up and provision of ongoing counseling or symptomatic treatment.
5. Recommend monitoring for development of PTSD using validated symptom measures (e.g., PTSD Checklist, other screening tools for ASD/PTSD).

6. Psychotherapy:

- a. Consider early brief intervention (4 to 5 sessions) of cognitive-based therapy (CBT) that includes exposure-based therapy, alone or combined with a component of cognitive re-structuring therapy for patients with significant early symptom levels, especially those meeting diagnostic criteria for ASD. [A]
- b. Routine formal psychotherapy intervention for asymptomatic individuals is not beneficial and may be harmful. [D]
- c. Strongly recommend **against** individual Psychological Debriefing as a viable means of reducing acute stress disorder (ASD) or progression to post-traumatic stress disorder (PTSD). [D]
- d. The evidence does not support a single session group Psychological Debriefing as a viable means of reducing acute stress disorder (ASD) or progression to post-traumatic stress disorder, but there is no evidence of harm (Note: this is not a recommendation pertaining to Operational Debriefing). [D]
- e. Groups may be effective vehicles for providing trauma-related education, training in coping skills, and increasing social support, especially in the context of multiple group sessions. [I]
- f. Group participation should be voluntary.

7. Pharmacotherapy:

- a. There is no evidence to support a recommendation for use of a pharmacological agent to prevent the development of ASD or PTSD. [I]
- b. Strongly recommend **against** the use of benzodiazepines to prevent the development of ASD or PTSD [D]

For discussion of the supporting evidence and grading of the recommendations, see Module I-1: [Early Interventions to Prevention of PTSD](#)

DISCUSSION

ASD Treatment

The relationship between ASD and PTSD was examined in three prospective studies. Classen and colleagues (1998) studied the acute stress reactions of bystanders to a mass shooting in an office building. They assessed 36 employees (bystanders) 8 days after the shooting. Between 7 and 10 months later, they reassessed 32 employees for post-traumatic stress symptoms and found that 33 percent of them met criteria for ASD and that meeting criteria for ASD was a strong predictor of PTSD

(accounting for 19 percent of the variance), as well as intrusion (accounting for 53 percent of the variance) and avoidance (accounting for 45 percent of the variance).

In another prospective study, Harvey and Bryant (1998) examined the relationship between ASD and PTSD in 92 motor vehicle accident survivors. From the twelve participants (13 percent) who met criteria for ASD within 2 to 26 days of the accident, 78 percent met criteria for PTSD 6 months later. Nineteen participants (21 percent) met some but not all of the criteria for ASD; of the 15 individuals available for follow-up, 9 (60 percent) met criteria for PTSD. From the 61 participants who did not meet the criteria for ASD; only 2 met criteria for PTSD. This study provides strong evidence of ASD being a predictor of PTSD. Nevertheless, Harvey and Bryant concluded that the current criteria for ASD might be too stringent for ASD to be used to predict the risk for PTSD. Harvey and Bryant (1998a) also examined the relationship between ASD and PTSD for a subset (n=79) of the motor vehicle accident survivors who suffered mild traumatic brain injury as a result of the accident. They were particularly interested in the utility of ASD as a predictor of PTSD in individuals with post-concussive symptoms that could overlap with ASD symptoms. Their results were similar to previously reported findings: 14 percent met criteria for ASD; six months after the event, 82 percent of those with ASD also met criteria for PTSD.

In another prospective study, Brewin and colleagues (1999) evaluated the use of ASD to predict PTSD in 157 survivors of violent assault. Participants were assessed for several ASD symptoms using items from the Post-Traumatic Stress Disorder Symptoms Scale; additional items were generated to determine whether the event met the ASD criterion. Nineteen percent of participants met criteria for ASD, and 20 percent met criteria for PTSD at 6-month follow-up. They found that meeting full criteria for ASD was a better predictor of PTSD than any of the symptom clusters. Eighty three percent of participants who met criteria for ASD were diagnosed with PTSD six months later.

Research suggests that relatively brief but specialized interventions may effectively prevent PTSD in some subgroups of trauma patients. Several controlled trials have suggested that brief (i.e., 4 to 5 sessions) cognitive-behavioral treatments, comprised of education, breathing training/relaxation, imaginal and *in vivo* exposure, and cognitive restructuring, delivered within weeks of the traumatic event, can often prevent PTSD in survivors of sexual and non-sexual assault (Foa et al., 1995) and MVAs and industrial accidents (Bryant et al., 1998, 1999). Brief intervention with patients hospitalized for injury has been found to reduce alcohol consumption in those with existing alcohol problems (Gentilello et al., 1999). Controlled trials of brief early intervention services targeted at other important trauma sequelae (e.g., problems returning to work, depression, family problems, trauma recidivism, and bereavement-related problems) remain to be conducted, but it is likely that targeted interventions may be effective in these arenas for at least some survivors.

Two well-designed studies offer evidence that brief treatment interventions utilizing a combination of cognitive behavioral techniques may be effective in preventing PTSD in a significant percentage of subjects. In a study of a brief treatment program for recent sexual and nonsexual assault victims who all met criteria for PTSD, Foa et al. (1995) compared repeated assessments vs. a Brief Prevention Program (BPP) (four sessions of trauma education, relaxation training, imaginal exposure, *in vivo* exposure, and cognitive restructuring). Two months posttrauma, only 10 percent of the BPP group met criteria for PTSD, whereas 70 percent of the repeated assessments group met criteria for PTSD. In a study of motor vehicle and industrial accident victims who met criteria for ASD, Bryant et al. (1998) compared five

sessions of nondirective supportive counseling (support, education, and problem-solving skills) vs. a brief cognitive-behavioral treatment (trauma education, progressive muscle relaxation, imaginal exposure, cognitive restructuring, and graded *in vivo* exposure to avoided situations). Immediately post-treatment, 8 percent in the CBT group met criteria for PTSD, versus 83 percent in the supportive counseling group. Six months post-trauma, 17 percent in the CBT group met criteria for PTSD versus 67 percent in supportive counseling. One important caveat to these interventions is that the dropout rate was high, and the authors concluded that *those with more severe symptoms might need supportive counseling prior to more intensive cognitive behavioral interventions.*

In addition to targeted brief interventions, some trauma survivors may benefit from follow-up provision of ongoing counseling or treatment. Candidates for such treatment would include survivors with a history of previous traumatization (e.g., survivors of the current trauma who have a history of childhood physical or sexual abuse) or pre-existing mental health problems.

EVIDENCE

	Recommendation	Sources	LE	QE	SR
1	Monitor patient with ASD for development of PTSD (ASD predictor of PTSD).	Brewin et al., 1999 Bryant et al., 1998, 1999	I	Good	A
2	Brief intervention of CBT (4 to 5 sessions).	See Module I-1: Brief early CBT			

LE = Level of Evidence; QE = Quality of Evidence; SR = Strength of Recommendation (see Appendix A)

K. Acute Symptom Management

BACKGROUND

Survivors of trauma may not complain directly of ASD symptoms, such as re-experiencing or avoidance. Instead, they may complain of sleeping problems, pain, or other somatic concerns. After addressing immediate needs and providing education and intervention, alleviating these symptoms will make it easier for survivors to cope and recover from their traumatic experience.

RECOMMENDATIONS

1. Symptom-specific treatment should be provided after education, normalization, and basic needs are met.
2. Consider a short course of medication (less than 6 days), targeted for specific symptoms in patients post-trauma
 - a. Sleep disturbance/insomnia
 - b. Management of pain
 - c. Irritation/excessive arousal/anger.
3. Provide non-pharmacological intervention to address specific symptoms (e.g., relaxation, breathing techniques, avoiding caffeine) to address both general recovery and specific symptoms (sleep disturbance, pain, hyperarousal, or anger).

For discussion of the supporting evidence of the recommendations see [Module I-3: Management of Specific Symptoms](#)

L1. Facilitate Spiritual Support

BACKGROUND

Religion and spirituality may provide a framework by which many survivors of trauma construct a meaningful account of their experience and seek solace, and may provide a useful focus for intervention with trauma survivors. The terms “religious” and “spiritual” are both used in the clinical literature to refer to a set of beliefs and practices to which individuals may turn for support following a traumatic event.

RECOMMENDATIONS

1. Ensure patient access to spiritual care when sought.
2. Assess for spiritual needs.
3. Provide opportunities for grieving for losses (providing space and opportunities for prayers, mantras, rites, and rituals and end-of-life care, as determined important by the patient).

DISCUSSION

For discussion of the supporting evidence of the recommendations see Module I-2: D2- [Spiritual Support](#).

L2. Facilitate Social Support

BACKGROUND

PTSD is often associated with withdrawal from participation in social activities, limited friendships, and reduced emotional intimacy. Some research also suggests that veterans with PTSD have greater rates of social anxiety disorder. Poor social support predicts development of PTSD and a more chronic course of the disorder. Veterans with PTSD who are more involved in the community are more likely to show remission in PTSD symptoms than those with less community involvement and adjustment to peacekeeping is significantly related to self-disclosure, especially to supportive significant others. Overcoming problems in social functioning and promoting social participation may require active, sustained intervention. When indicated, improvements in social functioning should be established as a formal treatment goal. Social support is critical for helping the individual cope after a trauma has occurred. It may be necessary to identify potential sources of support and facilitate support from others (e.g., partners, family, friends, work colleagues, and work supervisors). Survivors can also be taught a range of social skills to facilitate social participation and support-seeking.

RECOMMENDATIONS

1. Immediately after trauma exposure, preserve an interpersonal safety zone protecting basic personal space (e.g., privacy, quiet, personal effects).
4. As part of Psychological First Aid, reconnect trauma survivors with previously supportive relationships (e.g., family, friends, unit members) and link with additional sources of interpersonal support.
1. Assess for impact of PTSD on social functioning.
5. Facilitate access to social support and provide assistance in improving social functioning, as indicated.

DISCUSSION

Optimizing existing social supports is helpful in settings of acute stress and may decrease risk of suicide in PTSD (Kotler et al., 2001). For example, higher social support for women who have experienced domestic violence may reduce risk of PTSD and other mental disorders (Coker et al., 2002).

3. RE-ASSESSMENT**M. Reassess Symptoms and Function**

OBJECTIVE

Identify patients with persistent traumatic stress symptoms, related dysfunction, or additional treatment needs.

BACKGROUND

Clinical reassessment of response to the acute intervention is indicated to determine if there are persistent symptoms and, if necessary, to develop a follow-up plan.

Especially important are acute levels of traumatic stress symptoms, which predict chronic problems; for example, more than three-quarters of MVA patients diagnosed with ASD will have chronic PTSD at 6 months post-trauma.

In follow-up appointments, it will be important to screen for PTSD and other anxiety disorders, depression, alcohol and substance abuse, problems with return to work and other productive roles, adherence to medication regimens and other appointments, and potential for re-traumatization.

RECOMMENDATIONS

1. Assessment of the response to the acute intervention should include an evaluation for the following risk factors:
 - a. Persistent or worsening traumatic stress symptoms (e.g., dissociation, panic, autonomic arousal, cognitive impairment)
 - b. Significant functional impairments (e.g., role/work, relationships)
 - c. Dangerousness (suicidal or violent ideation, plan, and/or intent)
 - d. Severe psychiatric co-morbidity (e.g., psychotic spectrum disorder, substance use disorder or abuse)
 - e. Maladaptive coping strategies (e.g., pattern of impulsivity, social withdrawal, or other reactions under stress)
 - f. New or evolving psychosocial stressors
 - g. Poor social supports.
2. Follow-up after acute intervention to determine patient status should include the following:
 - a. Patient does not improve or status worsens – continue management of PTSD (See Module B) in consultation or referral to PTSD specialty care or mental health provider. Recommend involvement of the primary care provider in the treatment. Patients with multiple problems may benefit from a multi-disciplinary approach to include

- occupational therapy, spiritual counseling, recreation therapy, social work, psychology, and/or psychiatry.
- b. Patient demonstrates partial improvement (e.g., less arousal, but no improvement in sleep) – consider augmentation or adjustment of the acute intervention and follow up within 2 weeks.
 - c. Patient recovers from acute symptoms – provide education about acute stress reaction and contact information with instructions for available follow-up if needed.

DISCUSSION

After initiating an acute intervention, it is crucial for providers to follow-up and assess for treatment response and for any new or additional risk factors. Studies of exposed populations show that poor social supports and severe stress after the trauma may increase the risk of developing PTSD. Persons with stress reactions may respond with maladaptive coping styles or health risk behaviors; so, an assessment of coping styles and health risk behaviors is warranted. Those patients who respond well to acute interventions can then be offered contact information for follow-up should they later become symptomatic.

4. FOLLOW-UP

N. Persistent (>1 Month) or Worsening Symptoms, Significant Functional Impairment, or High Risk for Development of PTSD.

OBJECTIVE

Identify patients with PTSD or high risk for developing PTSD who may benefit from PTSD treatment.

BACKGROUND

A crucial goal of follow-up activities is referral, as necessary, for appropriate mental health services. In fact, referral, and subsequent delivery of more intensive interventions, will depend upon adequate implementation of screening. Screening, whether conducted in formal or informal ways, can best help determine who is in need of referral. But even if those who might benefit from mental health services are adequately identified, factors such as embarrassment, fear of stigmatization, practical barriers (e.g., distance from services), and cultural norms that do not support help-seeking may all limit motivation to seek help or pursue a referral. Those making referrals can directly discuss these attitudes about seeking help and attempt to preempt avoidance of needed services. Motivational interviewing techniques (Rollnick et al., 1992) may help increase rates of referral acceptance.

RECOMMENDATIONS

1. Individuals who fail to respond to early interventions should be referred for PTSD treatment when they have:
 - a. Worsening of stress-related symptoms
 - b. High potential or new-onset potential for dangerousness
 - c. Development of ASD/PTSD
 - d. Maladaptive coping with stress (e.g., social withdrawal, alcohol use)
 - e. Exacerbation of pre-existing psychiatric conditions
 - f. Deterioration in function

- g. New onset stressors
 - h. Poor social supports.
2. Primary Care provider should consider initiating therapy pending referral or if the patient is reluctant or unable to obtain specialty services.
 3. Primary Care provider should continue evaluating and treating co-morbid physical illnesses and addressing any other health concerns, as well as educating and validating the patient regarding his/her illness.

DISCUSSION

Not all individuals who are exposed to trauma or who have an Acute Stress Reaction (ASR) following trauma require a mental health referral. However, patients who are deteriorating or not responding to acute supportive interventions need to be identified and referred to mental health. Also, those patients who have a high potential for dangerousness or potential for the development of PTSD also need to be identified and referred to specialty care.

Some patients with an ASR who show partial improvement may benefit from augmentation of the acute intervention and additional follow-up. Because people recover from traumatic stress-related problems at different rates, some individuals may require more time or an adjustment of the treatment prior to improvement. For example, early in treatment, medications may be adjusted to target prominent symptoms.

Patients with partial PTSD exhibit clinically meaningful levels of functional impairment in association with their symptoms (Stein, 1997). Functional impairment, rates of co-morbid disorders, and rates of suicidal ideation were shown to increase linearly with an increasing number of PTSD symptoms, and individuals with sub-threshold PTSD had increased suicidal ideation, even after controlling for the presence of co-morbid major depressive disorder (Marshall, 2001).

Patients who do not respond to first-line interventions may warrant treatment augmentation or a mental health referral. Clear indications for a mental health referral include: a worsening of stress-related symptoms, new onset of dangerousness or maladaptive coping to stress, exacerbation of co-morbid psychiatric conditions, or deterioration in function. Because patients with new-onset stressors, poor social supports, or inadequate coping skills may be at heightened risk to develop PTSD, mental health referral is also indicated.

Primary Care providers who identify patients with possible PTSD should consider referral to a Mental Health or PTSD clinic. This referral should be made in consultation with the patient, and with consideration of the patient's severity of problems and preferences.

