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

Department of Veterans Affairs
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Version 1.0

Prepared by:

THE MANAGEMENT OF POST-TRAUMATIC STRESS
Working Group

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INTRODUCTION

INTRODUCTION

Post-traumatic Stress Disorder (PTSD) is the most prevalent mental disorder arising from combat. It also strikes military men and women deployed in peacekeeping or humanitarian missions, responding to acts of terrorism, caught up in training accidents, or victimized by sexual trauma. Its burden may be transient or last a lifetime. The response to psychological trauma is probably as old as human nature but the diagnosis of a traumatic stress disorder is among the newest in the diagnostic catalogue. Twenty years ago, most people, including most clinicians, did not know that PTSD existed. Even among those who acknowledged PTSD, their view tended to be *retrospective*: PTSD planning and practice in the Departments of Defense (DoD) and Veterans Affairs (VA) centered on work with survivors of past conflicts such as Vietnam, Korea, or World War II. As DoD and VA face the challenge of a new generation of combatants and veterans, our perspective must become *prospective*: building on the lessons of the past and serving those in present need but also aiming at the future in order to maximize preparedness and, if possible, prevention.

PTSD is, itself, only part of a spectrum of traumatic stress disorders, hence this Clinical Practice Guideline for the Management of *Post-traumatic Stress*. These disorders can be arranged along a temporal axis from Acute Stress Reaction, to Acute Stress Disorder, Acute PTSD, and Chronic PTSD. Each of these may be associated with serious mental and physical comorbidities. Some survivors will experience only a part of this spectrum while others will progress through the entire range. The diagnosis of Acute Stress Reaction is not to be found in the Diagnostic and Statistical Manual of the American Psychiatric Association, Fourth Edition (DSM-IV) but it is defined by the World Health Organization in the International Classification of Diseases (ICD-10) and was deemed useful to include in this guideline. The framers of this Guideline also found it useful to coin a new term, Combat and/or Operational Stress Reaction (COSR) in order to address special concerns relevant to interventions with active duty men and women.

The goal of this Guideline project was to create an algorithm to aid field personnel and health care workers in identifying, assessing, and/or treating military men and women and veterans who have survived traumatic events. This Guideline is unique in that it offers a decision tree for prevention, assessment, and treatment with full annotation across a broad range of posttraumatic disorders. It was designed by and for mental health providers, primary care clinicians, chaplains, pharmacists, and other professionals to be comprehensive and evidenced-based but still accessible and practical: an educational tool analogous to textbooks and journals but in a more user-friendly format. Clinical Practice Guidelines offer a solution to inefficiency and inappropriate variation in care; however, Guidelines must always be applied in the context of a provider's clinical judgment for the care of a particular patient. This Clinical Practice Guideline is meant to inform and support clinicians without constraining them.

This Guideline builds on DoD and VA expertise to promote state-of-the-art assessment and intervention. It is a tool designed for this time of trauma and challenge. Parts of this Clinical Practice Guideline have already served in Afghanistan and Iraq. But the Guideline also sets an implicit agenda for the future. Because research on traumatic stress is still in its infancy, the Working Group had to base a number of recommendations on opinion rather than evidence. Each such recommendation is a challenge to the research community. The members of the Working Group fully understand that Clinical Practice Guidelines will only be used if they are useful for the clinician as well as the survivor. The adoption of the Guideline challenges DoD and VA to integrate each algorithmic step into their computerized record systems such that data is automatically collected and transcribed into the clinical record. Finally, the Clinical Practice Guideline for the Management of Posttraumatic Stress, if implemented across DoD and VA, will create a vast living laboratory for research on core questions such as: Do the recommended assessment tools successfully screen for those who will develop clinically meaningful problems?; Can the recommended interventions significantly decrease the human suffering and the institutional costs associated with traumatic stress disorders?; Are there demographic factors that favor the use of one intervention over another? Perhaps the single most important question raised by this Guideline is whether early intervention can prevent traumatic stress disorders or stem their progression over time. Thus, in laying out the best available evidence-based, clinically informed practices, this Clinical Practice Guideline has the potential to generate still better science and newer, more effective practice- but like any tool, it will only be of service to the extent that it is used.

The PTSD Diagnosis

In their review of the history of the PTSD diagnosis, Parry-Jones and Parry-Jones (1994) note "abnormal stressors are by no means a product of the twentieth century but have featured, sporadically, in all societies from the earliest civilizations." Although stressful events have been noted throughout human history, some controversy exists over whether PTSD is "a timeless condition, which existed before it was codified in modern diagnostic classifications but was described by different names such as 'railway spine' and 'shellshock'" (Jones et al., 2003) or whether it is "is a novel presentation that has resulted from a modern interaction between trauma and culture" (Jones et al., 2003).

Formal investigations into the psychiatric outcomes of traumatic events primarily date back to the nineteenth century, and are mainly limited to review of railway accidents and military combat (Parry-Jones and Parry-Jones, 1994). Kinzie and Goetz (1996) provide a useful overview:

> 'Since the mid-19th century, clinical syndromes resembling PTSD have been described. However, understanding of PTSD has been complicated by questions of nomenclature, etiology, and compensation. Nomenclature placed PTSD syndromes under existing psychiatric disorders: traumatic hysteria, traumatic neurasthenia, or traumatic neurosis. Etiological issues have been concerned often solely with organic factors, pre-existing personality impairments, intrapsychiatric conflicts, and social factors. Only after World War II and the concentration camp experiences did the role of severe trauma in PTSD become recognized.'

Recognition of post-traumatic stress gained momentum in the period surrounding the Second World War. Around this time The Josiah Macy, Jr. Foundation published several studies on "combat fatigue," including "How Can the Flight Surgeon Better Treat Anxiety?" "Notes on Men and Groups Under Stress of Combat," and "Personality Disturbances in Combat Fliers" (Jones, 1987).

In the period following World War II, the characterization of PTSD began to broaden to include not only combat-related stress but also "reactions in response to overwhelming environmental stress 'outside the range of usual human experience'" (DSM-III, cited in Parry-Jones and Parry-Jones, 1994). Turnbull (1998) notes that "PTSD first appeared as an operational diagnosis in DSM-III (1980) and was revised in DSM-III-R (1987) and DSM-IV (1994). It made its first appearance in the ICD system later, in 1992." The category of "stress disorders, post-traumatic" was introduced as a Medical Subject Headings (MeSH) term in 1981. Since the early 1980's, hundreds of studies, descriptions, and recommendations for treatment of PTSD have appeared in the clinical and psychiatric literature.

Epidemiology of Stress Reaction Disorders

The NIMH Fact Sheet "Reliving Trauma" (2001) gives some idea of the magnitude of the suffering caused by PTSD in the United States:

- An estimated 5.2 million American adults ages 18 to 54, or approximately 3.6 percent of people in this age group in a given year, have PTSD.
- About 30 percent of Vietnam veterans developed PTSD at some point after the war. The disorder also has been detected among veterans of the Persian Gulf War, with some estimates running as high as 8 percent.
- More than twice as many women as men experience PTSD following exposure to trauma.
- Depression, alcohol or other substance abuse, or other anxiety disorders frequently co-occur with PTSD. The likelihood of treatment success is increased when these other conditions are appropriately diagnosed and treated as well.

In their overview of PTSD diagnosis and assessment, Keane et al. (2000) note that several studies have found lifetime prevalence rates from between five and twelve percent of the adult population. Keane et al. (2000) also support the finding that women are more likely than are men to develop PTSD. They also report that members of certain groups, such as Vietnam Veterans, rape victims, and disaster victims, are at greater risk for developing PTSD (Keane et al., 2000). These researchers conclude:

> Clearly, exposure to traumatic events is common in the United States and it seems that the prevalence of PTSD in the general population is high, ranking behind only substance abuse disorders, major depression, and social phobia in frequency. As a result, trauma exposure and PTSD represent a major challenge to the public health delivery system in Western developed countries.

Cost of PTSD

In a presentation to the FDA, Giller and Vermilyea (©1995-2002) quantify some of the costs of PTSD to patients and to the health care system:

- Early outcome studies show that early diagnosis and appropriate treatment of trauma-related disorders are cost effective, especially when compared with the cost of incorrect or inadequate treatment occurring prior to a correct diagnosis.
- In one study of women with trauma related dissociative disorders, if a correct diagnosis had been made after 12 months of treatment, rather than after an average of 99 months of treatment, the estimated savings would have been $250,000 per patient.
- In a study of rape victims, severely victimized female members in an HMO had outpatient medical expenses double those of control HMO members.
- Findings suggest that from 3.1 to 4.7 million crime victims received mental health treatment in 1991, for an estimated total cost of $8.3 to $9.7 billion. These recipients represent only a small portion of trauma victims in need of treatment, since those with PTSD are typically reluctant to seek professional help.

PTSD Treatment

The development of this Guideline originated with recognition of the need to diagnose and treat PTSD among the military population. In addition, the Guideline authors express the hope that by providing effective assistance to persons who have suffered a trauma, some of those persons might not go on to develop PTSD. This is the rationale for including modules covering diagnosis and treatment of ASR (Acute Stress Reaction) and ASD (Acute Stress Disorder) in the Guideline.

Recent world events involving large numbers of civilians point to an urgent need for effective post-trauma psychiatric and medical care. This Guideline will also be relevant to those authorities or volunteers responsible for the care of persons following natural disasters or man-made traumatic events.

Goals of the Guideline

- Implement routine screening in primary care
- Standardized initial and follow-up assessments
- Increase Prevention – promotion of resilience
- Increase detection of diagnosed ASR, ASD, PTSD
- Implement evidence based intervention
- Integration/coordination of primary care and mental health
- Implement routine screening for trauma and PTSD in mental health clinics

Guideline Development Process

The goal of the Guideline developers is to survey best practices in PTSD prevention, diagnosis, and treatment and to determine whether the evidence supports current practices, or whether the evidence suggests they should be modified or discontinued. Where evidence is not available, the working group made recommendations based on consensus of experts.

The following three guidelines were identified by the Working Group as appropriate seed guidelines. They served as the starting point for the development of questions and key terms.

- Effective Treatments for PTSD: Practice Guidelines from the International Society for Traumatic Stress Studies. Foa EB, Keane TM, Friedman MJ (Eds) 2000. New York: Guilford Publications

- Expert Consensus Guideline Series: Treatment of Post-traumatic Stress Disorder. Foa EB, Davidson JRT, Francis A. J Clin Psychiatry 1999; 60 (Suppl 16)

- Mental Health and Mass Violence: Evidenced-Based Early Psychological Intervention for Victims/Survivors of Mass Violence. A Workshop to Reach Consensus on Best Practices. National Institute of Mental Health 2002. NIH Publication No. 02-5138. Washington, D.C.: U.S. Government Printing Office. http://www.nimh.nih.gov/research/massviolence.pdf

The clinical experts and the research team evaluated the evidence for each question and rated the evidence according to criteria proposed by the U.S. Preventive Services Task Force. A more detailed description of the development process is included in Appendix A

The Guideline presents evidence-based recommendations that have been thoroughly evaluated by practicing clinicians and reviewed by clinical experts from the VHA and DoD. This document is a work in progress. It will be updated every two years, or when significant new evidence is published.

This Guideline is the product of several months of consensus building among experts in the treatment of traumatic stress related disorders and professionals from all aspects of the DoD and VA health care continuum: psychiatrists, psychologists, primary care physicians, nurses, social workers, chaplains, administrators, and expert consultants in the field of guideline and algorithm development. Both the VA and DoD are proud to participate jointly in the development of this Guideline.

Structure of the Guideline

The Guideline is organized into three sections,

Section I includes four clinical algorithms:

- ❖ CORE Module: Initial assessment and triage.
- ❖ Module A: Acute Stress Reaction (ASR) and Combat and Ongoing Operation Stress Reaction (COSR).
- ❖ Module B: Acute Stress Disorder (ASD) and Post-Traumatic Stress Disorder (PTSD) in Primary Care.
- ❖ Module C: Management of PTSD in Mental Health Specialty Care

Section II includes recommendations and discussion of evidence-base intervention for treatment of PTSD:

- ❖ Pharmacotherapy for ASD and PTSD
- ❖ Psychotherapy and Psychosocial Adjunctive Methods/Services

Clinical algorithms within the guideline provide a model that clinicians can use to determine the best interventions and timing of care for their patients and optimize healthcare utilization. If followed, the guideline is expected to have impact on multiple measurable patient outcome domains.

Finally, the members of our guideline development team hope that the elements of care identified in this guideline will provide fruitful ground for clinical research within our DoD/VA healthcare system. Modifications to the guideline will undoubtedly be necessary as a result of new research and practice-based evidence involving controlled trials of prevention and long-term outcome. [redundant].

KEY POINTS ADDRESSED BY THIS GUIDELINE

1. Triage and management of acute traumatic stress
2. Routine primary care screening for trauma and related symptoms
3. Diagnosis of trauma syndromes and comorbidities
4. Evidence-based management of trauma related symptoms and functioning
5. Collaborative patient/provider decision making, education, and goal setting
6. Coordinated and sustained follow-up
7. Identification of major gaps in current knowledge
8. Outline for psychological care in ongoing military operations
9. Proactive strategies to promote resilience and prevent trauma related stress disorders
10. Standardized longitudinal care (DoD/VA, Primary Care/Mental Health)

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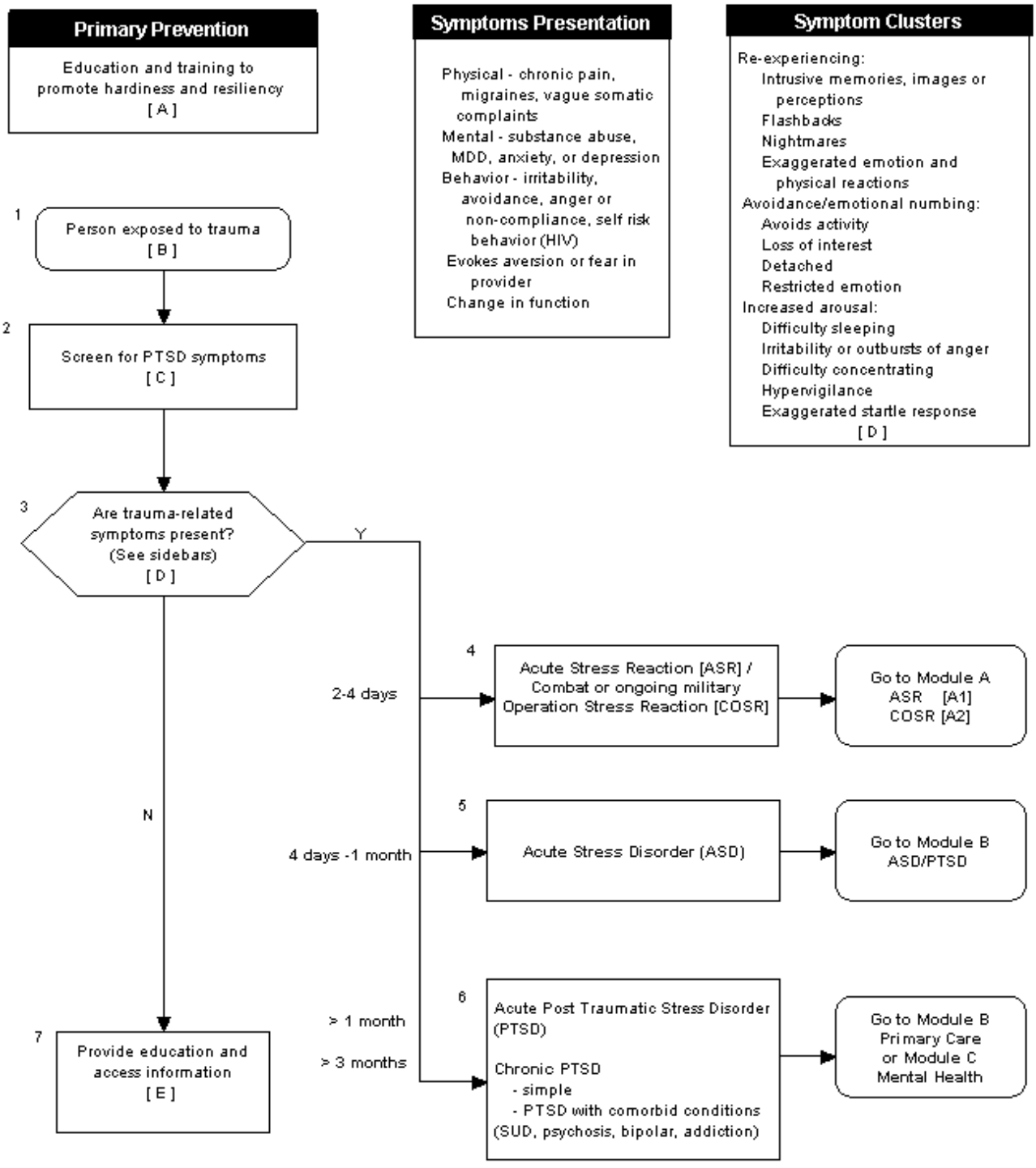
VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE MANAGEMENT OF POST-TRAUMATIC STRESS

CORE MODULE

INITIAL EVALUATION AND TRIAGE

DoD/VA Clinical Practice Guideline for Management of Traumatic Stress

Core Module
Initial Evaluation and Triage



ANNOTATIONS

PRIMARY PREVENTION

A. Education And Training to Promote Hardiness and Resiliency

OBJECTIVE

Prepare individuals and groups for exposure to traumatic experiences in ways that minimize the likelihood of development of 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 encounter 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 probability of trauma exposure is moderate or high, efforts should be undertaken to increase 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 to shaping the post-trauma environment so that it will foster post-trauma adaptation.

Some influential theories of PTSD posit that a process of classical 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. 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 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, Maddi, & Kahn, 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). 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 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. The training must include specific, practical actions to do 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 helpless 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 resource persons, 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 own 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 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 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 integrate these principles and that are, themselves, integrated into existing unit/community support systems may be expected to be most helpful (Gist & Lubin, 1999).

EVIDENCE

	Evidence	**Sources**	**QE**	**Overall Quality**	**R**
1	Undertaking steps to prepare workers in high-risk occupations for trauma exposure.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

POPULATIONS AT-RISK FOR DEVELOPING PTSD

B. People At-Risk For Developing Stress Symptoms After Trauma

OBJECTIVE

Identify persons at risk for developing a traumatic stress disorder (PTSD) after trauma exposure.

BACKGROUND

Although exposure to trauma is common, several risk factors for the development of PTSD have been identified. Risk factors for developing PTSD can be grouped as characteristics related to the trauma itself, pre-trauma factors and post-trauma factors.

- *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).
- *Pre-trauma* risk factors include adverse childhood, younger age, female gender (not in military cohorts), minority race, and low socioeconomic or educational status.
- *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.

The development of Acute Stress Disorder (ASD) at the time of the trauma is also a risk for developing PTSD (Classen et al., 1998). Similarly, dissociation at the time of the trauma appears to be an important predictor for the establishment of chronic PTSD (Murray et al., 2002).

RECOMMENDATIONS

1. Persons exposed to trauma should be assessed for known risk factors for developing PTSD – both pre-trauma risks and post trauma risks.
2. The trauma type, nature, and severity should be assessed.
3. Assessment of existing social supports and ongoing stressors is important.
4. Patients with Acute Stress Disorder (ASD) warrant careful clinical attention, as they are at high-risk for developing PTSD.
5. Patients with dissociative symptoms may also warrant careful clinical attention.

DISCUSSION

A 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). 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, 1998). 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 supports 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).

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, 1998; Mellman et al., 2001). In these studies among persons with ASD 40 to 80 percent go on to develop PTSD. Finally, most studies suggest an increased risk of PTSD development among individuals with peritraumatic dissociation (Birmes et al., 2001; Murray et al., 2002).

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Assessment of persons exposed to trauma for risk factors for developing PTSD (pre-trauma and post-trauma risks).	Brewin et al., 2000	II	Good	B
2	Assessment of trauma type, nature and severity.	Brewin et al., 1999 Bryant et al., 2000 Harvey & Bryant, 1998 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, 1998 Mellman et al., 2001 Murray et al., 2002	II	Good	B
5	Patients with dissociative symptoms warrant careful clinical attention	Brewin et al., 1999 Murray et al., 2002	II	Fair	C

QE = Quality of Evidence; R = Recommendation (see Appendix A)

SECONDARY PREVENTION – SURVEILLANCE SCREENING

C. Screen For PTSD Symptoms

OBJECTIVE

Identify possible cases of PTSD.

BACKGROUND

Patients don't 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, somatization, 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.
2. Patients should be screened for symptoms of PTSD using paper and pencil or computer-based screening tools.
3. No studies are available that compare the benefits of one PTSD screening tool versus another. However, the following screening tools have been validated and should be considered for use:
    - Primary Care PTSD Screen (PC-PTSD)
    - PTSD Brief Screen
    - Short Screening Scale for DSM IV PTSD
4. There is, as yet, insufficient evidence to recommend special screening or differing PTSD treatment for members of any cultural or racial groups

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, but there is no clear evidence supporting use of one particular screening tool versus another. Care should be exercised in implementing screening to avoid social stigmatization and adverse occupational effects of positive screens.

Screening Tools:

Primary Care PTSD Screen (PC-PTSD); (See Appendix C) Internal consistency (KR2-=.79) and test-retest reliability (r. -.84) of the PC-PTSD was found as 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)

PTSD Brief Screen (Leskin et al., 1999): The PTSD Brief Screen was developed using the rationally derived approach based on data from the National Comorbidity 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.

Screening for Sexual Trauma:
Within the Veterans Health Administration, every new women veteran must be screened for history of sexual trauma according to public law (see screening for sexual trauma at http://www.va.gov/publ/direc/health/direct/12000008.html).

The passage of Public Law (Pub. L.) 102-585, in 1992, authorized Department of Veterans Affairs (VA) to include outreach and counseling services for women veterans who experienced incidents of sexual trauma while they served on active duty in the military. The law defines sexual trauma as sexual harassment, sexual assault, rape and other acts of violence. It further defines sexual harassment as repeated unsolicited verbal or physical contact of a sexual nature, which is threatening in nature. NOTE: This law was later amended by Pub. L. 103-452, which authorizes VA to provide counseling to men as well as women. The Veterans Millennium Health Care Act, signed on November 30, 1999, has significant implications under Section 115, Counseling and Treatment for Veterans Who Have Experienced Sexual Trauma. Provisions of Pub. L. 106-117. Section 115 are to: (1) Expand the focus on sexual trauma beyond counseling and treatment, (2) Mandate that counseling and appropriate care and services will be provided, (3) Extend the period of the program to December 31, 2004, and (4) Require a formal mechanism be implemented to report on outreach activities.

Special screening of any 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? And 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.”

In terms of symptom severity and clinical course, the evidence is also mixed. Among the seven 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)
- One study found Hispanics to be more severely affected than Whites/Caucasians, but not to suffer from higher functional impairment levels than Whites (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)

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

	Recommendation	Sources	QE	Overall Quality	R
1	Screening all patients for PTSD symptoms.	Breslau et. al., 1999 Leskin & Westrup, 1999 Prins et al., 1999 Taubman et al., 2001	II-2	Fair	B
2	Frequency of PTSD symptom screening: • On entry into system • Annually • When clinically indicated	Working Group Consensus	III	Poor	I
3	PTSD screening instruments • Primary Care PTSD Screen • PTSD Brief Screen • Short Screening Scale for DSM IV	Breslau et al., 1999 Leskin & Westrup, 1999 Prins et al., 1999	II-2	Fair	B
4	Special screening or differing PTSD treatment for members of any cultural or racial groups.	Frueh et al., 1998 Frueh et al., 1997 Frueh et al., 1996 Ortega & Rosenheck, 2000 Penk et al., 1989 Rosenheck & Fontana, 1996 Trent et al., 2000	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

D. Are Trauma Related Symptoms Present?

OBJECTIVE

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

BACKGROUND

Warning Signs of Trauma Related Stress (APA)

Individuals who have experienced a traumatic event oftentimes suffer psychological stress related to the incident. In most instances, these are normal reactions to abnormal 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. The American Red Cross is now

working with mental health professionals trained in trauma. For information or a referral, contact the local American Red Cross chapter or the American Psychological Association at 202-336-5800.

The symptoms to watch out for include:

- Recurring thoughts, mental images, or nightmares about the event
- Having trouble sleeping or changes in appetite
- Experiencing anxiety and fear, especially when exposed to events or situations reminiscent of the trauma
- Being on edge, being easily startled or becoming overly alert
- Feeling depressed, 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

RECOMMENDATION

1. Individuals who are presumed to have symptoms of PTSD or who are positive for PTSD on the initial 4-item screening should receive specific assessment of their symptoms.
2. Useful information may include details such as time of onset, frequency, course, severity, level of distress, functional impairment, and other relevant information.
3. The elapsed time since the exposure to trauma is very important in assessing the risk of developing PTSD and determining the appropriate intervention. The following definition will help providers select the appropriate treatment algorithm.

Stress Related Disorders & Syndromes Definitions

Trauma

An extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or 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. The person's response to the event must involve intense fear, helplessness, or horror

Acute Stress Reaction (ASR) during an Ongoing Military Operation or,
Combat and Operational Stress Reactions (COSR)

Broad group of physical, mental and emotional signs, which result from heavy mental and emotional work during difficult conditions. 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 include depression, fatigue, anxiety, decreased concentration/memory, hyperarousal or any of the four clusters above that have not resolved within 4 days after the event, after a rule-out of other disorders.

Acute Stress Disorder (ASD)

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).

- 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:

    1. A subjective sense of numbing, detachment, and/or absence of emotional responsiveness.
    2. A reduction in awareness of his/her surroundings (e.g., "being in a daze").
    3. Derealization (the feeling that familiar surroundings or people are unreal or have become strange).
    4. Depersonalization (the feeling in an individual that (s)he is no longer him/herself. His/Her personality, body, external events, the whole world may be no longer appear real).
    5. 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, etc.)

Marked symptoms of anxiety or *increased arousal* (e.g., difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, and motor restlessness)

Post Trauma Stress Disorder (PTSD)

Clinically significant (causing significant distress or impairment in social, occupational, or other important areas of functioning) symptoms more than 1 month after exposure to a trauma. Symptoms include:

- Exposure to trauma as defined above.

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

    1. Recurrent and intrusive recollections of the event, including images, thoughts, or perceptions.
    2. Recurrent distressing dreams of the event.
    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).
    4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
    5. Physiologic 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:

    1. Efforts to avoid thoughts, feeling, 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 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:

    1. Difficulty falling or staying asleep
    2. Irritability or outbursts of anger
    3. Difficulty concentrating
    4. Hypervigilance
    5. Exaggerated startle response

Acute PTSD
Above clinically significant (causing significant distress or impairment in social, occupational, or other important areas of functioning) symptoms lasting >1 month, but <3 months after exposure to trauma.

Chronic PTSD
Above clinically significant (causing significant distress or impairment in social, occupational, or other important areas of functioning) symptoms lasting >3 months after exposure to trauma.

- Simple chronic PTSD – consist of symptoms from the above clusters
- Complex – persistent difficulties in interpersonal relations, mood, somatization and profound identity problems. Complex PTSD is 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.
- Comorbid **–** also meeting DSM criteria for another disorder such as substance abuse, depression, or anxiety disorder.

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

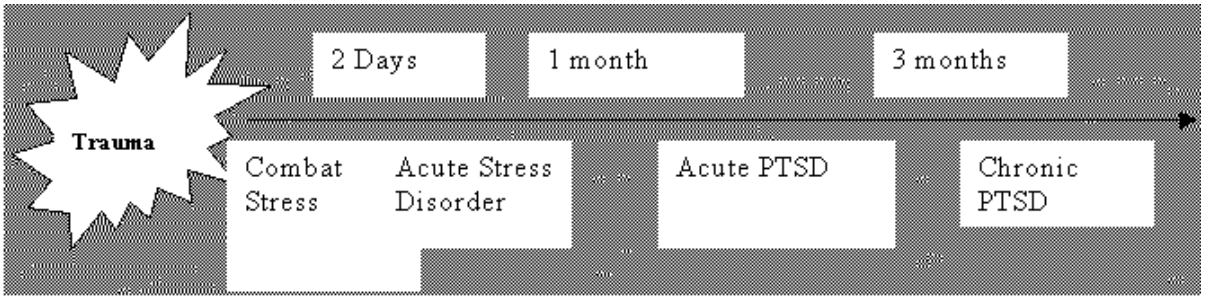


Table 0-1: Common Signs After Exposure to Trauma or Loss

Physical	Cognitive/Mental	Emotional	Behavioral
• Chest pain • Chills • Difficulty breathing • Dizziness • Elevated blood pressure • Fainting • Fatigue • Grinding teeth • Headaches • Muscle tremors • Nausea • Profuse sweating • Rapid heart rate • Shock symptoms • Thirst • Twitches • Visual difficulties • Vomiting • Weakness	• Blaming someone • Change in alertness • Confusion • Difficulty identifying familiar objects or people • Hyper-vigilance • Increased or decreased awareness of surroundings • Intrusive images • Loss of orientation to time, place, person • Memory problems • Nightmares • Poor abstract thinking • Poor attention • Poor concentration • Poor decisions • Poor problem solving	• Agitation • Anxiety • Apprehension • Denial • Depression • Emotional shock • Fear • Feeling overwhelmed • Grief • Guilt • Inappropriate emotional response • Irritability • Loss of emotional control • Severe pain • Uncertainty	• Alcohol consumption • Antisocial acts • Change in activity • Change in communication • Change in sexual functioning • Change in speech pattern • Emotional outbursts • Erratic movements • Hyper-alert to environment • Inability to rest • Loss or increased appetite • Pacing • Somatic complaints • Startle reflex intensified • Suspiciousness • Withdrawal

E. Normalization For Asymptomatic Survivors And Responders

OBJECTIVE

Help trauma survivors and responders who are NOT themselves experiencing signs or symptoms recognize that these reactions in others are common in the aftermath of trauma and do not signify personal inadequacy, health problems, mental illness, or other enduring negative consequences.