Several treatment modalities can be initiated and monitored in the primary care setting (e.g., Pharmacotherapy, Supportive Counseling). Therefore, the Primary Care practitioner should consider initiating therapy pending referral. However, if the patient is reluctant or unable to obtain specialty services (see Module B), the Primary Care provider should continue evaluating and treating co-morbid somatic illnesses and addressing any other health concerns, as well as educating and validating the patient regarding his/her illness. If patients are referred to specialty care, it is vital that the Primary Care team (including the Healthcare Integrator) stay actively involved in coordination with the Specialist in the care of patients with PTSD.

Additional Points:

- Don't suggest or insinuate that physical or cognitive symptoms co-existing with ASD/PTSD are related to a "stress," "emotional," or "psychological" problem. Educate patients about the physiological dysregulation associated with PTSD and how this can impact physical and cognitive functioning
- Encourage referral to behavioral health specialty care via collaborative discussion, if indicated
- Primary Care providers should not hesitate to ask questions about trauma-related symptoms. Providers should be aware that narration of traumatic experiences may be associated with increased distress temporarily, and allow time to address it.

O. Monitor and Follow-Up

BACKGROUND

Many trauma survivors experience some symptoms in the immediate aftermath of a traumatic event. In most instances, these symptoms will eventually remit and do not require long-term follow-up. Those exposed to traumatic events and who manifest no or few symptoms after a period of time (approximately two months) do not require routine follow-up, but follow-up should be provided if requested.

RECOMMENDATIONS

1. Follow-up should be offered to individuals who request it or to those at high risk of developing adjustment difficulties following exposure to major incidents and disasters, including individuals who:
 - a. Have acute stress disorder or other clinically significant symptoms stemming from the trauma
 - b. Are bereaved
 - c. Have a pre-existing psychiatric disorder
 - d. Require medical or surgical attention
 - e. Were exposed to a major incident or disaster that was particularly intense and of long duration.
2. Primary Care providers should follow-up with patients about issues related to trauma in an ongoing way. Patients with initial sub-threshold presentation are at increased risk of developing PTSD and may need symptom-specific management.

DISCUSSION

For many types of trauma, experience indicates that relatively few survivors make use of available mental health services. This may be due to a lack of awareness of the availability of such services, low perceived need for them, lack of confidence in their utility or negative attitudes toward mental healthcare. Therefore, those planning follow-up and outreach services for survivors must consider how to reach trauma survivors to educate them about sources of help and market their services to the intended recipients (Excerpted from Raphael, 2000).

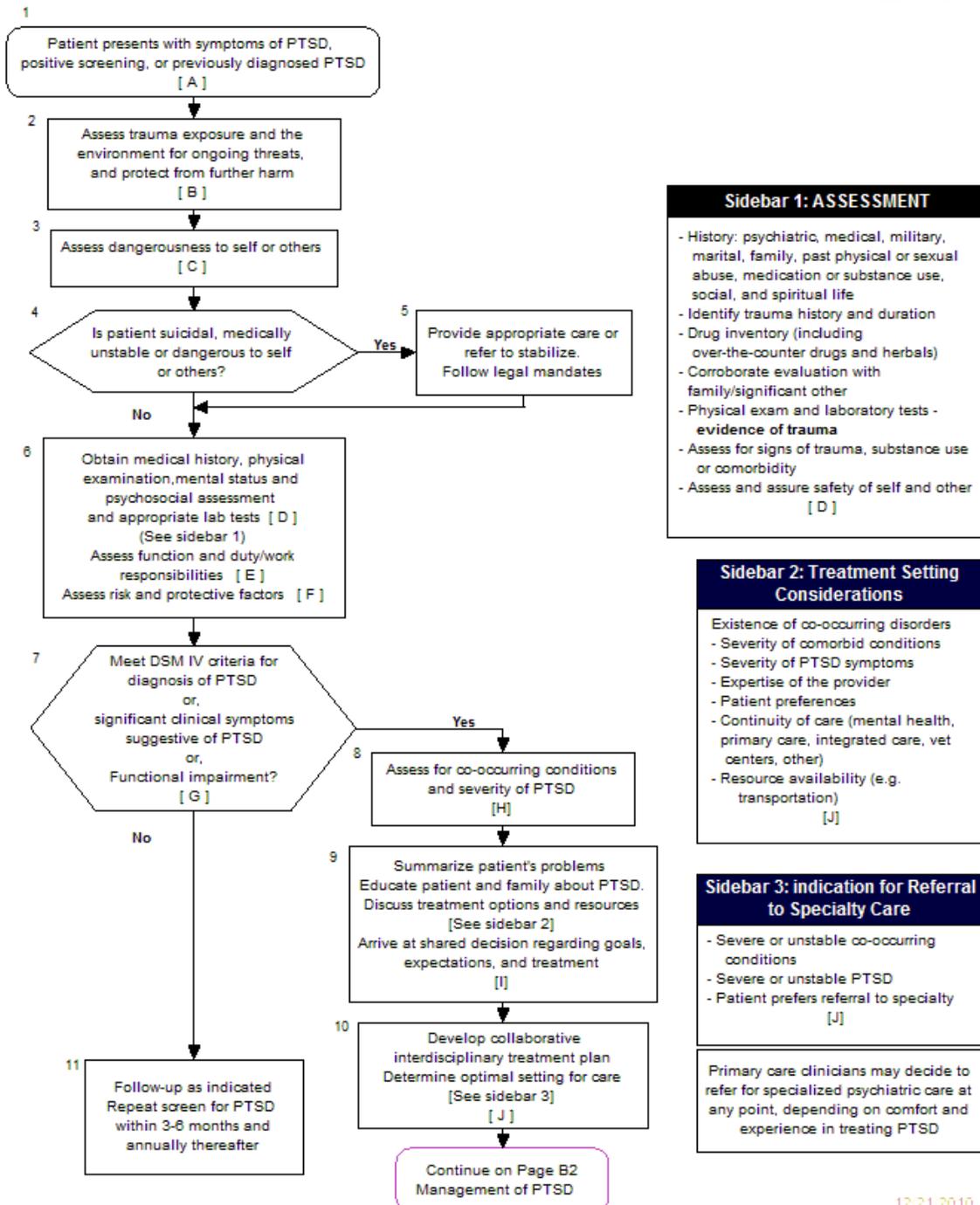
In the chaos of some kinds of traumatic events (e.g., natural disaster), it is important that workers systematically obtain detailed contact information to facilitate later follow-up and outreach. In addition, it is important that those providing outreach and follow-up efforts be opportunistic in accessing settings where survivors

are congregating. Each contact with the system of formal and informal services available to survivors affords an opportunity to screen for risk and impairment and intervene appropriately. Settings providing opportunities for contact with survivors are diverse (e.g., remembrance ceremonies, self-help group activities, settings where legal and financial services are delivered, interactions with insurance companies). For survivors injured or made ill during the traumatic event, follow-up medical appointments represent opportunities for reassessment, referral, and treatment.

MODULE B: ALGORITHM

**VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress
Module B: Assessment and Diagnosis of PTSD**

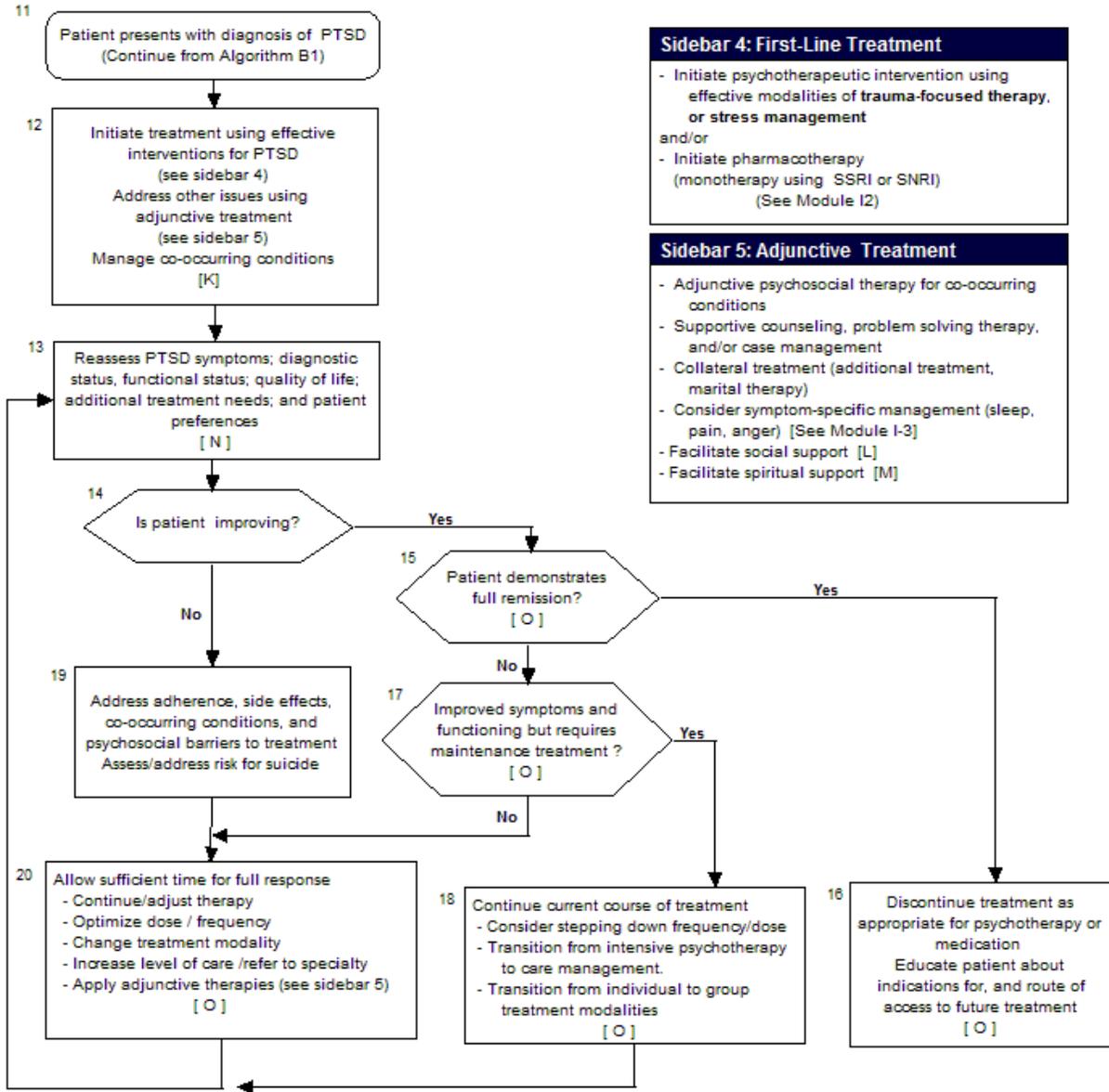
B-1



12/21/2010

VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress
Module B: PTSD Treatment

B-2

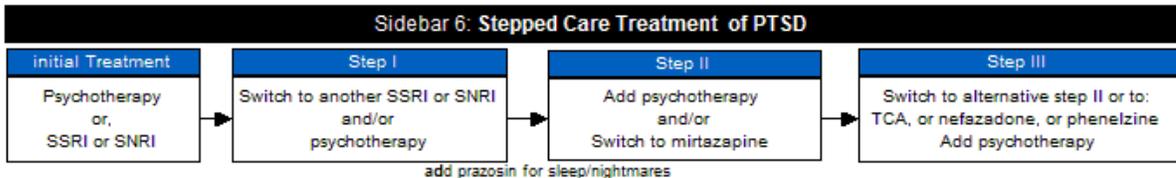


Sidebar 4: First-Line Treatment

- Initiate psychotherapeutic intervention using effective modalities of **trauma-focused therapy, or stress management** and/or
- Initiate pharmacotherapy (monotherapy using SSRI or SNRI) (See Module I2)

Sidebar 5: Adjunctive Treatment

- Adjunctive psychosocial therapy for co-occurring conditions
- Supportive counseling, problem solving therapy, and/or case management
- Collateral treatment (additional treatment, marital therapy)
- Consider symptom-specific management (sleep, pain, anger) [See Module I-3]
- Facilitate social support [L]
- Facilitate spiritual support [M]



MODULE B: ANNOTATIONS

1. ASSESSMENT

A. Assessment of Stress Related Symptoms

BACKGROUND

Post-traumatic stress disorder (PTSD) is the development of characteristic and persistent symptoms, along with difficulty functioning after exposure to a life-threatening experience or to an event that either involves a threat to life or serious injury. Symptoms of PTSD may diminish with the passage of time, or they may persist for many years. PTSD often occurs together with, or precedes other psychiatric illnesses. Patients are most likely to present to primary care with unexplained somatic and/or psychological symptoms (e.g., sleep disturbance, night sweats, fatigue, and difficulty with memory or concentration). The common symptoms after exposure to trauma are included in [Table B-1](#).

The symptoms required for the diagnosis of PTSD may be divided into 3 clusters and should be present for at least 1 month.

- **Intrusion or re-experiencing** - memories of the trauma or "flashbacks" that occur unexpectedly; these may include nightmares, intrusive mental images or extreme emotional distress, and/or physiological reactivity on exposure to reminders of the traumatic event.
- **Avoidance** - avoiding people, places, thoughts, or activities that bring back memories of the trauma; this may involve feeling numb or emotionless, withdrawing from family and friends, or "self-medicating" by abusing alcohol or other drugs.
- **Hyperarousal** - feeling "on guard" or irritable, having sleep problems, having difficulty concentrating, feeling overly alert and being easily startled, or having sudden outbursts of anger.

PTSD is frequently under-recognized and therefore often goes untreated. In a general survey in Israel, 9 percent of patients in a primary care setting were found to have PTSD. Only 2 percent of the sample was recognized as having the disorder. Despite this lack of recognition, more than 80 percent of men and 92 percent of women with PTSD in this survey reported significant distress from the disorder. Even individuals with "subthreshold" symptoms who do not meet full diagnostic criteria for the disorder suffer from significant impairments, including increased suicidal ideation.

In the case that this syndrome originates in war experiences, the presumed cause presents itself as an exceptional event overcoming the individual's resources. The notion of war traumatization has been extended to other events, such as catastrophes, physical attacks, rapes, child and wife battering, and sexual abuse. However, the events that cause PTSD are significantly more numerous. For example, it can be seen that medical events, such as giving birth, miscarriage, heart attack, cancer, or hospitalization following resuscitation may give rise to PTSD. Further, people experiencing prolonged periods of distress may equally develop a post-traumatic syndrome without any one particular event having occurred to surpass their defenses.

In some cases, providers may initially consider PTSD and use this guideline first, whereas in others it may be useful to follow the algorithms and recommendation of the DoD/VA guideline for Post Deployment Health, the VA/DoD guideline for medically unexplained symptoms or the VA/DoD guideline for Major Depressive Disorder (MDD). All these guidelines provide a link to this module when appropriate.

RECOMMENDATIONS

1. Patients who are presumed to have symptoms of PTSD or who are positive for PTSD on the initial screening should receive a thorough assessment of their symptoms that includes details such as time of onset, frequency, course, severity, level of distress, functional impairment, and other relevant information to guide accurate diagnosis and appropriate clinical decision-making.
2. Consider use of a validated, self-administered checklist to ensure systematic, standardized, and efficient review of the patient's symptoms and history of trauma exposure. Routine ongoing use of these checklists may allow assessment of treatment response and patient progress (see Appendix C: PCL-C).
3. Diagnosis of PTSD should be obtained based on a comprehensive clinical interview that assesses all the symptoms that characterize PTSD. Structured diagnostic interviews, such as the Clinician-Administered PTSD scale (CAPS), may be considered.

DISCUSSION

Initial screening is discussed in the CORE module (See [Core Module Annotation C](#), and [Appendix C: Screening Tools](#)).

Table B - 1 Common Symptoms following Exposure to Trauma

Physical	Cognitive/Mental	Emotional	Behavioral
<ul style="list-style-type: none"> • Chills • Difficulty breathing • Dizziness • Elevated blood pressure • Fainting • Fatigue • Grinding teeth • Headaches • Muscle tremors • Nausea • Pain • Profuse sweating • Rapid heart rate • Twitches • Weakness 	<ul style="list-style-type: none"> • Blaming someone • Change in alertness • Confusion • Hyper-vigilance • Increased or decreased awareness of surroundings • Intrusive images • Memory problems • Nightmares • Poor abstract thinking • Poor attention • Poor concentration • Poor decision-making • Poor problem solving 	<ul style="list-style-type: none"> • Agitation • Anxiety • Apprehension • Denial • Depression • Emotional shock • Fear • Feeling overwhelmed • Grief • Guilt • Inappropriate emotional response • Irritability • Loss of emotional control 	<ul style="list-style-type: none"> • Increased alcohol consumption • Antisocial acts • Change in activity • Change in communication • Change in sexual functioning • Change in speech pattern • Emotional outbursts • Inability to rest • Change in appetite • Pacing • Startle reflex intensified • Suspiciousness • Social withdrawal

B. Assessment of Trauma Exposure

BACKGROUND

Assessment should include a careful examination of the traumatic experience itself, including the nature of the event and the patient's involvement in it; the patient's emotional, physical, and behavior responses at time of traumatization; and thoughts and feelings about those responses (e.g., what he or she did or did not do).

RECOMMENDATIONS

1. Assessment of the trauma exposure experience should include:
 - a. History of exposure to traumatic event(s)
 - b. Nature of the trauma
 - c. Severity of the trauma
 - d. Duration and frequency of the trauma
 - e. Age at time of trauma
 - f. Patient's reactions during and immediately following trauma exposure (e.g., helplessness, horror, and fear)
 - g. Existence of multiple traumas.
2. If trauma exposure is recent (<1 month), particular attention should be given to the following:
 - a. Exposure to/Environment of trauma
 - b. Ongoing traumatic event exposure
 - c. Exposure, perhaps ongoing, to environmental toxins
 - d. Ongoing perceived threat.
3. When assessing trauma exposure, the clinician must consider the patient's ability to tolerate the recounting of traumatic material, since it may increase distress and/or exacerbate PTSD symptoms.

DISCUSSION

The history also should include an assessment of prior stressful life events; coping skills; ego resources and self-capacities; environmental and social resources; cognitive functioning; psychiatric history; medical, family, social, and occupational history; and cultural and religious background. This background is necessary to establish an appropriate treatment plan specific to the individual patient. For example, if the individual does not feel safe in his or her current living situation, issues concerning safety need to be addressed first. Or, if the individual has a history of childhood abuse and has learned to use dissociation to protect the self, treatment will need to focus on helping the trauma victim manage his or her tendency to dissociate under stress. Assessment of cognitive ability may be important after trauma exposure because the patient's cognitive status could influence the course of psychotherapy, the specific psychotherapeutic technique recommended to the patient, or the provision of group versus individual psychotherapy. The repeatedly traumatized individual may also need to work through earlier childhood traumas as well as the more recent traumatic event.

C. Assessment of Dangerousness to Self or Others

BACKGROUND

It is crucial to assess for safety and dangerousness in persons with PTSD, including current risk to self or others, as well as historical patterns of risk. Assessment of dangerousness needs to take place in a safe and secure environment and should begin with the building of rapport. In patients with thoughts of self-harm, assessment should include existence of current intent and previous suicidal ideation, intent, or history of a suicide attempt.

RECOMMENDATION

1. All patients with PTSD should be assessed for safety and dangerousness, including current risk to self or others, as well as historical patterns of risk:
 - a. Suicidal or homicidal ideation, intent (plan), means (e.g., weapon, excess medications), history (e.g. violence or suicide attempts), behaviors (e.g., aggression, impulsivity), co-morbidities (substance abuse, medical conditions) [B]
 - b. Family and social environment – including domestic or family violence, risks to the family [B]
 - c. Ongoing health risks or risk-taking behavior [B]
 - d. Medical/psychiatric co-morbidities or unstable medical conditions [B]
 - e. Potential to jeopardize mission in an operational environment. [I]

DISCUSSION

Any history of suicidal attempts or a family history of a completed or attempted suicide should be taken seriously. Pay careful attention to patients with behaviors that may signal dangerousness (e.g., agitation, threatening, intimidation, paranoia). Access to weapons or other means of harm should also be taken seriously. Assess for domestic or family violence, because these are elevated in those with PTSD. Assessment of medical, psychiatric, and social/environmental risks is also warranted.

Assessment of dangerousness can include questions, such as:

- You sound like you've had a very difficult time recently. Has life ever seemed like it's not worth living?
- Have you ever thought about acting on those feelings? Have you thought of how you would do this?
- Sometimes, when people get really upset or angry, they feel like doing harm to other people. Have you had any thoughts recently about harming others?
- How do you express your feelings?
- Are there times you are afraid to go home?

Dangerousness to Self

Suicidality - Persons with PTSD, including sub-threshold PTSD, are at high risk for suicidal ideation (Marshall et al., 2001) and, for women, suicide attempts (Breslau, 2000; Ferrada-Noli et al., 1998; Kaslow et al., 2000; Prigerson & Slimack, 1999).

Suicidal behavior is best assessed with the following criteria: presence of active depression or psychosis, presence of substance abuse, past history of suicidal acts, formulation of plan, a stated intent to carry out the plan, feeling that the world would

be better off if the patient were dead, availability of means for suicide (e.g., firearms and pills), disruption of an important personal relationship, and failure at an important personal endeavor. The presence of these factors often constitutes a psychiatric emergency and must always be taken seriously. Among young adults, aggressive symptoms may be predictive of suicidality in men and elevated symptoms of PTSD and/or depression may be more predictive in women (Prigerson & Slimack, 1999). Other predictors of completed suicide in general include history of suicide attempts, family history of suicide, access to weapons, male gender, and Caucasian race. Rates of suicidal ideation in treatment-seeking Vietnam veterans have been 70 to 80 percent (Kramer et al., 1994). Additionally, Vietnam veterans with diagnosed PTSD have an increased risk of death due to suicide as compared to those without PTSD (Bullman & Kang, 1994). Among veterans with PTSD, intensive combat-related guilt has been linked to suicidality (Hendin & Haas, 1991). These findings point to the need for greater clinical attention to the role of guilt in the evaluation and treatment of suicidal veterans with PTSD.

Individuals with severe childhood trauma (e.g., sexual abuse) may present with complex PTSD symptoms and parasuicidal behaviors, (e.g., self mutilation, medication overdoses) (Roth et al., 1997). Further, limited cognitive coping styles in PTSD have been linked to a heightened suicide risk (Amir et al., 1999). Fostering competence and social support may reduce this risk (Kotler et al., 2001). Co-morbid substance use disorders may increase the risk of suicidality. Additionally, persons with PTSD may also be at personal risk of danger through ongoing or future victimization in relationships (e.g. domestic violence/battering, or rape).

- Many war veterans suffer from post-traumatic stress disorder (PTSD), depression, or both disorders (Tanielian, 2008 RAND). The majority of US soldiers in Iraq were exposed to some kind of traumatic, combat-related situations, such as being attacked or ambushed (92 percent), seeing dead bodies (94.5 percent), being shot at (95 percent), and/or knowing someone who was seriously injured or killed (86.5 percent) (Hoge, 2004).
- In a nationally representative sample ($N = 5877$; age 15-54) that compared the relationship between anxiety disorders and suicidal ideation or suicide attempts, PTSD was significantly associated with suicidal ideation (adjusted odds ratio = 2.79; $p < 0.01$) and suicide attempts (adjusted odds ratio = 2.67; $p < 0.01$). None of the other anxiety disorders was significantly associated with suicidal ideation or attempts (Sareen, 2005).
- Older and younger veterans are more prone to suicide than are middle-aged veterans (Zivin, 2007). Veterans with PTSD have been reported to have high levels of suicidal ideation and behaviors (Oquendo, 2005).
- Jakupcak (2009) found PTSD to be a risk factor for suicidal ideation in Iraq and Afghanistan War veteran. Veterans from OEF/OIF who screened positive for PTSD were more than 4 times as likely to endorse suicidal ideation relative to non-PTSD veterans. Among veterans who screened positive for PTSD ($n = 202$), the risk for suicidal ideation was 5.7 times greater in veterans who screened positive for two or more co-morbid disorders relative to veterans with PTSD only.
- Patients with co-occurring disorders, such as depression and alcohol abuse or depression and posttraumatic stress disorder (PTSD), have been reported to be at much higher risk for suicide than patients with only 1 of these disorders.
- Male veterans with schizophrenia or schizoaffective disorder and co-morbid PTSD were reported to have higher rates of suicidal ideation and suicidal behaviors compared to those without co-morbid PTSD (Strauss, 2006).

- In a large, nationally representative, longitudinal data set of depressed veterans whose causes of death have been definitively identified using linked National Death Index data, veterans who received a PTSD diagnosis had a lower rate of suicide than did veterans without PTSD (68.16 vs 90.66, respectively). The suicide rate was higher in the South than in the Northeast (88.93 vs 73.55, respectively) or central regions (88.93 vs 83.09, respectively) but slightly lower than rates in the West (88.93 vs 90.04, respectively). Veterans with a service-connected disability had a lower rate of suicide than those without a service-connected disability (70.06 vs 92.20) (Zivin, 2007).

Dangerousness to Others

Some individuals with PTSD may be at risk for violence toward others (Swanson et al., 2002). Explosivity, anger problems, and past history of violence are associated with an increased risk for violent behavior. Violence often emerges as a response to a perceived threat or marked frustration by the patient stemming from his or her inability to meet goals by nonviolent means. The specific factors that contribute to violent behavior may include psychiatric, medical, environmental and situational/social engagements. Often, it is a combination of these factors that precipitates and aggravates the potential for violence, which may quickly escalate to agitation or the carrying out of violent impulses. Whatever the cause, the following situations may serve as warning signs pointing toward a very real threat of violence:

- Ideation and/or intent to harm others
- Past history of violent behaviors
- Severely agitated, aggressive, threatening, or hostile behaviors
- Actively psychotic presentation.

Clinicians should keep in mind the possibility that thoughts or plans of violent acts toward others may represent thoughts of suicide, either after committing violence against another person, or by creating a situation where another person will be forced to harm the patient (e.g. 'suicide by cop'). Special attention to the risk of domestic violence is warranted. Careful attention to the home environment and relationships is essential. If there are children, an assessment of parenting skills, anger management, caregiver burden, and discipline style is crucial. Advising high-risk patients and their families on gun removal and safe storage practices has been recommended to decrease the risk of violence (Seng, 2002). PTSD is a predictor of violence in persons with severe mental illness (Swanson et al., 2002). Also, substance use disorders are highly co-morbid in PTSD and can also predict violence. Immediate attention and intervention may be required in order to ward off the potential for escalation of agitation or violent impulses.

Health Risks

Persons with PTSD may have high rates of health risk behaviors, health problems, and medical conditions. Thus, an assessment of health and behavioral risks in individuals with PTSD is warranted. In addition to alcohol and drug use, persons with PTSD are at high risk for cigarette smoking (Acierno et al., 1996) and obesity (Vieweg et al., 2006). PTSD is a predictor of several HIV-risk behaviors as well as a risk factor for related blood-borne infections, such as hepatitis B and C (Hutton et al., 2001). Other potentially dangerous co-morbid medical conditions are intoxication or withdrawal syndromes requiring medical detoxification (e.g., alcohol, benzodiazepine, barbiturates, and possibly opiates). Medical conditions that can present a danger to others include the risk of transmission of blood-borne

pathogens, such as HIV and HCV/HBV; thus, risk assessment and serotesting are warranted.

Medical Conditions

Urgent conditions - Any condition immediately threatening to life, limb, or eyesight or requiring emergency medical care requires immediate attention.

Chronic diseases - PTSD has also been linked to cardiovascular disease, anemia, arthritis, asthma, back pain, diabetes, eczema, kidney disease, lung disease, ulcers, chronic pain, work absenteeism, and other generalized health problems (Weisberg et al., 2002; Hoge et al., 2007). One explanation for these problems may relate to the association of PTSD with dysregulation of the neuroendocrine, autonomic, nervous, and immune system functions (Schnurr and Green, 2003; Gill et al., 2009). Patients who have PTSD and other chronic medical diseases may find that PTSD worsens their medical conditions. Some medical conditions, which can be acutely dangerous in the presence of PTSD, include bronchial asthma, peptic ulcer disease, GI bleed, and malignant hypertension (Davidson et al., 1991).

Psychiatric Conditions

Delirium - (also known as organic brain syndrome, organic psychosis, acute confusional state, acute brain syndrome, and various other names) is a disorder of cognition and consciousness with abrupt onset that is frequently overlooked. This is common in the elderly and medically ill (Farrell & Ganzini, 1995).

Acute or marked psychosis - "Psychosis" in and of itself is not a psychiatric disorder. Rather, psychosis is a symptom, which may present in a variety of conditions. Psychotic patients have an impaired sense of reality, which may manifest in several forms (hallucinations, delusions, mental confusion or disorganization). Acute psychosis represents a medical emergency.

Severe debilitating depression (e.g., catatonia, malnourishment, severe disability) - While many mild to moderate illnesses may not necessarily present situations mandating immediate attention, the presence of severe depressive symptoms may represent a medical emergency, even in the absence of suicidal ideation.

EVIDENCE

	Recommendation	Sources	LE	QE	R
1	Assess for dangerousness including suicidal or homicidal ideation, intent, means, history, behaviors, and co-morbidities	Breslau, 2000 Bullman & Kang, 1994 Ferrada-Noli et al., 1998 Kaslow et al., 2000 Marshall et al., 2001 Prigerson & Slimack, 1999 Swanson et al., 2002 Zivin, 2007	III II-2 III II-2 II II II II-2	Good	B
2	Assess family and social environment – including risks for family	Seng, 2002 Swanson, 2002	III II	Good	B
3	Assess ongoing health risks or risk-taking behaviors	Acierno et al., 1996 Hutton et al., 2001 Vieweg et al., 2006	II-2 II II-2	Good	B

4	Assess medical or psychiatric co-morbidities or unstable medical condition	Davidson et al., 1991 Farrell et al., 1995 Weisberg et al., 2002 Hoge et al., 2007 Gill et al., 2009	II III III III III	Good	B
5	In operational environment, consider the potential to jeopardize the mission	Working Group Consensus	III	Poor	I

LE = Level of Evidence; QE = Quality of Evidence; SR= Recommendation (see Appendix A)

D. Obtain Medical History, Physical Examination, Laboratory Tests and Psychosocial Assessment

OBJECTIVE

Obtain comprehensive patient data in order to reach a working diagnosis.

BACKGROUND

A wide range of medical conditions and treatments may result in abnormal behavior, and many medical disorders may produce or exacerbate psychiatric symptoms in patients with pre-existing mental illness. Multiple studies indicate high rates of medical disease (24 to 50 percent) in patients presenting with psychiatric symptoms (Williams & Shepherd, 2000). Failure to detect and diagnose underlying medical disorders may result in significant and unnecessary morbidity and mortality (Lagomasino et al., 1999). The converse problem is far greater in primary care: patients present with somatic symptoms and have psychiatric disorders that have not been properly diagnosed or treated. In one study, 5 of 6 patients with a psychiatric diagnosis had a somatic presentation, and the primary care physician made the diagnosis only half the time, whereas for the 16 percent with a psychological complaint, the correct diagnosis was made 94 percent of the time (Bridges et al., 1985). A standardized approach to medical evaluation, including a thorough history, physical examination, laboratory evaluation, and occasionally other ancillary testing, prevents the omission of important aspects of the evaluation (Williams & Shepherd, 2000).