BACKGROUND

Contemporary approaches to early intervention following trauma exposure emphasize the importance of "normalization" of acute stress reactions. This means that survivors or responders who show distressing symptoms or disturbed behavior are helped to understand that their reactions are "normal responses to the abnormal events." Such an approach follows from the common clinical observation that individuals experiencing acute stress reactions often interpret their reactions as "personal weakness" or "going crazy," which increases their demoralizations and distress. Normalization is undermined if survivors or responders who are not feeling disruptive distress (yet) show a derogatory or punitive attitude to others who are. Also, the persons 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 that should go with normalization may therefore help them recognize how to protect themselves better, and to seek care early if symptoms do start getting the better of 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 asymptomatic trauma survivor or responder understand that the acute stress reactions of other people are common and do not indicate personal failure or weakness, mental illness, or health problems. The responders should be taught the simple words and measures that will support quick recovery, rather than push survivors towards a persisting disorder.
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 alcohol or other substance misuse/abuse.
3. Provide education and access information to include the following:

    - Begin with clear statement about ASR being normal, common, and expectable responses to trauma; the reliance on self and buddy management, and other available resources if stress symptoms persist or worsen
    - Maximize positive expectation of mastery
    - Demystify PTSD (before listing symptoms) and emphasize the human brain and mind's natural resiliency; e.g., our forefathers/mothers, generations ago survived very bad situations or we wouldn't be here, and we can survive also
    - Painful memories sometimes get stuck, through no fault of the sufferer. Such memories cause real biological changes that can cause physical change and illness elsewhere in the body. Many of these changes can be reversed. All can be compensated for by developing new brain skills, aided by medication when appropriate
    -
    - Professionals with special skills and capabilities (including some religious pastors and mental health professionals, other medical people and others with special training and supervision) can intervene to reverse this process
    - Resolving developing symptoms and problems.

DISCUSSION

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 peoples' sometimes inadequate attempts to cope with their reactions are also within the range of "normal" for the strange situation.

Asymptomatic survivors can help symptomatic ones to see that it is natural for them to wonder how they're 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 serve 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).

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Providing pre- and post-trauma education to understand and cope with exposure experience.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

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

MODULE A1

ACUTE STRESS REACTION (ASR)

KEY POINTS

1. Provide for basic survival needs and comfort (e.g., liquids, food, shelter, clothing, heat/cooling).
2. Help survivors achieve restful and restorative sleep.
3. Preserve an interpersonal safety zone protecting basic personal space (e.g., privacy, quiet, personal effects).
4. Provide nonintrusive ordinary social contact (e.g., a "sounding board," judicious uses of humor, small talk about current events, silent companionship).
5. Address immediate physical health problems or exacerbations of prior illnesses.
6. Assist in locating and verifying the personal safety of separated loved ones/friends.
7. Reconnect survivors with loved ones, friends, trusted other persons (e.g., work mentors, health care, clergy).
8. Help survivors take practical steps to resume ordinary day-to-day life (e.g., daily routines or rituals).
9. Help survivors take practical steps to resolve pressing immediate problems caused by the disaster (e.g., loss of a functional vehicle, finance, housing).
10. Facilitate resumption of normal family, community, school, and work roles.
11. Provide opportunities for grieving for losses.
12. Help survivors reduce problematic tension or anxiety to manageable levels.
13. Support survivors' helpers through consultation and training about common stress reactions and stress management techniques.

BACKGROUND

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)" (WHO, 1992). 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).

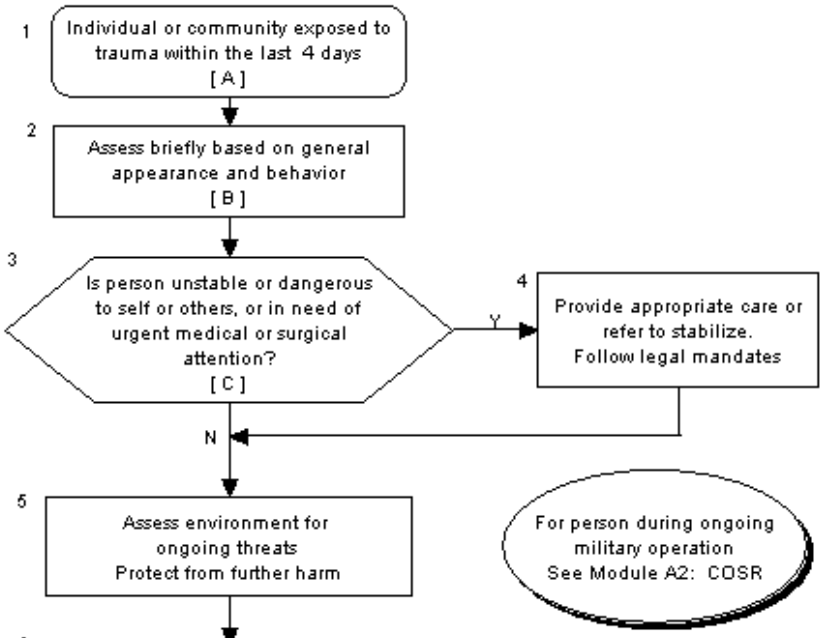
In light of the transient nature of this reaction, health care professionals and other caregivers need to know how to provide optimal support to persons in the first days following a traumatic event. In developing the current guideline, the authors carefully reviewed the NIMH Guideline recommendations (NIMH, 2002) and the recommendations presented in a National Center for PTSD Fact Sheet (Litz et al., 2002):

- Early, brief, and focused psychotherapeutic intervention can reduce distress in bereaved spouses, parents, and children.
- Selected cognitive behavioral approaches may help reduce incidence, duration, and severity of acute stress disorder, post-traumatic stress disorder, and depression in survivors.
- When feasible, initial screening is required so that preventive interventions can be used for those individuals who may have difficulty recovering on their own.

The authors of this guideline used the statements above as a starting point for research and discussion, and have formulated the recommendations discussed below for the treatment of persons with ASR. Most of the recommendations in this module are based on group consensus. When available, the evidence and supporting research are presented in evidence tables.

VA/DoD Clinical Practice Guideline for the Management of Traumatic Stress
Module A1 - Acute Stress Reaction

A1



ASSESSMENT

a) Symptoms
b) Trauma
c) Risk factors
d) Medical status
e) Mental status
f) Functional status
g) Psychosocial status
h) Dangerousness
i) Unit disruption

IMMEDIATE NEEDS

Survival
Safety
Security
Food
Shelter
Sleep
Medical care (first aid)
Mental health triage
Orientation
Communication with family friends and community

ACUTE INTERVENTIONS

Provide:
- Acute symptom management [H]
- Education & normalization (J)
- Social & spiritual support [K]
- Consider medication [L] (avoid use of benzodiazepines)

Avoid:
- Individual debriefing [I]
- Compulsory group debriefing

ANNOTATIONS

ASSESSMENT

A. Trauma Exposure

DEFINITION

Traumatic events are events that cause a person to fear that he or 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. Among the common kinds of traumatic events are:

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

B. Screen For ASR

OBJECTIVE

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

BACKGROUND

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 (see Core Module Table 0-1 for a list of common signs after exposure to trauma or loss). 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. At this stage (less than 4 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.
2. There is no evidence to support any specific screening tool.
3. Individuals exhibiting the following responses to trauma should be screened for ASR:
    - Physical: exhaustion, hyperarousal, somatic complaints (GI, GU, MS, CV, Resp, NS), Conversion disorder symptoms
    - Emotional: anxiety, depression, guilt/hopelessness
    - Behavioral: avoidance, problematic substance use
    - Cognitive/mental: amnestic or dissociative symptoms, hypervigilence, paranoia, intrusive re-experiencing.

DISCUSSION

An acute stress reaction may occur concurrent with other wounds or illnesses. As in any medical condition, providers should confirm that the symptoms are not due to identified medical/surgical conditions requiring other urgent treatment. ASR does not require a specific traumatic event, and may result from cumulative exposure to multiple stressors.

In the aftermath of a disaster, most of those suffering from acute trauma 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 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 have or are seeing. Some may not be immediately identifiable as traumatized because they may be highly active - looking for others or after others, organizing help and rescue. A percentage of these may, in the next days or weeks, develop symptoms of trauma.

C. Dangerousness To Self Or Others

OBJECTIVE

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

BACKGROUND

First aid can be applied to stress reactions of the mind as well as to physical injuries of the body. Psychological first aid 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 and encourange a feeling of safety and identify existing social supports.

RECOMMENDATIONS

1. Acute medical issues should be addressed to preserve life and avoid further harm:
    - ABC's (Maintain: Airways, Breathing, Circulation)
    - Substance intoxication or withdrawal
    - Danger to self or others: suicidal, homicidal behavior
    - Self-injury or mutilation
    - Inability to care for oneself.

2. A safe private, and comfortable environment should be arranged for continuation of the evaluation.
    - Establish a working treatment alliance with the patient
    - Maintain a supportive, non-blaming non-judgmental stance throughout the evaluation
    - Help with the removal of any ongoing traumatic event
    - Minimizing further traumas that may arise from the initial traumatic event
    - Assess and optimize social supports.

3. Legal mandates should be followed:
    - Reporting of violence, assault
    - Confidentiality for the patient
    - Mandatory testing
    - Attend to chain of evidence in criminal cases (e.g. rape, evaluation)
    - Involuntary Commitment procedures if needed.

4. Carefully consider the following potential interventions to secure safety:
    - Find safe accommodation and protecting against further trauma
    - Voluntary Admission
    - Restraint/seclusion only if less restrictive measures are ineffective
    - Forced medications.

DISCUSSION

Primary care providers can be instrumental in helping survivors of trauma develop skills, resources, and social support networks. Optimizing existing social supports is helpful in settings of acute stress and may a decrease risk of suicidality in PTSD (Kotler, et al ., 2001). For example, there is a suggestion in the literature that higher social support in women who have experienced domestic violence may reduce risk of PTSD and other mental disorders (Coker et al., 2002) A study of rape survivors interviewed about the social reactions they received post-rape supported the work of others --- that negative social reactions (e.g., blaming) hinder recovery (Campbell et al., 2001). Survivors who had someone believe their account of what happened or were allowed to talk about the assault-and considered these reactions to be healing-had fewer emotional and physical health problems than victims who considered these reactions hurtful, or victims who did not experience these reactions at all (Campbell et al., 2001.)

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 was first 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 situation. The FM 21-11 First Aid for Soldiers document (1991) includes the following:

> "The Psychological first aid is most needed at the first sign that a soldier cannot 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 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 minute's 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. Even when there is no immediate danger of physical injury, psychological harm may occur.

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 of the soldier's strength as does the loss of blood." (The Department of the Army; Washington, DC, 4 December 1991)

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 after traumatic stressor with acute stress symptoms 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.

For extended discussion of dangerousness - See Module B – Annotation C

D. Assess Medical and Functional Status Based on General Appearance and Screening Instruments

RECOMMENDATIONS

1. Medical status should be obtain for all persons presenting with symptoms to include:
    - History, physical examination and a neurological examination
    - Use of prescribed medications, mood or mind-altering substances, and possible biological or chemical agent exposure
    - A minimal mental status examination to assess cognitive function.
2. The history and physical examination findings should lead the provider to other assessments as clinically indicated. There is no test for acute stress reaction, so testing is directed towards detection of associated medical conditions. Assessment may include:
    - Screen for toxicology if the symptom presentation indicates.
    - Radiological assessment of patients with focal neurological findings or possible head injury.
    - 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 including active stressors, losses, current social supports, basic needs (e.g. housing, food, financial resources).
4. A brief assessment of function based on general appearance and behavior should be completed to evaluate: 1) objectively impaired function; 2) subjectively impaired function; 3) baseline level of function (LOF) vs. current LOF; and 4) family and relationship functioning.

The approach to triage in the immediate response to traumatic exposure for service members with symptoms during Ongoing Military Operations may vary markedly from the management of civilians exposed to traumatic events. Combat and Operational Stress Reactions (COSR) management is targeted to preserve the fighting force and return the service member (SM) to functional status.

See module A2 - Management of Combat And Operational Stress Reaction (COSR)

DISCUSSION

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. Whenever possible, this 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 this 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).

E. Assess Pre-Existing Psychiatric And Medical Conditions

BACKGROUND

Circumstances brought about by a traumatic event may complicate any existing psychiatric conditions or may exacerbate pre-existing pathology. Establishing safety and assurance may enable people to get back on track, and maintain their pre-trauma stable condition.

RECOMMENDATIONS

1. Assessment of patients with pre-existing psychiatric conditions to identify the vulnerable, high risk individuals and groups.
2. Referral to metal health specialty when indicated or emergency hospitalization if needed.

DISCUSSION

The NIMH, 2002 guideline address the need to manage pre-existing psychiatric and medical conditions . The authors note that although normal recovery from a traumatic event may be expected for most individuals, "the presumption of clinically significant disorders in the early post-incident phase is inappropriate, except for individuals with preexisting conditions." They 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" and they call for additional attention to be paid to members of these groups in the immediate post-trauma period.

F. Risk Factors For Developing ASD/PTSD

BACKGROUND

Not all trauma survivors develop permanent disorder. In fact, many recover. Thus, the search for risk factors that increase vulnerability to chronic PTSD occurred early in the history of the disorder. The study of risk factors has become increasingly popular, emphasizing environmental and demographic factors, personality and psychiatric history, dissociation, cognitive and biological systems, and genetic or familial risk (Yehuda, 1999).

Early identification of those at-risk for negative outcomes following trauma can facilitate prevention, referral, and treatment. Screening for current psychopathology and risk factors for future impairment can be accomplished via brief semi-structured interviews and standardized assessment questionnaires. Screening should address past and current psychiatric and substance use problems and treatment, prior trauma exposure, pre-injury psychosocial stressors, and existing social support. Event-related risk factors should also be assessed, including exposure to death, perception of life-threat, and peri-traumatic dissociation.

RECOMMENDATIONS

1. Individuals exposed to trauma should be screened for one or more of the following risk factors for developing ASD/PTSD.

Pre-traumatic factors

- Ongoing life stress
- Lack of social support
- Pre-existing Psychiatric disorder
- Other pre-traumatic factors including: female gender, low socioeconomic status, lower level of education, lower level of intelligence, race (Hispanic, Japanese, other Ethnic minority), reported abuse in childhood, report of other previous traumatization, report of other adverse childhood factors, family history of psychiatric disorders, poor training or preparation for the traumatic event.

Peri-traumatic or trauma related factors

- Severe trauma
- Type of trauma (interpersonal traumas such as torture, rape or assault convey high risk of PTSD)
- High perceived threat to life
- Age at trauma (school age youth, 40-60 years of age)
- Community (Mass) trauma
- Other peri-traumatic factors including: history of peri-traumatic dissociation and interpersonal trauma.

Post-traumatic factors

- Ongoing life stress
- Lack of social support
- Bereavement

- Major loss of resources
- Other post-traumatic factors including: children at home and female with distressed spouse.

DISCUSSION

Risk Factors for ASD?
When evaluating risk factors for ASD, the clinician should keep in mind that ASD is defined as occurring in the first four weeks after a traumatic event. Thus pre-traumatic and peri-traumatic factors will be more likely to be relevant in this period. While it is possible that post-traumatic factors such as loss of financial resources may play a role, in many cases not enough time will have passed following the trauma for these factors to have developed.

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.

Patient who were totally incapacitated, physically injured or suffered major losses, are also at higher risk for developing PTSD. Different types of trauma have different toxicity. Interpersonal violence (rape torture physical assault) likely to produce PTSD than more impersonal events (accidents, group trauma etc.) A high perceived threat to life may predict PTSD after major traumatic injury (Holbrook, 2001).

Another major risk factor for the development of PTSD is poor social support at the time of the trauma. The intrapersonal characteristic of hardiness as well as postwar 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). Studies of veterans have been reported gender differences in PTSD risks: war-zone stressors appear preeminent for PTSD in men, posttrauma resilience-recovery variables more important for women (King et al., 1999). However, the effects of combat exposure on women and men in recent conflicts warrant further study.

For further discussion of risk factors for PTSD - See Module B Annotation F

TRIAGE AND TREATMENT

G. Ensure Basic Physical Needs Are Met

OBJECTIVE

Ensure 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 health care. Their normal shelter, clothing, etc may be destroyed or inaccessible. These disruptions are additionally traumatizing.

RECOMMENDATIONS

1. Acute intervention should ensure that the following needs are met:

Basic Needs

- Safety/Security/Survival
- Food, hydration, clothing and shelter
- Sleep
- Medication (i.e., replace medications destroyed/lost)
- Orientation

- Communication with family, friends and community
- Protection from ongoing threats/toxins/harm.

Psychological First Aid

- Protect survivors from further harm
- Reduce physiological arousal
- Mobilize support for those who are most distressed
- Keep families together and facilitate reunion with loved ones
- Provide information, foster communication and education
- Use effective risk communication techniques.

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 removedfrom 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.

Triage:
The 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, 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.

H. Acute Symptom Management

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, they may not need specialized care.

For people who show signs of Acute Stress Disorder or PTSD (including symptoms of intrusive recollections, avoidance, numbing, and physiological hyperarousal when confronted with reminders of the trauma) psychological intervention, either alone or in combination with medication, may be indicated.

RECOMMENDATIONS

1. Symptoms treatment should be provided after basic needs are met. (sleep, normalization and other non-pharmacological modalities).
2. Apply a series of specific psychological interventions (individually or in a group) to reduce acute stress symptoms and to address both general recovery and specific symptoms (e.g., breathing/relaxation treatment).
   Individual psychological interventions may include:
   - Assurance/reassurance
   - Defusing (3 phased discussion provided within hours of the crisis for purpose of assessment triage and acute symptom mitigation)
   - Mitigate fear and anxiety
   - Sleep hygiene
   - Re-establish routine
   - Exercise and nutrition
   - Bereavement
   - Survivor success
   - Advise about alcohol/substance use
   - Modulate mood / irritability

   Group psychological interventions
   - 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
   - Group participation should be voluntary.
3. Peoples' reaction to ASR varies. 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 normal recovery, and monitor.
4. Consider a short course of medication for some individuals targeted for specific symptoms (e.g., sleep disturbance). [See Annotation M]

DISCUSSION

In the recent "Mental Health and Mass Violence" document, an invited group of experts present initial guidelines for the care of persons who have experienced a traumatic event (NIMH, 2002). The guideline authors present a suggested structure for intervention, based on a "hierarchy of need" ranging from the need for basic survival to the need for communication with family and friends. The authors recommend "key aspects of early intervention shall include: psychological first aid, needs assessment, monitoring the recovery environment, outreach/information dissemination, technical assistance/consultation/training, fostering resilience, coping, and recovery (i.e., facilitating natural support networks), triage, and treatment (NIMH, 2002).

In their overview document, Litz et al. (2002) note "two potential risk mechanisms (social support and hyper-arousal) that deserve special attention." They provide the following recommendations:

- An individual's recovery from trauma is facilitated by the availability of positive social supports and the inclination to use them to share the account of the trauma
- Early intervention may need to assist the individual 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

- Early interventions for trauma should target hyper-arousal by training survivors in methods of anxiety and stress management. Although speculative, it is plausible that systematic reductions in hyper-arousal in the days and weeks after a trauma could accomplish a number of goals" including engendering a sense of control, learning to cope with negative affect, promotion of healthy self-care practices, and limiting chronic emotional reactivity.

I. Psychological Debriefing

OBJECTIVE

Reduce risk for development of PTSD following traumatic event.

BACKGROUND

In recent years, providing psychological debriefings to subjects following exposure to a traumatic event has been touted as an effective means of reducing subsequent development of PTSD. It has been widely used with victims of natural and man-made disaster as well as public safety personnel, crime and accident victims.

The approach grew out of practices and experiences involving the military of the United States and other western nations. For soldiers exhibiting signs of acute stress reactions following combat-related traumatic events, the practice of conducting early debriefings as part of a larger restoration approach, appeared to have significant impact on reducing more permanent disability.

The use of debriefings soon after exposure to traumatic events became part of military doctrine in the United States and elsewhere, as well as part of standards for early response to catastrophe for organizations such as the Red Cross. Unfortunately, the technique appears to be of little help, and potentially harmful, as prophylaxis for PTSD

DEFINITIONS

In considering the use of debriefings as part of early interventions following trauma exposure, a distinction between the general approaches of psychological versus operational debriefings is in order.

Psychological Debriefing is a one-time individual and/or group review of a traumatic event, by survivors or other impacted persons, for the purpose of actively encouraging the individuals to: (a) talk about their experiences during the event, (b) recognize and verbalize their thoughts, emotions and physical reactions during and since the event, and (c) thereby reduce later PTSD. Psychological debriefings are led by specially trained debriefers according to several protocols. Some protocols emphasize normalization of symptoms and group support. Some include psycho-education and information about resources for those who find they need it.

The term "Psychological Debriefing" should not be extended to purely informational briefings, or to operational debriefings.

Operational Debriefing is a routine individual or team review of the details of an event from a factual perspective, for the purpose of: (a) learning what actually happened for the historical record or planning purposes; (b) improving results in similar future situations or missions; and (c) increasing the readiness of those being debriefed for further action. Operational debriefings are conducted by leaders or specialized debriefers according to the organization's standing operational procedure.

Although operational debriefings achieve important short-term objectives of the organization, there is insufficient evidence that they can also reduce subsequent PTSD or other long-term negative outcomes. Organizations that use operational debriefings should train their debriefers to avoid causing unintentional psychological harm and to identify individuals who need mental health follow-up.

Critical Incident Stress Debriefing (CISD) is a formalized structured method of group review of the stressful experience of a disaster. In fact, **CISD was developed to assist first responders such as fire and police**

personnel, not the survivors of a disaster or their relatives. CISD was never intended as a substitute for therapy, was designed to be delivered in a group format, and is meant to be incorporated into a larger, multi-component crisis intervention system labeled "Critical incident Stress Management (CISM)." CISM incorporates several components, including pre-crisis intervention, disaster or large-scale incident, demobilization, and informational briefings, "town meetings," and staff advisement, defusing, CISD, one-on-one crisis counseling or support, family crisis intervention and organizational consultation, and follow-up and referral mechanisms for assessment and treatment, if necessary.

RECOMMENDATION

Individual

1. Recommend against Psychological Debriefing as a viable means of reducing acute post-traumatic distress (ASR or ASD) or progression to post-traumatic stress disorder.

Group

2. There is insufficient evidence to recommend for or against conducting structured group debriefing.
3. Compulsory repetition of traumatic experiences in a group may be counterproductive.
4. Group debriefing with pre-existing groups (teams, units, EMTs, co-workers, family members) may assist with group cohesion, morale and other important variables that have not been demonstrated empirically.
5. Group participation should be voluntary.

DISCUSSION

Individual

Recent reviews of studies of psychological debriefing as an early intervention to reduce PTSD or PTSD symptoms have concluded that this technique is ineffective (e.g., Rose, Bisson, & Wessely, 2001). In addition, at least two well-controlled studies with longer term follow-up of patients has indicated that this intervention may be related to a poorer outcome compared to controls (Bisson, 1997; Mayou, et al, 2000, a follow-up on Hobbs, 1996). Overall, the amount of research to date is limited and the full evaluation of the value of including this technique in work with individuals who have been exposed to trauma remains incomplete.

Practice guidelines on debriefing formulated by the International Society for Traumatic Stress Studies (ISTSS) concluded that there is little evidence that debriefing prevents psychopathology. They recommended that, while debriefing is well-received, and may be useful to facilitate screening of those at risk, to disseminate education and referral info, and to improve organizational morale, if employed, it should be used by experienced, well-trained practitioners, should not be mandatory, should utilize some clinical assessment of potential participants, and should be accompanied by clear and objective evaluation procedures. They stated that it is premature to conclude that debriefing should be discontinued, but that "more complex interventions for those individuals at highest risk may be the best way to prevent the development of PTSD following trauma."

Group

Randomized controlled trials (RCT) have not confirmed that such debriefings of individuals (and to a lesser studied extent, of groups) do reduce acute Post-Traumatic distress (ASR or ASD) or decrease PTSD symptoms months later.

Several RCTs found increased PTSD symptoms, and in one case increased diagnosed PTSD. The RCTs to date cover only a limited variety of traumatic stressors, subject populations, and debriefing protocols. Most controlled studies have been of one-on-one, one time individual debriefing of victims of motor vehicle accidents or crime such as rape. A few studies of groups have also reported no or negative benefit for PTSD symptoms. Other mental health outcomes other that PTSD symptoms, such as attrition or substance abuse, have not been well studied, but one study of British troops returned from the Balkans found the debriefed groups were less likely to overuse alcohol soon after than returning than were the undebriefed groups. (Deahl, 2000) The longest negative follow-up study is at 3 years.

A conclusion of the Mayou, 2000 study of motor vehicle accident survivors was that "psychological debriefing is ineffective and has adverse long-term effects. It is not an appropriate treatment for trauma victims." When considering this type of studies, it's important to keep in mind that it concerns civilian trauma survivors who apparently had no previous knowledge of one another before random assignment to the group debriefing of comparison condition. It doe not systematically address the, as yet unexplored, question of the possible effectiveness of group debriefing for professionals (e.g., military and EMTs).

A review of the literature according to Rose et al. (2002) reveals it is difficult to conduct research in the wake of a traumatic event when the nature of the event demands immediate attention. Group trauma often occurs in unpredictable and chaotic circumstances. In such emergency situations the operational imperative is most important under difficult and stressful circumstances. Group debriefing may occur with pre-existing groups (teams, co-workers, family members, neighbors). Given the difficult and at times extremely distraught circumstances, investigators must do the best they can with the material available at the time.

Group psychological debriefing has been difficult to research with control studies because of the nature of the intervention following a disaster and the difficulty with follow up procedures. It is possible that group debriefing is more effective in reducing or preventing the symptoms of PTSD than noted. The lack of well-designed research and the fact that those individuals who do not develop symptoms of PTSD do not seek treatment, prevent any mode of measuring efficacy of group debriefing. As for the efficacy of group debriefing with rescue personnel or military personnel, it may be that debriefing does not prevent or reduce symptoms of PTSD because they are often exposed to additional or continued trauma as result of the nature of their employment.

While group debriefing may not reduce or prevent the symptoms of PTSD, it does seem to be well received and bring relief to individuals and according to Foa and colleagues (2000), may be useful for screening, education, and support.

Prophylactic psychological debriefings of individuals or groups who are not yet symptomatic patients share most of these concerns and warnings. The requirement to "Do No Harm" and for only voluntary participation is especially strong.
Survivors who are handling the trauma well can be encouraged to participate on the grounds that their perspectives on the event may be important to everyone's understanding of what really happened, and may benefit others.

Operational debriefings after traumatic events during on-going military operation also share these considerations and concerns, but as noted in the COSR module they have other objectives that may override individual mental health protection. All operational debriefings should select protocols and train the debriefers to minimize psychological harm to the participants.
Medical teams in disaster situations may need to be operationally debriefed to develop and sustain team cohesion.