RECOMMENDATIONS

1. All patients should have a thorough assessment of medical and psychiatric history, with particular attention paid to the following:
 - a. Baseline functional status
 - b. Baseline mental status
 - c. Medical history: to include any injury (e.g., mild-TBI)
 - d. Medications: to include medication allergies and sensitivities; prescription medications; herbal or nutritional supplements; and over-the-counter (OTC) medications (caffeine, energy drinks or use of other substances)
 - e. Past psychiatric history: to include prior treatment for mental health and substance use disorder, and past hospitalization for depression or suicidality
 - f. Current life stressors.
2. All patients should have a thorough physical examination. On physical examination, particular attention should be paid to the neurological exam and

- stigmas of physical/sexual abuse, self-mutilation, or medical illness. Note distress caused by, or avoidance of, diagnostic tests/examination procedures.
3. All patients, particularly the elderly, should have a Mental Status Examination (MSE) to include assessment of the following:
 - a. Appearance and behavior
 - b. Language/speech
 - c. Thought process (loose associations, ruminations, obsessions) and content (delusions, illusions and hallucinations)
 - d. Mood (subjective)
 - e. Affect (to include intensity, range, and appropriateness to situation and ideation)
 - f. Level of Consciousness (LOC)
 - g. Cognitive function
 - h. All patients should have routine laboratory tests as clinically indicated, such as TSH, Complete Metabolic Panel, Hepatitis, HIV, and HCG (for females). Also consider CBC, UA, Tox/EtoH panel, and other tests
 - i. Other assessments may be considered (radiology studies, ECG, and EEG), as clinically indicated
 - j. All patients should have a narrative summary of psychosocial assessments to include work/school, family, relationships, housing, legal, financial, unit/community involvement, and recreation, as clinically appropriate.

DISCUSSION

Differential diagnosis is important, given the many co-morbidities associated with PTSD, including dementia, depression, substance abuse/withdrawal, bereavement, psychosis, bipolar disorder, seizure disorder, persistent post-concussion syndrome, thyroid disease, neoplasm, somatoform-spectrum disorders (including irritable bowel, chronic fatigue, headaches, and non-cardiac chest pain), anxiety disorders, toxicosis, rheumatoid-collagen vascular disease, hypoxia, sleep apnea, closed head injury, CHF, and delirium.

Medical and Psychiatric History

The medical history may be obtained from the patient, family, friends, or coworkers or from official accounts of a traumatic event.

- Substance use and misuse can cause, be caused by, and/or exacerbate PTSD. Use of screening tools (such as the AUDIT, MAST, or DAST) can improve detection of substance use disorders (see the VA/DoD Guideline for Substance Use Disorder)
- The active ingredients of OTC/herbal supplements can create pharmacokinetic and pharmacodynamic interactions with prescribed medications or medications that might be prescribed for treatment of PTSD (Shord et al., 2009; Ulbricht et al., 2008). For example, the serotonin syndrome, present with substantial anxiety symptoms, is the result of the interaction between SSRI or SNRI medications and another serotonergic substance such as St John's Wort or

- dextromethorphan (common ingredient in cough syrup); or prescription medications such as tramadol (a prescription-only analgesic), or methadone. An additional concern involves energy drinks. These drinks contain caffeine in modest to excessive amounts (Reissig et al., 2009) that may exacerbate anxiety symptoms, or, indicate a deficit in attention that should be pursued further for an underlying co-morbid etiology such as Attention-Deficit Hyperactivity Disorder.
- Risk factors suggesting the need for a higher-than-usual index of suspicion include certain physiological and psychological conditions or life events that may contribute to the development or exacerbation of PTSD symptoms (see Annotation F).

Physical Examination

A brief screening physical examination may uncover endocrine, cardiac, cerebrovascular, or neurologic disease that may be exacerbating or causing symptoms. Particular attention should be given to a neurological examination and stigmata of physical/sexual abuse, self-mutilation, or medical illness. Special note should also be made of distress caused by, or avoidance of, diagnostic tests or examination procedures, since these reactions may be suggestive of prior physical or sexual abuse. Careful attention should also be given to complying with legal mandates for documentation, reporting, and collection of evidence.

Mental Status Examination (MSE)

Particularly in the elderly patient, a full Mental Status Examination (MSE) including a cognitive screening assessment should occur. The assessment may consist of using a standardized instrument, such as the Folstein Mini-Mental State Examination (MMSE) (Crum et al., 1993; Cummings, 1993; Folstein et al., 1975). Typically scores below 24 on the Mini Mental State Exam (MMSE) are suggestive of cognitive impairment however, some older adults do not score well on the MMSE (there some tasks patients have to perform with their hands; thus those who have full or partial paralysis or even bad arthritis have a hard time doing those tasks and lose at least 2-3 points). If screening is suggestive of cognitive impairment and the patient is not delirious, then a laboratory evaluation to assess for reversible causes of dementia is appropriate. However, the PTSD assessment should be continued. If delirium is present, consider it an emergency and stabilize the patient before continuing with the PTSD assessment.

Level of Consciousness (LOC) should be assessed to rule out delirium. Abnormal tics or movements should be noted, as well as dysarthria, dysprosody, aphasia, agraphia, and alexia, which may suggest underlying neurological disease. Sensory illusions may be seen in neurological syndromes and intoxications (Lagomasino et al., 1999).

Consider seeking further evaluation and consultation from neuropsychology specialty in cases of suspected cognitive disorders.

Laboratory Evaluation

The history and physical examination findings should be used to direct a conservative laboratory evaluation. There is no test for PTSD, but PTSD is frequently co-morbid with substance use disorders, depression, and high-risk behaviors. Therefore, testing is directed toward detection of associated medical conditions and ruling out any contraindications to medical therapy. Appropriate laboratory studies include: TSH, Complete Metabolic Panel, Hepatitis, HIV, and HCG (for females). Also consider CBC, UA, Tox/EtoH Panel, and other tests, as clinically indicated.

Other Evaluation

- Diagnostic imaging and neuropsychological testing are not a part of the standard evaluation for PTSD. Proceed with management while awaiting the completion of the laboratory evaluation
- MRI/CT of the head may be indicated to rule out mass lesions, intracranial bleeding, hydrocephalus, or subdural hematomas (Lagomasino et al., 1999)
- ECG may rule out underlying cardiac abnormalities that preclude the use of medications, such as tricyclic antidepressants (Lagomasino et al., 1999)
- Consider EEG or other diagnostic testing, as indicated by history and physical exam.

Psychosocial Assessment

- Past psychiatric illness, treatment, or admission
- Past/ongoing problems with anxiety, impulsivity, mood changes, intense/unstable interpersonal relationships, suicidality, and hallucinations
- Recreational use of drugs/alcohol/tobacco/caffeine
- Social supports (family, friends, homelessness/housing, community, and financial status)
- Losses (bereavement, friend/family member injuries/death, occupation, and moral injury/betrayal)
- Occupational/educational/military history
- Environmental resources
- Coping Skills
- Factors affecting expression and intensity of PTS symptoms
- Legal issues
- Religious/spiritual history.

Consider use of checklists to determine if psychosocial rehabilitation services are indicated in PTSD treatment (see Module 1-2: D. Psychosocial Rehabilitation Intervention).

E. Assessment of Function, Duty/Work Responsibilities and Patient's Fitness (In Relation To Military Operations)**BACKGROUND**

One of the key goals of care is to assist the individual in beginning to return to a normal level of functioning. The clinician must assess the individual's current level of family, relationship, work/school, and social functioning.

Ideally, service members who become ineffective as a result of PTSD will be returned to duty at the earliest possible time. For most military specialties, the time required to enlist and train the soldier to minimal operational readiness often exceeds a year. Consequently, service members who become ineffective due to stress-related conditions constitute a significant source of trained personnel who potentially have much to offer despite their disability. Assessment of fitness for duty may also have implications for medical boards and vocational rehabilitation.

RECOMMENDATION

1. Assessment of function should be obtained through a comprehensive narrative assessment (see Table B-2), and the use of standardized, targeted, and validated instruments designed to assess family/relationship, work/school, and/or social functioning.
2. The determination of when to return to work/duty should take into consideration the complexity and importance of the patient's job role and functional capabilities.
3. The continuing presence of symptoms of PTSD should not be considered in itself as sufficient justification for preventing a return to work/duty.

DISCUSSION

Global Functional Assessment

Consider using instruments, such as the GAF (American Psychiatric Association, 1994) or the SF-36 (McHorney, 1994), to assess function. Such measures are useful for directing therapeutic interventions and monitoring response to treatment. The GAF score, while readily available and familiar to mental health professionals, is a poor predictor of function among combat veterans with PTSD. The GAF score explained only 17 percent of the variability in the scores among these combat veterans (Miller et al., 2008). No single test (GAF, SF-36, PCL, or many others) can replace a careful and thoughtful clinical assessment when the clinician is tasked with determining level of function.

Narrative Functional Assessment

Functional assessment must be considered from the patient's point of view as well as from the clinician's point of view. A narrative account provides a more complete picture of the patient and his/her response to trauma. It allows for targeted social and behavioral interventions. Components of functional assessment should include: work/school, relationships, housing, legal, financial, unit/community involvement, and recreation.

Duty/Work Responsibilities

Practitioners who are managing patients suffering from stress reactions or PTSD should consider a variety of factors when deciding if, and when, the individual is ready to return to work or military duty, including severity of the condition, level of occupational impairment, nature of the occupation, and the level of social support.

Table B - 2 Components of Functional Assessment

Work	<ul style="list-style-type: none"> • Is the person unemployed or seeking employment? • If employed, any changes in productivity? • Have co-workers or supervisors commented on any recent changes in appearance, quality of work, or relationships? • Tardiness, loss of motivation, loss of interest? • Been more forgetful, easily distracted?
School	<ul style="list-style-type: none"> • Changes in grades? • Changes in relationships with friends? • Recent onset or increase in acting out behaviors? • Recent increase in disciplinary actions? • Increased social withdrawal? • Difficulties with concentration and short-term memory?
Marital & Family Relationships	<ul style="list-style-type: none"> • Negative changes in relationship with significant others? • Irritable or easily angered by family members? • Withdrawal of interest in or time spent with family? • Any violence within the family? • Parenting difficulties? • Sexual function difficulties?
Recreation	<ul style="list-style-type: none"> • Changes in recreational interests? • Decreased activity level? • Poor motivation to care for self? • Sudden decrease in physical activity? • Anhedonia?
Housing	<ul style="list-style-type: none"> • Does the person have adequate housing? • Are there appropriate utilities and services (electricity, plumbing, other necessities of daily life)? • Is the housing situation stable?
Legal	<ul style="list-style-type: none"> • Are there outstanding warrants, restraining orders, or disciplinary actions? • Is the person regularly engaging in or at risk to be involved in illegal activity? • Is patient on probation or parole? • Is there family advocacy/Dept. of Social Services (DSS) involvement?
Financial	<ul style="list-style-type: none"> • Does the patient have the funds for current necessities, including food, clothing, and shelter? • Is there a stable source of income? • Are there significant outstanding or past-due debts, alimony, child support? • Has the patient filed for bankruptcy? • Does the patient have access to healthcare and/or insurance?
Unit/Community Involvement	<ul style="list-style-type: none"> • Does the patient need to be put on profile, MEB, or limited duty? • Is patient functional and contributing in the unit environment? • Is there active/satisfying involvement in a community group or organization?

F. Assessment of Risk/Protective Factors

BACKGROUND

Following a traumatic event, a majority of those exposed may experience acute-traumatic stress reaction. Of the population of persons who experience a traumatic event, only a subset will ultimately develop PTSD. After 9 to 12 months, 15 to 25 percent continue to be disturbed by these symptoms. This group with persistent symptoms may have a distinct combination of characteristics that determine the presence of ongoing problems. The presence of, and interplay among, three groups of risk factors—biological factors (including genetics), the nature of the trauma, and the recovery environment (psychological and social support) work together to contribute to an individual's vulnerability or resilience to PTSD.

RECOMMENDATIONS

1. Patients should be assessed for risk factors for developing PTSD. Special attention should be given to post-traumatic factors (i.e., social support, ongoing stressors, and functional incapacity) that may be modified by intervention.
2. When evaluating risk factors for PTSD, the clinician should keep in mind that PTSD is defined as occurring only after four weeks have elapsed following a traumatic event. PTSD symptoms, however, may not appear until a considerable time has passed—sometimes surfacing years later.

DISCUSSION

Risk Factors for PTSD

Two major systematic reviews of predictors of PTSD have been published (Brewin et al., 2000; Ozer et al., 2003). The main outcome measure considered in the reviews was effect size calculated for the different factors. Effect sizes give an indication of the magnitude of the associations found.

The meta-analysis of risk factors for PTSD of assessed studies of trauma-exposed adults reported that 14 different risk factors in the literature have a modest association with PTSD development (Brewin et al., 2000). The review by Ozer et al. (2003) focused on personal characteristics salient for psychological processing and functioning and aspects of the traumatic event or its sequelae. Dissociation during the trauma, perceived support, and perceived life threat were strongly associated with PTSD. Prior trauma and prior (in early childhood or in adult life) adjustment factors were identified among the pre-trauma factors. Prior trauma was more strongly related to PTSD when the traumatic experience involved non-combat interpersonal violence than when the traumatic experience resulted from combat or an accident. Perceived life threat was more associated when assessment was further away from the traumatic event and in non-combat interpersonal violence than in accidents. Perceived social support was also more significant in studies that assessed individuals further away from the time of the traumatic event. Family history of psychiatric disorders was more significant among survivors of non-combat interpersonal violence than when the traumatic experience was combat exposure.

The following characteristics have been reported in studies to be risk factors for the development of PTSD:

Pre-traumatic factors

- Ongoing life stress or demographics
- Lack of social support
- Young age at time of trauma
- Pre-existing psychiatric disorder
- Female gender
- Low socioeconomic status, lower level of education, lower level of intelligence, race (African-American, American Indian, and Pacific Islander)
- Prior trauma exposure (reported abuse in childhood, report of other previous traumatization, report of other adverse childhood factors)
- Family history of psychiatric disorders (genetics).

Peri-traumatic or trauma-related factors

- Severe trauma
- Type of trauma (interpersonal traumas, such as torture, rape, or assault, convey a high risk of PTSD)
- High perceived threat to life
- Community (mass) trauma
- Peri-traumatic dissociation.

Post-traumatic factors

- Ongoing life stress
- Lack of positive social support
- Negative social support (e.g., negative reactions from others)
- Bereavement
- Major loss of resources
- Other post-traumatic factors, including children at home and distressed spouse.

Overall, factors, such as gender, age at trauma, and race, predicted PTSD in some populations but not in others. Further, factors, such as education, prior trauma, and childhood adversity, predicted PTSD more consistently (Harvey & Bryant, 2000; Harvey & Bryant, 1998b). However, this varies with the population and study methods. Prior psychiatric history, childhood abuse, and family psychiatric history have more consistent predictive effects. Factors operating during or after the trauma (e.g., trauma severity, lack of social support, and additional life stress) have somewhat stronger effects than pre-trauma factors. This finding is consistent with other studies that suggest poor social support and ongoing life stress to be predictors of PTSD development. This may have clinical implications, as early interventions that increase social support after trauma exposure may reduce the likelihood of PTSD (Litz et al., 2002).

The development of Acute Stress Disorder (ASD) at the time of the trauma is also a risk for developing PTSD (Classen et al., 1998). Numerous prospective cohort studies with various types of trauma exposure (e.g., violent assault and accidents) support that ASD is a predictor of later PTSD (Brewin et al., 1999; Bryant et al., 2000;

Harvey & Bryant, 1999; Mellman et al., 2001). In these studies, among persons with ASD, 40 to 80 percent did develop PTSD. Finally, most studies suggest an increased risk of PTSD development among individuals with peri-traumatic dissociation (Birmes et al., 2001; Murray et al., 2002). Subsequent research indicates that it is the post-traumatic duration of dissociation, rather than the peri-traumatic occurrence of dissociation (Panasetis & Bryant, 2003), that predicts the development of PTSD.

Pre-Traumatic Factors

Prior exposure to traumatic events is a risk indicator for chronic PTSD (Brewin et al., 2000; Ozer et al., 2003). In particular, a history of exposure to interpersonal violence, in childhood or adulthood, substantially increases the risk for chronic PTSD following exposure to any type of traumatic event (Breslau, 2002; Brewin et al., 2000; Ozer et al., 2003). Green et al. (2000) surveyed 1909 college-aged women and found that those who had experienced interpersonal trauma and those who had experienced multiple traumas exhibited elevated symptoms. Dougall et al. (2000) hypothesized that prior trauma history sensitizes victims to the new stressor, thus potentiating its impact. They argued that evaluating trauma history is essential for improving early intervention efforts.