EVIDENCE

	Recommendation	**Sources**	**QE**	**Overall Quality**	**R**
1	Psychological debriefing is ineffective and has adverse long-term effects	Hobbs et al., 1996 Mayou et al., 2000 Bisson 1997	I	Fair	D
2	Debriefing is well-received and useful for screening, education, and support.	Foa et al., 2000 Rose et al., 2002	III	Poor	I
3	Group debriefing is effective	Foa et al., 2000	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

Table 1. Randomized Controlled Trials of Psychological Debriefing (Litz et al., 2002)

Study	Study Group	Conditions/*n*	Results	Limitations
Bisson, Jenkins, Alexander, & Bannister, 1997	Hospitalized burn victims	Individual or couples CISD (*n* = 57) Assessment only control (*n* = 46)	Greater PTSD (IES and CAPS), anxiety (HADS), and depression (HADS) in CISD group at 13 months	Limited information about intervention; CISD group reported higher initial symptoms, more severe burns and greater PTE exposure despite random assignment
Conlon, Fahy & Conrory, 1999	Motor vehicle accident survivors	Psychological Debriefing (*n* = 18) Assessment only control (*n* =22)	PTSD symptoms (IES and CAPS) decreased sharply for both groups, but there were no significant differences between groups at the 3-month follow-up assessment point.	Limited information about the nature of the debriefing; low power
Deahl, Srinivasan, Jones, Thomas, Neblett, & Jolly, 2000	Peacekeepers serving in Bosnia	Debriefing (*n* = 54) Assessment only control (*n* = 52).	Debriefed group had lower depression and anxiety scores (HADS), but nondebriefed had greater reductions in PTSD (IES) symptoms at 6-month follow-up. Greater alcohol problems in nondebriefed group	Groups had very low baseline symptoms; likely floor effect
Hobbs, Mayou, Harrison, & Warlock, 1996	Motor vehicle accident survivors	Psychological debriefing (*n* = 54) Assessment only control (*n* = 52)	PD condition had worse outcomes on two BSI scales. No group differences on IES.	Differential attrition in groups; self-report only
Mayou, Ehlers & Hobbs, 2000	Motor vehicle accident survivors	3-year follow-up of the above study	PD group had significantly worse outcomes (BSI symptoms, travel anxiety, financial status, and overall functioning) No differences between groups on IES	Significant attrition; initial differences between groups may have influenced 3-year outcomes
Rose, Brewin, Andrews, & Kirk, 1999	Physical and sexual assault victims	CISD (*n* = 54) Psychoeducation only (*n* = 52) Assessment only control (*n* = 51)	All groups improved but no differences among groups on measures of PTSD (PSS and IES) or depression (BDI) at 6 or 11 months	Very low response rate (157 out of 2,161)

J. Education And Normalization / Expectancy Of Recovery

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 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.

See also CORE Module – Annotation E

K. Facilitate Social and Spiritual Support

BACKGROUND

Social support will be 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).
Hunter (1996) notes the need for integrated care for PTSD: “given the complex range of PTSD symptomatology, a successful treatment program will address not only the emotional issues that characterize the disorder but also its psychophysiological, cognitive, and interpersonal processes and existential meanings.”

The terms “religious” and “spiritual” are both used in the clinical literature to refer to beliefs and practices to which individuals may turn for support following a traumatic event? Some researchers have attempted to differentiate between organized practices such as “attendance at services and other activities” and non-organized practices, including “prayer and importance of religious and spiritual beliefs” (Strawbridge et al., 1998). Because the terms are so closely related, and because researchers in this area have not consistently differentiated between the two concepts, the reader should assume that in the discussion below we refer to religion/spirituality in the general sense and not in any specific terms.

RECOMMENDATION

1. Preserve an interpersonal safety zone protecting basic personal space (e.g., privacy, quiet, personal effects).
2. Provide nonintrusive ordinary social contact (e.g., a "sounding board," judicious use of humor, small talk about current events, silent companionship).
3. Provide opportunities for grieving for losses. Provide access to religious/spiritual resources when sought. (Providing space and opportunities for prayers, mantras, rites and rituals and end-of-life care as determined important by the patient).
4. Consider providing direct spiritual care or ensuring patient access to spiritual care when sought.

DISCUSSION

Religion may provide a framework by which survivors of trauma construct a meaningful account of their experience, and may be a useful focus for intervention with trauma survivors.

Religion seeking is an observed post-traumatic phenomenon:

There is a large body of anecdotal literature documenting the propensity of individuals to seek religious/spiritual comfort following a traumatic event. The terrorist attacks of September 11, 2001 provide a recent instance of this phenomenon. Bell Meisenhelder (2002) notes "the events of September 11, 2001 triggered a widespread national response that was two-fold: a post-traumatic stress reaction and an increase in attendance in religious services and practices immediately following the tragic events." Schuster and his colleagues performed a nationwide phone survey of 569 adults within a week of the event (2001), and found that "forty-four percent of the adults reported one or more substantial stress symptoms; 91 percent had one or more symptoms to at least some degree. Respondents throughout the country reported stress syndromes. They coped by talking with others (98 percent), turning to religion (90 percent)."

The role of the Chaplain:

Recent research on cognitive processes in victimization indicates that major changes in an individual's basic life assumptions may occur following a traumatic event. These assumptions involve the security and meaningfulness of the world and the individual's sense of self-worth in relation to perception of the environment (Janoff-Bulman, 1979). Specifically, these assumptions are: (1) that one's environment is physically and psychologically safe; (2) that events are predictable, meaningful and fair; (3) that one's own sense of self-worth is positive in relation to experiences with other people and events (Hunter, 1996).

The Chaplain may play an important role in helping individuals regain a sense that their basic life assumptions are true. Chaplains receive training in a wide variety of supportive techniques, and they stand ready to assist all individuals, including those who do not subscribe to an organized religion. Chaplains may provide assistance in one or more of the following ways:

- Organizing and mobilizing community action
- Providing education and consultation with advice for leaders
- Assisting in the mobilization of action plans and recovery processes
- Offering facilitation of adaptation and mastery in social change
- Assisting in the development of community networks
- Supporting the development of a positive recovery organization
- Serving as a source of communication
- Fostering community theater and art geared to encouraging working through and recovery from the trauma.

Providing space and opportunities for prayers, mantras, rites and rituals and end-of-life care as determined important by the patient is another important contribution of the Chaplain. (Canda and Phaobtong, 1992; Lee, 1997).

Demonstrated benefits of the practice: religious/spiritual care:

Baldacchino and Draper (2001) conducted a literature review of 187 articles on spirituality and health published between 1975 and 2001. They found that while most of the studies presented only anecdotal evidence, five studies did focus on spiritual coping strategies used in various illnesses. They conclude, "research suggests that spiritual coping strategies, involving relationship with self, others, Ultimate other/God or nature were found to help individuals to cope with their ailments. This may be because of finding meaning, purpose and hope, which may nurture individuals in their suffering." They further conclude, "the onset of illness may render the individual, being a believer or nonbeliever to realize the lack of control over his/her life. However the use of spiritual coping strategies may enhance self-empowerment, leading to finding meaning and purpose in illness." While these studies did not specifically address PTSD, this condition is often characterized by a feeling of lack of control, and thus spirituality may be seen to be an appropriate control-seeking response.

Humphreys et al. (2001) surveyed a convenience sample of 50 women in a battered women's shelter; 39% of whom had been diagnosed with PTSD. They report "when we analyzed biopsychosocial variables, we saw beneficial effects of support (financial, social, spiritual). These findings reinforce the need to enhance the resources of battered women, to help them identify existing opportunities, and to fortify self-caring strategies that give them strength." Calhoun et al. (2000) designed a study to examine "the degree to which event related rumination, a quest orientation to religion, and religious involvement is related to post-traumatic growth." In this descriptive study of 54 young adults who had experienced a traumatic event, "the degree of rumination soon after the event and the degree of openness to religious change were significantly related to post-traumatic growth. Congruent with theoretical predictions, more rumination soon after the event, and greater openness to religious change were related to more post-traumatic growth."

Nixon et al. (1999) conducted a descriptive study of 325 Oklahoma City firefighters following the bombing of the Alfred P. Murrah Federal Building. They report "of particular importance in this analysis was the finding that support from 'faith' was a primary predictor of positive outcome and positive attitude over the one-year period." They did find, however, that the helpful effect of faith was more pronounced among younger firefighters. Thus it remains to be seen whether religious/spiritual counseling is equally effective for all age groups.

Not all researchers have found religiosity/spirituality to be helpful in stressful situations. Strawbridge and his colleagues used a large public health survey to investigate "associations between two forms of religiosity and depression as well as the extent to which religiosity buffers relationships between stressors and depression" (1998). The authors defined "non-organizational religiosity" as including prayer and spiritual beliefs, while "organizational religiosity" includes attendance at formal services and other activities. Strawbridge et al. found that "non-organizational religiosity" was not helpful in easing depression, and it exacerbated associations with depression for child problems. "Organizational religiosity" had a weak association with worsened depression, and it too exacerbated family-related problems. The authors conclude that "religiosity may help those experiencing non-family stressors, but may worsen matters for those facing family crises."

It should be noted that none of the studies above provide direct evidence for religious/spiritual practices in reducing PTSD symptoms. The studies do, however, suggest that patients may find comfort and a sense of control resulting from religion/spirituality, and this may lead to an eventual reduction in PTSD symptoms.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Consider referral for religious/spiritual counseling as indicated for patient symptoms, consistent with available resources, and resonant with patient belief systems	Baldacchino and Draper, 2001 Bell Meisenhelder, 2002 Calhoun et al., 2000 Humphreys et al., 2001 Nixon et al., 1999 Strawbridge et al., 1998	III	Poor	I
2	When providing psychological first aid or primary care services, consider providing direct spiritual care or ensuring patient access to spiritual care	Bogia and Preston, 1985 Everly, 2000	II	Fair	C
3	For patients who have developed PTSD, consider referral for religious/spiritual counseling as indicated for patient symptoms, consistent with available resources, and resonant with patient belief systems	Baldacchino and Draper, 2001 Bell Meisenhelder, 2002 Calhoun et al., 2000 Humphreys et al., 2001 Nixon et al., 1999 Strawbridge et al., 1998	III	Poor	I

QE = Quality of Evidence; R = Recommendation; SR = Systematic Review (see Appendix A)

L. Pharmacotherapy

OBJECTIVE

To lessen the physical, psychological, and behavioral morbidity associated with acute stress reaction, hasten the return to full function (duty), and diminish the likelihood of chronicity.

BACKGROUND

Stress reactions produce biologic, psychological, and behavioral changes. Biologic alterations include disruptions in neurochemicals, sleep patterns, hyper-arousal, and somatic symptoms (e.g., pain, gastrointestinal symptoms, etc). Psychological changes include: mood disturbances (e.g., emotional labiality, irritability, blunting, numbing) anxiety (e.g., increased worry, ruminations) and cognitive disturbances (e.g., memory impairment, confusion, and impaired task completion).

To facilitate provision of physical needs, normalization, and psycho-education it may be prudent, when possible, to wait 24 to 48 hours before beginning medications.. Pharmacotherapy may be aided by determining whether the patient suffers from excessive adrenergic arousal or symptoms of psychomotor withdrawal. If non-pharmacological treatments fail to improve symptomatology, and potential medical causes of neuropsychiatric impairment are ruled out, then medications may be considered.

The use of medications for short-term treatment of targeted symptoms may be beneficial. (e.g. Insomnia)

RECOMMENDATIONS

Table 2: Summary Table –Pharmacotherapy for ASR

R	Significant Benefit	Some Benefit	Unknown	No Benefit/Harm
A				
B		Propranolol		
C				
I		Benzodiazpines	Other Sympatholytics Antidepressants Anticonvulsants Atypical Antipsychotics Antihistamines	
D				Typical Antipsychotics

R=Level of recommendation (see appendix A)

1. Strongly recommend providing for physical needs, sleep, normalization, and other non-pharmacological modalities.
2. Recommend the use of medication only for individuals that do not respond to non-pharmacological treatment as a normal recovery is expected from ASR.
3. Consider a short course of medication targeted for specific symptoms.
   - Sleep disturbance/insomnia (e.g., benzodiazepines, antihistamines).
   - Hyperarousal/excessive arousal/panic attacks. (e.g. benzodiazepines, propranolol (up to 10 days)).
4. There is insufficient evidence to support a recommendation for preventative use of a pharmacological agent to prevent the development of ASD or PTSD.

DISCUSSION

Few studies have examined the effectiveness of pharmacological treatment for acute symptom management and PTSD prevention during the first 4 days immediately following a traumatic event. There are no double-blind, placebo-controlled trials investigating the utility of benzodiazepines to prevent ASD or PTSD. Some descriptive studies do exist, however. In one small case-control study, Gelpin et al. (1996) followed 13 patients who received clonazepam 2.7 mg/d $\pm$ 0.8 mg/d or alprazolam 2.5 mg/d within 6.7 $\pm$ 5.8 days of a traumatic event and 13 pair-matched trauma survivors for six months. Nine (69%) of the benzodiazepine-treated patients, compared to only 3 (23%) of the control patients, eventually met the criteria for PTSD (p = NS). In a very small descriptive study (N=4), Mellman et al. (1998) found that temazepam was useful in reducing short-term stress following a traumatic event. The study does not indicate whether the four patients went on to develop PTSD.

There are no controlled trials of the usefulness of antihistamines or antidepressants for management of ASR (Cochrane Database Pharmacotherapy Review 2002 Q#5 and Q#17, page 10). Open trials and clinical experience with clonidine, guanfacine, and prazosin suggest they maybe useful for ASR; however, they have not been systematically studied.

Propranolol may be considered for treatment of immediate post-event stress. Pitman et al. (2002) performed an RCT with 41 participants to test the effectiveness of this agent in reducing post-acute stress. The authors report that the study participants experienced significant reductions in their symptoms.

One study suggests that treatment with a beta-adrenergic blocker following an acute psychologically traumatic event may reduce subsequent PTSD symptoms (Pitman et al., 2002). Patients were randomized to begin, within 6 hours of the event, a 10-day course of double-blind propranolol (n = 18) versus placebo (n = 23) 40 mg four times daily. The mean (SD) 1-month Clinician-Administered PTSD Scale (CAPS) score of 11 propranolol completers was 27.6 (15.7) compared to 20 placebo completer's average score of 35.5 (21.5) (t = 1.1, df = 29, p = 0.15). Two propranolol-treated patients' scores fell above, and nine below, the placebo group's median (p = 0.03, sign test). None of the eight propranolol, but six of 14 placebo-treated patients, were physiologic responders during script-driven imagery of the traumatic event when tested 3 months afterward (p = 0.04, one-tailed t-test). These pilot results suggest that acute, post-trauma propranolol may have a preventive effect on subsequent PTSD.

There are no studies evaluating the pharmacotherapy for acute dissociation or traumatic pain associated with ASR.

Future research should included additional studies of prevention and comparative trials between agents. Research questions that remain include the timing of non-pharmacological and pharmacological intervention(s), the type of trauma and between drug class and within drug class response, dose-response trials, the relationship between treatment trial duration and outcome, the effects of demographics (e.g., age, gender, culture) on treatment outcomes, pharmacotherapy and psychosocial therapy interactions, the effect of co-morbid diagnoses on treatment response, and the psychobiologic correlates of treatment response. Also, the effect of clinical setting (e.g., military versus civilian), treatment-compensation interactions, and the effect of PTSD severity on outcome should be investigated. Standardization of assessment measures should be addressed that would include scales for individual symptoms, global assessment, and quality of life, as well as the psychobiological correlates of treatment response.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	Net Effect	R
1	Benzodiazepines	Mellman et al., 1998	III	Poor	Moderate	I
2	Antihistamines		III	Poor	Small	I
3	Propranolol	Pitman et al., 2002	I	Good	Moderate	B
4	Pharmacotherapy prophylaxis for ASD or PTSD	Stein et al., 2000, Cochrane Review	I	Poor	Small	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

REASSESSMENT

M. Reassessment

OBJECTIVE

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

BACKGROUND

Clinical reassessment within 4 days of the acute intervention is indicated to determine if there are persistent symptoms and 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 (Bryant and Harvey 2000). 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 with medication regimens and other appointments, and potential for re-traumatization.

RECOMMENDATION

1. Treatment response to the acute intervention should be reassessed. This should include an evaluation for the following risk factors:
    - Persistent or worsening traumatic stress symptoms (e.g., dissociation, panic, autonomic arousal, cognitive impairment)
    - Significant functional impairments (e.g. role/work, relationships)
    - Dangerousness (suicidal or violent ideation, plan, and/or intent)
    - Severe psychiatric comorbidity (e.g., psychotic spectrum disorder, substance use disorder or abuse)
    - Maladaptive coping strategies (for example, pattern of impulsivity, social withdrawal, etc under stress)
    - New or evolving psychosocial stressors
    - Poor social supports
2. Follow-up after acute intervention to determine patient status.
    - Patient does not improve or status worsens – refer to mental health provider and/or PTSD specialty team. Recommend continued 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.
    - Patient demonstrates partial improvement (e.g. less arousal, but no improvement in sleep) – consider augmentation or adjustment of the acute intervention within 2 weeks.
    - Patient recovers from acute symptoms – provide education about acute stress reaction and contact information with instructions for available follow-up if needed.

DISCUSSION

Most persons with an acute trauma exposure will not develop an acute stress disorder or PTSD. Some individuals, however, may go on to develop these disorders. After initiating an acute intervention, it is crucial for primary care providers to follow-up and assess for treatment response and for any new or additional risk factors. 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 treatment of ASR. For example, individuals with subthreshold 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. Studies of trauma 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.

FOLLOW-UP

N. Referral And Consultation With Mental Health

OBJECTIVE

Provide guidance for primary care providers on optimal referral for potential PTSD patients..

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, that 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, and cultural norms 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 exhibit any of the following conditions should be referred to mental health:
    - Failure to respond to acute supportive interventions
    - Worsening of stress related symptoms
    - High potential for dangerousness
    - Development of ASD/PTSD
    - New onset of dangerousness or maladaptive coping to stress
    - Exacerbation of pre existing psychiatric conditions
    - Deterioration in function
    - New onset stressors, poor social supports, or inadequate coping skills.

DISCUSSION

Not all individuals who are exposed to trauma or who have an Acute Stress Reaction to 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 a stress related disorder (ASD, PTSD) also need to be identified and referred to mental health.

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 comorbid 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.

Some patients with an acute stress response may benefit from augmentation of the acute intervention and additional follow-up.

Because people recover from traumatic stress 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.

Psychotherapy for PTSD is unlikely to be effectively provided in the Primary Care setting. Primary Care providers who identify patients with possible PTSD should consider referral to a Mental Health or PTSD specialist (may have specialists or VET Center contact patient). This referral should be made in consultation with the patient and with consideration of the patient's preferences.

In addition, because there are many other therapy modalities which can be initiated and monitored in the primary care setting (e.g. Pharmacotherapy, Supportive Counseling), we recommend that the Primary Care practitioner consider initiating therapy pending referral or if the patient is reluctant or unable to obtain mental health services. The Primary Care practitioner also has a vital role to play in the health of PTSD patients by evaluating and treating comorbid somatic illnesses, by mobilizing community resources (e.g., OT, Family Support, Command and Unit supports, and Family Members, Chaplains), and by educating and validating the patient regarding his/her illness. It is vital that the Primary Care provider and the Primary care team (including the Health Care Integrator) stay actively involved, in coordination with the Mental Health Specialist, in the care of patients with PTSD.

Additional Points:

- Don't push patients, but encourage referral to mental health
- Primary Care physician should follow up trauma-related issues after initial visit.
- Primary Care practitioners should ask questions about trauma related symptoms, but not delve into details of the trauma unless there is time and skill to support the patient without retraumatizing them.

O. Monitor And Follow-Up

RECOMMENDATIONS

1. Follow-up should be offered to those individuals who request it.
2. Follow-up should be offered to individuals and groups at high risk of developing adjustment difficulties following exposure to major incidents and disasters, including individuals who:
    - Have acute stress disorder or other clinically significant symptoms stemming from the trauma
    - Are bereaved
    - Have a pre-existing psychiatric disorder
    - Have required medical or surgical attention
    - Were exposed to a major incident or disaster that was particularly intense and of long duration

DISCUSSION

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

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 health care. 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.

APPENDIX A
ASR Definitions

Acute stress reaction is a transient condition that develops in response to a traumatic event. The symptoms of acute stress reaction begin within minutes of the traumatic event and disappear within days (even hours). Symptoms include a varying mixture of:

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

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

The ICD-10 Classification of Mental and Behavioural Disorders
World Health Organization, Geneva, 1992
F43.0 Acute Stress Reaction

A transient disorder of significant severity which develops in an individual without any other apparent mental disorder in response to exceptional physical and/or mental stress and which usually subsides within hours or days. The stressor may be an overwhelming traumatic experience involving serious threat to the security or physical integrity of the individual or of a loved person(s) (e.g. natural catastrophe, accident, battle, criminal assault, rape), or an unusually sudden and threatening change in the social position and/or network of the individual, such as multiple bereavement or domestic fire. The risk of this disorder developing is increased if physical exhaustion or organic factors (e.g. in the elderly) are also present.
Individual vulnerability and coping capacity play a role in the occurrence and severity of acute stress reactions, as evidenced by the fact that not all people exposed to exceptional stress develop this disorder. The symptoms show great variation but typically they include an initial state of "daze", with some constriction of the field of consciousness and narrowing of attention, inability to comprehend stimuli, and disorientation. This state may be followed either by further withdrawal from the surrounding situation (to the extent of a dissociative stupor), or by agitation and overactivity (flight reaction of fugue). Autonomic signs of panic anxiety (tachycardia, sweating, flushing) are commonly present. The symptoms usually appear within minutes of the impact of the stressful stimulus or event, and disappear within 2-3 days (often within hours). Partial or complete amnesia for the episode may be present.

Diagnostic Guidelines
There must be an immediate and clear temporal connection between the impact of an exceptional stressor and the onset of symptoms; onset is usually within a few minutes, if not immediate. In addition, the symptoms:

a. show a mixed and usually changing picture; in addition to the initial state of "daze", depression, anxiety, anger, despair, overactivity, and withdrawal may all be seen, but no one type of symptom predominates for long;
b. resolve rapidly (within a few hours at the most) in those cases where removal from the stressful environment is possible; in cases where the stress continues or cannot by its nature be reversed, the symptoms usually begin to diminish after 24-48 hours and are usually minimal after about 3 days.

This diagnosis should not be used to cover sudden exacerbations of symptoms in individuals already showing symptoms that fulfill the criteria of any other psychiatric disorder, except for those in F60 (personality disorders). However, a history of previous psychiatric disorder does not invalidate the use of this diagnosis.
Includes:

- acute crisis reaction
- combat fatigue
- crisis state
- psychic shock

Management Plan for Acute Stress Reaction

Management strategies will always vary from one individual to the next depending on the individual's particular problems. However, the management of acute stress reaction generally involves:

1. Help with the removal of any ongoing traumatic event. This help could involve minimising further traumas that may arise from the initial traumatic event. For example, practical assistance with finding safe accommodation if necessary or protecting against further loss (possessions, job) (See Section 1.1.9 - Structured Problem Solving).
2. Discussion about what happened during the traumatic event: (e.g., what was seen, how the individual acted or felt, or what he or she thought at the time). Discussion may help the individual reduce any negative appraisals of his or her reaction during the experience. For example, some individuals may feel guilty about their sense of helplessness during the trauma (e.g., that they did not do anything to stop the trauma). These negative appraisals are a common reaction to a traumatic event. In most cases it is highly unlikely that, when faced with such a trauma, the individual could have acted in any other way.
3. Provision of education about the typical responses to a traumatic event and guidelines for how to best cope in the hours and days following the event (see Section 4.14.10).
4. Encourage the individual to confront the trauma by talking about the experience to family and friends.
5. Time. Reassure the individual that the acute stress reaction is likely to pass in a short period of time.
6. Social support will be 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).
7. Use of simple relaxation methods. These methods provide effective and productive ways of coping with the anxiety and tension associated with the stress reaction (e.g., breathing control, exercise, relaxation, or pleasant activities).
8. Encourage the individual to gradually confront situations associated with the traumatic event (e.g., returning to work but perhaps only for a few hours at a time).
9. Advise the individual not to use drugs or alcohol to cope with his or her reaction to the trauma. Instead, encourage the individual to use simple relaxation methods as per item 7 above.
10. Ensure that the individual receives follow-up consultations. Persistent symptoms may require more specialised treatment and a revised diagnosis of Post-Traumatic Stress Disorder and/or depression.

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

MODULE A2

COMBAT AND ONGOING OPERATION STRESS REACTION (COSR)

INTRODUCTION

The approach to triage in the immediate response to traumatic exposure for service members with symptoms during Ongoing Military Operations is directed by dual sets of objectives:

Military Considerations

Management of combat and operational stress reactions (COSR) during ongoing military operations is targeted to preserve the fighting force and return the service member (SM) to functional status. Context and setting of care delivery may vary markedly.

Military Clinical Objectives

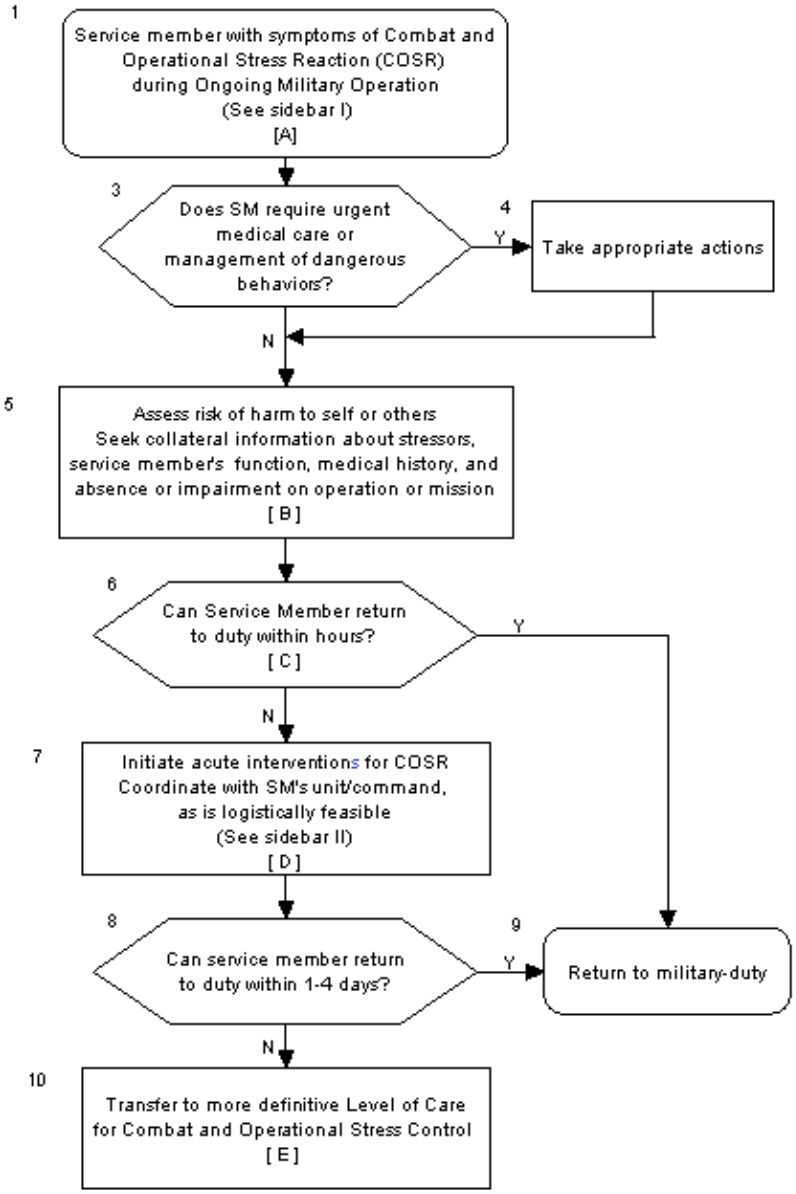
1. Prevent exacerbation of symptoms / mitigate symptoms of acute stress.
2. Prevent development of traumatic stress sequelae (e.g., ASD, PTSD, depressive disorders, anxiety disorders, and substance use disorders).
3. Keep SM with his/her unit and prevent unnecessary medical evacuation.
4. Return SM to duty as soon as possible.
5. Maintain and enhance unit capabilities and readiness

Prior to deployment and regularly thereafter, ensure appropriate primary prevention in the form of COSR briefs are offered to combatants, providers, and the chain of command.

For further discussion of the key element, please see Module A1: Acute Stress Reaction

Management of Stress Reactions Combat and Operational Stress Reaction(COSR) During Ongoing Military Operations

A2



COSR SYMPTOMS

Possible Syndrome:

- exhaustion/burnout
- hyperarousal and anxiety
- somatic complaints (GI, GU, MS, CV, respiratory, NS)
- depression/guilt/hopelessness
- conversion disorder symptoms
- amnestic and/or dissociative symptoms
- behavioral changes
- emotional dysregulation
- anger/irritability
- brief, manageable "psychotic symptoms" (e.g., hallucinations due to sleep deprivation, mild "paranoia")

COSR does not require a specific traumatic event and can be a result of accumulating stress

COSR ACUTE INTERVENTIONS

Treat according to service member's prior role and not as a "patient"; avoid a hospital setting

Assure or provide the following, as needed:

- o Reunion or contact with primary group
- o Respite from intense stress
- o Thermal comfort
- o Oral hydration
- o Oral food
- o Hygiene (toileting, shower, shave, and female needs)
- o Sleep (to facilitate rest and restoration)
- o Encourage talk about the event with supportive others

Reserve group debriefing for members of pre-existing and continuing groups (Voluntary attendance)

Assign appropriate duty tasks and recreational activities that will restore focus and confidence and reinforce teamwork

Avoid further traumatic events until recovered for full duty

Evaluate periodically

Consider using a short course of medication targeted for specific symptoms

10-15-03

ANNOTATIONS

A. Service Member With Symptoms Of Combat And Operational Stress Reaction (COSR) During Ongoing Military Operations

BACKGROUND

Traumatic events are events that cause a person to have the experience that he or 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. Among the common kinds of traumatic events are:

- Combat in the war zone
- Rape and sexual assault
- Natural disaster (e.g., hurricanes, floods or fires)
- Motor vehicle accidents
- Exposure to the sudden or unexpected death of others
- 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 toxic contamination (e.g., gas or fumes, chemicals, radioactivity)

COSR does not require a specific traumatic event, but may result 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 include depression, fatigue, anxiety, decreased concentration/memory, hyperarousal or any of the four clusters above that have not resolved within 4 days after the event, after a rule-out of other disorders.

RECOMMENDATIONS

1. Identify service member with symptoms compatible with COSR. Symptoms are not attributed to identified medical/surgical condition requiring other urgent treatment (a service member can have COSR concurrent with minor return-to-duty [RTD] wounds/illness).
2. Evacuate to next level of care, if unmanageable.
3. Screen service member for symptoms of COSR, which include:
   - Exhaustion/burnout
   - Hyperarousal and anxiety
   - Somatic complaints (GI, GU, MS, CV, respiratory, NS)
   - Depression or guilt/hopelessness
   - Conversion Disorder symptoms
   - Amnestic or dissociative symptoms
   - Behavioral changes
   - Emotional dysregulation
   - Anger/irritability
   - Brief, manageable “psychotic symptoms” (e.g., hallucination due to sleep deprivation and mild “paranoia”)
4. Address the underlying cause of symptoms (e.g. sleep deprivation) in brief restoration program. Advise service member’s Commander, chaplain, etc. on follow-up actions. Document symptoms and observations.

B. Assess Risk Of Harm To Self Or Others;
Seek Collateral Information About Stressors, And Service Member's Function, Medical History, And Absence Or Impairment On Operation Or Mission

OBJECTIVE

Obtain information to assess service member's condition and triage for appropriate care.

RECOMMENDATIONS

1. Arrange for a safe and comfortable environment to continue the evaluation. Secure any weapons and explosives.
2. Medical triage to rule out:
    - Neurotoxicant exposure
    - Head injury
    - Undetected wounds
    - Acute physical illness (e.g., infectious)
3. Document symptoms of COSR, obtain collateral information from unit leaders, and assess service member's function, to include:
    - Any changes in productivity?
    - Co-worker or supervisor reports of recent changes in appearance, quality of work, or relationships?
    - Any tardiness/unreliability, loss of motivation, or loss of interest?
    - Forgetful or easily distracted?
    - Screening for substance use.

C. Can Service Member Return To Duty Within Hours?

OBJECTIVE

Identify service members who can rapidly resume effective functioning in the unit.

BACKGROUND

Ideally, service members who become ineffective as a result of COSR will be returned to duty at the earliest possible time. This is necessary, as stress-related casualties can constitute an important source of fully trained replacements for battlefield losses.

RECOMMENDATIONS

1. Consider the service member's role and functional capabilities and the complexity and importance of his/her job when determining when to return the service member to duty.
2. The continuing presence of symptoms of COSR alone should not constitute a basis for preventing a return to duty.
3. Educate and "normalize" observed psychological reactions to the chain of command.

DISCUSSION

For most military specialties that are directly involved in combat operations, the time to enlist and train the service member to minimal operational readiness often exceeds a year. Consequently, service members who suffer minor wounds or those that become ineffective due to stress related conditions constitute a significant source of trained personnel that can be used to replace operational losses.

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, considering type of job and level of responsibility:

- Service members in lower skilled jobs, such as truck drivers, food service personnel, and basic supply functions, can be expected to function effectively despite continuing anxiety. The cost of functional failure of individuals in these roles is likely limited.
- Service members in higher skilled jobs or those that involve more potent risks (e.g., artillery forward observers, combat controllers, physicians, and pilots) should not be returned to duty unless there appears to be a high probability that the service member has resumed effective functioning.
- Individuals in leadership positions should be required to demonstrate a higher level of reconstitution as errors on the part of these individuals can result in much greater damage to units.
- Consequently, service members who suffer minor wounds or those that become temporarily ineffective due to stress related conditions constitute a significant source of trained personnel that can be used to replace operational losses.

D. Initiate Acute Intervention For COSR;
Coordinate With Service Member's Unit/Command;
Treat Within Closest Proximity To Service Member's Unit, As Is Logistically Feasible

OBJECTIVE

Initiate acute symptom management.

BACKGROUND

Acute interventions should be tailored to address the individual service person, unit and military force needs and characteristics. Early interventions should typically seek to address diverse outcomes, with the aim of promoting normal recovery, resiliency, and personal growth. Collective outcomes should also be addressed, such as social order and community / unit cohesion.

RECOMMENDATIONS

1. Maintain sense of unit integrity:
   - Normalization
   - Validation
   - Keep positive approach
   - Set up expectation for recovery and RTD (role)
2. Keep treatment consistent with the "PIES" principle:
   - *Proximity*: Prevention and treatment are conducted in proximity to the battlefield or the origin of the stressor. Treatment proximate to the member's unit where he can be visited by fellow military members is ideal. Consider all options for proximate treatment; strive to maintain connection to unit to maintain unit integrity
   - *Immediacy*: Treatment should begin as soon as tactically and logistically possible
   - *Expectancy*: From the outset, the expectation is that the SM is experiencing a normal reaction to an abhorrently abnormal situation and will return to duty following resolution, restitution and adaptation
   - *Simplicity*: All modalities of prevention and treatment are simple and clearly understood. No dynamic therapy. No medical model. The only "model" is the military model—military members caring for military members.
3. Initiate treatment:
   - Treat according to service member's prior role and not as a "patient;" avoid a hospital setting
   - Assure or provide the following, as needed:
     - Reunion or contact with primary group
     - Respite from intense stress
     - Thermal comfort
     - Oral hydration
     - Oral food
     - Hygiene (toileting, shower, shave, and feminine)
     - Sleep (to facilitate rest and restoration, use anxiolytic medication judiciously and sparingly in the acute setting)

- Encourage talk about the event with supportive others

4. Reserve group debriefing for members of pre-existing and continuing groups at appropriate time and setting. Attendance should be voluntary and only be conducted by personnel trained in debriefing methods.
5. Assign job tasks and recreational activities that will restore focus and confidence and reinforce teamwork (limited duty).
6. Avoid further traumatic events until recovered for full duty.
7. Evaluate periodically.
8. Consider using a short course of medication targeted for specific symptoms (see Pharmacotherapy for COSR).

E. Transfer To More Definitive Level of Care For Combat And Operational Stress Control

OBJECTIVE

Transfer service member for treatment augmentation or mental health treatment or referral.

BACKGROUND

Some patients with an acute stress response may benefit from augmentation of the acute intervention and additional follow-up. Because people recover from traumatic stress at different rates, some individuals may require more time or an adjustment of the treatment prior to improvement.

RECOMMENDATIONS

1. Service members who do not respond to first line supportive interventions may warrant a transfer for treatment augmentation or mental health treatment or referral.
2. Transfer to a more definitive level of treatment may include more intense or prolonged treatment at a Combat Refresher Training facility. Service members should be prepared for the transfer with continued positive expectation of recovery from their symptoms and return to normal level of functioning.
3. Ensure that casualties being transferred due to other medical conditions (wounded in action) receive psycho-education relating to anticipated psychological changes, provide positive expectations, and offer support prior to departure from the area of responsibility.

DISCUSSION

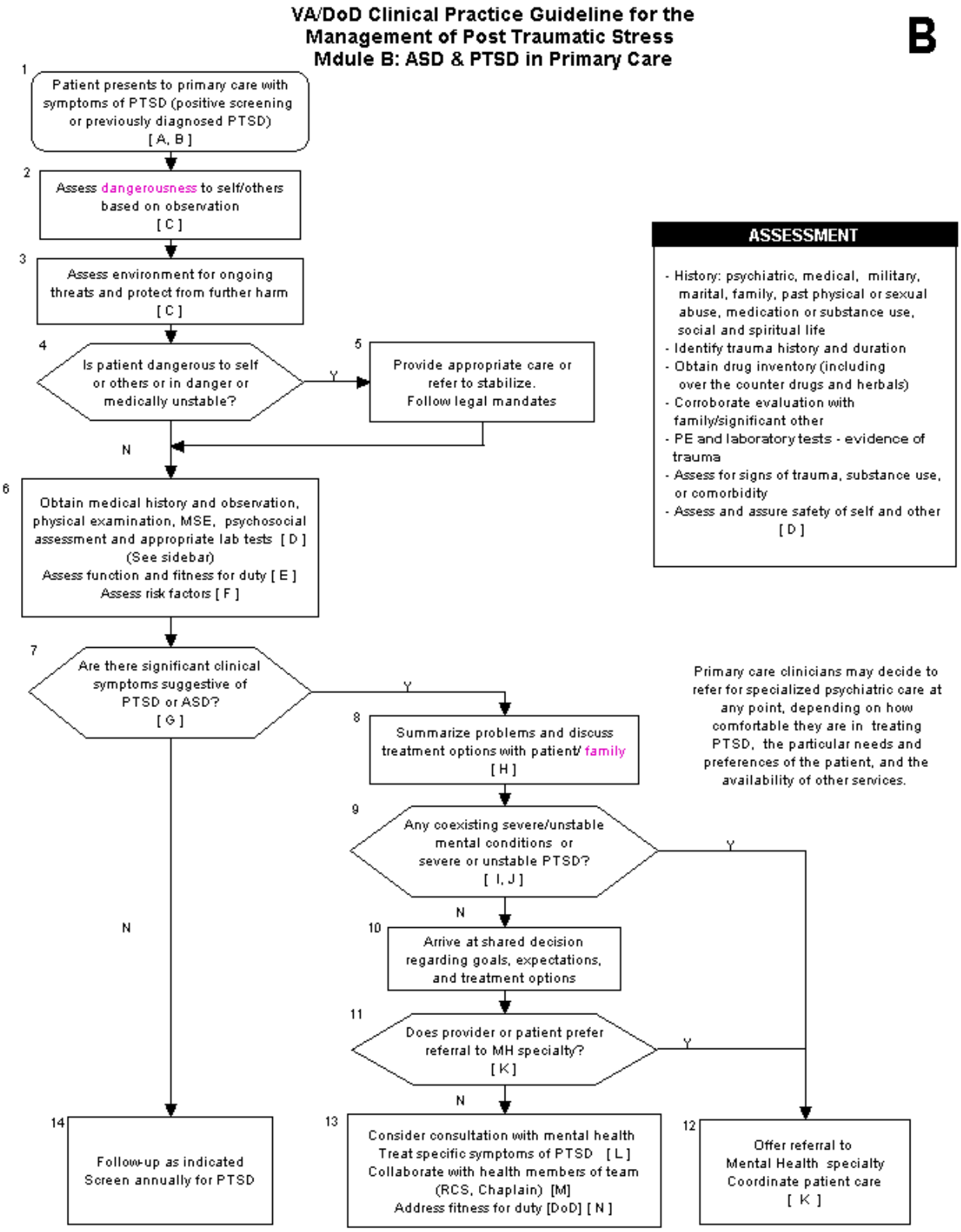
Not all individuals who are exposed to trauma or who have a COSR require a mental health referral. However, those service members who are deteriorating or not responding to acute supportive interventions need to be identified and evacuated to a more definitive level of care. Also, patients who have a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

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 comorbid 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.

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

MODULE B

ACUTE STRESS DISORDER (ASD) AND POST-TRAUMATIC STRESS DISORDER (PTSD) IN PRIMARY CARE


VA/DoD Clinical Practice Guideline for the Management of Post Traumatic Stress
Mdule B: ASD & PTSD in Primary Care
B
1
Patient presents to primary care with symptoms of PTSD (positive screening or previously diagnosed PTSD) [A, B]
2
Assess dangerousness to self/others based on observation [C]
3
Assess environment for ongoing threats and protect from further harm [C]
4
Is patient dangerous to self or others or in danger or medically unstable?
Y
5
Provide appropriate care or refer to stabilize. Follow legal mandates
N
6
Obtain medical history and observation, physical examination, MSE, psychosocial assessment and appropriate lab tests [D] (See sidebar)
Assess function and fitness for duty [E]
Assess risk factors [F]
7
Are there significant clinical symptoms suggestive of PTSD or ASD? [G]
Y
8
Summarize problems and discuss treatment options with patient/ family [H]
9
Any coexisting severe/unstable mental conditions or severe or unstable PTSD? [I, J]
Y
N
10
Arrive at shared decision regarding goals, expectations, and treatment options
11
Does provider or patient prefer referral to MH specialty? [K]
Y
N
N
12
Offer referral to Mental Health specialty Coordinate patient care [K]
13
Consider consultation with mental health Treat specific symptoms of PTSD [L] Collaborate with health members of team (RCS, Chaplain) [M] Address fitness for duty [DoD] [N]
14
Follow-up as indicated Screen annually for PTSD
ASSESSMENT
- History: psychiatric, medical, military, marital, family, past physical or sexual abuse, medication or substance use, social and spiritual life
- Identify trauma history and duration
- Obtain drug inventory (including over the counter drugs and herbals)
- Corroborate evaluation with family/significant other
- PE and laboratory tests - evidence of trauma
- Assess for signs of trauma, substance use, or comorbidity
- Assess and assure safety of self and other [D]
Primary care clinicians may decide to refer for specialized psychiatric care at any point, depending on how comfortable they are in treating PTSD, the particular needs and preferences of the patient, and the availability of other services.
11-1

ANNOTATIONS

A. Assessment of Trauma Exposure 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. In some cases the symptoms of PTSD disappear with time, whereas in other cases they persist for many years. PTSD often occurs with or precedes other psychiatric illnesses.

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, having sudden outbursts of anger.

Diagnostic criteria for acute stress disorder (ASD) require a presentation of **dissociative** symptoms - numbing, reduction in awareness, derealization, depersonalization or dissociative amnesia.

Patients are most likely to present to primary care with unexplained somatic and/or psychological symptoms, e.g., sleep disturbance, night sweats, fatigue, difficulty with memory or concentration, etc. In some cases, providers may consider PTSD early 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, the VA/DoD guideline for medical unexplained symptoms or the VA/DoD guideline for management of depression in primary care. All these guidelines provide a link to this module when appropriate.

RECOMMENDATIONS

Assessment in Primary Care

1. Patients who are presumed to have symptoms of PTSD or who are positive for PTSD on the initial screening should receive specific assessment of their symptoms.
2. A thorough assessment of the symptoms is necessary for accurate diagnosis, rating the severity of the disorder, and making correct clinical decisions.
3. Consider self-administered checklists to ensure systematic, standardized, and efficient review of the patient's symptoms.
4. Useful information may include details such as time of onset, frequency, course, severity, level of distress, functional impairment, and other relevant information.

Table B-1. Common Symptoms After Exposure to Trauma or Loss

Physical	Cognitive/Mental	Emotional	Behavioral
• Fatigue • Muscle tremors • Chest pain • Elevated blood pressure • Thirst • Visual difficulties • Grinding teeth • Dizziness • Chills • Fainting • Nausea • Twitches • Difficulty breathing • Rapid heart rate • Headaches • Vomiting • Weakness • Profuse sweating • Shock symptoms	• Poor attention • Change in alertness • Memory problems • Poor problem solving • Poor decisions • Increased or decreased awareness of surroundings • Difficulty identifying familiar objects or people • Intrusive images • Poor abstract thinking • Nightmares • Confusion • Poor concentration • Hyper-vigilance • Blaming someone • Loss of orientation to time, place, person	• Anxiety • Grief • Severe pain • Fear • Loss of emotional control • Apprehension • Agitation • Inappropriate emotional response • Guilt • Denial • Emotional shock • Uncertainty • Depression • Feeling overwhelmed • Irritability	• Change in activity • Suspiciousness • Inability to rest • Pacing • Emotional outbursts • Hyper-alert to environment • Erratic movements • Somatic complaints • Withdrawal • Alcohol consumption • Antisocial acts • Change in speech pattern • Loss of, or increased appetite • Startle reflex intensified • Change in sexual functioning • Change in communication

DISCUSSION

Initial screening is discussed in the CORE module (See Core Module annotation E; For Screening Tools –see appendix C).
The DSM-IV (1994) describes three-symptom clusters characteristic of PTSD (reexperiencing, avoidance, and arousal).

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

a. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions
b. Recurrent distressing dreams of the event
c. 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 upon awakening or when intoxicated)
d. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
e. 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:

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).

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

1. Difficulty falling or staying asleep
2. Irritability or outbursts of anger
3. Difficulty concentrating
4. Hypervigilance
5. Exaggerated startle response.

Diagnostic criteria for ASD require a presentation of **dissociative** symptoms in addition to one symptom of each of the three PTSD symptom clusters. Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms:

1. Subjective sense of numbing, detachment, or absence of emotional responsiveness
2. Reduction in awareness of his or her surroundings (e.g., "being in a daze")
3. Derealization
4. Depersonalization
5. Dissociative amnesia (i.e., inability to recall an important aspect of the trauma).

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. A number of symptoms of avoidance could be characterized as dissociative. For example, the dissociative symptom of numbing could be considered an expression of a restricted range of affect and, hence, an avoidance symptom in the PTSD diagnosis. Feeling detached or estranged from others (another avoidance symptom in PTSD) might also be an example of the dissociative symptom of detachment. Similarly, the inability to remember an important aspect of the trauma describes the dissociative symptom of amnesia. Stupor, another dissociative symptom, is characterized as a decrease in activity that is both spontaneous and responsive. Symptoms of stupor could be interpreted as a decreased interest or participation in significant activities, thereby qualifying as another avoidance symptom of PTSD. 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.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	A thorough assessment of the symptoms	Lagomasino et al., 1999 Williams & Shepherd, 2000	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

B. Assessment Of Trauma Exposure

RECOMMENDATION

1. Assessment of the trauma exposure should include:
    - History of exposure to traumatic event(s)
    - Nature of the trauma
    - Severity of the trauma
    - Duration and frequency of the trauma
    - Age at time of trauma
    - Patient's reaction at time of trauma (e.g., helplessness, horror, and fear)
    - Existence of multiple traumas.
2. When assessing trauma exposure the clinician must consider the patient's ability to tolerate the recounting of traumatic material, since it may exacerbate PTSD symptoms.

3. The assessment should be performed cautiously, especially in situations where the trauma source is still present and the patient perceives himself or herself to be in danger.

DISCUSSION

Trauma assessment includes a careful examination of the trauma, including the nature of the patient's involvement in the traumatic event, the patient's thoughts and feelings about what he or she did or did not do, the effect of the trauma on the patient's life and experience of self and others, and an assessment of the patient's trauma symptoms. The history also should include an assessment of prior stressful life events; coping style; ego resources and self capacities; 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. For example, if the individual does not feel safe in his or her current living situation, issues concerning safety need to be addressed first. Alternatively, 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. The repeatedly-traumatized individual may also need to work through earlier childhood traumas as well as the more recent event.

C. Assessment Of Dangerousness To Self Or Others

RECOMMENDATION

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

DISCUSSION

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 should begin with building rapport and need to take place in a safe and secure environment. If the patient has thoughts of self-harm, identify whether they have had suicidal ideation or intent or a history of a suicide attempt. Any history of suicidal attempts or a family history of a completed suicide should be taken seriously. Pay careful attention to patients with behaviors that may signal dangerousness (e.g., agitation, intimidation, paranoia, or threatening). Access to weapons or other means of harm should also be taken seriously. Assess for domestic or family violence. Assessment of medical, psychiatric, and social/environmental risks is also warranted.

Assessment of dangerousness can include questions such as:

- You sound like you've been having a very tough time and are quite distressed. Has life ever seemed not worth living?
- Have you ever thought about acting on those feelings?
- Sometimes, when people get really upset or angry, they feel like doing harm to other people. Have you had any thoughts about harming others, recently?
- How would I know you are angry or upset? 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 (Simon, 1992). 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). 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. Additionally, Vietnam veterans with diagnosed PTSD have an increased risk of death due to suicide as compared to those without PTSD (Bullman & Kang, 1994).

Those 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). Comorbid 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).

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 increased risk for violent behavior. Violence often emerges as a response to perceived threat or marked frustration by the patient stemming from their 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 frank agitation or the carrying out of violent impulses. Whatever the cause, the following situations may serve as warning signs pointing towards a very real threat of violence:

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

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 violence risk (Seng, 2002). PTSD is a predictor of violence in persons with severe mental illness (Swanson et al., 2002). Substance use disorders are highly comorbid 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). PTSD is a predictor of several HIV-risk behaviors as well as risk factors for related blood-borne infections, such as hepatitis B and C (Hutton et al., 2001). Other potentially dangerous comorbid 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, HCV/HBV, thus risk assessment and serotesting is warranted.

Psychiatric conditions:

a. *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).

b. *Acute or marked psychosis* - "Psychosis" in and of itself, is not a 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.

c. *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.

Medical conditions:

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

b. *Chronic diseases* - Patients who have PTSD and other chronic medical diseases may find that their medical conditions are worsened by PTSD. Some medical conditions can be acutely dangerous in the presence of PTSD such as bronchial asthma, peptic ulcer disease, GI bleed and hypertension, if malignant (Davidson et al., 1991). PTSD has also been linked to cardiovascular disease, anemia, arthritis, asthma, back pain, diabetes, eczema, kidney disease, lung disease, and ulcers (Weisberg et al., 2002).

Operational Risk (Combat or Ongoing Military Operation)

Because reexposure to trauma may exacerbate or trigger PTSD symptoms, special consideration must be given when including patients with a history of PTSD symptoms in mission critical operations.

See VA/DoD Clinical Practice Guideline for Major Depression Disorder (MDD) Appendix 2, Unstable and High-Risk Conditions and Appendix 3, Suicidality.

EVIDENCE:

	Recommendation	Sources	QE	Overall Quality	R
1	Dangerousness including suicidal or homicidal ideation, intent, means, history, behaviors, and comorbidities.	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	III II-2 III II-2 II II II	Good	B
2	Family and social environment – including risks for family.	Seng 2002 Swanson 2002	III II	Good	B
3	Ongoing health risks or risk taking behavior.	Acierno et al., 1996 Hutton et al., 2001	II-2 II	Good	B
4	Medical/psychiatric comorbidities or unstable medical conditions.	Davidson et al., 1991 Farrell et al., 1995 Weisberg et al., 2002	II III III	Good	B
5	In operational environment, consider the potential to jeopardize the mission.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation;(see Appendix A)

D. Obtain Medical History, Physical Examination, MSE And Laboratory Tests

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 are not 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% with a psychological complaint, the correct diagnosis was made 94% 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 medical and psychiatric history, with particular attention paid to the following:
    - Baseline functional/mental status
    - Past medical history
    - Medications: to include herbal & over-the-counter (OTC) drugs
    - Past psychiatric history: to include: prior treatment, past hospitalization for depression or suicidality, and substance use disorders
    - Current life stressors

    If trauma exposure is recent (<1 month) particular attention should be given to the following:
    - Exposure to/ Environment of trauma
    - Ongoing traumatic event
    - Exposure, perhaps ongoing, to environmental toxin
    - Ongoing perceived threat
2. All patients should have a thorough physical examination. On physical examination, particular attention should be paid to the neurological exam and stigmata 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:
    - Appearance and behavior
    - Language/speech
    - Thought process (loose associations, ruminations, obsessions) and content (delusions, illusions and hallucinations)
    - Mood (subjective)
    - Affect (to include intensity, range, and appropriateness to situation and ideation)
    - Level of Consciousness (LOC)
    - Cognitive function
4. All patients should have routine laboratory screening tests including TSH, Complete Metabolic Panel, Hepatitis, HIV, and HCG (for females). Also consider CBC, UA, Tox/EtoH panel and other tests, as clinically indicated.
5. Other assessments may be considered (radiology studies, ECG, and EEG), as clinically indicated.
6. 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/co-morbidities associated with PTSD include: dementia, depression, substance abuse/withdrawal, bereavement, psychosis, bipolar disorder, seizure disorder, thyroid disease, neoplasm, somatization disorder (including irritable bowel, headaches, and non-cardiac chest pain), anxiety disorder, toxicosis, rheumatoid-collagen vascular disease, hypoxia, sleep apnea, closed head injury, CHF, and delirium).

Medical History

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

- Baseline functional/mental status
- Past medical history
- Exposure to/environment of trauma (severity, duration, ongoing risk, and individual vs. community exposure)
- Medications: to include herbal & OTC drugs
- Past psychiatric history to include: prior treatment, past hospitalization for depression or suicidality, and inability to function in usual life roles
- Substance use and misuse can cause and/or exacerbate PTSD. Use of screening tools (such as the CAGE, AUDIT, MAST or DAST can improve detection of substance use disorders (see the VA/DoD Substance Use Guideline, for substance use assessment tools).
- Family history of PTSD or psychiatric disorder
- Sleep/eating patterns
- Current life stressors
- Risk factors suggesting the need for a higher than usual index of suspicion - Certain physiological and psychological conditions or life events 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 neurologic 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) includes a cognitive screening assessment. The assessment may consist of a standardized instrument such as the Folstein Mini-Mental State Examination (MMSE) (Crum RM, et al., 1993; Cummings JL, 1993; Folstein et al., 1975). 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. The PTSD assessment should be continued. If delirium is present, consider it an emergency and stabilize the patient before proceeding, then return to the algorithm and continue with PTSD assessment.

During the MSE, 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 neurologic 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 to rule

out 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 the algorithm 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
- Legal issues
- Religious/spiritual history

Checklist to Determine If Psychosocial Rehabilitation Services are Indicated in PTSD Treatment (Foa et al., 2000)

	If the client and clinician together conclude that the client with PTSD:	**Service/Training**
1	Is not fully informed about aspects of health needs and does not avoid high-risk behaviors (e.g., PTSD, substance)	*Activate health education services*
2	Does not have sufficient self-care and independent living skills	*Refer to self-care/independent living skills training services*
3	Does not have safe, decent, affordable, stable housing that is consistent with treatment goals	*Use and/or refer to supported housing services*
4	Does not have a family that is actively supportive and/or knowledgeable about treatment for PTSD	*Implement family skills training*
5	Is not socially active	*Implement social skills training*
6	Does not have a job that provides adequate income and/or fully uses his or her training and skills	*Implement supportive employment interventions*
7	Is unable to locate and coordinate access to services such as those listed above	*Use case management services*

EVIDENCE

	Recommendation	**Sources**	**QE**	**Overall Quality**	**R**
1	Obtain thorough history and physical.	Lagomasino et al., 1999 Williams & Shepherd, 2000	III	Poor	I
2	Obtain appropriate laboratory evaluation	Lagomasino et al., 1999 Williams & Shepherd, 2000	III	Poor	I
3	Perform radiological assessment	Lagomasino et al., 1999	III	Poor	I
4	Other assessment	Lagomasino et al., 1999	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

E. Assessment Of Functioning

BACKGROUND

One of the key goals of care is to assist the individual in beginning to return to a normal level of function. The clinician or caregiver must assess the individual's current state of health and functioning. Whenever possible, this should include assessment of any physical injuries and assessment of the individual's level of functioning and level of family and relationship functioning.

RECOMMENDATION

1. Assessment of global function should be obtained, such as the Global Assessment of Function (GAF) scale or the SF-36.

DISCUSSION

Global Functional Assessment

Consider using instruments such as the GAF (American Psychiatric Association, 1994) or the SF-36 (McHorney, 1994) to assess global function. Such measures are useful for directing therapeutic interventions and monitoring response to treatment.

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.

Table B-2. Functional Assessment

Work	• 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	• Changes in grades? • Changes in relationships with friends? • Recent onset or increase in acting out behaviors? • Recent increase in disciplinary actions? • Increased social withdrawal?
Family Relationships	• 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?
Recreation	• Changes in recreational interests? • Decreased activity level? • Poor motivation to care for self? • Sudden decrease in physical activity? • Anhedonia?
Housing	• Does the person have adequate housing? • Are there appropriate utilities and services (electricity, plumbing, etc) • Is the housing situation stable?

Legal	• 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	• 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	• 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?

EVIDENCE

	Recommendation	Sources of Evidence	QE	Overall Quality	R
1	Global Functional Assessment.	Working Group Consensus	III	Poor	I
2	Narrative Functional Assessment.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

F. Assessment of Risk Factors

BACKGROUND

Following a traumatic event, a majority of those exposed may experience post-traumatic mental responses. However, after 9 to 12 months, 15 to 25 percent continue to be disturbed by these symptoms. This group with persistent symptoms may have distinct psychological, social, or biological factors that determine the presence of these ongoing problems. The search for risk factors that increase vulnerability to chronic PTSD occurred early in the history of the study of this disorder. The study of risk factors has become increasingly popular, emphasizing environmental and demographic factors, personality and psychiatric history, dissociation, cognitive and biological systems, and genetic or familial risk (Yehuda, 1999).

Brewin and colleagues (2000) conducted a meta-analysis of risk factors and found that gender, psychiatric history, history of child abuse, and prior adversity play a role in the development of PTSD. More important factors, however, were the severity of the trauma, ongoing stress, and lack of current social support.