Epidemiological studies have yielded higher rates of PTSD *in women* than in men in general populations, and there are also a number of gender differences in clinical presentation after trauma. Seedat and Stein (2000) studied a series of patients presenting with physical trauma after interpersonal violence and found that “women were more likely than men to have been previously assaulted or to have sustained injury by a relative or someone known to them, but less likely to have used substances at the time of the assault or to require emergency surgery.” Although there is considerable evidence suggesting a gender difference in PTSD prevalence, it is unclear whether this difference may be related to a higher risk of traumas that result in increased risk (e.g., rape) or greater willingness to seek mental healthcare for PTSD among women. One analysis in military personnel suggested that women and men who are working in support units with similar level of combat exposure appear to have an equivalent risk of developing PTSD (Hoge et al., 2007), and further research is needed. Numerous epidemiological studies utilizing representative samples that have examined the prevalence of traumatic exposure and rates of PTSD across the adult lifespan found that younger adults had the highest prevalence of traumatic events and PTSD, followed by middle-aged adults and then older adults (Creamer & Parslow, 2008; De Vries & Olf, 2009; Kessler et al., 2005; Spitzer et al., 2008).

Pre-existing psychiatric problems are associated with more adverse responses to trauma (Norris et al., 2002; Breslau, 2002), as shown in a review of epidemiological studies that found that preexisting psychiatric disorder was one of 3 factors that had a predictable effect on the development of PTSD. Two meta-analyses of risk or predictive factors for PTSD have identified prior psychiatric history as a risk factor for the development of PTSD (Brewin et al., 2000; Ozer et al., 2003). A *family history* of psychiatric disorders may also contribute to a person’s vulnerability to PTSD. Brewin and colleagues (2000) found that “factors, such as psychiatric history, reported *childhood abuse*, and family psychiatric history ... had more uniform predictive effects” than did other risk factors, such as gender or age at trauma.

Genetics – Family history of any psychiatric disorder or possible genetic differences in regulating pre-synaptic uptake of serotonin (or other neurobiological mechanism) can increase risk. Genetic research has shown that of the two variants of the gene regulating pre-synaptic uptake of serotonin, the long form appears to be associated

with resilience and the short form with the vulnerability to stress events. Individuals who inherited the short form and were exposed to four or more stressful life events were much more likely to develop PTSD and depression and to attempt suicide (Koenen et al., 2009). Other genes that may confer vulnerability or resilience are currently under investigation. Twin studies have also indicated that there is a genetic vulnerability to PTSD. Twin research to date suggests that exposure to assaultive trauma is moderately heritable, whereas exposure to non-assaultive trauma is not. PTSD symptoms are moderately heritable, and co-morbidity of PTSD with other disorders may be partly due to shared genetic and environmental influences (Koenen, 2008; Afifi, 2010).

Peri-Traumatic Factors

Foy et al. (1984) published one of the first formal studies to look at risk factors for PTSD and reported characteristics of trauma exposure to be of central importance. Numerous studies have since observed a dose-response relationship between trauma severity and PTSD. The more severe the trauma, the more likely the person experiencing it will develop PTSD. Armenian and colleagues (2000) found this to be true among disaster victims. Feehan et al. (2001) found higher PTSD rates among more severely traumatized members of a general cohort.

With regards to type of trauma, interpersonal violence (rape, torture, physical assault) was found to be more likely to produce PTSD than more impersonal events (such as accidents or group trauma) (Holbrook et al., 2001).

Situations where the trauma is potentially life-threatening also carry a high risk of PTSD; in a meta-analysis of 68 PTSD studies, Ozer et al. (2003) found "perceived life threat" to have a high risk value, and in Woods' study of abused women, the perceived threat of homicide played a role in the later development of PTSD. Holbrook et al. (2001) diagnosed 261 (32 percent) of 824 individuals as having PTSD 6 months after major physical trauma. Patients who were totally incapacitated, experienced physical injury, or suffered major losses were also at higher risk for developing PTSD. Factors associated with a PTSD diagnosis included perceived threat to life, female gender, younger age, and lower income.

Ozer et al. (2003) also found that dissociation at the time of the trauma is predictive of later development of PTSD. Demographic factors may also be predictive. Finnsdottir & Elklit (2002) found higher rates of PTSD among disaster victims who were young at the time of the trauma. In a general group of psychiatric patients, Neria et al. (2002) found young age at trauma to be a risk factor for PTSD. Finally, biological factors may also be relevant to predicting PTSD. Shalev et al. (1998) measured the heart rate and blood pressure of eighty-six trauma survivors at the time of their presentation at a hospital emergency room and concluded that "elevated heart rate shortly after trauma is associated with the later development of PTSD." In a meta-analysis, Yehuda et al. (1998) reported that studies "demonstrated increased heart rate and lower cortisol levels at the time of the traumatic event in those who have PTSD at a follow-up time compared to those who do not."

Post-Traumatic Factors

The post-trauma environment has been shown to be an important predictor of chronicity (Berwin, 2000). The experience of traumatization may have life-altering consequences in terms of social status, employment, and health, and continuing difficulties in these areas may contribute to the likelihood that a person will develop PTSD. Feehan et al. (2001), in interviews with 374 trauma survivors, found

unemployment to be a risk factor. Likewise, in a meta-analysis performed by Norris et al. (2002), "resource loss" was cited as a risk for PTSD.

Impaired social support is a not-infrequent outcome of a traumatic experience. Armenian et al. (2000), Brewin et al. (2000), Gregurek et al. (2001), and Ozer et al. (2003) all reported that the loss of support from significant others can pose a risk for development of PTSD.

Finally, general ongoing life stress may also play a role. Brewin et al. (2000) reported "life stress" to be more predictive of PTSD development than pre-traumatic factors, such as gender or age at trauma. Norris et al. (2002) found that in disaster victims, "secondary stressors" increased the likelihood of adverse outcomes.

Some have suggested that secondary gain related to compensation may predict treatment outcome. Laffaye et al. (2008), in a comprehensive review of the literature, found that initial levels of perceived support and stressors did not predict the course of chronic PTSD symptoms. Furthermore, the literature indicates that veterans who are seeking, or have been awarded, compensation participate in treatment at similar or higher rates than do their non-compensation-seeking counterparts. Veteran treatment outcome studies produced either null or mixed findings, with no consistent evidence that compensation-seeking predicts worse outcomes. Studies of motor vehicle accident survivors found no association between compensation status and course of recovery (Laffaye, 2007).

Risk Factors for PTSD in Military Veterans

Friedman et al. (1994) concluded that "the likelihood of developing chronic PTSD depends on premilitary and postmilitary factors in addition to features of the trauma itself. Premilitary factors include negative environmental factors in childhood, economic deprivation, family psychiatric history, age of entry into the military, premilitary educational attainment, and personality characteristics. Postmilitary factors include social support and the veteran's coping skills. Among military personnel, there are three populations at risk for unique problems that may amplify the psychological impact of war-zone stress. They are women whose war-zone experiences may be complicated by sexual assault and harassment; nonwhite ethnic minority individuals whose premilitary, postmilitary, and military experience is affected by the many manifestations of racism, and those with war-related physical disabilities, whose PTSD and medical problems often exacerbate each other."

Among military service members, combat exposures are reported as the strongest predictors of subsequent PTSD (Berwin, 2000; Clancy 2006; Foy, 1987; Baker 1997; Smith 2008). The frequency and intensity of direct combat appears to be one of the strongest predictors of PTSD. A number of studies have found a strong dose response relationship of combat frequency and intensity to PTSD prevalence (e.g. Hoge, et al., 2004; Dohrenwend et al., 2006; MHAT6 report (2009); and the Smith, Ryan et al., 2008). Wartime exposure includes numerous combat events such as being wounded, losing a team member, near miss of life witnessing, torture, witnessing killing, or killing enemy or civilian in combat (Maguen et al., 2010).

Studies of veterans have reported gender differences in PTSD risks: war zone stressors appear preeminent for PTSD in men, and post-trauma resilience-recovery variables are more important for women (King et al., 1999).

There are good arguments favoring a genetic contribution to the PTSD diagnosis in combat veterans. The Vietnam Twin Registry studies found the effect size of combat exposure was 5 to 12 times smaller than the effect size of zygosity upon PTSD

diagnosis (Gilbertson et al., 2006). Kremen et al. (2007) reported a similar relationship by examining cognitive ability and rates of PTSD diagnosis. These data from the Vietnam Twin Registry involve small N due to the sample nature, but they do offer excellent support for a genetic contribution to PTSD diagnosis.

Clancy et al. (2006) examined the effect of exposure before, during, or after military service. Findings indicated that non-military-related trauma was prevalent among the veterans sample (90 percent). Regression analyses for PTSD symptom severity revealed that age, greater combat exposure, and a history of physical assault after military service were significantly associated with more severe PTSD symptoms. Childhood physical abuse, adult sexual trauma, and a history of being physically assaulted during military service were also significantly associated with PTSD symptom severity.

Injury severity was a significant predictor of any mental health diagnosis and PTSD diagnosis. Gunshot wounds and diastolic blood pressure were significant predictors of any mental health diagnosis but not PTSD. A study of a sample of 1968 men (831 battle injuries and 1137 non-battle injuries) injured during Operation Iraqi Freedom (OIF) found that those with battle injuries compared with non-battle injuries had a greater risk of PTSD and other mental health diagnoses, and there was a positive association with injury severity (MacGregor et al., 2009). Aggressive pain control after injury has shown, in one study, to reduce the incidence of PTSD. The study (Holbrook, 2010) found that the use of morphine during trauma care may reduce the risk of subsequent development of PTSD after serious injury.

One semi-prospective study (Zohar, 2009) examined risk factors for the development of post-traumatic stress disorder following combat trauma by comparing a large sample of war veterans (Israeli Defense Force) who developed PTSD with a matched control group of veterans who did not. Neither behavioral assessment nor training was found to predict PTSD. The predictive factors that were found were essentially non-specific, such as cognitive functioning, education, rank, and position during the trauma, with little effect from training. The author concluded that "... an armed force that uses universal recruitment, carefully structured predrafting psychological assessment of social and individual qualifications (including motivation) failed to identify increased risk factors for PTSD. However, nonspecific factors were found to be associated with an increased risk for PTSD. This study suggests that the focus of future research on risk factors for PTSD should incorporate other domains rather than behavioral assessment alone" (Zohar et al., 2009).

Phillips et al. (2010) identified risk factors for PTSD among military service members as related to their combat exposure. The threat of death and serious injury and the witnessing of injury or death are significant risk factors for screening positive for post-deployment PTSD among male Marines, as well as violence exposures prior to entering the Marine Corps, which are independent of future combat exposures. Prior assault was also found to increase vulnerability, rather than resilience against, PTSD symptoms among military professionals in the Millennium Cohort Study of US military cohort deployed in the wars in Iraq and Afghanistan (Smith, 2008). Higher frequency and intensity of combat has been strongly associated with increased rates of PTSD (Hoge, 2004; Dohrenwend, 2006).

PTSD symptoms among service members deployed to Iraq or Afghanistan have been associated with lower rank, being unmarried, less formal education, and a history of childhood adversity (Smith, 2008; Iversen, 2008).

The intrapersonal characteristic of hardiness as well as post-war social support may be protective against developing PTSD. In contrast, negative life events in the postwar or trauma period are linked to PTSD (King et al., 1998).

There is evidence that a strong social support network, indicated by unit cohesion, is protective. A large social support network may diminish the association between stressful life events and PTSD symptoms (Schnurr et al., 2004; Benetsch et al., 2000; Brailey et al., 2007).

EVIDENCE

	Evidence	Sources	LE	QE	SR
1	Assessment of persons exposed to trauma for risk factors for developing PTSD (pre-trauma and post-trauma risks)	Brewin et al., 2000 Ozer et al., 2003	II	Good	B
2	Assessment of trauma type, nature, and severity	Brewin et al., 1999 Bryant et al., 2000 Harvey & Bryant, 2000 Mellman et al., 2001	II	Good	B
3	Assessment of existing social supports and ongoing stressors.	Litz et al., 2002	II	Good	B
4	Patients with dissociative symptoms or ASD warrant careful clinical attention due to a high risk for developing PTSD	Birmes et al., 2001 Brewin et al., 1999 Bryant et al., 2000 Harvey & Bryant, 2000 Mellman et al., 2001 Murray et al., 2002	II	Good	B

LE = Level of Evidence; QE = Quality of Evidence; SR = Strength of Recommendation (see Appendix A)

2. TRIAGE

G. Diagnosis of PTSD or Clinical Significant Symptoms Suggestive of PTSD?

BACKGROUND

In the primary care setting, providers often do not have the time or resources to accomplish a detailed mental health intake evaluation; so it is important for them to be comfortable with the initial evaluation and management of stress-related disorders without having to be concerned with the fine details of DSM-IV and making a definite diagnosis. Providers who perform the initial evaluation of a patient with suspected PTSD should recognize that a detailed recounting of the traumatic experience may cause further distress to the patient.

Please refer to [Annotation A](#) for a discussion of post-traumatic symptoms.

RECOMMENDATION

1. A diagnosis of stress-related disorder consistent with the DSM IV criteria for PTSD should be formulated before initiating treatment.
2. Diagnosis of PTSD should be obtained based on a comprehensive clinical interview that assesses all the symptoms that characterize PTSD. Structured diagnostic interviews, such as the Clinician-Administered PTSD scale (CAPS), may be considered.
3. When a diagnostic work out cannot be completed, primary care providers should consider initiating treatment or referral based on a working diagnosis of stress-related disorder.
4. Patients with difficult or complicated presentation of the psychiatric component should be referred to PTSD specialty care for diagnosis and treatment.
5. Patients with partial or sub-threshold PTSD should be carefully monitored for deterioration of symptoms.

DISCUSSION

Approximately 90 percent of patients with a mental health diagnosis are seen in primary care (Gebhart, 1996).

Many options are available to primary care providers to treat stress-related disorders and to relieve the burden of suffering for PTSD patients including pharmacotherapy, supportive counseling, and referral. Because these interventions can be helpful in a variety of psychiatric disorders, it is not essential that a detailed diagnostic assessment be completed prior to initiating treatment for PTSD.

In addition, a detailed recounting of the traumatic experience may cause further distress to the patient and is not advisable unless a provider has been trained and is able to support the patient through this experience.

Table B - 3 Diagnostic criteria for Post-Traumatic Stress Disorder (DSM-IV)

<p>A. The person has been exposed to a traumatic event in which both of the following were present:</p> <ol style="list-style-type: none"> 1. The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others 2. The person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganized or agitated behavior <p>B. The traumatic event is persistently re-experienced in one (or more) of the following ways:</p> <ol style="list-style-type: none"> 1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed 2. Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content 3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated) Note: In young children, trauma-specific reenactment may occur 4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event 5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event <p>C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:</p> <ol style="list-style-type: none"> 1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma 2. Efforts to avoid activities, places, or people that arouse recollections of the trauma 3. Inability to recall an important aspect of the trauma 4. Markedly diminished interest or participation in significant activities 5. Feeling of detachment or estrangement from others 6. Restricted range of affect (e.g., unable to have loving feelings) 7. Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span) <p>D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:</p> <ol style="list-style-type: none"> 1. Difficulty falling or staying asleep 2. Irritability or outbursts of anger 3. Difficulty concentrating 4. Hypervigilance 5. Exaggerated startle response <p>E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month</p> <p>F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning</p> <p>Specify if: Acute: if duration of symptoms is less than 3 months Chronic: if duration of symptoms is 3 months or more With Delayed Onset: if onset of symptoms is at least 6 months after the stressor</p>
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DSM-IV & DSM-IV-TR Cautionary Statement

- The specified diagnostic criteria for each mental disorder are offered as guidelines for making diagnoses, because it has been demonstrated that the use of such criteria enhances agreement among clinicians and investigators. The proper use of these criteria requires specialized clinical training that provides both a body of knowledge and clinical skills.
- These diagnostic criteria and the DSM-IV Classification of mental disorders reflect a consensus of current formulations of evolving knowledge in our field. They do not encompass, however, all the conditions for which people may be treated or that may be appropriate topics for research efforts.
- The purpose of DSM-IV is to provide clear descriptions of diagnostic categories in order to enable clinicians and investigators to diagnose, communicate about, study, and treat people with various mental disorders. It is to be understood that inclusion here, for clinical and research purposes, of a diagnostic category, such as Pathological Gambling or Pedophilia, does not imply that the condition meets legal or other non-medical criteria for what constitutes mental disease, mental disorder, or mental disability. The clinical and scientific considerations involved in categorization of these conditions as mental disorders may not be wholly relevant to legal judgments, for example, that take into account such issues as individual responsibility, disability determination, and competency.
- Dissociative symptoms are not considered an essential feature of PTSD, as they are for ASD. Dissociative symptoms included among the diagnostic criteria for PTSD are categorized as reexperiencing (e.g., dissociative flashbacks) or avoidance /numbing (e.g., dissociative amnesia and psychic numbing). For example, the dissociative symptom of psychic numbing which is an expression of a restricted range of affect among the avoidance/numbing symptoms of PTSD. Similarly, the inability to remember an important aspect of the trauma describes the dissociative symptom of amnesia. Thus, while dissociation has not been identified as a central feature of PTSD, dissociative symptoms can contribute to a diagnosis of PTSD, making the comparison of ASD and PTSD less inconsistent than it might seem.

Partial or Sub-threshold PTSD

Studies in which the prevalence of partial or sub-threshold PTSD was examined found it to be substantial. In one study of infantry soldiers returning from Iraq, the prevalence of PTSD was estimated to be 12 percent when a stringent PCL definition of PTSD was utilized but rose to 18-20 percent when a more liberal DSM symptom-based definition was applied (Hoge, 2004). A large Canadian epidemiological study assessing for current PTSD found the incidence to be 5.0 percent (women) and 1.7 percent (men), but the incidence of partial PTSD was even higher at 5.7 percent and 2.2 percent for women and men, respectively. Individuals with sub-threshold PTSD showed similar levels of social and occupational impairment as those meeting full criteria (Stein, 1997; Marshall, 2001).

H. Assess for Co-Occurring Disorders

OBJECTIVE

Improve management of PTSD symptoms when they are complicated by the presence of a medical or psychiatric co-morbidity.

BACKGROUND

Co-morbid medical and psychiatric conditions are important to recognize, because they can modify clinical determinations of prognosis, patient or provider treatment priorities, selection of interventions, and the setting where PTSD care will be provided. Patients with PTSD have been found to frequently report physical symptoms, cognitive health concerns, and utilize high levels of medical care services. Providers should also expect that 50 to 80 percent of patients with PTSD will have one or more coexisting mental health disorders. PTSD is strongly associated, among veterans from recent deployment (OEF/OIF), with generalized physical and cognitive health symptoms attributed to concussion/mild traumatic brain injury (mTBI).

Because of the many potential etiologies of these symptoms, it is generally best to develop a collaborative care treatment strategy based in primary care and address these health concerns simultaneously with PTSD symptoms (see VA/DoD Clinical Practice Guideline for Post-Deployment Health). Management should focus on identifying and treating the symptoms that are causing the most impairment, regardless of the cause or diagnosis.

Some co-morbid medical or psychiatric conditions may require early specialist consultation in order to assist in determining treatment priorities. In some cases, these disorders may require stabilization before (or in concert with) initiation of PTSD treatment.

RECOMMENDATIONS

1. Providers should recognize that medical disorders/symptoms, mental health disorders, and psychosocial problems commonly coexist with PTSD and should screen for them during the evaluation and treatment of PTSD.
2. Because of the high prevalence of psychiatric co-morbidities in the PTSD population, screening for depression and other psychiatric disorders is warranted (see also VA/DoD Clinical Practice Guidelines for the Management of Major Depressive Disorder [MDD] and for Bipolar Disorder).
3. Patterns of current and past use of substance by persons with trauma histories or PTSD should be routinely assessed to identify substance misuse or dependency (alcohol, nicotine, prescribed drugs, and illicit drugs) (see also VA/DoD Clinical Practice Guideline for Substance Use Disorders).
4. Pain (acute and chronic) and sleep disturbances should be assessed in all patients with PTSD.
5. Generalized physical and cognitive health symptoms - also attributed to concussion/mild traumatic brain injury (mTBI) and many other causes - should be assessed and managed in patients with PTSD and co-occurring diagnosis of mTBI (see also VA/DoD CPG for Concussion/mild-TBI, and the CPG for Post-Deployment Health).
6. Associated high-risk behaviors (e.g., smoking, alcohol/drug abuse, unsafe weapon storage, dangerous driving, HIV and hepatitis risks) should be assessed in patients with PTSD.

7. Providers should consider the existence of co-morbid conditions when deciding whether to treat patients in the primary care setting or refer them for specialty mental healthcare (See Annotation J).
8. Patients with complicated co-morbidity may be referred to mental health or PTSD specialty care for evaluation and diagnosis (see Annotation J).

DISCUSSION

Co-morbid conditions and psychosocial problems of significant importance to treatment planning include:

Medical Conditions: PTSD is associated with elevated rates of generalized physical and cognitive health concerns, which are thought to be mediated in part by neuroendocrine dysregulation and autonomic nervous system reactivity (Hoge et al., 2007; Schnurr & Green, 2004). These health conditions can include chronic headaches, chronic musculoskeletal pain, memory and attention problems, fatigue, dizziness, gastrointestinal symptoms, sleep dysfunction, hypertension, rapid heart rate (sometimes in association with panic symptoms), cardiovascular disease, impulsivity, anger, sexual problems, and a variety of other health complaints. The trauma-focused techniques may be undesirable and counter-productive for older adults as they can lead to increased autonomic arousal and decreased cognitive performance. In patients with serious cardiac problems, consultation from the primary care physicians can be sought. If in consultation with other health professionals, and the patient, it is decided that trauma-focused treatments is feasible, then mental health treatment providers can proceed with caution and closely monitor patients at greater risk from high arousal. These health concerns can sometimes cluster together and may present as multisystem problems in the same manner as somatoform-spectrum or medically unexplained physical symptom (MUPS) conditions. These symptoms have been commonly described after all wars, overlap with numerous conditions, and often have more than one potential etiology (see DoD/VA Post-Deployment Health CPG). For example, service members or veterans who present to primary care with headaches, cognitive problems, fatigue, dizziness, and/or irritability may be experiencing these symptoms as a result of chronic sleep deprivation, neuroendocrine/autonomic nervous system dysregulation associated with PTSD, residual effects of injuries during deployment (including concussions/mTBIs), chronic pain, medication side effects, depression, substance misuse, or other causes. For veterans of combat, their experiences may have involved the extremes of physiological stress, contributing to long-term dysregulation of neuroendocrine and autonomic nervous systems.

It is important for clinicians to be aware of the high medical co-morbidity of PTSD and the fact that physical health concerns (e.g., chronic pain, headaches) may make it more difficult to treat PTSD symptoms. Because of the many potential etiologies of these symptoms, it is generally best to develop a collaborative care treatment strategy based in primary care and address these health concerns simultaneously with PTSD symptoms, or the VA post-deployment care clinic model, an integrated primary care – mental health clinical setting centered on the combat veteran (see also the VA/ DoD Guideline for Post-Deployment Health).

Some medical disorders may restrict PTSD treatment options (e.g., dementia limits psychotherapeutic options; cardiac conduction problems may limit some pharmacotherapeutic options; and disorders that restrict mobility may limit ability to attend weekly treatment sessions). It is generally best to maximize medical management of these conditions first and then focus on PTSD treatment.

Substance Use Disorders: Patients with PTSD frequently use alcohol, nicotine, and other substances in maladaptive ways to cope with their symptoms. Approximately 40 to 50 percent of PTSD patients treated in the VA have current substance use problems. Effective PTSD treatment is extremely difficult in the face of active substance use problems, unless substance use disorders are also treated. Most often, attempts to address substance problems should proceed concurrently with the direct management of PTSD. However, in cases when the substance use is severe, substance use may require initial treatment and stabilization before progressing to PTSD care (e.g., patient requires detoxification from opiates) (see Annotation J2 - Concurrent PTSD and Substance Abuse). Ongoing heavy alcohol use will interfere with prolonged exposure therapy by chemically enhancing the extinction of anxiety, thus not allowing the patient an opportunity to fully engage in therapy.

Mild-Traumatic Brain Injury (mTBI): Providers should have specific awareness of traumatic brain injury (TBI), particularly concussion/mTBI, in the post-deployment population because of the high incidence of concussion/mTBI during deployment (10-20 percent of combat veterans), and high co-morbidity of post-concussive symptoms (PCS) with PTSD. Concussion/mTBI is common in sports injuries, motor vehicle accidents, military training (e.g., hand-to-hand combat), and combat. It is associated with a variety of symptoms that will manifest immediately following the event, and may resolve quickly, within minutes to hours after the injury event. In certain individuals the symptoms persist longer leading to a persistent post-concussion symptoms (PPCS). Although there has been controversy of the relative contribution of concussion/mTBI and PTSD to post-deployment health outcomes, what is not controversial, is that PPCS include many of the same symptoms that veterans report after combat service, and overlap with the physical and cognitive health problems associated with PTSD, depression, and other causes (Bryant, 2008; Hoge, 2009; Stein & Mcallister, 2009). Several studies in OIF/OEF veterans have shown that PTSD is associated with post-deployment cognitive impairment, headaches, and other post-concussive symptoms. A history of concussion/mTBI with loss of consciousness has also been shown to have a small independent association with some post-deployment outcomes (Schneiderman et al., 2008; Hoge et al., 2008; Marx et al., 2009; Pietrzak et al., 2009). These studies highlight the complex interrelationship of causal factors responsible for post-deployment symptoms, and supports collaborative care approaches to treatment.

It is often difficult to precisely attribute symptoms to concussive events that occurred months or years earlier. Combat-related concussions (particularly those involving loss of consciousness) are associated with an increased risk of PTSD, presumably because of the life-threatening context of the concussion (distinct from concussions occurring in non-life threatening situations, such as sports accidents, which are not associated with PTSD), but possibly because of other factors (e.g., physiological, neurocognitive) inherent to the TBI, as well.

Psychiatric Disorders: In addition to substance use disorders, other commonly occurring mental disorders that co-exist with PTSD include: major depression, dysthymia, panic disorder, obsessive-compulsive disorder, and generalized anxiety disorder. Treatment of these disorders often occurs concurrently with therapy for PTSD, but on occasion they will take precedence. These disorders have evidence-based therapies that may pose additional effective treatment options. Co-morbid disorders that are less common with PTSD, but not rare, include psychotic disorders and bipolar disorder. Practitioners should be alert to co-morbid eating disorders, such as bulimia, particularly in women.

Personality Disorders: Personality disorders are long-term problems of coping that begin in childhood or adolescence and are often associated with past abuse or neglect and recurrent relationship problems. These patterns often result in poor adherence to prescribed PTSD management, and the primary care provider may require early assistance and advice from the mental healthcare provider.

The primary care practitioner should remain cautious of making a personality disorder diagnosis when PTSD is a known or suspected diagnosis. In some instances, PTSD could explain behavior attributed to a personality disorder. A mistaken personality disorder diagnosis can lead to delays in treatment for PTSD. For example, poor adherence to treatment may indicate a personality disorder, but it also may indicate a patient who was sexually assaulted on active military duty and is angry with authority figures because the assault was not appropriately investigated by the military chain of command.

Psychosocial Problems: Associated behavior problems and psychosocial deficits commonly present in patients with chronic PTSD include:

- Homelessness
- Suicidality
- Domestic violence or abuse
- Aggression, rage.

I. Educate Patient and Family

OBJECTIVE

Help trauma survivors cope with ASD/PTSD by providing information that may help them manage their symptoms and benefit from treatment.

BACKGROUND

Education of the trauma survivor is a core component of all PTSD treatment. Survivors need to better understand what they are experiencing, how to cope with reactions or symptoms, and what happens in treatment. It is also helpful to provide this information to family members or to the patients' significant others so that they can more effectively support the patient's recovery.

Education may be helpful in encouraging patients to self-refer to treatment or for family members encouraging a patient to attend treatment. Chaplains, particularly in the active duty military population, can be highly effective educational liaisons. Military culture does not attach any stigma to speaking with a chaplain although some military members may be reluctant to seek mental health assistance. Education from military chaplains may reduce barriers to care.

Caregivers (informal and formal) are often integral to treatment with older adults who are physically and mentally vulnerable/compromised. When conducting therapy with those with cognitive or physical impairments, providers may want to engage caregivers for additional support, reinforcement of materials presented in therapy, and assistance with transportation in getting to treatment.

RECOMMENDATIONS

1. Trauma survivors and their families should be educated about PTSD symptoms, other potential consequences of exposure to traumatic stress, practical ways of coping with traumatic stress symptoms, co-morbidity with other medical health concerns, processes of recovery from PTSD, and the nature of treatments. [C]

2. Providers should explain to all patients with PTSD the range of available and effective options for PTSD treatment.
3. Patient preferences along with provider recommendations should drive the selection of treatment interventions in a shared and informed decision-making process.

DISCUSSION

PTSD education involves teaching the survivor to label, recognize, and understand PTSD symptoms (and other trauma-related problems) that he or she is experiencing. Education should include discussion of the adaptive nature of many of the symptoms, which have to do with survival and the body's normal responses to threat. This is particularly important if PTSD occurred after exposure encountered in an occupational context, where the person was trained to respond to critical incidents (e.g., military, firefighter, police, and other first responders). Education should also provide simple advice regarding coping (such as sleep hygiene instruction), explain what can be done to facilitate recovery, and describe treatment options. Education can help make symptoms more understandable and predictable, decrease fear of symptoms, increase social support and lessen feelings of isolation, increase awareness of coping options and reduce maladaptive coping, and help survivors decide whether to seek treatment or learn how to better participate in treatment.

Education should be one of the first steps of PTSD treatment. It can help establish the credibility of the treatment provider, make treatment seem immediately helpful to the patient, and help prepare the patient for next steps in treatment. In fact, education should continue throughout PTSD treatment, sometimes in brief discussions when the patient has questions and sometimes more systematically as a formal activity. It can be delivered to individuals or to groups. Because patients with PTSD often have difficulties with concentration and memory, repetition of educational information and provision of written information are important.

The content of PTSD-related education can include the following topics:

Nature of PTSD symptoms: It is useful to help the survivor identify and label the reactions that he or she may be experiencing, recognize that emotional and physical reactions are expected after trauma, understand how the body's response to trauma includes many of the symptoms of PTSD, and understand that anxiety and distress are often "triggered" by reminders of the traumatic experience that can include sights, sounds, or smells associated with the trauma, physical sensations (e.g., heart pounding), or behaviors of other people.

Practical steps to cope with trauma-related problems: Survivors can also be educated about ways of coping with their PTSD symptoms in order to minimize their impact on functioning and quality of life. While education about coping is not a substitute for more systematic coping skills training, information on specific topics can be useful. Survivors can be helped to distinguish between positive and negative coping actions. Positive coping includes actions that help to reduce anxiety, lessen other distressing reactions and improve the situation; they include relaxation methods, physical exercise in moderation, talking to another person for support, positive distracting activities, and active participation in treatment. Negative coping methods may help to perpetuate problems and can include continual avoidance of thinking about the trauma, use of alcohol or drugs, social isolation, and aggressive or violent actions.

Nature of the recovery process and PTSD treatment: Survivors will sometimes have unrealistic or inaccurate expectations of recovery and may benefit from understanding that recovery is an ongoing daily gradual process (i.e., it doesn't happen through sudden insight or "cure") and that healing doesn't mean forgetting about the trauma or having no emotional pain when thinking about it. Education about what happens in treatment is also important. Treatment providers should explain and encourage discussion of treatment options, including evidence-based treatments. This can help build motivation to participate or persist in treatment.

Despite the fact that education is a component in all PTSD treatment and the strong clinical consensus that exists as to the importance of education, there is little empirical evidence that it reduces PTSD symptoms. Education is a component of empirically supported treatments but has not been evaluated as a "stand-alone" treatment (nor is it intended to be delivered in the absence of other treatment elements).