RECOMMENDATION

1. All patients should be assessed for risk factors for developing ASD or PTSD. Special attention should be given to post-traumatic factors (i.e., social support and functional incapacity) that may be modified by intervention.
2. Because of the high prevalence of psychiatric comorbidities in the PTSD population, assessment for depression and other psychiatric comorbidities is warranted (see also VA/DoD Clinical Practice Guideline for the Management of MDD and Psychotic Disorders).

3. Substance use patterns of 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 the Management of Substance Use Disorders).

DISCUSSION

The following characteristics have been shown to be risk factors for the development of PTSD:

Pre-traumatic factors

- Ongoing Life Stress
- Lack of Social Support
- Pre-existing Psychiatric disorder
- Other pre-traumatic factors including: female gender, low socioeconomic status, lower level of education, lower level of intelligence, race (Hispanic, Japanese, other Ethnic minority), reported abuse in childhood, report of other previous traumatization, report of other adverse childhood factors, family history of psychiatric disorders, poor training or preparation for the traumatic event

Peri-traumatic or trauma related factors

- Severe Trauma
- Type of trauma (interpersonal traumas such as torture, rape or assault convey high risk of PTSD)
- High perceived threat to life
- Age at trauma (School age youth, 40-60 yo)
- Community (Mass) Trauma
- Other peri-traumatic factors including: history of peri-traumatic dissociation and interpersonal trauma

Post-traumatic factors

- Ongoing Life Stress
- Lack of Social Support
- Bereavement
- Major Loss of Resources
- Other post-traumatic factors including: children at home and female with distressed spouse

Individually, the effect size of all the risk factors was modest, but factors operating during or after the trauma, such as trauma severity, lack of social support, and additional life stress, had somewhat stronger effects than pretrauma factors (Brewin et al., 2000).

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, 2002a; Brewin et al., 2000; Ozer et al., 2003). Green et al. (2000) surveyed 1,909 college-aged women and found that those who had experienced interpersonal trauma, and those who had experienced multiple traumas, experienced "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 & Stein 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" (2000). The authors believe that an understanding of gender differences in PTSD rates may eventually help reveal the underlying cause of this disorder.

Pre-existing psychiatric problems are associated with more adverse response to trauma (Norris et al., 2002). Breslau (2002a), in a review of recent epidemiological studies, found that preexisting psychiatric disorder was one of 3 factors that had a predictable effect on the development of PTSD. Both recent 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 f*amily history* of psychiatric disorders may also contribute to a person's vulnerability to PTSD. Brewin and colleagues 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 (2000).

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 his 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, and in a meta-analysis, Brewin et al., (2000) found that "factors operating during or after the trauma, such as trauma severity, lack of social support, and additional life stress, had somewhat stronger effects than pretrauma factors." 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 (2000), the perceived threat of homicide played a role in later development of PTSD. 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, and 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. (1998a) 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 experience of trauma 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 the 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 trauma 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. And 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 are 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.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
	Pre-trauma				
1	Prior exposure to traumatic events	Breslau et al., 1999a Brewin et al., 2000 Dougall et al., 2000 Green et al., 2000 Maes et al., 2001 Neria et al., 2002 Ozer et al., 2003 Seedat & Stein, 2000 Zatzick et al., 2002	II I II II II II I II II	Good	B
2	Female gender	Breslau, 2002b Breslau et al., 1999b Brewin et al., 2000 Finnsdottir & Elklit, 2002 Neria et al., 2002 Seedat & Stein, 2000 Stretch et al., 1998 Zatzick et al., 2002	II II I II II II II II	Good	B
3	Psychiatric disorders or personality dimensions	Breslau, 2002a Brewin et al., 2000 Maes et al., 2001 Norris et al., 2002 Ozer et al., 2003	III I II III I	Good	B
4	Cognitive factors: Lower intelligence Neurological soft signs	Brewin et al., 2000 Gurvits et al., 2000	I II	Good	B
5	Parental or family history of PTSD	Yehuda et al., 1998b	II	Poor	I
6	Childhood abuse/assault	Breslau et al., 1999a Breslau, 2002a Brewin et al, 2000 Neria et al., 2002	II III I II	Good	B
7	Low educational level or socioeconomic status	Armenian et al., 2000 Brewin et al., 2000 Bromet et al., 2002 Finnsdottir & Elklit, 2002	II I II II	Good	B
	Peri-trauma				
8	Severity of trauma Perceived life threat	Armenian et al., 2000 Brewin et al., 2000 Feehan et al., 2001 Ozer et al., 2003 Woods, 2000	II I II I II	Good	B
9	Peri-traumatic dissociation	Ozer et al., 2003	I	Good	B
10	Youth at time of exposure	Brewin et al., 2000 Finnsdottir & Elklit, 2002 Neria et al., 2002 Norris et al., 2002	I II II III	Good	B
11	Biological factors such as HR increase	Shalev et al., 1998 Yehuda et al., 1998a	II II	Fair	C
	Post-trauma				
12	Resource loss/unemployment	Feehan et al., 2001 Norris et al., 2002	II III		B

	Recommendation	Sources	QE	Overall Quality	R
13	Impaired social support system	Armenian et al., 2000 Brewin et al., 2000 Gregurek et al., 2001 Ozer et al., 2003	II I II I	Good	B
14	Health problems	Norris et al., 2002	III	Poor	I
15	On-going life stress	Brewin et al., 2000 Norris et al., 2002	I III	Good	

QE = Quality of Evidence; R = Recommendation (see Appendix A)

Table B-3. Studies Of Risk Factors For PTSD

Author	Number	Population	Risk Associated With	Method	QE
Armenian 2000	154	Disaster victims	Severity of trauma Lack of education Lack of social support	Interview	II
Breslau 1999a	2181	General	Previous exposure Multiple exposures Childhood assault	Phone survey	II
Breslau 1999b	2181	General	Female	Phone survey	II
Breslau 2002a	N/A	N/A	Psychiatric disorder Family history of disorder Childhood trauma	Lit review	III
Breslau 2002b	2181	General	Female	Phone survey	II
Brewin 2000	90,000	N/A	Lack of social support Life stress Trauma severity Adverse childhood Low intelligence Childhood abuse Low socio-econ. status Family psych history Female Previous trauma Lack of education Young age Minority race	Meta analysis	II
Bromet 2002	600	Disaster victims	Disadvantaged	Interview	II
Dougall 2000	108	Crash site workers	Multiple exposure	Survey/interview	II
Fauerbach 2000	70	Burn survivors	Neuroticism	Interview	II
Feehan 2001	374	General	Trauma severity (M) Relation to assailant (F) Unemployment	Interview	II
Finnsdottir & Elklit 2002	104	Disaster victims	Loss of family member Female Young age Lack of education	Questionnaire	II
Green 2000	1909	Sophomore women	Multiple exposure	Questionnaire	II

Author	Number	Population	Risk Associated With	Method	QE
Gregurek 2001	42	Croatian vets	Lack of social support	Questionnaire	II
Gurvits 2000	21 F 38 M	Sex abuse Combat vets	Neurologic soft signs	Exam and tests	II
King 1999	432 F 1200M	Veterans	War-related stressors Post-trauma variables	Questionnaire?	II
Maes 2001	127	Disaster victims	Previous trauma History of phobia Loss of control Alcohol intoxication (decrease the odds)	Interview	II
Neria 2002	426	Psychiatric patients	Female Young age Previous trauma Childhood abuse	Interview	II
Norris 2002	60,000	Disaster victims	Psychological problems Distress (nonspecific) Health problems Life stress Resource loss Youth	Empirical review	III
Ozer 2003	68 studies	N/A	Peritraumatic dissociation Perceived life threat Post trauma social support Peritraumatic emotional responses Family psych history Previous trauma Prior psych adjustment	Meta analysis	I
Shalev 1998	86	Trauma victims ED	Heart rate elevation	PE	II
Stretch 1998	1000	Active duty	Female	Questionnaire	II
True 1993	4042 twin pair	Viet vets	Genetic influence	Self-report	II
Woods 2000	160	Abused women	Trauma severity Risk of homicide	Interview/assess	II
Yehuda 1998a	N/A	ED patients	Increased heart rate Low cortisol levels	Physical assessment	II
Yehuda 1998b	22 22	Holocaust survivors Offspring	Parental PTSD	Interview/assess	II
Yehuda 1999	N/A	Holocaust offspring	Parental PTSD	Lit review	III
Yehuda 2000	35 15	Holocaust controls	Low cortisol levels	Urinary cortisol	II
Zatzick 2002	101	Trauma victims	Previous trauma Female Intoxication	Interview	II

A PubMed clinical query was used to supplement the findings of two recent meta analyses (Brewin et al., 2000; Ozer et al, 2003). The clinical query for etiology identifies case-control and cohort studies. In addition, a few studies recommended by the workgroup have been included.

G. Are There Clinical Significant Symptoms Suggestive Of PTSD Or ASD?

BACKGROUND

Primary care providers should be comfortable performing the initial evaluation and management of ASD and PTSD.
Please refer to Annotation A for a discussion of post-traumatic symptoms.

RECOMMENDATION

1. Primary care providers should formulate a presumptive diagnosis of stress related disorder consistent with the DSM IV criteria for ASD and PTSD.
2. Primary care providers should consider initiating treatment or referral based on a working diagnosis of stress related disorder.
3. Patients with difficult or complicated presentation of the psychiatric component should be referred to mental health specialty for diagnosis and treatment.

DISCUSSION

Approximately 90 percent of patients with a mental health diagnosis are seen in primary care (Gebhart, 1996). Primary care providers often do not have 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.

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, as well as those with functional impairment because of acute physiological symptoms (e.g., arousal).

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 resources. 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 treating the patient.

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.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Working diagnosis.	Working Group Consensus	III	Poor	C
2	Limited criteria for working diagnosis.	Working Group Consensus	III	Poor	C
3	Initiate treatment/referral based on working diagnosis.	Working Group Consensus	III	Poor	C

QE = Quality of Evidence; R = Recommendation (see Appendix A)

DSM-IV Criteria for Stress Disorders

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 benefit 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. A diagnosis of ASD is given when an individual experiences significantly distressing symptoms of

reexperiencing, 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 B-4. DSM-IV Criteria for Stress Disorders

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 reexperienced 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, 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 preexisting Axis I or Axis II disorder.

Diagnostic criteria for 309.81 Post-traumatic Stress Disorder (DSM-IV)

A. The person has been **exposed to a traumatic event** in which both of the following were present:
- (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

B. The traumatic event is persistently **reexperienced** in one (or more) of the following ways:
- (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

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:
- (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)

D. Persistent symptoms of increased **arousal** (not present before the trauma), as indicated by two (or more) of the following:
- (1) difficulty falling or staying asleep
- (2) irritability or outbursts of anger
- (3) difficulty concentrating
- (4) hypervigilance
- (5) exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is **more than 1 month.**

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

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

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 nonmedical 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.

H. Patient Education

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 part 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 patient's significant others so that they can more effectively support the patient's recovery.

RECOMMENDATIONS

1. Trauma survivors should be educated about PTSD symptoms, other potential consequences of exposure to traumatic stress, practical ways of coping with traumatic stress symptoms, processes of recovery from ASD/PTSD, and the nature of treatments.

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, providing simple advice regarding coping, explaining what he or she can do to facilitate recovery, and describing 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 helping activity. It can be delivered to individuals or to groups. Because those 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:

1. *Nature of PTSD symptoms:* It is often useful to help the survivor identify and label the reactions that he or she may be experiencing, recognize that emotional and physical reactions are very common (and not dangerous), 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.

2. *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, simple information can also 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: relaxation methods, 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.
3. *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. This can help build motivation to participate or persist in treatment.

Despite the ubiquity of education in PTSD treatment, and a strong clinical consensus as to the importance of such education, there is little evidence bearing on its impact on chronic PTSD. Education has usually been a component of empirically-supported treatments, but it 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	Overall Quality	R
1	Education regarding the trauma, its effects, ways of coping, and the treatment process.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

I. Coexisting Severe Mental Conditions

OBJECTIVE

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

BACKGROUND

Comorbid medical and psychiatric conditions are important to recognize, because they can modify clinical determinations of prognosis, patient or provider treatment priorities, and setting where PTSD care will be provided. Patients with PTSD have been found to frequently report physical symptoms and to utilize high levels of medical care services. Providers should also expect that 50 to 80 percent of patients with PTSD have one or more coexisting mental disorders. Some comorbid 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) initiating PTSD treatment.

RECOMMENDATIONS:

1. Primary care providers should recognize that medical disorders/symptoms, mental disorders, and psychosocial problems commonly coexist with PTSD and should screen for them during the evaluation and treatment of PTSD.
2. Consider the existence of comorbid conditions when deciding whether to treat patients in the primary care setting or refer them for specialty mental health care.

DISCUSSION

Comorbid conditions and psychosocial problems of greatest interest to the primary care provider include:

1. *Medical conditions:* 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.
2. *Substance use disorders:* Patients with PTSD frequently use alcohol 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 (See annotation J) 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 I - Concurrent PTSD and Substance Abuse).
3. *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 agoraphobia. 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. Comorbid disorders that are less common with PTSD, but not rare, include psychotic disorders and bipolar disorder, and somatization or medically unexplained physical symptoms. Practitioners should be alert to comorbid eating disorders, such as bulimia, particularly in women.
4. *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 health care provider.
5. *Psychosocial problems:* Associated behavior problems and psychosocial deficits commonly present in patients with chronic PTSD include:
    - Homelessness
    - Suicidality
    - Domestic violence or abuse
    - Explosive aggression
    - Chronic pain, medically unexplained symptoms, and “somatization”

The clinician will need to determine the best strategy for prioritizing and treating multiple disorders. One key decision concerns whether these disorders should be treated concurrently or consecutively. Another choice point is whether PTSD and its psychiatric comorbidities should be treated in the primary care setting or referred to specialty mental health care. A number of guidelines or principles should be considered in making these treatment decisions:

- Integrated care models have several advantages, where the physical and mental health needs of patients are addressed in a single setting by a multidisciplinary provider team.
- 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 comorbid mental disorders that are severe or unstable. (Examples include: patients whose depression is accompanied by suicidality, patients with substance dependence disorder, 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.
- Primary care clinicians may decide to refer for specialized psychiatric care at any point, depending on how comfortable they are in treating PTSD, the particular needs and preferences of the patient, and the availability of other services.

A number of logistical, provider, and resource restrictions may also influence the decision about how to best provide treatment for patient's comorbid disorders. Factors to consider when developing the most appropriate treatment plan include:

- Local resource availability (mental health, primary care, integrated care, Vet Centers, other)
- Level of provider comfort and experience in treating psychiatric comorbidities
- Patient preferences
- The need to maintain a coordinated continuum of care for chronic comorbidities
- Availability of resources and time in engaging in the treatment of the diseases

For patients referred to specialty mental health care, it is important to preserve the continuity of care by ensuring ongoing communication with the primary care provider and to coordinate care when multiple providers are involved.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Screen for medical disorders/symptoms, mental disorders, and psychosocial problems that commonly coexist with PTSD during the evaluation and treatment of PTSD.	Working Group Consensus	III	Poor	I
2	Stabilization of acute coexisting medical and/or psychiatric disorders prior to initiating PTSD treatment.	Working Group Consensus	III	Poor	I
3	Consider the existence of comorbid conditions when deciding whether to refer to specialty mental health care.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

J. Concurrent PTSD and Substance Abuse

OBJECTIVE

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

BACKGROUND

Research has documented a strong relationship between PTSD and substance abuse problems in civilian and military populations of both genders (e.g., NVVRS; Kessler et al., 1995). For example, among male veterans seeking treatment for combat-related PTSD, high rates of lifetime alcohol use disorders and drug abuse/dependence have been documented (Roszell et al., 1991). Similarly, an extensive literature has documented high rates of PTSD among male veterans seeking substance abuse treatment. For example, Triffleman et al. (1995) found that 40 percent of substance abuse inpatient veterans had a lifetime history of combat-related PTSD, 58 percent had a lifetime history of PTSD due to combat or other traumatic exposure, and 38 percent had current PTSD.

A prospective and retrospective study (Breslau et al., 2003) reported an increased risk for the onset of nicotine dependence and drug abuse or dependence in persons with PTSD, but no increased risk or a significantly (P = .004) lower risk (for nicotine dependence, in the prospective data) in persons exposed to trauma in the absence of PTSD, compared with unexposed persons. Exposure to trauma in either the presence or the absence of PTSD did not predict alcohol abuse or dependence.

Clinicians should note that substance abuse may mask or suppress PTSD symptoms, causing an individual to apparently fail to meet criteria for PTSD diagnosis.

RECOMMENDATIONS

1. Substance use patterns of clients with trauma histories or PTSD should be routinely assessed (see the VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders).
2. Substance abusers should be routinely screened for trauma exposure and PTSD.
3. Integrated PTSD-Substance Abuse Treatment should be considered.
4. Substance-abusing patients with PTSD should be educated about the relationships between PTSD and substance abuse, referred for concurrent PTSD treatment, or provided with integrated PTSD/Substance Abuse treatment.
5. Substance Abuse-PTSD patients should receive follow-up care that includes a continued focus on PTSD issues.

DISCUSSION

Substance abusers with PTSD experience higher levels of subjective distress and other problems than substance abusers without PTSD. For instance, compared with women who abuse substances but do not meet diagnostic criteria for PTSD, female PTSD-substance abusers report greater psychopathology, substance abuse problems, dissociation, and behaviors associated with borderline personality disorder (e.g., Ouimette et al., 1996). Patients with concurrent PTSD and substance abuse may benefit less from conventional substance abuse treatment than those with substance abuse only (Ouimette et al., 1998a), and PTSD is frequently under-diagnosed among individuals receiving treatment for substance abuse (Dansky et al., 1997). These considerations have led some authorities to develop specialized treatments that integrate treatment for PTSD and substance abuse (Najavits, 2002; Triffleman et al., 1999).

Therapies that integrate treatment for PTSD and substance abuse are now being developed and evaluated. The most studied approach is the "Seeking Safety" treatment that is available in manualized form (Najavits, 2002), has preliminary evidence of effectiveness for both substance abuse and PTSD, and is being evaluated in RCTs. This latter treatment is an "early treatment" or "first stage" present-centered therapy for substance use and PTSD that is organized around issues of safety and self-care; it does not promote exploration of trauma histories via narrative accounts or exposure treatment. It is a 25-session treatment that teaches trauma- and substance abuse-related behavioral (e.g., emotional "grounding"), cognitive (e.g., getting out of "user thinking" and "victim thinking"), and interpersonal (e.g., self-protection in relationships) coping skills.

More generally, because substance abusers with 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.

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.

12-step programs can play an important role in the treatment of PTSD/substance abuse. In PTSD/substance abuse veterans hospitalized for substance abuse disorder, greater 12-step involvement was associated with a number of positive changes during treatment (Ouimette et al., 1998b) and with remission from substance abuse/dependence over a two-year period. Involvement in 12-Step groups may be especially helpful for patients who are socially isolated, lack positive social activities and social support, or lack a social group supportive of abstinence. It is possible that PTSD patients may have special difficulties in affiliating with the groups (e.g., social anxiety, social skills deficits, difficulties with intimacy and trust, feeling unsafe in groups of people) and it may be appropriate in some circumstances for clinicians to target affiliation as a treatment goal. With regard to women, consideration should be given to the fact that exposure to 12-step environments

comprised largely of men may present a real problem for those with a history of male-perpetrated sexual assault; use of women's meetings may be preferable, especially early in recovery.

Although little is known about the management of substance abuse in the context of acute stress reactions, one RCT has demonstrated that brief intervention with those admitted to the hospital for injury can reduce alcohol consumption and injury recidivism (Gentilello et al., 1999).

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Routine assessment of substance use patterns of clients with trauma histories or PTSD.	Working Group Consensus	III	Poor	I
2	Integrated PTSD-Substance Abuse treatment.	Working Group Consensus	III	Poor	I
3	Routine screening of substance abusing patients for trauma exposure and PTSD.	Dansky et al., 1997	III	Poor	I
4	Education for substance-abusing patients with PTSD about the relationships between PTSD and substance abuse, referral for concurrent PTSD treatment, or provision of integrated PTSD/substance abuse treatment.	Working Group Consensus Najavits, 2002 Ouimette et al., 1998	III	Poor	I
5	Follow-up care for substance abuse-PTSD patients to include a continued focus on PTSD issues.	Ouimette et al., 2000	II-3	Fair	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

K. Referral To Mental Health Specialty

OBJECTIVE

Provide guidance for primary care providers on optimal referral for PTSD patients.

BACKGROUND

Patients with PTSD have a complex and often challenging presentation. Evidence regarding the effectiveness of treatment modalities at this point is severely limited, but there is good evidence that cognitive behavioral therapy (CBT) is an effective intervention for ASD and PTSD. (See Module C for details of mental health treatment.)

RECOMMENDATIONS

1. Primary care providers should consult with a mental health provider and/or a PTSD Specialty Team for all patients with acute or chronic stress disorders.
2. Primary care providers should continue to be involved in the treatment of patients with acute or chronic stress disorders.
3. Treatment for patients with acute stress disorder or acute or chronic PTSD should involve a multi-disciplinary team approach to include OT, Spiritual Counseling, Recreation Therapy, Social Work, Psychology and/or Psychiatry.
4. Patients with clinically significant symptoms or co-morbidities to PTSD, including chronic pain, insomnia, anxiety, and depression, should receive treatment for those complicating problems.
5. Case Management should be provided, as indicated, to address high utilization of medical resources.

6. Consider referral for alternative care modalities as indicated for patient symptoms, consistent with available resources, and resonant with patient belief systems.

DISCUSSION

Because it is difficult for PCPs to be able to provide psychotherapy the Working Group recommends that primary care providers who identify patients with possible PTSD consider referral to a mental health or PTSD specialist early in the treatment algorithm. This referral should be made in consultation with the patient and with consideration of the patient's preferences.

In addition, because there are many other therapy modalities which can be initiated and monitored in the primary care setting (e.g., Pharmacotherapy and Supportive Counseling), the Working Group recommends that the primary care practitioner consider initiating therapy pending referral or if the patient is reluctant or unable to obtain mental health services. The primary care practitioner also has a vital role to play in the health of patients with PTSD by evaluating and treating comorbid somatic illnesses, by mobilizing community resources (e.g., OT, Family Support, Command and Unit supports, Family Members, and Chaplains), and by educating and validating the patient regarding his/her illness. It is vital that the primary care provider and the primary care team (including the Health Care Integrator) stay actively involved, in coordination with the mental health specialist, in the care of patients with PTSD.

Additional Points:

- Don't push patients, but encourage referral to mental health.
- Primary care providers should follow-up issues related to trauma after the initial visit.
- Primary care providers should ask questions about trauma related symptoms, but not delve into details of the trauma unless there is the time and skill to support the patient without causing retraumatization.

EVIDENCE

	Recommendation	**Sources**	**QE**	**Overall Quality**	**R**
1	Consultation/Referral to Mental Health/PTSD Specialist.	Working Group Consensus	III	Poor	I
2	Continued involvement of the primary care provider	Working Group Consensus	III	Poor	I
3	Multidisciplinary team approach.	Working Group Consensus	III	Poor	I
4	Patients with clinically significant symptoms or co-morbidities to PTSD, including chronic pain, insomnia, anxiety, and depression, should receive treatment.	Working Group Consensus	III	Poor	I
5	Case Management as indicated to address high utilization of medical resources.	Working Group Consensus	III	Poor	I
6	Referral for alternative care modalities as indicated for patient symptoms, consistent with available resources, and resonant with patient belief systems.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

L. Treatment in Primary Care

BACKGROUND

Primary care providers often treat patients with mental health disorders. Many options are available to primary care providers to treat stress-related disorders and to relieve the burden of suffering for ASD/PTSD patients, including pharmacotherapy, supportive counseling, hypnosis, and referral resources.

Since people who develop ASD are at greater risk of developing PTSD, they should be identified and offered treatment as soon as possible. Research suggests that relatively brief but specialized interventions may effectively prevent PTSD in some subgroups of trauma patients.

RECOMMENDATIONS

ALL PATIENTS with Stress Related Disorders

1. A supportive and collaborative treatment relationship or therapeutic alliance should be developed and maintained with patients with ASD/PTSD inclusive of their input in treatment planning.
2. Primary care providers should routinely provide the following services for all patients with stress related disorders, especially those who are reluctant to seek specialty mental health care:
    - Supportive counseling
    - PTSD-related education
    - Regular follow-up and monitoring of symptoms
    - Early recognition of PTSD
3. Primary care providers should consider consultation with mental health providers for patients with ASD/PTSD, who warrant a mental health referral but may be reluctant or refuse it.
4. Primary care providers should take leadership in convening a collaborative team for patients with PTSD. Team members may include the primary care providers, mental health specialists, chaplains, pastors, social worker, occupational or recreational therapists, Vet Centers, family support centers, exceptional family member programs, VA benefit counselors, peer-support groups, and others.

ASD

5. Because ASD does not occur in all people who later develop PTSD, consider treatment for acutely traumatized people with ASD, with severe PTSD symptoms as well as for those who are incapacitated by acute psychological or physical symptoms.
6. Patients with ASD should be monitored for development of PTSD. The use of validated PTSD symptom measure such as the PTSD Checklist should be considered (see Appendix D).
7. Primary care providers should consider pharmacologic management of disruptive symptoms (e.g., sleep) (see Pharmacotherapy for ASD).
8. Brief (4 to 5 sessions) of cognitive behavioral therapy (CBT) is an effective early intervention for patients with ASD. In addition to targeted brief interventions, some trauma survivors may benefit from follow-up provision of ongoing counseling or treatment.

PTSD

9. All patients with PTSD should have a specific primary care provider assigned to coordinate their overall healthcare.
10. Pharmacologic 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 once the patient has been referred to the mental health clinic (see Pharmacotherapy for PTSD).
11. Primary care providers should perform a brief PTSD symptom assessment at each visit. The use of a validated PTSD symptom measure, such as the PTSD Checklist, should be considered (see Appendix D).
12. Primary care providers should assess patients with PTSD for associated high-risk behaviors (e.g., smoking, alcohol/drug abuse, HIV and hepatitis risks) and comorbid medical and psychiatric illnesses.

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 doctor-patient relationship draws heavily on trust, respect, and openness, and since the relationship often has to be formed in a bureaucratic setting, the doctor may find the PTSD patient to be withholding, negativistic, or even hostile at the initial meeting. He or she may seem to have "an attitude." Over the years, many combat veterans have been misunderstood and misdiagnosed by otherwise competent professionals over exactly this dynamic. In transference terms, it's as if the patient brings to the initial meeting the full force of the traumatic experience. He may take on the persona of the combat soldier, the rape victim, or the assault or accident victim. If a therapeutic relationship is to have any opportunity to develop, the treatment provider often must make an internal shift from being a medical or psychiatric detective to being open, available and honest on a personal level. Some providers naturally relate in this way, but others have found that they are most useful when they "put on the white coat" and withdraw into a detached "professional" role. Unfortunately, medical schools and graduate schools often teach this role But, with the combat veteran as with most patients, the truly professional stance is one of caring and concerned involvement. The provider who relates from a stilted, defensive role will meet a veteran who does the same. If the provider wants to assist the patient in finding and re-developing trust in a core identity that has been shifted by combat or sexual assault, the provider must relate from his/her own core identity. 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 videotape of the same. Unsettling though it may be, the provider must understand the feelings of profound rage and grief that are involved in traumatic experiences. These feelings will be present in the interview setting and must be met with respect at a minimum. Another useful way to think about the combat veteran is that the individual has been subjected to an experience that has moved them away from their center and at the same time has developed a persona with PTSD diagnostic characteristics. At first, it may seem that this person has no real center in much the same way that a person with borderline personality disorder seems to lack a center. Their identity seems to have been redefined by their traumatic experience, and the provider is not accustomed to dealing with the features of this apparent new identity. The requirement is simply to first understand this aspect of the veteran's persona, and then to accept it, empathize with it, get curious about it, and welcome it home. The veteran himself is struggling with exactly the same tasks.

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 (1998a) 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. Bryant and Harvey (1998b) 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 postconcussive symptoms that could overlap with ASD symptoms. Their results were similar to previously reported findings: 14 percent met criteria for ASD; 6 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 (Foe et al. 1993); 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., 1998a , 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 at 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., (1998a) 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 CBT met criteria for PTSD, versus 67 percent in supportive counseling. One important caveat to these interventions is that dropout rate was high, and the authors concluded that *those with more severe symptoms may 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 preexisting mental health problems.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Monitor patient with ASD for development of PTSD. (ASD predictor of PTSD).	Brewin et al. 1999 Bryant et al, 1998a & 1998 b	I	Good	A
2	Brief intervention of CBT (4 to 5 sessions).	Bryant et al., 1998a Foe et al, 1995	I	Good	A

QE = Quality of Evidence; R = Recommendation (see Appendix A)

PTSD Treatment

Pharmacologic management of PTSD and related symptoms

It is usually feasible, depending on the provider's confidence and motivation in treating PTSD, to consider offering pharmacological therapies within the primary care setting.