EVIDENCE

	Recommendation	Sources	QE	QE	R
1	Educate patients and family members regarding the trauma, its effects, ways of coping, and the treatment process.	Working Group Consensus	III	Poor	C

LE = Level of Evidence; QE = Quality of Evidence; SR= Recommendation (see Appendix A)

J. Determine Optimal Setting for Management of PTSD and Co-Occurring Disorders

J1. Management of PTSD with Co-morbidity

BACKGROUND

When PTSD has been determined to be the primary target of intervention because it is significantly impairing a patient's functioning or causing a high level of distress, the patient's preferences and motivation, the co-occurrence of other conditions, and the capacity to provide the necessary services should be considered in determining the optimal setting for treatment and long-term management. The referral to specialty care may be considered in this context.

When there are co-occurring medical or psychiatric conditions, the clinician will need to determine the best strategy for prioritizing and treating multiple disorders. In general, these disorders should be treated concurrently with PTSD treatment, although there are exceptions, such as severe substance dependence, that require medical detoxification prior to other forms of treatment. One important decision point is whether PTSD and its psychiatric co-morbidities should be treated in the primary care setting or referred to specialty mental healthcare.

RECOMMENDATIONS

Consultation / Referral

1. PTSD and co-morbid mental health conditions should be treated concurrently for all conditions through an integrated treatment approach, which considers patient preferences, provider experience, severity of the conditions, and the availability of resources.

2. Patients with PTSD and severe co-morbid mental health conditions should be treated either through referral or in consultation with a provider that is experienced in treating the co-morbid conditions.
3. Because of the profound social impairment of PTSD (caused, for example, by the patient's anger and avoidance symptoms), close friends and family members in the patient's immediate daily environment (e.g., parents, spouse, or children) should be provided with education and advised to consider assistance from specialty care, both for individual treatment and couples/family treatment.
4. Factors to consider when determining the optimal setting for treatment include:
 - a. Severity of the PTSD or co-occurring disorders
 - b. Local availability of service options (specialized PTSD programs, evidence-based treatments, behavioral health specialty care, primary care, integrated care for co-occurring disorders, Vet Centers, other)
 - c. Level of provider comfort and experience in treating psychiatric co-morbidities
 - d. Patient preferences
 - e. The need to maintain a coordinated continuum of care for chronic co-morbidities
 - f. Availability of resources and time to offer treatment.
5. Considerations related to possible referral:

Complicated severe PTSD: Some patients with PTSD have complicated, challenging presentations. These patients warrant referral to specialty PTSD care that includes access to cognitive-behavioral evidence-based treatments (see [Module I-2: Treatment for PTSD](#)).

Co-occurring major depressive disorder (MDD) in the absence of significant suicidality, panic, or generalized anxiety often shows reduction in intensity when the PTSD is treated. Depression of mild severity may not require referral to specialty care or additional treatments outside those targeting PTSD. Patients should be carefully monitored for changes in symptoms. A reduction of PTSD symptoms that is not accompanied by reduction of symptoms in depression or anxiety would justify a more formally targeted treatment (refer to the VA/DoD guideline for MDD).

Co-occurring mild to moderate disorders, such as substance use, pain disorders, and sleep problems, can frequently be effectively treated in the context of PTSD treatment and do not require a referral to specialty care. Consultation, to integrate adjunctive interventions, may be considered (see the respective VA/DoD CPGs).

Co-occurring severe psychiatric disorders, while not precluding concurrent PTSD treatment, typically justify referral to specialty care for evaluation and treatment. These disorders may include: *Severe Major Depression or Major Depression with suicidality, Unstable Bipolar Disorder, Severe Personality Disorders, Psychotic Disorders, Significant TBI, and Severe Substance Use Disorder (SUD) or substance abuse* of such intensity that PTSD treatment components are likely to be difficult to implement.

Persistent Post-Concussion Symptoms in patients who present with PTSD and a history of concussion/mTBI may be best managed within either primary care or polytrauma rehab settings that utilize a multidisciplinary

team approach. Providers should recognize that mTBI/concussion is one of numerous possible etiologies of co-morbid post-deployment symptoms occurring in veterans and service members with PTSD, and it is often difficult to precisely attribute symptoms to concussive events that occurred months or years earlier. From a treatment standpoint, physical or cognitive symptoms, such as headaches or memory problems, or other persistent post-concussive symptoms should be treated symptomatically whether or not concussion/mTBI is thought to be one of the causal factors. Clinicians should not get caught up in debating causation but maintain focus on identifying and treating the symptoms that are contributing to the most impairment. There is no evidence to support withholding PTSD treatments while addressing post-concussive symptoms.

DISCUSSION

A number of guiding principles should be considered in making treatment decisions with these patients:

- Integrated care models, in which the physical and mental health needs of patients are addressed in a single setting by a multidisciplinary provider team, have potential to reduce perceived stigma associated with help-seeking
- In systems where integrated care models do not exist, consultation and comprehensive assessment by a mental health provider are recommended
- In general, referral to specialty mental health is indicated if a patient with PTSD has co-morbid mental disorders that are severe or unstable. Examples include: patients whose depression is accompanied by suicidality, patients with substance dependence, and patients with concurrent psychotic or bipolar disorder. If the patient is referred to mental health for treatment of PTSD, then it is usually best for the mental health provider to provide comprehensive treatment for all mental disorders.
- For patients referred to specialty mental healthcare, it is important to preserve the continuity of care by ensuring ongoing communication with the primary care provider and to ensure coordination of care when multiple providers are involved.

J2. Management of Concurrent PTSD and Substance Use Disorder

OBJECTIVE

Improve management of PTSD symptoms when they are complicated by a concurrent substance abuse problem.

BACKGROUND

Research has documented a strong relationship between co-occurring PTSD and substance use problems in civilian and military populations of both genders (e.g., Jacobsen et al., 2001; Kessler et al., 1995). In FY 2008 almost 22% of VA patients diagnosed with PTSD also received a SUD diagnosis with rates of 70% seen in patients hospitalized for PTSD. Similarly, an extensive literature has documented high rates of PTSD among male veterans seeking SUD treatment. Patients diagnosed with both disorders tend to have poorer long-term prognoses for each condition than do those with one diagnosis without the other.

A similar relationship exists between PTSD and nicotine dependence (Fu et al., 2007; McFall et al., 2006). Smoking rates were high among clinical samples with PTSD

(40%-86%) as well as nonclinical populations with PTSD (34%-61%). Most studies showed a positive relationship between PTSD and smoking and nicotine dependence, with odds ratios ranging between 2.04 and 4.52.

In addition to the recommended PTSD services, programs should address substance use conditions that exist in association with the PTSD. Treatment services directed toward these additional SUD problems, when they exist, are associated with SUD improvement. Given improvement in PTSD symptoms, co-occurring SUD problems may show some spontaneous improvement if services are not provided, but in many instances the SUD must be addressed directly.

There is no evidence to support a preferred sequencing of treatments for diagnoses. In general, treatments for patients with both PTSD and SUD can be effectively delivered concurrently. Providers should consult the relevant CPG for SUD and PTSD individually. Clinical judgment based on systematic symptom monitoring will continue to be needed in deciding which specific treatments to implement, for which patients, and under which treatment conditions.

RECOMMENDATIONS

1. All patients diagnosed with PTSD should receive comprehensive assessment for SUD, including nicotine dependence (as recommended by the separate Clinical Practice Guideline).
2. Recommend and offer cessation treatment to patients with nicotine dependence. [A]
3. Patients with SUD and PTSD should be educated about the relationships between PTSD and substance abuse. The patient's prior treatment experience and preference should be considered since no single intervention approach for the co-morbidity has yet emerged as the treatment of choice
4. Treat other concurrent Substance Use Disorders consistent with VA/DoD clinical practice guidelines including concurrent pharmacotherapy:
 - a. Addiction-focused pharmacotherapy should be discussed, considered, available and offered, if indicated, for all patients with alcohol dependence and/or opioid dependence.
 - b. Once initiated, addiction-focused pharmacotherapy should be monitored for adherence and treatment response.
5. Provide multiple services in the most accessible setting to promote engagement and coordination of care for both conditions. [I]
6. Reassess response to treatment for SUD periodically and systematically, using standardized and valid self-report instrument(s) and laboratory tests. Indicators of SUD treatment response include ongoing substance use, craving, side effects of medication, emerging symptoms, etc.
7. There is insufficient evidence to recommend for or against any specific psychosocial approach to addressing PTSD that is co-morbid with SUD. [I]

DISCUSSION

Co-occurring PTSD and SUD is associated with: more severe PTSD symptoms; the higher the rates of other co-occurring Axis I and II Disorders, the higher the rates of medical problems and the greater the likelihood of relapse (Najavits, 1997; Ouimette and Brown, 2002; Brady, 2001). Rates of co-occurrence are high: Men with PTSD are

5 times more likely to have a SUD compared to the general population. Women with PTSD are 1.4x more likely (Helzer et al., 1987). Lifetime prevalence of PTSD among individuals seeking SUD treatment has been reported as high as 50%. Population based data are lower.

The literature, in general, provides support for improved SUD and PTSD symptoms when individuals are provided treatment. No systematic findings indicate harm to patients provided integrated treatment for co-occurring SUD and PTSD and there is recognition that both conditions ought to be addressed. There are findings that support provision of integrated treatment for SUD and PTSD both as an adjunct to existing SUD treatment services or as stand-alone treatments (Ouimette et al., 1998a). However, the data are limited making it difficult to clearly identify one specific treatment as the “gold standard.” Studies examining both patient characteristics and clinician concerns indicate that one central feature may be the high rate of other co-occurring Axis I and Axis II psychiatric disorders among this cohort and not just SUD and PTSD alone (Cacciola et al., 2008). A key component of this seems to be the likelihood of more severe symptom presentation (e.g., history of suicide attempts, inpatient psychiatric hospitalizations).

Addiction-focused pharmacotherapy should be provided in addition to any indicated pharmacotherapy for co-existing PTSD and directly coordinated with specialty psychosocial treatment and adjunctive services for psychosocial problems as well as with the patient’s primary care and/or general mental health providers.

Because withdrawal symptoms experienced during early abstinence may be associated with a resurgence of traumatic memories, worsening PTSD symptoms, and, possibly, increased risk for suicidal thoughts or attempts (Kosten & Krystal, 1988), the client should be supported closely through this period, prepared for possible short-term worsening of PTSD symptoms, and helped to develop strategies for managing symptoms and urges to drink or use.

Because patients with SUD and PTSD may be at higher risk for relapse and their relapses may be “triggered” in part by trauma reminders and cues, clinicians should adapt relapse prevention methods to help substance abuse patients identify their trauma-related relapse cues and prepare them to cope with those triggers without drinking or using.

EVIDENCE

	Recommendation	Sources	QE	QE	R
1	Routinely assess substance use patterns of clients with trauma histories or PTSD	Working Group Consensus	III	Poor	I
2	Offer addiction-focused pharmacotherapy when appropriate	Brady et al., 2005	I	Good	B
4	Educate substance-abusing patients with PTSD about the relationships between PTSD and substance abuse	Working Group Consensus	III	Poor	I
5	Consider concurrent PTSD treatment or provision of integrated PTSD/substance abuse treatment	Najavits, 2002 Ouimette et al., 1998	II-2	Mod	C
6	Follow-up care for SUD-PTSD should include a continued focus on both and monitoring	Ouimette et al., 2000	II-3	Fair	I

LE = Level of Evidence; QE = Quality of Evidence; SR= Recommendation (see Appendix A)

J3. The Role of the Primary Care Practitioner

BACKGROUND

Primary care clinicians may decide to refer for specialized psychiatric care at any point, depending on their level of comfort, experience, experience in treating PTSD, the particular needs and preferences of the patient, and the availability of other services.

RECOMMENDATIONS

1. Primary care providers should routinely provide the following services for all patients with trauma-related disorders, especially those who are reluctant to seek specialty mental healthcare:
 - Education about the disorder and importance of not letting stigma and barriers to care interfere with specialty treatment if needed
 - Provision of evidence-based treatment within the primary Care or through referral
 - Regular follow-up and monitoring of symptoms
 - Regular follow-up and monitoring of co-morbid health concerns.
2. Primary care providers should consider consultation with mental health providers for patients with PTSD who warrant a mental health referral but refuse it or seem reluctant to talk to a mental health provider.
3. Primary care providers should take leadership in providing a collaborative multi-disciplinary treatment approach. Team members may include the primary care providers, mental health specialists, other medical specialists (e.g., neurology, pain management), chaplains, pastors, social workers, occupational or recreational therapists, Vet Center staff members, staff of family support centers, exceptional family member programs, VA benefits counselors, vocational rehabilitation specialists, peer counselors, and others.
4. When an integrated behavioral health clinician is available (e.g., collaborative care model, or Post-Deployment Care clinics) evidence-based treatment should be provided.
5. Primary care providers should continue to be involved in the treatment of patients with acute or chronic stress disorders. All patients with PTSD should have a specific primary care provider assigned to coordinate their overall healthcare.

3. TREATMENT

K. Initiate Treatment Using Effective Interventions for PTSD

BACKGROUND

Many treatment strategies are available to treat stress-related disorders and to relieve the burden of suffering for PTSD patients. Options include pharmacotherapy, psychotherapy, and somatic and alternative medicine interventions. Treatment may be provided by primary care providers, specialty mental health providers, or some combination of these.

Primary care is an ideal setting in which to educate patients and their families about treatment options for post-traumatic stress. Patient education is recommended as an element of treatment of PTSD for all PTSD patients and their family members. Such educational efforts must include informing patients that even if they respond to medication therapy, treatment for a longer period may be needed. The patient's preferences along with provider recommendations should drive the selection of treatment interventions in a shared decision-making process.

Discussion of the evidence supporting the recommendations for treatment intervention is included in Module I-2: Treatment for PTSD.

RECOMMENDATIONS

1. A supportive and collaborative treatment relationship or therapeutic alliance should be developed and maintained with patients with PTSD.
2. Evidence-based psychotherapy and/or evidence-based pharmacotherapy are recommended as first-line treatment options.
3. Specialized PTSD psychotherapies may be augmented by additional problem-specific methods/services and pharmacotherapy.
4. Consider referral for alternative care modalities (Complementary Alternative Medicine) for patient symptoms, consistent with available resources and resonant with patient belief systems. [See Module I-2]
5. Patients with PTSD who are experiencing clinically significant symptoms, including chronic pain, insomnia, anxiety, should receive symptom-specific management interventions. [See Module I-3]
6. Management of PTSD or related symptoms may be initiated based on a presumptive diagnosis of PTSD. Long-term pharmacotherapy will be coordinated with other intervention.

For Specific Treatment Modalities: See Module I-2 Treatment Interventions for PTSD:

Psychotherapy

Pharmacotherapy

Adjunctive Treatments

Somatic Therapy

Complimentary Alternative Therapy (CAM)

DISCUSSION

Establishing Therapeutic Alliance

Many people with PTSD find that their relationships with others have changed as a result of exposure to trauma. They often report that they have difficulty trusting others, are suspicious of authority, dislike even minor annoyances, and generally want to be left alone. Since the clinician-patient relationship draws heavily on trust, respect, and openness, and since the relationship often has to be formed in a busy clinical or bureaucratic setting, the provider may find the PTSD patient to seem to be withholding, negativistic, or even hostile at the initial meeting. The patient may seem to have "an attitude," or "Axis II" co-morbidity. As a result, many combat veterans feel misunderstood or misdiagnosed by otherwise competent professionals, and

ultimately the patient suffers through feeling betrayed and misunderstood by the mental health professional. If a therapeutic relationship is to have any opportunity to develop, the treatment provider must adopt a stance of caring and concerned involvement that takes what the patient says at face value, doesn't judge or label this type of behavior, and doesn't withdraw into an "objective" "professional" role. In short, the clinician who can relate honestly and openly is more likely to have a patient who is willing to relate to him/her as a fellow human being and an effective partner in treatment.