- The symptom relief that medication provides allows most patients to participate more effectively in psychotherapy when their condition may otherwise prohibit it.
- Acute (emergency room) administration of propranolol in the immediate aftermath of a traumatic event appeared to prevent the later development of physiological hyperreactivity but neither reduced ASD nor prevented subsequent PTSD.
- Antidepressant medications may be particularly helpful in treating the core symptoms of PTSD—especially intrusive symptoms.

Refer to the evidence-based pharmacologic strategies for ASD and PTSD, summarized in the section on Pharmacotherapy Intervention of this guideline. The section also includes medication tables that summarize indications/benefits, contraindications/adverse effects, and usual dosages.

Supportive Counseling

Primary care-based supportive counseling for PTSD has received little study to date and cannot be endorsed as an evidence-based psychotherapeutic strategy. However, it may be the sole psychotherapeutic option available for the patient with PTSD who is reluctant to seek specialty mental health care. Elements for primary care-based supportive counseling for PTSD include helping patients brainstorm and solve problems of everyday living and problems presented by PTSD symptoms and sequelae (e.g., agoraphobia or other phobic avoidance), provision of PTSD-related psychoeducation, assisting patients in recognizing early signs and symptoms of PTSD relapse, and encouraging initiation of active coping strategies such as physical activity, relaxation strategies, and social and recreational activities.

Regular follow-up and monitoring

Regular follow-up with monitoring and documentation of symptom status should be part of primary care treatment of any chronic disease. Primary care providers should perform a brief PTSD symptom assessment at each visit (no more than quarter-annually is usually needed for the patient with apparently stable PTSD symptoms). The mnemonic "DREAMS" is an effective way for some primary care providers to remember cardinal PTSD symptom domains (Lange, 2000):

- **D**etachment
- **R**eexperiencing the event
- **E**vent had emotional effects
- **A**voidance
- **M**onth in duration (symptoms for >1 month)
- **S**ympathetic hyperactivity or Hypervigilance

The use of a pencil-paper measure of PTSD symptom severity such as the PTSD Checklist (see appendix D PCL) 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 related 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 health care

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 health care use.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Supportive, therapeutic alliance.	Working Group Consensus	III	Poor	I
2	Specific primary care provider assigned to coordinate overall health care.	Working Group Consensus	III	Poor	I
3	Pharmacologic treatment.	*See pharmacotherapy interventions*	-	-	-
4	Consider consultation with mental health providers.	Working Group Consensus	III	Poor	I
5	Implementation of a collaborative, team approach.	Working Group Consensus	III	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

M. Referral To Vet Centers

OBJECTIVE

Provide timely mental health services to veterans in need of support.

BACKGROUND

There are 206 Vet Centers nationwide that provide Readjustment Counseling Services (RCS) to combat era veterans. They are located in seven regions: Northeast, Mid-Atlantic, Central, Southeast, Southwest, Western Mountain and Pacific Western (http://www.va.gov/rcs). Legislation passed by Congress and signed into law by the President changed eligibility for Vet Center services (Public Law 104-262) and extended definition of the Vietnam era for war zone veterans (P.L. 104-275). Vet Centers serve the following veterans (see VHA DIRECTIVE 97-002, Jan. 9, 1997, for eligibility details):

- War Zone Veterans (all eras), including: Vietnam War, Korean War, World War II, and American Merchant Marines
- Vietnam era Veterans not in the War Zone: Lebanon, Grenada, Panama, Persian Gulf, and Somalia
- Operation Joint Endeavor, Operation Joint Guard, & Operation Joint Forge
- Sexually traumatized while in the military

Vet Center services include individual readjustment counseling, referral for benefits assistance, group readjustment counseling, liaison with community agencies, marital and family counseling, substance abuse information and referral, job counseling and placement, sexual trauma counseling, and community education.

RECOMMENDATIONS

1. Veterans with symptoms of PTSD should have an initial assessment of needs.
2. Veterans who are dangerous to self or others should be referred to the local VAMC or nearest emergency room.
3. Veterans who are seeking to have basic needs met should be referred to the VA Homeless Coordinator or community resources for food, shelter, or emergency financial assistance.
4. Veterans who are eligible for Vet Center services should have an in-depth psychosocial history taken, including a comprehensive military history and treatment plan.
5. Treatment plans in the Vet Center may include individual, family, or group therapy. Veterans can receive medical treatment or medication management at the Vet Center by a psychiatrist, RN, or ARNP or be referred to the local VAMC, CBOC, or community resources.

6. Veterans who are eligible for Vet Center services should be made aware of the Center resources and referred if the patient desires.

DISCUSSION

Veterans do not have to be service-connected to receive services at the Vet Center and are never billed for services. Family members can be seen to promote better understanding of the symptoms of PTSD and of how PTSD affects the family process.

Veterans initially seen at the Vet Center may or may not be service-connected, and may be homeless, psychotic or have other mental illnesses, actively using substances, suicidal or may just be seeking information.

Veterans initially seen in the primary care setting who are diagnosed with PTSD and are in need of a referral for treatment can be referred to the Vet Center for therapy. This is especially helpful if the veteran is not service-connected, cannot afford treatment, or feels uncomfortable in a hospital setting or sitting in large waiting areas with large numbers of people. If the veteran needs a referral to community services, the Vet Center is also available. The staff at the Vet Center is available for crisis intervention and works closely with VAMC staff during the assessment phase and in partnership during the course of treatment.

N. Assess Duty/Work Responsibilities And Patient's Fitness (In Relation To Military Operation)

BACKGROUND

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 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 to duty may also have implications for medical boards & vocational rehabilitation.

RECOMMENDATION

1. The determination of when to return a service member to duty should take into consideration the individual's service member's role, the complexity and importance of his job, and the service member's functional capabilities.
2. The continuing presence of symptoms of PTSD should not be considered as the sole basis for preventing a return to duty.

DISCUSSION

Practitioners who are managing patients suffering from stress reactions or PTSD should consider a variety of factors when deciding when the individual is ready to return to work or military duty.

First, what is the patient's job and level of responsibility? Patients in lower skill jobs (e.g., truck drivers, food service personnel, and basic supply functions) can be expected to function effectively despite continuing anxiety. In addition, the cost of functional failure of individuals in these roles is likely limited. In contrast, patients in higher skill jobs or those that involve more potent risks (e.g., artillery forward observers, combat controllers, physicians, and pilots) should not be returned to duty unless there appears to be a high probability that they have resumed effective functioning. Individuals in leadership positions should be required to demonstrate a higher level of reconstitution as errors on the part of these individuals can potentially lead to much greater consequences.

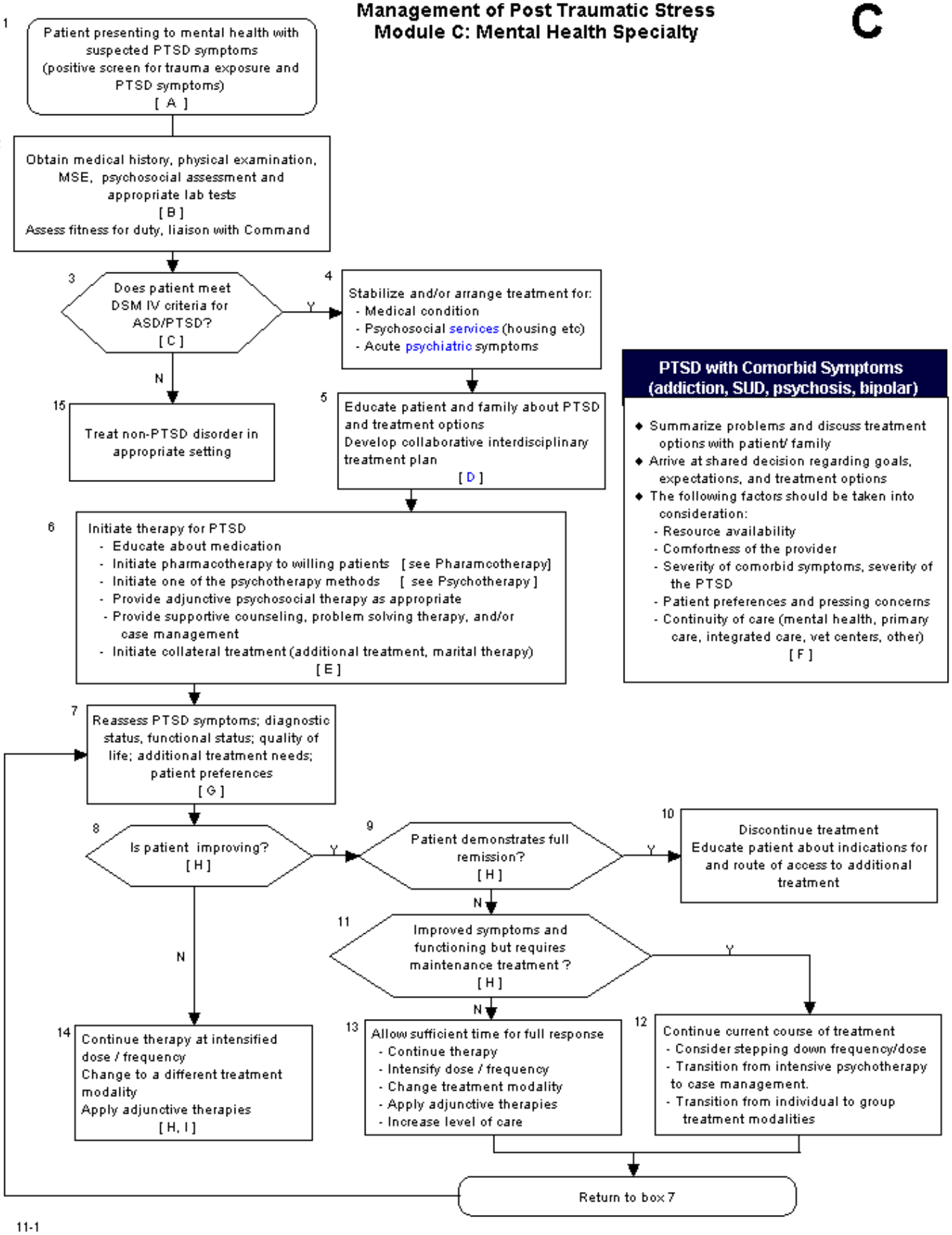
VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE MANAGEMENT OF **POST-TRAUMATIC STRESS**

MODULE C

MANAGEMENT OF PTSD IN MENTAL HEALTH SPECIALTY CARE

VA/DoD Clinical Practice Guideline for the Management of Post Traumatic Stress Module C: Mental Health Specialty

C



11-1

ANNOTATIONS

A. Patient Presenting To Mental Health With Suspected PTSD Symptoms,

RECOMMENADTIONS

Assessment in Mental Health Specialty

1. Mental health clinicians should obtain a comprehensive diagnostic assessment that includes, but is not limited to, the symptoms that characterize PTSD (see DSM IV, 1994).
2. Routine use of self-administered checklists may ensure systematic, standardized, and efficient review of the patient's symptoms and history of trauma exposure (see Appendix C [PCL-C]).
3. The assessment should also include review of other salient symptoms (guilt, dissociation, derealization, depersonalization, reduction, and awareness of surrounding) that impact on treatment decisions. Structured psychiatric interviews, such as the clinician administered PTSD scale (CAPS), may be considered.

For discussion see CORE Module Annotation D, and Module B – Management of ASD and PTSD in Primary Care Annotations A and B

B. Obtain Medical History, Physical Examination, MSE, Psychosocial Assessment, And Appropriate Lab Tests

See Module B: Management of ASD & PTSD in Primary Care, Annotation D, E and F

C. Does Patient Meet DSM-IV Criteria For ASD/PTSD?

OBJECTIVE

Diagnose ASD/PTSD by DSM-IV criteria

RECOMMENDATIONS

1. Diagnostic criteria should be documented in the medical record

DISCUSSION

DSM-IV DEFINITIONS

When an individual who has been exposed to a traumatic event develops anxiety symptoms, reexperiencing of the event, and avoidance of stimuli related to the event lasting less than four weeks they may be suffering from this Anxiety Disorder.

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

1. 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
2. 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)
3. The traumatic event is persistently reexperienced 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.
4. Marked avoidance of stimuli that arouse recollections of the trauma (e.g., thoughts, feelings, conversations, activities, places, people).
5. Marked symptoms of anxiety or increased arousal (e.g., difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, motor restlessness).
6. 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.
7. The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event.
8. 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 preexisting Axis I or Axis II disorder.

When an individual who has been exposed to a traumatic event develops anxiety symptoms, reexperiencing of the event, and avoidance of stimuli related to the event lasting more than four weeks, they may be suffering from this Anxiety Disorder.

Diagnostic criteria for 309.81 Post-traumatic Stress Disorder (DSM-IV)

G. 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. Note: In children, this may be expressed instead by disorganized or agitated behavior

H. The traumatic event is persistently reexperienced in one (or more) of the following ways:
(3) 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.
(4) recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.
(5) 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.
(6) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
(7) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

I. 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:
(8) efforts to avoid thoughts, feelings, or conversations associated with the trauma
(9) efforts to avoid activities, places, or people that arouse recollections of the trauma
(10) inability to recall an important aspect of the trauma
(11) markedly diminished interest or participation in significant activities
(12) feeling of detachment or estrangement from others
(13) restricted range of affect (e.g., unable to have loving feelings)
(14) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

J. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
(6) difficulty falling or staying asleep
(7) irritability or outbursts of anger
(8) difficulty concentrating
(9) hypervigilance
(10) exaggerated startle response

K. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

L. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

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

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.
- hese 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 nonmedical 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.

D. Educate Patient And Family About Treatment Options; Develop Collaborative And Interdisciplinary Treatment Plan

See Module B: Management of ASD & PTSD – Primary Care, Annotation H

E. Initiate Therapy For PTSD

See Intervention Module

F. PTSD With Other Comorbid Symptoms (Addiction, SUD, Psychosis, Bipolar) [Sidebar]

See Module B: Management of ASD & PTSD in Primary Care, Annotations I and J

G. Reassess PTSD Symptoms; Diagnostic Status, Functional Status; Quality Of Life; Additional Treatment Needs; Patient Preferences

OBJECTIVE

Assess patient status following therapeutic intervention to determine future direction

RECOMMENDATIONS

1. Follow-up status of patients with PTSD should be monitored at least every three months. Use interview and questionnaire methods to assess PTSD symptoms and function.
    - Diagnostic status and symptom severity
    - Functional status / Health-related quality of life
    - Psychosocial treatment needs
    - Patient preferences
    - Therapy adherence
    - Adverse treatment effects

DISCUSSION

Patients should be assessed 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 recommended in this guideline demonstrate clinically significant changes during this time frame. Assessment of the following domains is advised: (a) diagnostic status and symptom severity of PTSD and comorbid mental disorders and 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 treatment 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 PTSD – Primary Care Module, 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. This information is also a useful form of feedback to be shared 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. Alternatively, a patient-administered clinical outcome questionnaire that assesses all domains is available for clinical assessment and program monitoring. This instrument is available through the VA Northeast Program Evaluation Center.

H. Follow-Up In Mental Health

RECOMMENDATIONS

1. If patient does not improve or status worsens, consider one of the following treatment modification options:
    - Continued applications of the same modality at intensified dose and/or frequency
    - Change to a different treatment modality
    - Apply adjunctive therapies
    - Increase level of care (e.g., referral facility, partial hospitalization, inpatient hospitalization, residential care)
    - Consider a referral to adjunctive services for treatment of comorbid disorders or behavioral abnormalities (e.g., homelessness, domestic violence or aggressive behavior)
2. If patient demonstrates partial (insufficient) remission, consider one of the following treatment modification options:
    - Continue the present treatment modality to allow sufficient time for full response
    - Continue applications of the same modality at intensified dose and/or frequency
    - Change to a different treatment modality
    - Apply adjunctive therapies
    - Increase level of care (e.g., referral facility, partial hospitalization, inpatient hospitalization, residential care)
    - Consider a referral to adjunctive services for treatment of comorbid disorders or behavioral abnormalities (e.g., homelessness or domestic violence)
3. If patient demonstrates improved symptoms and functioning but requires maintenance treatment:
    - Continue current course of treatment
    - Consider stepping down the type, frequency, or dose of therapy
        - Transition from intensive psychotherapy to case management contacts
        - Transition from individual to group treatment modalities
    - Discuss patient status and need for monitoring with the primary care provider
    - Consider a referral to adjunctive services for treatment of comorbid 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:
    - Discontinue treatment
    - Educate the patient about indication and route of future care access
    - Monitor by primary care for relapse/exacerbation

DISCUSSION

Patient does not improve or status worsens:

Reassessment of patients' clinical status may occasionally show that symptoms and/or functional status is failing to improve or is deteriorating in a sustained way. It is important to determine that 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 undergoing exposure therapy 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 his/her in the decision to continue with the current method of treatment. Increasing session contacts and or increasing the dose of medications may provide support needed to alter the outcome of treatment.

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. Some patients find exposure therapy too distressing and may need to postpone that type of intervention, in favor of using an approach that is more easily tolerated (e.g., cognitive therapy and symptom management approaches).

Another approach is to hold the course of a current therapy, which may appear ineffective, but apply adjunctive treatments (see 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 return to outpatient management after greater stabilization of symptoms have been achieved.

Often, progress in PTSD treatment may by 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 reassessment.

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 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 responsivity 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.

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 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 contact (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 referring 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.

I. Referral

OBJECTIVE

Treat symptoms, support function, and alleviate suffering in those patients with PTSD who are unwilling, unable, or unsuitable for treatment in a mental health setting.

RECOMMENDATIONS

1. Evaluate psychosocial function and refer for psychosocial services, as indicated. Available resources include, but are not limited to: chaplains, pastors, Family Support Centers, Exceptional Family Member Programs, VA benefit counselors, occupational or recreational therapists, Vet Centers, and peer-support groups.
2. Provide case management, as indicated, to address high utilization of medical resources.
3. Consider psychotherapeutic interventions as appropriate for level of training and available resources.
4. 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

DISCUSSION

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 the 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.

EVIDENCE

	Recommendations	**Sources**	**QE**	**Overall Quality**	**R**
1	Consultation/referral to a mental health/PTSD specialist.	Working Group Consensus	III	Poor	I
2	Continued involvement of the primary care provider	Working Group Consensus	III	Poor	I
3	Multidisciplinary team approach	Working Group Consensus	III	Poor	I

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

EVIDENCE-BASED INTERVENTION FOR TREATMENT OF PTSD

INTERVENTIONS

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PHARMACOTHERAPY INTERVENTIONS

A. ACUTE STRESS DISORDER (ASD) PHARMACOTHERAPY

Table 1: Summary Table

R	Significant Benefit	Some Benefit	Unknown	No Benefit/Harm
A				
B		Imipramine		
C		Propranolol		
I			Benzodiazpines Other Sympatholytics Other Antidepressants Anticonvulsants Atypical Antipsychotics Choral Hydrate	
D				Typical Antipsychotics

R_= level of recommendation (see appendix a)
Although the effectiveness of SSRI has been demonstrated for PTSD – it has not been tested in ASD and therefore can not be recommended.

OBJECTIVE

To lessen the physical, psychological, and behavioral morbidity associated with acute stress reaction, hasten the return to full function (duty, work, social role function), and diminish the likelihood of chronicity.

BACKGROUND

Stress reactions produce biologic, psychological, and behavioral changes. Biologic alterations include disruptions in nerurochemicals, sleep patterns, hyper-arousal, and somatic symptoms (e.g., pain, gastrointestinal symptoms, etc). Psychological changes include: mood disturbances (e.g., labiality, irritability, blunting, numbing) anxiety (e.g., increased worry, ruminations) and cognitive disturbances (e.g., memory impairment, confusion, and impaired task completion. Different types of trauma can lead to ASD, from interpersonal assaultive violence to accidents to combat related trauma. For example, as many as ninety percent of individuals whom experience sexual assault will have acute stress symptoms (Breslau, 1996).

Empiric studies in ASD pharmacotherapy are lacking. To facilitate provision of physical needs, normalization, and psycho-education, it may be prudent to wait 24 to 48 hours before beginning medications. Pharmacotherapy may be aided by determining whether the patient suffers from excessive adrenergic arousal or symptoms of psychomotor withdrawal. If non-pharmacological treatments fail to improve symptomatology, and potential medical causes of neuropsychiatric impairment are ruled out, then medications may be considered.
The use of medications for short-term treatment of targeted symptoms may be beneficial (e.g. Insomnia).

RECOMMENDATIONS

1. Recommend provide for physical needs, sleep, normalization, and other non-pharmacological modalities.
2. Consider the use of medication for individuals that do not respond to non-pharmacological treatment.
3. Consider the use of imipramine to ameliorate the symptoms of ASD
4. Consider a short course of medication targeted for specific symptoms.

- Sleep disturbance/insomnia
  - Benzodiazepines (up to 5 days)
  - Chloral hydrate (up to 5 days)
- Hyperarousal/excessive arousal/panic attacks
  - Propranolol and other anti-adrenergic agents (up to 10 days)
  - Imipramine (up to 7 days)
  - Benzodiazepines (up to 5 days) avoid short acting agent [e,g, alprazolam])

5. There is insufficient evidence to support a recommendation for preventative use of a pharmacological agent to prevent the development of PTSD
6. There is insufficient evidence to support a recommendation for PTSD pharmacotherapies for patient presenting symptoms for less than 4 weeks.

DISCUSSION

Few studies have examined the effectiveness of pharmacological treatment for acute symptom management and PTSD prevention during the first four weeks following a traumatic event. There are no double-blind, placebo-controlled trials investigating the utility of benzodiazepines to prevent PTSD. Some descriptive studies do exist, however. The evidence for the use of benzodiazepines is mixed. In an open-label trial short-term use of benzodiazepine for sleep was associated with acute reduction in post-traumatic symptoms (Mellman et al., 1998). Four patients with acute stress symptoms that included disturbed sleep were treated within 1 to 3 weeks of trauma exposure with temazepam. The drug was administered for 5 nights, tapered for 2 nights, then discontinued. Evaluations 1 week after the last dose of medication revealed improved sleep and reduced stress symptoms.

Another open-label study found that early, more prolonged benzodiazepine use was associated with a higher rate of subsequent PTSD (Gelpin et al., 1996). This open study followed 13 patients that received clonazepam 2.7 mg/d $\pm$ 0.8 mg/d or alprazolam 2.5 mg/d within 6.7 $\pm$ 5.8 days of a traumatic event and 13 pair-matched trauma survivors for 6 months. Nine (69%) of the benzodiazepine-treated patients compared to only 3 (23%) of the control patients met criteria for PTSD (p = NS).

Propranolol may be considered for treatment of post-event hyperarousal. One study suggests that treatment with a beta-adrenergic blocker following an acute psychologically traumatic event may reduce subsequent post-traumatic stress disorder (PTSD) symptoms (Pitman et al., 2002). Within 6 hours of a traumatic event patients were randomized to a 10-day course of propranolol (n = 18) versus placebo (n = 23) 40 mg four times daily. The mean (SD) 1-month Clinician-Administered PTSD Scale (CAPS) score of 11 propranolol completers was 27.6 (15.7) compared to 20 placebo completer's average score of 35.5 (21.5) (t = 1.1, df = 29, p = 0.15). Two propranolol-treated patients' scores fell above, and nine below, the placebo group's median (p = 0.03,sign test). None of the eight propranolol-, but six of 14 placebo-treated patients were physiologic responders during script-driven imagery of the traumatic event when tested 3 months afterward (p = 0.04, one-tailed t-test). These pilot results suggest that acute, post-trauma propranolol may have a preventive effect on subsequent PTSD.

A prospective, randomized, double blind study of pediatric (mean age 8, range 2 – 29) burn patients determined the effect of imipramine (n=12) and chloral hydrate (n=13) on ASD symptoms for 7 days (Robert et al., 2000). These children had a mean total burn area of 45% and received a structured interview 3 times over the study period. Five of 13 (38%) patients that received chloral hydrate compared to 10 of 12 (83%) imipramine-treated patients ($p<0.02$) was considered improved.

There are no controlled trials of the usefulness of antihistamines or antidepressants for the management of ASD (Cochrane Database Pharmacotherapy Review 2002). Open trials and clinical experience with clonidine, guanfacine, and prazosin suggest they maybe useful for ASR; however, they have not been systematically studied.

There is insufficient research to support a recommendation for preventative use of a pharmacological agent to prevent the development of PTSD (Cochrane Systematic Review of PTSD 2002).

Future research should included additional studies of prevention and comparative trials between agents. Research questions that remain include the timing of non-pharmacological and pharmacological intervention(s), the type of

trauma and between drug class and within drug class response, dose-response trials, the relationship between treatment trial duration and outcome, the effects of demographics (e.g., age, gender, culture) on treatment outcomes, pharmacotherapy and psychosocial therapy interactions, the effect of co-morbid diagnoses on treatment response, and the psychobiologic correlates of treatment response. Also, the effect of clinical setting (e.g., military versus civilian), treatment-compensation interactions, and the effect of PTSD severity on outcome should be investigated. Standardization of assessment measures should be addressed that would include scales for individual symptoms, global assessment, and quality of life, as well as the psycholobiological correlates of treatment response.

EVIDENCE

	Recommendation	**Sources**	**QE**	**Overall Quality**	**Net Effect**	**Grade**
1	Provide for physical needs, sleep, normalization	Working Group Consensus	III	Poor	-	-
2	Pharmacological treatment for individuals not responding to attention to physical needs, sleep, and normalization	Working Group Consensus	III	Poor	-	I
3	Benzodiazepines for sleep disturbance/insomnia/hyperarousal/excessive arousal/panic attacks	Gelpin et al 1996 Mellman et al 1998 Mellman et al 1998	II-2	Fair	M	C
3	Chloral hydrate for sleep disturbance/insomnia	Robert et al 2000	I	Fair	S	C
3	Imipramine for hyperarousal/excessive arousal/panic attacks	Robert et al 2000	I	Fair	M	B
3	Propranolol for hyperarousal/excessive arousal/panic attacks	Pittman et al 2002	I	Good	M	C
4	Pharmacotherapy prophylaxis for PTSD	Cochrane Review 2002	I	Poor	-	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

B. POST-TRAUMATIC STRESS DISORDER (PTSD) PHARMACOTHERAPY

Table 2: Summary Table

R	Significant Benefit	Some Benefit	Unknown	No Benefit/Harm
A	SSRIs			
B		TCAs MAOIs		
C		Sympatholytics Novel Antidepressants		
I			Anticonvulsants Atypical Antipsychotics Buspirone Non-benzodiazepine hypnotics	
D				Benzodiazepines Typical Antipsychotics

R_= LEVEL OF RECOMMENDATION (SEE APPENDIX A)

OBJECTIVE

To minimize signs and symptoms of PTSD and maintain function.

BACKGROUND

There is growing evidence that PTSD is characterized by specific psychobiological dysfunctions, which has contributed to a growing interest in the use of medications to treat trauma-related biological effects .

RECOMMENDATIONS

MONOTHERAPY:

1. Strongly recommend selective serotonin reuptake inhibitors (SSRIs) for the treatment of PTSD.
2. Recommend tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs) as second-line treatments for PTSD.
3. Consider an antidepressant therapeutic trial of at least 12 weeks before changing therapeutic regimen.
4. Consider a second-generation (e.g., nefazodone, trazodone, venlafaxine, mirtazapine, bupropion, etc) in the management of PTSD.

AUGMENTED THERAPY FOR TARGETED SYMPTOMS:

5. Consider prazosin to augment the management of nightmares and other symptoms of PTSD.
6. Recommend medication compliance assessment at each visit.
7. Since PTSD is a chronic disorder responders to pharmacotherapy may need to continue medication indefinitely; however it is recommended that maintenance treatment should be periodically reassessed.
8. There is insufficient evidence to recommend a mood stabilizer (e.g. lamotrigine) for the treatment of PTSD.
9. There is insufficient evidence to recommend atypical antipsychotics for the treatment of PTSD.
10. There is insufficient evidence to support the recommendation for a pharmacological agent to prevent the development of PTSD.

11. Recommend against the long-term use of benzodiazepines to manage core symptoms in PTSD.
12. Recommend against typical antipsychotics in the management of PTSD.

DISCUSSION

Antidepressants, particularly serotonergic reuptake inhibitors have proved effective in treating PTSD, and have been recommended as first-line agents in treatment guidelines (Davidson et al., 2001; Brady et al., 2000; Foa et al., 2000; Foa et al., 1999). Sertraline is the best-studied of the SSRIs, with four studies of over 100 participants each showing a significant response to the drug (Brady et al., 2000; Davidson et al., 2001b; Londborg et al., 2001; Rapaport et al., 2002). Significantly, the FDA has approved sertraline for the treatment of PTSD, and it is likely that other serotonergic drugs will be given FDA approval as the results of ongoing multicenter studies become available. Paroxetine has also been FDA approved, and two large studies (Marshall et al., 2001; Tucker et al., 2001) have demonstrated its usefulness in treating PTSD. Fluoxetine has also been shown to be useful (Barnett et al., 2002; Connor et al., 1999; Malik et al., 1999; Martenyi et al., 2002a; Martenyi et al., 2002b; Meltzer-Brody, et al., 2000). Citalopram and fluvoxamine have been less studied, although they too show promise for reducing PTSD symptoms.

Other medications used in PTSD include anticonvulsants, mood stabilizers (lithium), anxiolytics (benzodiazepines, beta-blockers and beta-adrenergic agonists), and other antidepressants (monoamine oxidase inhibitors and tricyclic antidepressants). In clinical practice there is a tendency to use polypharmacy in the treatment of PTSD, and also to use medications in conjunction with psychosocial treatments. However, studies examining the efficacy of these combined approaches area currently lacking (Halligan & Yehuda, 2001).

In a Cochrane Review, Stein et al. (2000) report on 22 RCTs in the pharmacological treatment of PTSD. Chronic PTSD was the primary diagnosis included in these studies; however, several addressed DESNOS and complex PTSD. The most common types of trauma studied were military combat, sexual abuse as a child or adult, physical abuse as a child or adult, or witnessing of a traumatic event. Also included were individuals who experienced accidents or natural disasters, or were the victims of a violent crime, torture, or terror.

Seventeen of the 22 RCT of pharmacological management of PTSD involved SSRIs (n = 8), MAOIs (n = 5), TCAs (n = 3) and trazodone (n = 1). Trials with SSRIs generally were of 12 weeks or longer and used clinician-administered evaluation of response. Overall, the antidepressant studies using global assessment (e.g., Clinical Global Improvement) and individual symptom assessment (e.g., intrusion, avoidance, hyperarousal) reported that drug treatment produced both statistically and clinically significantly reductions in symptoms compared to placebo. However, it is important to note that patients were rarely rated as "complete responders." A meta-analysis of 4 RCTs that compared SSRIs to placebo without regard to diagnostic criteria, duration, severity, or co-morbid diagnoses reported that treatment favored the drug in all 4 trials; however, only one study (with 183 subjects) reached statistical significance. Two RCTs maintained treatment with an SSRI for 64 weeks and 40 weeks, respectively. One study reported that 50% of patients experienced worsening symptoms when placebo was substituted for active drug and in the second report patients on placebo were 6.4 times more likely to relapse compared to the drug group. Although some patients may respond to an antidepressant trial within 3 months, some patients may require more than 12 weeks to respond to SSRIs (Martenyi et al 2002).

Stein et al. (2000) note that for TCAs (3 studies) and MAOIs (5 studies), methodological limitations of early trials included short-duration (5 weeks or less) and reliance on self-administered rating scales. Of the TCAs, nortriptyline is the only recently-studied drug (Dow et al., 1997; Zygmont et al., 1998). In a small study, Zygmont and his colleagues found the drug to be helpful in reducing traumatic grief symptoms (1998); Dow et al. found improvement in CGE for dual diagnosis after nortriptyline (1997). In the MAOI category, Neal et al. (1997) report significant improvement in symptoms in a small sample with the use of moclobemide, and Connor et al. (2001) report significant improvement in CAPS scores with brofaromine. In meta-analysis evaluations dropout rates between SSRIs, TCAs, and MAOIs secondary to drug side effects did not differ among the 3 groups or placebo (Stein et al., 2000).

Sympatholytics have also been investigated as PTSD therapy. Of the sympatholytics, prazosin and propranolol have been the subject of recent studies. In four relatively small studies (Raskind et al., 2003; Raskind et al., 2002; Raskind et al., 2000; Taylor & Raskind, 2002), prazosin has demonstrated a value in reducing nightmares and in

improving CAPS, CGI, and CGIC scores. Propranolol has been investigated for its ability to reduce stress and levels of recall (Pitman et al., 2002; Reist et al., 2001; Taylor & Cahill, 2002) and has shown promise in these areas. Emotional arousal has been shown to enhance memory, an effect that is blocked by propranolol suggesting that the noradrenergic system is important in the mechanism action (Reist et al., 2001). Because PTSD has as prominent features heightened arousal and distressing memories, the current study was undertaken to examine whether PTSD subjects differed from controls in emotional enhancement of memory. Seventeen subjects with PTSD and 21 controls received either placebo or 40 mg of propranolol prior to exposure to either an emotionally arousing or emotionally neutral, narrated slide story. PTSD and control subjects did not differ in the acquisition and retention of memories under emotionally arousing or emotionally neutral conditions.

It has been suggested that an adrenergic receptor-blocker could be used to diminish, if not alleviate, the target symptoms of PTSD. Severely traumatized Cambodian refugee patients (N = 68) who suffered from chronic PTSD and major depression improved symptomatically when treated with a combination of clonidine and imipramine (Kinzie et al., 1989). A prospective pilot study of nine patients using this combination of an alpha-2 adrenergic agonist and a tricyclic antidepressant resulted in improved symptoms of depression in six patients, five to the point that DSM-III-R diagnoses were no longer met. The average decrease in the Hamilton Rating Scale for Depression score was 16. PTSD global symptoms improved in six patients but only in two to the point that DSM-III-R diagnoses were not met. There was no further sleep disorder in five and the frequency of nightmares lessened in seven patients. Startle reaction improved only in four patients; avoidance behavior showed little improvement in any of the nine. The imipramine-clonidine combination was well tolerated and presents a promising treatment for severely depressed and traumatized patients, although further studies are needed. Overall, however, there is insufficient evidence to recommend the routine use of sympatholytics (e.g., propranolol, clonidine, prazosin, guanfacine) in PTSD.

There are no RCTs for novel antidepressants in the literature. Nefazodone, however, has been the subject of several recent small- to mid-sized case-control studies (Davis et al., 2000; Garfield et al., 2001; Gillin et al., 2001; Hertzberg et al., 1998; Hidalgo et al., 1999; Zisook et at., 2000). In all six studies, the drug was helpful in improving CAPS, HAM-D, sleep, and anxiety. Trazodone, venlafaxine, and mirtazapine have also shown promise in some small descriptive studies. Although nefazodone now has some evidence-based support, overall there is insufficient literature to recommend the use of novel antidepressants (e.g., bupropion, nefazodone, venlafaxine, trazodone) for PTSD pharmacotherapy.

Mood stabilizers/anticonvulsants are another category of potential PTSD medications. Some evidence is available to support the use of lamotrigine for PTSD therapy. In a small RCT (n = 14), Hertzberg et al. (1999) evaluated lamotrigine (maximum dose 500 mg/day) against placebo. The authors report that "of 10 patients who received lamotrigine, 5 (50%) responded according to the DGRP [PTSD scale], compared to 1 of 4 (25%) who received placebo. Lamotrigine patients showed improvement on reexperiencing and avoidance/numbing symptoms compared to placebo patients. Treatments were generally well tolerated." Non-RCT evidence also provides limited support for the use of mood stabilizers/anticonvulsants. Topiramate seems to reduce nightmares (Berlant, 2002; Berlant, 2001); valproate reduces hyperarousal in some patients (Clark et al., 1999; Fesler, 1991; Ford, 1996); and carbamazepine (Ford, 1996) and gabapentin (Brannon et al., 2000; Hamner et al., 2001) also appear to be helpful. Again, though, the overall quality of the evidence is insufficient to call for a routine recommendation for use of these agents.

Though benzodiazepines are widely used for symptomatic control of insomnia, anxiety, and irritability, there is no evidence they reduce the core symptoms (e.g., syndromal symptoms) of PTSD, such as avoidance or dissociation (Friedman and Southwick 1995, Viola et al 1997). At Tripler Army Medical Center, after having treated 632 patients, the vast majority of whom suffered from combat-related PTSD, between 1990 and 1996, the staff began to "explore treatment alternatives" to benzodiazepines due to the "risks attendant to benzodiazepine management of PTSD, coupled with poor clinical outcome" (Viola et al., 1997). More recent studies have been scarce, and only Kosten et al. (2000) presents recent evidence. This study does not support the use of benzodiazepines in PTSD.

The typical antipsychotics chlorpromazine and thioridazine each have one case report of their use in PTSD (Leber et al., 1999; Dillard et al., 1993). No other studies of this class of agents for PTSD were found. Second-generation antipsychotics are better studied. Most of the studies, however, are case-control or descriptive. Only two RCTs exist for this class of agents; Stein et al. (2000) investigate the use of olanzapine and report a significant response in

some measures, but not in global response. Hamner et al. (2003) tested risperidone in a small sample of patients with comorbid psychoses and reported some effect. As with other drug classes, there is insufficient literature to recommend the use of atypical antipsychotics (olanzapine, quetiapine, risperidone, ziprasidone, aripiperazole) to recommend their routine use in PTSD.

Zolpidem, a nonbenzodiazepine hypnotic, has been the subject of two studies (Dieperink & Drogemuller, 1999; Lavie, 2001 [review]). The drug appears to be characterized by a good response and fewer side effects than other agents. Buspirone, a nonbenzodiabepine antianxiety drug, is reported to have "clinical efficacy" in two very small studies (Duffy & Malloy, 1994; Wells et al., 1991).

There are gender differences in the pharmacokinetics (e.g., absorption, distribution, metabolism, and elimination) of men and women (Brady KT, Back SE, Gender and the Psychopharmalogical treatment of PTSD in Gender and PTSD, Kimerling, Ouimette, Wolfe, Guilford Press, London). For absorption, differences in gastric motility, gastric pH, and enzyme activity may vary between men and women; however, the clinical magnitude of these differences has not been determined. Issues such as differences in body weight, blood volume, plasma protein binding, and lean body mass to adipose tissue ratio may affect serum levels of medications. For example, women tend to have lower plasma protein binding than men, which may lead to a greater level of active drug. For drug metabolism via the liver, pre-menopausal women have higher CYP3A4 activity compared to men and post-menopausal women, which may lead to lower levels of benzodiazepines, for example. In addition, the effect of pregnancy, lactation, hormone replacement treatment, and the menstrual cycle on the pharmacokinetics of psychotropic medications needs to be studied further.

Future research should included additional studies of prevention and comparative trials between agents. Research questions that remain include the timing of non-pharmacological and pharmacological intervention(s), the type of trauma and between drug class and within drug class response, dose-response trials, the relationship between treatment trial duration and outcome, the effects of demographics (e.g., age, gender, culture) on treatment outcomes, pharmacotherapy and psychosocial therapy interactions, the effect of co-morbid diagnoses on treatment response, and the psychobiologic correlates of treatment response. Also, the effect of clinical setting (e.g., military versus civilian), treatment-compensation interactions, and the effect of PTSD severity on outcome should be investigated. Standardization of assessment measures should be addressed that would include scales for individual symptoms, global assessment, and quality of life, as well as the psychobiological correlates of treatment response.

EVIDENCE

	Recommendation	**Key Study**	**QE**	**Overall Quality**	**Net Effect [**M-Moderate S- Small[	**Grade**
1	SSRIs	Stein et al., 2000, Cochrane Review	I	Good	M	A
2	TCAs	Stein et al., 2000, Cochrane Review	I	Good	M	B
2	MAOIs	Stein et al., 2000, Cochrane Review	I	Good	M	B
3	Antidepressant therapeutic trial	Martenyi et al 2002	I	Fair	M	B
4	Second-generation antidepressants	Hidalgo et al., 1999	II-2	Fair	S	C
5	Prazosin	Raskind et al., 2003	I	Fair	M	C
6	Check medication compliance at each visit	Group Consensus	III	Poor	-	I
7	Maintenance treatment	Rapaport et al 2002	II	Fair	S	C
8	Mood stabilizers	Hertzberg et al., 1999	I	Fair	M	C

9	Atypical antipsychotics	Hamner et al., 2003	I	Good	S	I
10	Pharmacotherapy prophylaxis of PTSD	Cochrane Review 2000	III	Poor	S	I
11	Benzodiazepines	Kosten et al., 2000	II-2	Fair	M	I
12	Typical antipsychotics	Stein et al., 2000, Cochrane Review	I	Poor	S	D

R_= LEVEL OF RECOMMENDATION (SEE APPENDIX A)
Not available in US
**FDA approved

Table 3: Symptom Response by Drug Class and Individual Drug (based on controlled and uncontrolled trials)

		Global Improvement	Re-experiencing (B)	Avoidance/ Numbing (C)	Hyper-arousal (D)
SSRIs					
	Fluoxetine	X	X	X	X
	Sertraline	X		X	X
	Paroxetine	X	X	X	X
TCAs		X	X		
MAOIs		X	X	X	
Sympatholytics			X		X
	Prazosin	X			
	Propranolol				
Novel Antidepressants					
	Trazodone		X	X	X
	Nefazodone		X	X	X
Anticonvulsants					
	Carbamazepine		X		X
	Valproate			X	X
Benzodiazepines					X
Atypical antipsychotics			X		X

Table 4: Drug Details Table

Agent	Oral Dose	Absolute/Relative Contraindications	Adverse Events	Remarks
Selective Reuptake Serotonin Inhibitors (SSRIs)				
Fluoxetine Paroxetine Sertraline Fluvoxamine Citalopram	20 – 60 mg/d 20 – 60 mg/d 50 – 200 mg/d 50 – 150 mg bid 20 – 60 mg/d	**Contraindications** • MAO inhibitor within 14 days **Relative contraindication** • Hypersensitivity	• Nausea • Headache • Sexual dysfunction • Hyponatremia/SIADH (Syndrome of Inappropriate Antidiuretic Hormone) • Serotonin syndrome	• Avoid abrupt discontinuation of all except fluoxetine • Citalopram and sertraline are less likely to be involved in hepatic enzyme drug interactions • Fluoxetine and fluvoxamine are generically available • Therapeutic blood levels not established for PTSD
Tricyclic Antidepressants				
Imipramine Amitriptyline Desipramine Nortriptyline Protriptyline Clomipramine	150 – 300 mg/d 150 – 300 mg/d 100 – 300 mg/d 50 – 150 mg/d 30 – 60 mg/d 150 – 250 mg/d	**Contraindications** • Clomipramine – seizure disorder • MAOI use within 14 days • Acute MI within 3 months **Relative Contraindications** • Coronary artery disease • Prostatic enlargement	• Anticholinergic effects • Orthostatic hypotension • Increased heart rate • Ventricular arrthymias	• Therapeutic blood levels not established for PTSD • Desipramine and nortriptyline have lower rate of anticholinergic and hypotensive effects
Monoamine Oxidase Inhibitors				
Phenelzine Tranylcypromine	Target 1 mg/kg/d Target 0.7 mg/kg/d	**Contraindications** • All antidepressants within 7 days of start of a MAOI, except fluoxetine is 5 weeks • CNS stimulants and decongestants	• Hypertensive crisis with drug/tyramine interactions • Bradycardia • Orthostatic hypotension • Insomnia	• Patient must maintain tyramine-free diet • Doses should be taken in the morning to reduce insomnia
Sympatholytics				

Propranolol Prazosin	40 mg/d *target 6 – 10 mg/d* *Start with 1 mg at bedtime and increase as blood pressure allows.*	Propranolol – sinus bradycardia, congestive heart failure	• Propranolol – hypotension, bronchospasm, bradycardia • • Prazosin – first dose syncope	• Propranolol has only been used in a single dose for prevention of PTSD • • Prazosin primarily used for management of recurrent distressing dreams

Agent	Oral Dose	Absolute/Relative Contraindications	Adverse Events	Remarks
Novel Antidepressants				
Bupropion Nefazodone Trazodone Venlafaxine	150 – 450 mg/d 300 – 600 mg/d 300 – 600 mg/d 150 – 375 mg/d	**<u>Contraindications</u>** • MAOI use within 14 days • Bupropion – single doses of regular-release >150 mg/d and total daily dose >450 mg/d. Reduce dose in low-weight patients – seizure disorder - anorexia/bulimia	• Trazodone and nefazodone – sedation, rare priapism • Venlafaxine – hypertension in patients with pre-existing hypertension • Nefazodone - hepatoxicity	• Need to taper venlafaxine to prevent rebound signs/symptoms • The group has a lower rate of sexual dysfunction compared to SSRIs • Obtain baseline & periodic LFTs when treating with nefazodone
Anticonvulsants				
Carbamazepine	Target 400 – 1600 mg/d	• Bone marrow suppression, particularly leukopenia	• Leukopenia, SIADH, drowsiness, ataxis	• Therapeutic blood levels are not established for PTSD, but blood level monitoring may be useful in cases of suspected toxicity
Gabapentin	Target 300 – 3600 mg/d	• Renal impairment	• sedation, ataxia	
Lamotrigine	Target 25 – 500 mg/d. Start 25 mg qod x 2 weeks, then 25 mg qd x 2 weeks, then 25 – 50 mg qd q1-2 weeks to 400 mg/d or as tolerated.	• Increased rash with valproate; max dose of 200 mg	• Stevens- Johnson syndrome, fatique	

Topiramate	Target 200 – 400 mg/d. Start with 25 – 50 mg/d and increase by 15 – 50 mg/week to maximum dose or as tolerated.	• Hepatic impairment	• Angle closure glaucoma, secondary, sedation, dizziness, ataxia	
Valproate	target 10 – 15 mg/kg/d	• Impaired liver function, thrombocytopenia	• Nausea/vomiting, sedation, ataxia, thrombocytopenia	
Benzodiazepines				
Clonazepam Lorazepam Alprazolam Diazepam	Start - 0.25 mg bid, increase by 0.25 mg q1-2 days; maximum 20 mg/d 2 – 4 mg/d 1.5 to 6 mg/d 10 - 40 mg/d	• Caution in elderly patients and patients with impaired liver function. • Risk of abuse in patients with history of substance abuse	• Sedation • Memory impairment • Ataxia • Dependence	• If doses sustained > 2 months at therapeutic doses, then drug should be tapered over 4-week period • • Alprazolam – concern with rebound anxiety
Typical antipsychotics				
Chlorpromazine Haloperidol Thioridazine	100 – 800 mg/d 2 – 20 mg/d 100 – 800 mg/d	**<u>Contraindication</u>** • Parkinson's disease • QTc prolongation	• Sedation • Orthostatic hypotension with chlorpromazine, thioridazine • Akathisia • Dystonia • Drug-induced parkinsonism • Tardive dyskinesia may occur with all antipsychotics with long-term use. • Neuroleptic malignant syndrome • QTc changes	• Therapeutic doses not established in the treatment of PTSD • Use should be well justified in medical record because of the risk of tardive dyskinesia. • Maximum daily dose of thioridazine is 800 mg/d because of pigmentary retinopathy

Atypical antipsychotics				
Olanzapine Quetiapine Risperidone	5 – 20 mg/d 300 – 800 mg/d 1 – 6 mg/d	**Relative contraindication** • Parkinson's disease	• Sedation • Weight gain • Neuroleptic malignant syndrome • Higher doses may cause akathisa, drug-induced parkinsonism, especially with risperidone doses >6 mg/d	• Therapeutic doses not established for PTSD • Weight gain occurs with all agents; however, olanzapine produces significantly greater gain • The relative risk of tardive dyskinesia compared to typical antipsychotics has not been established for these agents • Monitor for development of diabetes /hyperglycemia
Non-benzodiazepine				
hypnotics - zaleplon - zolpidem	 5 – 10 mg/d 5 – 10 mg/d	• Caution with alcohol/drug abuse history • Caution in elderly and patients with liver dysfunction	• Sedation • Ataxia • Rebound insomnia may occur	• Abuse has occurred resulting in withdrawal reactions
anti-anxiety - buspirone	 20 – 60 mg/d	**Contraindication** • MAOI use within 14 days	• Nausea • Headache	

Table 5: Summary of Evidence

Drug	Source of Evidence	Result	n	QE	Quality	R
SSRI						
Sertraline (FDA approved)	*Brady et al., 2000 Davidson et al., 2002 Davidson et al., 2001a Davidson et al., 2001b Davidson et al.,2001c Londborg et al., 2001 Rapaport et al., 2002 Smajkic et al., 2001 Zohar et al., 2002	Significant improvement, CAPS-2, CGI Study of effect on individual symptoms Effective for prevention of PTSD relapse Significant responder rate, CAPS-2 Effective for preventing PTSD relapse Significant response maintained x 36 weeks Significant response maintained x 64 weeks Significant improvement, Bosnian refugees Numeric advantage (only), Israeli vets	187 ? 96 208 96 128 359 15 42	I II-2 I I I II-1 I/II-1 II-2 I	G F G G G G G F G	A
Paroxetine (FDA approved)	Marshall, et al., 2001 Smajkic et al., 2001 Tucker, et al., 2001	Significant improvement, CAPS-2 & CGI Significant improvement, Bosnian refugees Significant improvement, CAPS-2	551 12 307	I II-2 I	G F G	A
Fluoxetine	Barnett et al., 2002 *Connor et al., 1999 Hertzberg et al., 2000 Malik et al., 1999 Martenyi et al., 2002a Martenyi et al., 2002b Meltzer-Brody, et al., 2000	Study of tolerability. Well-tolerated "Superior" response for civilian patients No response for combat vets with severe s/s Significant improvement on SF-36 Effective for prevention of PTSD relapse Effective: improvement in TOP-8, CGI Reduced all symptom clusters of PTSD	65 53 12 16 131 301 53	I I I I I I II-2	G G F F G G F	A
Citalopram	Blaha et al., 1999 Khouzam et al., 2001 Seedat et al., 2000	Reduction in PTSD and scarring, burn pts. Remission of some s/s for Gulf War vets Significant improvement, CAPS-2	? 2 14	III III II-1	P P F	C
Fluvoxamine (not on VA formulary)	Escalona et al., 2002 Neylan et al., 2001	Appears to improve PTSD symptoms Improved sleep quality for Vietnam vets	15 21	III III	P P	I
TCA						
Amitriptyline	*Davidson et al., 1990 Davidson et al., 1993	Effective for core symptoms of PTSD Significant improvement: IES, CGI, HAMD	46 62	I I	G G	B
Clomipramine	Muraoka et al., 1996?	One case report	1	III	P	I
Desipramine	*Reist et al., 1989	Did not show efficacy; no statistics	27	III	P	I
Imipramine	*Kosten et al., 1991	Significant improvement, CAPS-2, IES	41	I	G	B
Nortriptyline	Zygmont et al., 1998 Dow et al., 1997	Effective for traumatic grief symptoms Improvement in CGE for dual diagnosis	22 ?	II-1 ?	G F	B
Protriptyline	No studies, 1990-2003					
MAOI/RIMA						
Brofaromine	*Baker et al., 1995 Connor et al., 2001 *Katz et al., 1994	Trial did not show efficacy over placebo Significant improvement in CAPS Significant improvement in CAPS-2 & CGI	146 177 64	I I I	G G G	B
Phenelzine	*Kosten et al., 1991 *Shestatzky et al., 1988	Significant improvement in IES Did not show efficacy; no statistics	37 13	I III	G P	B
Moclobemide	Neal et al., 1997	Significant improvement	20	II-1	G	B
Sympatholytics						
Clonidine	Kinzie & Leung, 1989	Cambodian refugees improved, dual therapy	68	III	P	I
Guanfacine	Horrigan & Barnhill, 1996	suppression of PTSD associated nightmares in children	1	III	P	C
Prazosin	Raskind et al., 2003	Significant improvement, CAPS, CGI	10	I	F	C

Drug	Source of Evidence	Result	n	QE	Quality	R
	Raskind et al., 2002	Significant improvement in dream scores	59	II-2	F	
	Raskind et al., 2000	Improvement in nightmare item, CAPS	4	II-2	F	
	Taylor & Raskind, 2002	Improvement in CGIC and nightmares	5	II-2	F	
Propranolol	Finestone & Manly, 1994	Dissociation precipitated by propranolol	1	III	P	C
	Pitman et al., 2002	Significant improvement post acute stress	41	I	G	
	Reist et al., 2001	Recall of arousing story was reduced	38	II-2	F	(acute)
	Taylor & Cahill, 2002	Effective for reemergent PTSD s/s	1	III	P	
Novel Antidepressants						
Bupropion	Canive et al., 1998	No change in total CAPS score - male combat veterans,	17	II-2	F	I
Nefazodone	Davis et al., 2000	Significant improvement in CAPS, HAM-D	36	II-2	G	C
	Garfield et al., 2001	Significant improvement in CAPS, anxiety	14	II-2	F	
	Gillin et al., 2001	Significant improvement in sleep, CAPS	12	II-2	F	
	Hertzberg et al., 1998	CGI scores were "much improved"	10	II-2	F	
	Hidalgo et al., 1999	High response rate; pooled data, 6 studies	105	II-2	F	
	Zisook et at., 2000	PTSD symptoms lessened, CAPS	19	II-2	F	
Trazodone	Hertzberg et al., 1996	Four patients "much improved"	6	III	P	I
	Warner et al., 2001	Reduction in nightmares; 9 reports priapism	74	III	III	
Venlafaxine	Hamner et al., 1998	Case report of positive response	1	III	P	I
	Smajkic et al., 2001	Significant improvement, Bosnian refugees	5	II-2	F	
Mirtazapine	Bahk et al., 2002	Significant improvement in IES, MADRS	15	III	P	I
	Connor et al., 1999	Clinical improvement in > 50% of patients	6	III	P	
	Davidson et al., 2003	Significant improvement in the SPRINT, SIP, DTS as compared to placebo	26	I	G	
Mood Stabilizers/Anticonvulsants						
Carbamazepine	Ford, 1996	Case report of a positive response	1	III	P	I
Gabapentin	Brannon et al., 2000	Case report of a positive response	1	III	P	C
	Hamner et al., 2001	Effective for insomnia, adjunct treatment	30	II-2	F	
Lamotrigine	*Hertzberg et al., 1999	Promising results	14	I	F	C
Topiramate	Berlant, 2002	Significant suppression of nightmares	35	II-1	F	C
	Berlant, 2001	Case report of positive response	3	III	P	
Valproate	Clark et al., 1999	Significant ↓ intrusion, hyperarousal, HAM	16	II-2	F	C
	Fesler, 1991	Significant ↓ hyperarounsal in Vietnam vets	16	II-2		
	Ford, 1996	One case report of a + response	1	III		
Benzodiazepines						
Benzodiazepines	Kosten et al., 2000	Not associated with adverse outcomes	370	II-2	F	I
Alprazolam	*Braun et al., 1990 (concern: rebound anxiety)	Did not show efficacy.	16	II-2	F	D
		No beneficial effect	16	II-1	F	
	Gelpin et al., 1996	Withdrawal s/s after discontinuation	8	III	P	
	Risse et al., 1990	No effect on response to loud tones	9	III	F	
	Shalev et al., 1998					
Clonazepam	Fossey & Hamner, 1994	A source of sexual dysfunction	42	III	P	I
	Gelpin et al., 1996	No beneficial effect in PTSD	20	II-1	F	
	Shalev & Rogel-Fuchs, 1992	No effect on auditory startle	N/A	III	F	
Lorazepam	Tulen et al., 1991	Physiological endpoints only (HR)	9	I	F	I
Temazepam	Mellman et al., 1998	Short-term for acute stress, + response	4	III	P	I
Typical Antipsychotics						
Chlorpromazine	Leber et al., 1999	One case report	1	III	P	D
Thioridazine	Dillard et al., 1993	One case report of a + response	1	III	P	D
Haloperidol	No studies, 1990-2003					

Drug	Source of Evidence	Result	n	QE	Quality	R
Second-generation Antipsychotics						
Clozapine	Hamner, 1996	One case report of a + response	1	III	P	I
Olanzapine	Butterfield et al., 2001	No beneficial effect. High placebo response	15	I	G	I
	Labbate & Douglas, 2000	Letter				
	Petty et al., 2001	Significant improvement in CAPS, CGI	48	II-1	G	
	Prior, 2001	Letter				
	Roefaro & Mukherjee, 2001	Therapy-induced hyperglycemic coma	1	III	P	
	Stein et al., 2002	Adjunct to SSRI. Significant improvement in measures, but not in global response	19	I	F	
Quetiapine	Hamner et al., 2003	Significant improvement in CAPS	20	II-1	F	I
	Sattar et al., 2002	One case report of a + response	1	III	P	
Risperidone	Eidelman, et al., 2000	4 cases of flashbacks, post physical trauma	4	III	P	I
	Hamner et al., 2003	Adjunct to other meds, comorbid psychoses	40	I	G	
	Krashin & Oates, 1999	Two case reports of a + response	2	III	P	
	Leyba, 1998	4 cases of a + response	4	III	P	
	Monnelly & Ciraulo, 1999	1 case of a + response	1	III	P	
	Stanovic et al., 2001	Burn patients reported fewer symptoms	10	III	P	
Ziprasidone	Haddad & Anderson, 2002	Review of the issue of QTc prolongation	N/A			
Nonbenzodiazepine Hypnotics						
Zolpidem	Dieperink & Drogemuller, 1999	25 cases of a + response	32	III	P	I
	Lavie, 2001 (review)	Fewer side effects for this class, in general	N/A			
Zaleplon	No studies, 1990-2003					
Zopiclone	No studies, 1990-2003					
Non-benzodiazepine Antianxiety						
Buspirone	Duffy & Malloy, 1994	Significant improvement, SI-PTSD & BDI	8	II-2	F	I
	Wells et al., 1991	"Clinical efficacy"	3	III	P	

* in Stein et al., 2000 (Cochrane Review)

Studies of pharmacotherapy for PTSD in individuals exposed to trauma that assessed clinical outcomes were included. Evidence from randomized controlled trials was considered to be of highest quality, followed by observational evidence. Other sources were evaluated when randomized controlled trials and observational studies were not available or did not provide adequate evidence. Studies were excluded if they did not evaluate response to pharmacotherapy and if they did not evaluate individuals exposed to trauma.