A general understanding of what has happened to the veteran is critical in this process of developing a therapeutic relationship. Every provider working with combat veterans should be advised to read some basic material on the experience of combat and watch documentaries of the same. The provider must develop an understanding that wartime and military service involves some of the most intense human experiences and that those feelings of profound rage, fear, and grief can be an expected part of these experiences. These feelings will be present in the interview setting and must be met with respect and compassion. It is also helpful for the professional to be careful not to assume that they have any understanding of the military experience if they have not themselves served in the military and should not be afraid to ask questions when they don't understand something about the military that the patient is referring to.

Family, religious organizations and community leaders can be helpful when dealing with an unfamiliar culture and/or religion. It may also be appropriate to consult a local cultural adviser. But particular attention should be paid to the individual's own beliefs and values, and confidentiality always must be maintained when getting input from other sources. Patient's beliefs should be seen in the context of their social, religious, and cultural environment, and if need be, a trusted member of the person's faith or cultural group should be consulted.

PTSD Treatment

Refer to the evidence-based treatment strategies for PTSD, summarized in the section on Pharmacotherapy and Psychotherapy Intervention of this guideline. The section also includes medication tables that summarize indications/benefits, contraindications/adverse effects, and usual dosages (see [Module 1-2](#)).

Supportive counseling for PTSD has received little study to date and cannot be endorsed as an evidence-based psychotherapeutic strategy. However, it has been shown to be effective compared with no treatment and may be the sole psychotherapeutic option available for the patient with PTSD who is reluctant to seek specialty mental healthcare. It may be a useful engagement strategy to provide temporary support, with the ultimate goal to convince patient to accept evidence-based treatment.

L. Facilitate Spiritual Support [See [Module 1-2: D2- Spiritual Support](#)]

M. Facilitate Social Support [See [Module A: Annotation L2](#)]

4. RE-ASSESSMENT & FOLLOW-UP

N. Assess Response to Treatment

OBJECTIVE

Re-assess patient status following therapeutic intervention to determine response to treatment, inform treatment decisions, and identify need for additional services. Re-assessment should address PTSD symptoms, diagnostic status, functional status, quality of life, additional treatment needs, and patient preferences.

RECOMMENDATIONS

1. At a minimum, providers should perform a brief PTSD symptom assessment at each treatment visit. The use of a validated PTSD symptom measure, such as the PTSD Checklist, should be considered (see Appendix C).
2. Comprehensive re-assessment and evaluation of treatment progress should be conducted at least every 90 days, perhaps with greater frequency for those in active treatment, and should include a measure of PTSD symptomatology (e.g., PCL) and strongly consider a measure of Depression symptomatology (e.g., PHQ9).
3. Other specific areas of treatment focus (e.g., substance abuse) should also be reevaluated and measured by standardized measures of outcome.
4. Assessment of functional impairment should also be made, at a minimum, by asking patients to rate to what extent their symptoms make it difficult to engage in vocational, parental, spousal, familial, or other roles.
5. Consider continued assessment of:
 - Patient preferences
 - Treatment adherence
 - Adverse treatment effects.

DISCUSSION

Patients should be assessed at least every three months after initiating treatment for PTSD, in order to monitor changes in clinical status and revise the intervention plan accordingly. The interval of three months is suggested because many controlled trials of first-line therapies for PTSD demonstrate clinically significant changes during this time frame. Assessment of the following domains is advised: (a) symptom severity and diagnostic status of PTSD, co-morbid mental disorders, and co-morbid medical conditions; (b) functional status and quality of life in major areas of adjustment (e.g., occupation, social and family relations, activities of daily living and capacity for self-care, physical health needs, and spiritual fulfillment); (c) psychosocial needs (e.g., financial and housing deficits); (d) patient satisfaction with treatment received and preferences for type and amount of continued treatment; (e) compliance or adherence with treatments provided; and (e) adverse side effects of pharmacological or psychosocial treatments administered.

A number of interview and questionnaire methods are recommended for assessing the diagnostic status and clinical severity of patients (see Annotation E). These measures may be used to identify the presence/absence of major mental disorders, including PTSD, as well as the degree of symptom severity. Much of this information

is important to share with patients in assessing progress of treatment and making collaborative decisions about future directions of care. The DSM-IV criteria for PTSD domains (b – e) can be routinely measured using standard clinical interview methods.

Regular Follow-Up and Monitoring

The use of pencil-and-paper measures of PTSD symptom severity, such as the PTSD Checklist (PCL; see appendix C), should be considered. Scores on the PCL may be plotted serially over time to create a longitudinal record of symptom severity and may be helpful for recognizing environmental (e.g., renewed proximity to a previously abusive parent) or seasonal (e.g., anniversary of a traumatic war event) precipitants of PTSD symptoms.

Early Recognition of a Psychosocial Crisis and Referral to Specialists

Primary care providers may be the first to recognize that a patient with PTSD is entering a psychosocial crisis. Depending on the severity and disability associated with the crisis and the potential for harm to the patient or others, the primary care provider may be obliged to obtain specialty mental health services, even if that patient is reluctant to seek those services.

Coordination of General Healthcare

The traditional role of the primary care provider as the coordinator of various disciplines and consultants involved in the treatment of any single patient is especially relevant for the patient with PTSD. Particularly in patients with chronic PTSD, medically unexplained symptoms or problems with substance use (including smoking) may lead to the need for a wide range of specialists. Coordination of these services is important to avoid confusion and unnecessary healthcare use.

O. Follow-Up

BACKGROUND

Because of risk of relapse following discontinuation of treatment in patients with chronic PTSD, long-term treatment is often needed. Most patients with chronic PTSD (defined by the DSM-IV as full-criterion symptoms lasting 3 months or more) should be monitored for at least 1 year, with regularly scheduled follow-up in order to prevent relapse.

The continued importance of psychoeducation and reinforcement of health-promoting behaviors by the primary care physician is an important but generally neglected area of public health.

RECOMMENDATIONS

1. If patient does not improve or status worsens, consider one of the following treatment modification options:
 - a. Continue application of the same modality at intensified dose and/or frequency
 - b. Change to a different treatment modality
 - c. Apply adjunctive therapies

- d. Consider a referral to adjunctive services for treatment of co-morbid disorders or behavioral abnormalities (e.g., homelessness, domestic violence, or aggressive behavior).
 - e. For patient with severe symptoms or coexisting psychiatric problems consider referrals to:
 - Specialized PTSD programs
 - Specialized programs for coexisting problems and conditions
 - Partial psychiatric hospitalization or “day treatment” programs
 - Inpatient psychiatric hospitalization.
2. If patient demonstrates partial (insufficient) remission, consider one of the following treatment modification options:
- a. Before making any therapeutic change, ensure that “treatment non-response” is not due to one or more of the following: not keeping psychotherapy appointments, not doing prescribed homework, not taking prescribed medications, still using alcohol or illicit substances, still suffering from ongoing insomnia or chronic pain, not experiencing any new psychosocial stressors, the original assessment did not overlook a co-morbid medical or psychiatric condition
 - b. Continue the present treatment modality to allow sufficient time for full response
 - c. Continue application of the same modality at intensified dose and/or frequency
 - d. Change to a different treatment modality
 - e. Apply adjunctive therapies
 - f. Increase level of care (e.g., referral facility, partial hospitalization, inpatient hospitalization, residential care)
 - g. Consider a referral to adjunctive services for treatment of co-morbid disorders or behavioral abnormalities (e.g., homelessness or domestic violence).
3. If patient demonstrates improved symptoms and functioning but requires maintenance treatment:
- a. Continue current course of treatment
 - b. Consider stepping down the type, frequency, or dose of therapy
 - c. Consider:
 - Transition from intensive psychotherapy to case management contacts
 - Transition from individual to group treatment modalities
 - Transition to as-needed treatment
 - d. Discuss patient status and need for monitoring with the primary care provider

- e. Consider a referral to adjunctive services for treatment of co-morbid disorders or behavioral abnormalities (e.g., homelessness or domestic violence).
4. If patient demonstrates remission from symptoms and there are no indications for further therapy:
 - a. Discontinue treatment
 - b. Educate the patient about indications for and route of future care access
 - c. Monitor by primary care for relapse/exacerbation.
5. Evaluate psychosocial function and refer for psychosocial rehabilitation, as indicated. Available resources include, but are not limited to: chaplains, pastors, Family Support Centers, Exceptional Family Member Programs, VA benefits counselors, occupational or recreational therapists, Vet Centers, and peer-support groups (see Module I-2 D: Psychosocial Rehabilitation).
6. Provide case management, as indicated, to address high utilization of medical resources.

Table B-4 Treatment Response and Follow-Up

Step	Patient Condition	Options	Reassess at:*
1	Initial Treatment	<ul style="list-style-type: none"> • Psychotherapy and/or • SSRI/SNRI 	2 weeks ** / 4 weeks
2	Non response to initial dose	<ul style="list-style-type: none"> • Assess adherence • Increase dose • Consider longer duration • Switch to another SSRI or SNRI • Add psychotherapy • Consider referral to specialty care 	4 to 6 weeks
3	Failed second trial of antidepressant	<ul style="list-style-type: none"> • Switch to another SSRI/SNRI or mirtazapine • Add psychotherapy • Augment with prazosin (sleep/nightmare) 	8-12 weeks
4	Failed three trials including augmentation	<ul style="list-style-type: none"> • Re- evaluate diagnosis and treatment • Switch to TCA • If no response consider nefazodone (monitoring side effects), or phenazine (with careful consideration of risks) • Consider referral to specialty care 	> 12 weeks

*Times are general guidelines and may vary considerably

**If treatment is not tolerable, switch to another antidepressant.

DISCUSSION

Patient Does Not Improve or Status Worsens:

Re-assessment of patient's clinical status may occasionally show that symptoms and/or functional status are failing to improve or are deteriorating in a sustained way. It is important to determine if this static or deteriorated state is not simply the result of a major life crisis unrelated to the therapy being administered.

The clinician must next determine if a patient's unimproved clinical status reflects a temporary exacerbation of symptoms expected to occur in the course of treatment that will ultimately prove to be effective. For example, it is common for patients in a range of trauma-focused therapies to experience some brief distress or symptom exacerbation during initial phases of treatment where they focus on emotions associated with traumatic memories. In this case, it is important to reassure the patient about the natural course of recovery through treatment, assist him/her in coping with symptoms, and enlist him/her in the decision to continue with the current method of treatment. Increasing session contacts and or increasing the dose of medications may provide needed support.

If the clinician and patient agree that the current treatment regimen is ineffective, then a collaborative decision can be made to switch to a different modality. Another approach is to hold the course of a current therapy, which may appear ineffective, but apply adjunctive treatments (see Module I-2: PTSD Interventions). There is no empirical evidence that supports the effectiveness of combination treatments for PTSD. However, there is clinical consensus that some treatments can act synergistically (e.g., combining coping skills and symptom management approaches with exposure-based treatments).

Clinicians should consider changing the treatment plan by increasing the level of care offered to patients. Levels of care for PTSD vary in intensity, including infrequent visits administered in outpatient clinics, partial hospital programs, specialized inpatient PTSD programs, PTSD residential care programs and domiciliaries, and acute inpatient hospitalization. Patients who fail to progress in outpatient treatment may benefit from a temporary transition to a higher level of care, followed by a return to outpatient management after greater stabilization of symptoms has been achieved.

Often, progress in PTSD treatment may be compromised by a concurrent behavioral disorder (e.g., domestic violence), life crisis (e.g., homelessness), or uncontrolled substance use disorder. Referral to ancillary clinical services should be considered for patients for whom these problems emerge during the course of treatment, as identified upon re-assessment.

Patient Demonstrates Improved Symptoms and Functioning but Requires Maintenance Treatment:

Treatment may also lead to slight or moderate improvement that nonetheless leaves the patient with significant distress and impairment in functioning. If the patient demonstrates partial (insufficient) remission, consider one of the following treatment modification options:

- Continue the present treatment approach to allow sufficient time for full response. This option might be worth considering when a treatment involves acquisition of skills (e.g., cognitive restructuring or anxiety management). In such a case, it is possible that the patient may be in the process of learning the skill, with the full impact of therapy dependent on increased practice and

skill mastery. Or, treatment may not have yet yielded its maximum potential effect because of limited patient compliance; steps taken to increase adherence to treatment prescriptions may accelerate responsiveness to the intervention.

- If the moderate level of improvement obtained is less than would be expected, given what is known about the patient and the treatment modality, a change to a different treatment approach may be indicated.
- In certain circumstances, a move to an increased level of care may be warranted. For example, if current functioning remains poor despite some symptom improvement or the patient stands to experience major consequences for failure to improve more rapidly (e.g., marital separation), it may be desirable to move from outpatient care to a higher level of care (e.g., residential care).
- Improvement in PTSD symptoms may be inhibited by the presence of untreated additional problems, such as substance abuse or exposure to domestic violence. In such situations, it is important to initiate services for these problems in order to improve the capacity of the PTSD treatment to effect change.
- Patients with partial PTSD may exhibit clinically meaningful levels of functional impairment in association with their symptoms. Functional impairment, rates of co-morbid disorders, and rates of suicidal ideation were shown to increase linearly with increasing number of PTSD symptoms in one study, and individuals with sub-threshold PTSD had increased suicidal ideation, even after controlling for the presence of co-morbid major depressive disorder (Marshall, 2001).

When Symptoms and Other Trauma-Related Problems Show Significant Improvement, the Options Include the Following:

- Discontinue treatment
- Continue the course of treatment as is
- “Step down” to a treatment requiring less intensive resources.

Clinician judgment, based on discussion with the patient, will be the basis of such a decision.

When therapy has resulted in clinically significant improvement but the improvement in functioning is recent and of limited duration, a continuation of the existing type and intensity of treatment may be indicated if the clinician judges that time is required for the patient to continue practicing new skills or to otherwise consolidate treatment gains. This will be especially true if the clinician judges that a reduction in level of therapeutic support would threaten treatment gains.

If treatment has produced clear benefit but the patient is continuing to show treatment gains week-by-week, it may also be helpful to maintain the treatment as is, in hopes of continued improvement. For many patients, some level of continuing care may be indicated after more intensive help has produced improvements. A step-down to less resource-intensive help can often be accomplished by changing treatment type (e.g., from individual psychotherapy to periodic group support), reducing frequency of contacts (e.g., from once per week to twice per month contact), or reducing treatment dose (e.g., medication).

If treatment has resulted in significant reductions in PTSD but related problems (e.g., anger, social isolation, guilt) have shown little change, it will be important to consider adding treatment components to address those problems or refer the patient for additional services.

Patient Demonstrates Remission from Symptoms:

When the patient demonstrates remission from symptoms and there are no indications for further therapy, it is time to discontinue treatment. Discontinuation of treatment may be anxiety-provoking for some patients who have come to depend on the therapist. If this is the case, it may be helpful to discontinue treatment by using the step-down approach noted above and gradually moving toward termination. Whether treatment is ended gradually or more quickly, it is important to educate the patient about expected levels of continuing symptoms, indicators of relapse or need for future care, and ways of accessing care should the need arise. The patient can be encouraged to talk with his or her primary care provider about the treatment experience and enlist help in monitoring improvement.

Psychosocial Rehabilitation for All Patients with PTSD

Patients with persistent mental health symptoms and needs may benefit from a range of assistance strategies provided by a range of disciplines. In addition to the usual general health and mental health specialists, available resources include, but are not limited to, case management, chaplains, pastors, Family Support Centers, Exceptional Family Member Programs, VA Benefits Counselors, vocational counselors, occupational or recreational therapy, Vet Centers, and peer support groups.

In the primary care setting, appropriate encouragement of patients to obtain a mental health referral is important, even if patients are initially hesitant or reluctant to seek it. Mental health referral options include outpatient psychology, social work, or psychiatry clinics, depending on local resources and policies.

In specialty mental health settings, patients may be referred to specialized PTSD programs or programs that focus treatment on important coexisting problems, such as substance use disorder programs or programs for domestic violence or sexual assault/abuse. Depending on the level of associated disability, complexity of medication regimen, and level of threat to self or others, patients with persistent PTSD symptoms and needs may require inpatient or partial psychiatric hospitalization.

Providers referring from either the primary or specialty mental health setting should consider the need for case management to ensure that the range of patient needs is addressed and that follow-up contact is maintained.

See Module I-2: Interventions for PTSD D: Adjunctive Psychosocial Rehabilitation