C. PSYCHOTHERAPY INTERVENTIONS

OBJECTIVE

Reduce of symptoms severity and improve of global functioning.

Table 6: Summary Table

R	Significant Benefit	Some Benefit	Unknown	Harm
A	Cognitive Therapy [CT] Exposure Therapy [ET] Stress Inoculation Training [SIT] Eye Movement Desensitization and Reprocessing [EMDR]			
B		Imagery Rehearsal Therapy [IRT] Psychodynamic Therapy		
C				
D				
I		PTSD - Patient Education		

R_= level of recommendation (see appendix A)

Table 7. Adjunctive Treatments

B	Dialectical Behavioral Therapy [DBT]
B	Hypnosis

Table 8. Adjunctive Problem-Focused Methods/Services

	If the client and clinician together conclude that the patient with PTSD:	**Service/Training**
1.	Is not fully informed about aspects of health needs and does not avoid high-risk behaviors (e.g., PTSD, substance)	*Provide patient education*
2.	Does not have sufficient self-care and independent living skills	*Refer to self-care/independent living skills training services*
3.	Does not have safe, decent, affordable, stable housing that is consistent with treatment goals	*Use and/or refer to supported housing services*
4.	Does not have a family that is actively supportive and/or knowledgeable about treatment for PTSD	*Implement family skills training*
5.	Is not socially active	*Implement social skills training*
6.	Does not have a job that provides adequate income and/or fully uses his or her training and skills	*Implement vocational rehabilitation training*
7.	Is unable to locate and coordinate access to services such as those listed above	*Use case management services*
8.	Does request spiritual support	*Provide access to religious/spiritual advisors and/or other resources*
	OTHER CONDITIONS	
9.	Does have a borderline personality disorder typified by parasuicidal behaviors	*Consider Dialectical Behavioral Therapy*
10.	Does have concurrent substance abuse problem	*Integrated PTSD substance abuse treatment (e.g., Seeking Safety)*

Hospitalization:
There have been no satisfactory studies on **inpatient** treatment for patients with PTSD, in trauma-related conditions. Clinical consensus supports that it is appropriate for crisis intervention, management of complex diagnostic cases, delivery of emotionally intense therapeutic procedures, and relapse prevention.

RECOMMENDATIONS

1. Providers should explain to all patients with PTSD the range of available and effective therapeutic options for PTSD. [Expert Consensus]
2. **Cognitive Therapy [CT], Exposure Therapy [ET], Stress Inoculation Training [SIT], and** Eye Movement Desensitization and Reprocessing [**EMDR]** are strongly recommended for treatment of PTSD in military & non-military populations. EMDR has been found to be as effective as other treatments in some studies and less effective than other treatments in some other studies. [A*****]
3. **Imagery Rehearsal Therapy [IRT]** and **Psychodynamic Therapy** may be considered for treatment of PTSD. [B*****]
4. **Patient education** is recommended as an element of treatment of PTSD for all patients. [C*****]
5. Consider **Dialectical Behavioral Therapy** (DBT) for patients with a borderline personality disorder typified by parasuicidal behaviors. [B]
6. Consider **hypnotic techniques** especially for symptoms associated with PTSD, such as pain, anxiety, dissociation and nightmares, for which hypnosis has been successfully used. [*B]
7. Specialized PTSD psychotherapies may be augmented by additional problem specific methods /services, and pharmacotherapy. [Expert Consensus]

8. Combination of cognitive therapy approaches (e.g., ET plus CT), while effective, has not proven to be superior to either component alone. [B]
9. Specific psychotherapy techniques may not be uniformly effective across all patients. When selecting a specific treatment modality, consideration of patient characteristics such as gender, type of trauma (e.g., combat vs. other trauma), and past history may be warranted. [Expert Consensus]
10. Patient and provider preferences should drive the selection of evidence-based psychotherapy and/or evidence-based pharmacotherapy as the first line treatment. [Expert Consensus]
11. Selection of individual interventions should be based upon patient preference, provider level of skill and comfort with a given modality, efforts to maximize benefit and minimize risks to the patient, and consideration of feasibility and available resources. [Expert Consensus]
12. Psychotherapies should be provided by practitioners who have been trained in the particular method of treatment, whenever possible. [Expert Consensus]
13. A stepped care approach to therapy administration may be considered, though supportive evidence is lacking. [Expert Consensus]

***** detailed evidence tables for each therapy are included in the applicable DISCUSSION sections.

Note: Psychotherapy interventions are aimed at reduction of symptoms severity and improvement of global functioning. However, the clinical relevance and importance of other outcome indicators (e.g., improvement of quality of life, physical & mental health) are not currently well known.

Supportive psychotherapy is not considered to be effective for the treatment of ptsd. However, if the patient has reasonable control over his/her symptoms and is not in severe and acute distress, the goal may be to prevent relapse and supportive therapy may be helpful in that endeavor. Or, for the patient with certain co-morbid disorders, supportive therapy may be all they can tolerate without causing additional harm. Psychodynamic, interpersonal, experiential (e.g., Gestalt therapy), and many other approaches may also be beneficial parts of an effectively integrated approach. Most experienced therapists integrate diverse therapies, which are not mutually exclusive in a fashion that is designed to be especially beneficial to a given patient.

A. Selection Of Therapy For PTSD

In clinical practice, providers and patients alike are often faced with important decisions relating to type, number, frequency, and dose of various psychotherapies and pharmacologic therapies. Therapies may be broadly divided into (1) evidence-based psychotherapies, (2) evidence-based pharmacotherapies, and (3) key adjunctive or supplemental treatment modalities. Providers should explain to all patients with PTSD the range of therapeutic options that are available and effective for PTSD. This discussion should include general advantages and disadvantages (including side-effects) associated with each therapeutic option. In general, PTSD therapy research has provided insufficient evidence to favor medication or evidence-based psychotherapy as a first-line treatment. There is also insufficient evidence to suggest for or against combined medication and psychotherapy over only one of the two approaches.

It may be helpful to add therapies using a stepped care approach, even though supporting evidence does not exist. The use of stepped care has been advocated for many chronic conditions including hypertension, low back pain, and depression. In stepped care, the intensity of care is augmented for patients who do not achieve an acceptable outcome with lower levels of care. Stepped care is based on three assumptions: different people require different levels of care; finding the right level of care often depends on monitoring outcomes; and moving from lower to higher levels of care based on patient outcomes often offers efficient increases in overall effectiveness.

The level or intensity of care is guided by illness trajectory (degree of chronicity and current illness severity), observed outcomes, and previously attempted therapies. Active follow-up is used to determine the level of care each patient requires over time. In PTSD for example, the patient and provider may determine that the first-line therapy will be psychotherapy. If, after a period of treatment, the patient is not responding adequately, the patient may be "stepped up" in therapeutic intensity by adding a medication, such as a selective serotonin reuptake inhibitor (SSRI) to the regimen of ongoing psychotherapy.

Contrary to clinical intuition, there is no evidence indicating the superiority of programs that combine different cognitive behavioral therapies (Rothbaum, 2001).

B. Cognitive Therapy (CT)

BACKGROUND

Aaron Beck, at the University of Pennsylvania, developed Cognitive Therapy (CT) as a structured, short term, present-oriented psychotherapy for depression (Beck, 1964). It is an approach that focuses on improving mood by modifying dysfunctional thinking and behavior. Beck and others have successfully adapted CT to the treatment of a diverse set of psychiatric disorders, including PTSD (Freeman & Datillo, 1992; Freeman et al., 1989; Scott et al., 1989).

CT for PTSD typically begins with an introduction of how thoughts affect emotions and behavior. The cognitive model of change and expectations for participation in therapy is reviewed. Early in treatment, new skills to identify and clarify patterns of thinking are taught using techniques such as recording thoughts about significant events, identifying distressing trauma-related thoughts, and converting such dysfunctional thought patterns into more accurate thoughts. CT also emphasizes the identification and modification of distorted core beliefs about self, others, and the larger world. CT teaches that improved accuracy of thoughts and beliefs about self, others, and the world leads to improved mood and functioning.

DISCUSSION

Randomized controlled trials (RCTs) have shown that CT is an effective intervention for patients with PTSD (Lovell et al., 1998; Marks et al., 2001). It is useful for identifying and modifying the many negative beliefs related to a traumatic experience. CT can be used effectively to reduce distressing trauma-related thoughts (e.g., about survival guilt, self-blame for causing the trauma, feelings of personal inadequacy, or worries about the future). Modifying thoughts about these and other trauma-related issues can reduce PTSD symptoms and improve mood and functioning.

In RCTs, Lovell et al. (2001) and Marks et al. (1998) indicated that CT can produce a substantial treatment effect for civilian men and women with PTSD resulting from a variety of non-combat-related traumas. There are no RCTs that specifically evaluate the use of CT in military or veteran PTSD patients; however, the use of CT in this population is recommended based on expert consensus.

CT techniques are often delivered as part of treatment "packages" that can include exposure therapy, trauma-related education, and anxiety management. For example, Cognitive Processing Therapy, which has been manualized and validated for use with female sexual assault–related PTSD in women (Resick et al., 2002), combines aspects of CT and exposure therapy. CT can also be delivered in conjunction with a range of other psychological therapies (e.g., EMDR and psychodynamic therapy). CT techniques may be an especially helpful treatment component when co-morbid depressive and/or anxiety disorders are present.

Contraindications for CT have not been empirically established, but may include psychosis, severe brain damage, or severe intellectual impairment.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	CT is effective with civilian men and women exposed to combat and non-combat trauma.	Lovell, et al., 2001 Marks et al., 1998	I	Good	A
2	CT is effective with military and veterans with combat- and non-combat-related PTSD.	Working Group Consensus	III	Poor	I
3	CTis effective for women with PTSD associated with sexual assault.	Resick et al., 2002	I	Good	A

QE = Quality of Evidence; R = Recommendation (see Appendix A)

C. Exposure Therapy (ET)

BACKGROUND

RCTs have shown that Exposure Therapy (ET) helps men and women with PTSD reduce the fear associated with their experience through repetitive, therapist-guided confrontation of feared places, situations, memories, thoughts, and feelings. ET usually lasts from 8 to 12 sessions depending on the trauma and treatment protocol. Patients are repeatedly exposed to their own individualized fear stimuli, until their arousal and fear responses are consistently diminished. In session exposure is often supplemented by therapist-assigned and monitored self-exposure to the memories or situations associated with traumatization. ET providers can vary the pacing and intensity of exposing patients to the most frightening details of their trauma based on the patient's emotional response to the trauma and to the therapy itself.

Exposure can be accomplished via "imaginal" exposure or "in vivo" exposure. Imaginal exposure involves encouraging the patient to revisit the experience in imagination, recalling the experience through verbally describing the emotional details of the trauma. In vivo exposure involves asking the patient to physically confront realistically safe but still feared stimuli (e.g. driving a car after having been in a serious motor vehicle accident). This exposure can also be arranged in a hierarchical fashion. In the preceding example the patient might first sit in a car in the passenger seat, and then in the driver's seat, and then start the car, etc. The patient repeats each situation until a reduction in the intensity of emotional and physiological response is achieved, at which point they move on to the next item in their hierarchy.

DISCUSSION

RCTS of ET have demonstrated its efficacy in female victims of sexual and non-sexual assault, motor vehicle accidents, male combat-related trauma, and mixed trauma populations. Findings regarding efficacy in (mostly

Vietnam) combat veterans in VA clinical settings are less consistent and the degree of improvement in PTSD symptoms appears to be less pronounced.

In randomized trials comparing ET with other cognitive behavioral treatments ET has performed as well or better than any cognitive behavioral therapy (CBT) approach. In a comprehensive review of research studies examining CBT for PTSD Rothbaum et al. (2000) found the strongest evidence for exposure therapy. Four studies have found that exposure treatment for PTSD in samples heterogeneous with regard to their traumas has been efficacious. Richards et al. (1994) found that participants with PTSD who were given either four sessions of imaginal exposure followed by four sessions of in vivo exposure, or in vivo followed by imaginal exposure, improved considerably. Marks et al. (1998) found that exposure, cognitive therapy, and their combination were all equally successful in reducing PTSD at posttreatment and 6-month follow-up. Tarrier et al. (1999) found there was a significant improvement on all measures at posttreatment and follow-up, with no significant differences between exposure therapy and cognitive therapy. Thompson et al. (1995) found that 8 weekly sessions of imaginal and in vivo exposure were effective in treating participants with PTSD.

Vietnam combat veterans (uncontrolled study; 15 males) showed significant improvements from pre- to posttreatment on some measures but not on others, when given a comprehensive treatment package consisting of education, individual ET, programmed practice of the exposure, and social and emotional rehabilitation (Frueh et al., 1996, Keane et al., 1989). A large-scale, randomized controlled effectiveness trial was recently completed involving 360 Vietnam combat veterans (reference). This study compared exposure-based CBT with supportive "present-centered" group therapy that did not involve exposure. Results showed that (a) both treatment conditions produced moderate changes in PTSD symptoms from baseline levels and (b) the two treatment conditions were not different from one another in clinical effectiveness. Rates of drop out from treatment were somewhat higher for the ETgroup.

The Expert Consensus Panel for Post-traumatic Stress Disorder (1999) recommended ET for the treatment of intrusive thoughts, flashbacks, trauma related fears, panic attacks, avoidance and generalized anxiety in patients with PTSD, listing it as the quickest acting psychotherapy and one of the two most effective psychotherapies for PTSD. The International Society for Traumatic Stress Studies described ET as “quite effective” in the treatment of a mixed variety of trauma survivors: “In fact, no other treatment modality has evidence this strong indicating its efficacy.”

In most treatment settings, ET is delivered as part of a more comprehensive “package” treatment. That is, it is usually combined with PTSD education, coping skills training, and especially, cognitive restructuring. ET and cognitive restructuring are usually regarded as the most powerful components of treatment, although randomized trials comparing ET alone with combined ET and cognitive restructuring suggest that ET alone may be more effective than combined treatment.

There have, as yet, been no randomized trials comparing ET with pharmacotherapy. Therefore, it is not known how ET compares with SSRIs or other medications as effective treatments. Nor is it known whether combined ET plus pharmacotherapy is more effective than either treatment alone.

Patients need to be screened for their suitability prior to undergoing ET as it may temporarily increase their level of distress. Patients living in dangerous circumstances (e.g., domestic violence or a threatening environment) are not candidates for ET until their security can be assured. Other contraindications for ET have not been confirmed in empirical research, but may include health problems that preclude exposure to intense physiological arousal, current suicidal ideation, substance abuse not in stable remission, co-morbid psychosis, or lack of motivation to undergo the treatment. Because this treatment may increase distress and PTSD symptoms in the short term, it is not well accepted by all patients, some of whom may drop out of treatment. Therefore, providers must take concrete steps to prepare patients for the treatment (e.g., present clear rationale, explore patient concerns, encourage realistic expectations, and build commitment to the therapy) in order to reduce the risk of dropout.

EVIDENCE

	Evidence	Sources	QE	Overall	R

				Quality	
1	ET is effective in the treatment of PTSD (compared to placebo or waiting list).	Cooper et al., 1989 Foa et al., 1991 & 1999a Ironson et al., 2002 Keane et al., 1989 Marks et al., 1998 Tarrier et al., 1999	I	Good	A
2	ET compared to other forms of therapy show equivalent results.	Foa et al., 1991 & 1999a Marks et al., 1998 Paunovic & Ost, 2001 Resick & Nishith, 2001 Schnurr, 2001 Tarrier et al., 1999	I	Good	A

QE = Quality of Evidence; R = Recommendation (see Appendix A)

D. Stress Inoculation Training (SIT)

BACKGROUND

Stress inoculation training (SIT) is a type of CBT that can be thought of as a tool box or set of skills for managing anxiety and stress (Hembree & Foa, 2000). This treatment was developed for the management of anxiety symptoms and adapted for treating women rape trauma survivors. SIT typically consists of education and training of coping skills, including deep muscle relaxation training, breathing control, assertiveness, role playing, covert modeling, thought stopping, positive thinking and self-talk. The rationale for this treatment is that trauma related anxiety can generalize to many situations (Rothbaum et al., 2000). The Expert Consensus Guideline Series: Treatment of Post-traumatic Stress Disorder notes that anxiety management is among the most useful psychotherapeutic treatments for patients (Foa et al., 1999b).

DISCUSSION

There have been two RCTs that have evaluated SIT and both studies found SIT to be effective with women who have survived sexual assault. A study by Foa and colleagues (1991) with 45 female sexual assault victims compared SIT, Prolonged Exposure (PE), Supportive Counseling (SC) and wait list control. SIT was found to be the most effective treatment for short term symptom improvement and both SIT and PE were effective for long term improvement with PE superior to SIT. Rothbaum (2001) reports, "results suggested that all conditions produced improvement on all measures immediately posttreatment and at follow-up. At follow-up, clients who received PE continued to improve after treatment termination, whereas clients in the SIT and SC conditions evidenced no change between posttreatment and follow-up." Another study with 96 female sexual assault victims compared SIT, PE, combined SIT and PE, and wait list controls (Foa et al., 1999a). The study found all treatments were better than wait list control for ameliorating PTSD severity at posttreatment and at 6-month follow-up. Interestingly, although all three treatments were effective, the combined treatment was not superior to either SIT or PE alone, which may be related to the fact that clients in the combined treatment group actually received less PE and SIT training than participants in the individual treatments as treatment sessions were all equal in length.

A study of 15 women by Kilpatrick et al. (1982) found SIT to be effective in reducing rape related fear and anxiety.

Motor vehicle accident survivors (Hickling & Blanchard, 1997) had a 68 percent reduction of PTSD symptoms after involvement in a modified version of Foa et al.'s SIT/PE combination program.

SIT is designed to "inoculate" people with PTSD from heightened stress responses through teaching anxiety management skills which can include:

- Relaxation training: teaching patients to control fear and anxiety through the systematic relaxation of the major muscle groups.

- Breathing retraining: teaching slow, abdominal breathing to help the patient relax and/or avoid hyperventilation with its unpleasant and often frightening physical sensations.

A controlled study comparing three different forms of relaxation (relaxation, relaxation plus deep breathing, and relaxation plus deep breathing plus biofeedback) for 90 Vietnam veterans found that all treatments were equally, but only mildly, effective in leading to improvement (Watson et al., 1997).

- Positive thinking and self-talk: Teaching the person how to replace negative thoughts (e.g., 'I'm going to lose control') with positive thoughts (e.g., 'I did it before and I can do it again') when anticipating or confronting stressors.
- Assertiveness training: teaching the person how to express wishes, opinions, and emotions appropriately and without alienating others.
- Thought stopping: distraction techniques to overcome distressing thoughts by inwardly 'shouting stop (Foa et al., 1999b).

EVIDENCE

	Evidence	Sources	QE	Overall Quality	R
1	SIT is effective as a treatment for PTSD related to sexual assault.	Foa et al., 1999a Foa et al., 1991 Kilpatrick et al, 1982 Rothbaum, 2000	I	Good	A

QE = Quality of Evidence; R = Recommendation (see Appendix A)

E. Eye Movement Desensitization and Reprocessing (EMDR)

BACKGROUND

EMDR is a psychotherapy treatment that was originally designed to alleviate the distress associated with traumatic memories (Shapiro, 1989a; 1989b). The developer of EMDR, psychologist Dr. Francine Shapiro, proposes the idea that EMDR facilitates the accessing and processing of traumatic memories to bring these to an adaptive resolution (Shapiro, 2001). The possibility of obtaining significant clinical improvements in PTSD in a few sessions presents this treatment method as an attractive modality worthy of consideration.

During EMDR, the patient is asked to identify: (1) a disturbing image that encapsulates the worst part of the traumatic event; (2) associated body sensations; (3) a negative self-referring cognition (in concise words) that expresses what the patient "learned" from the trauma; (4) a positive self-referring cognition that the patient wishes could replace the negative cognition. The patient is then asked to hold the disturbing image, sensations, and the negative cognition in mind while tracking the clinician's moving finger back and forth in front of his or her visual field for about 20 seconds. In successive tracking episodes, the patient concentrates on whatever changes or new associations have occurred. Tracking episodes are repeated according to the protocol until the patient has no further changes. More tracking episodes then reinforce the positive cognition.

Between sessions, the patient is directed to keep a journal of any situations that provoke PTSD symptoms and of any insights or dreams about the trauma. The sessions required may be as few as two for uncomplicated PTSD. More sessions are required for multiple or more complicated trauma.

Standard CBT rating scales are used throughout the sessions to document changes in the intensity of the symptoms and the negative cognition, and the patient's belief in the positive cognition. The patient only needs to tell the therapist the concise negative and positive cognitions and whether (and what) cognition, image, emotion, or body sensation has changed. The therapist is close to the patient and maintains direct eye contact as part of the protocol. This fosters a non-directive interaction that usually detects adverse reactions, which the therapist helps the patient manage with cognitive techniques. EMDR processing is internal to the patient, who does not have to reveal the traumatic event.

The protocol allows for substitution of left-right alternating tone or touch as alternatives in place of the eye movements. Studies attempting to ascertain the relative contribution of the eye-movement component have suggested comparable treatment results with or without eye movements, indicating that this aspect of the treatment protocol may not be critical to effectiveness.

DISCUSSION

EMDR was deemed to be an efficacious treatment for PTSD following a critical review of the literature in the treatment guidelines generated by a task force for the International Society for Traumatic Stress Studies (Chemtob et al., 2000), as well as by Division 12 of the American Psychological Association. The United Kingdom Department of Health deemed EMDR efficacious in 2001. While the results of seven controlled published studies found large effect sizes for EMDR, EMDR as a treatment modality has been somewhat controversial in terms of the purported relative speed and efficiency of EMDR compared to other techniques. EMDR has also been touted as being more easily tolerated by patients who have difficulties engaging in prolonged exposure therapy.

Results of four independent reviews that involved 16 controlled trails were assessed by the guideline development panel. Overall, the findings indicated that EMDR represented an effective treatment compared to no treatment or delayed treatment conditions. When compared to other treatment modalities, most studies reviewed indicated that EMDR was as effective as other more traditional therapy approaches including relaxation training based treatments, exposure therapies, cognitive behavioral therapy, hypnotherapy, and psychodynamic therapy.

The review by Davidson (2001) allowed the comparison of EMDR against seven other conditions including no treatment, cognitive behavioral therapy, exposure approaches not involving in vivo re-exposure, a number of dismantling studies looking at variants of EMDR, and other "nonspecific" treatments. Patient groups assessed within the included studies involved both PTSD and other conditions. Overall, EMDR was found to be more effective than no treatment and generally was comparable in effect to the other active treatment conditions. Dismantling studies indicated comparable effectiveness across variant presentations of EMDR.

Maxfield and Hyer (2002) conducted a meta-analysis involving comparisons of EMDR against wait list controls, cognitive behavior therapy involving exposure, and treatment modalities described as other than CBT. Results indicated superiority of EMDR to the wait list control condition. Also, the authors found an overall superiority of EMDR compared to the other active treatment conditions, though they noted sufficient variability that they judged the summed results to indicate comparable vs. superior effectiveness of EMDR over other treatments.

Three studies specifically compared EMDR with CBT (Lee et al., 2002; Power et al., 2002; and Taylor et al., 2002). Lee et al. (2002) and Power et al. (2002) found that EMDR had equivalent or better results than CBT and was more efficient in that it worked faster. Taylor et al. (2002) found otherwise but used therapist-assisted *in vivo* work plus imaginal work. All three studies also gave an hour of daily homework in the exposure condition only, thus greatly increasing the total amount of therapeutic treatment time. Only the Ironson et al. study (2002) that equalized homework did the EMDR group have a faster response to treatment.

The Shephard et al. (2000) meta-analysis involved the use of studies that used patients meeting varying diagnostic criteria of PTSD (i.e., DSM-III, DSM-III-R, and DSM-IV) along with patients who failed to fully meet the diagnostic criteria. EMDR was compared to a broad variety of other treatment conditions including behavioral treatment, cognitive behavioral therapy, antidepressants, relaxation based training, anxiety reduction techniques, exposure based treatments, and variants of EMDR itself. The results indicated that EMDR was an effective treatment. Comparisons between active treatment conditions were less clear with EMDR being found to be as effective as other treatments in some studies and to be less effective than other treatments in a few studies. However, taken on the whole the results were interpreted to indicate generally comparable effectiveness.

Foa and colleagues (1997) conducted a meta-analytic review of studies that involved subjects with PTSD and victims of highly stressful events. EMDR was compared to multiple therapies across the set of studies including hypnotherapy, psychodynamic psychotherapy, CBT, and a variety of no treatment and waiting list control conditions. The authors found several studies that indicated no difference between EMDR and various control conditions. The authors cite a contrary finding in one study suggesting that EMDR was superior to the control condition. The overall conclusions of the authors suggested a more guarded outlook on EMDR as an effective treatment with the bulk of their findings suggesting that EMDR was not effective. Methodological problems in the reviewed studies resulted in a call for further study at the time the review was written.

In two recent "Point" "Counterpoint" reviews of EMDR, (Cahill, 2000; Servan-Schreiber, 2000) two psychiatrists with experience in the area of PTSD treatment debate the merits of EMDR. Servan-Schrieber (2000) reviewed the existing literature on EMDR and concluded that "only the combination of imaginal exposure and *in vivo* exposure has approached [the] degree of effectiveness shown by EMDR." He further argues that the mechanism of eye movement contributes an additional level of therapeutic effect beyond that of simple exposure. Servan-Schrieber cites a meta-analysis published in 1998 by Van Etten and Taylor that "identified more controlled studies of EMDR in PTSD than any other psychotherapeutic treatment modality. Van Etten and Taylor also found EMDR to be the most rapidly effective and best tolerated of all the treatments reviewed, including pharmacotherapy and behavior therapy." In his "Counterpoint" review, Cahill (2000) reviews the same general set of studies but concludes that because of methodological deficiencies in the studies, EMDR cannot be regarded as superior to CBT or other forms of exposure therapy. He does not believe that EMDR operates in a unique or different way from other forms of exposure or cognitive therapy.

Support for the unique property of therapeutic eye movement is provided by a set of seven studies recommended by a member of the Expert Group (Andrade et al., 1997; Barrowcliff et al., in press; Christman and Garvey, 2000; Kavanaugh et al., 2001; Kuiken et al., 2001-2002; Sharpley et al., 1996; and van den Hout et al., 2001). These studies attempt to resolve the issue of the unique role of eye movements, and they demonstrate the effectiveness of eye movements on the desensitization and retrieval of memories.

There may be some basis for or against recommending this treatment depending upon the trauma basis of the PTSD. Specifically, studies of EMDR efficacy with combat veterans have demonstrated considerable variability, with a number of authors suggesting that the treatment may be less than optimal for this condition (Boudewyns et al., 1993; Jensen, 1994). However, other studies that are more recent have suggested the opposite (Carlson et al., 1998; Devilly et al., 1998). It should be noted that only two of the cited studies had a full course of treatment – all the others were short duration studies, unlike the ET combat studies that offered ten or more sessions on all memories. Thus it is impossible to base a conclusion about the use of EMDR for combat trauma on these studies.

This variability in findings and associated evaluations of efficacy appears to be less evident in studies involving groups with different sources of trauma (e.g., sexual assault). Foa et al. (1995) note that exposure therapy may not be appropriate for use with clients whose primary symptoms include guilt, anger, or shame. Given the clinical reality of multiply-traumatized combat veterans' PTSD, this would be a major limitation on the applicability of ET and exposure-based CBT. Finally, the originators of the method have cautioned against the use of this technique with individuals having a past history of some type of dissociative disorder.

Overall, argument can reasonably be made that there are sufficient controlled studies that have sufficient methodological integrity to judge EMDR as effective treatment for PTSD.

EVIDENCE

	Recommendation	**Sources**	**QE**	**Overall Quality**	**R**
1	EMDR is more efficacious for PTSD than wait-list, routine care, and active treatment controls.	Chemtob et al., 2000 Davidson & Parker, 2001 Foa & Meadows, 1997 Maxfield & Hyer, 2002 Sheppard et al., 2000	I	Good	A

2	Eye movements are *not* critical to the effects of EMDR.	Foa & Meadows, 1997	I	Poor	C
3.	EMDR compared with ET and CT show mixed results.	Cahill, 2000 Davidson & Parker, 2001 Foa & Meadows, 1997 Ironson et al., 2002 Lee et al., 2002 Power et al., 2002 Servan-Schrieber, 2000 Sheppard et al., 2000 Taylor et al., 2002 Van Etten and Taylor, 1998	I	Fair	B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

F. Imagery Rehearsal Therapy (IRT)

BACKGROUND

Occurrence of nightmare as a problem is frequent; 4 to 8 percent in the general population and 60 percent in PTSD. Evidence shows that nightmares are associated with psychological distress and sleep impairment. A conditioning pattern similar to classic psychophysiological insomnia is produced in the nightmare disturbed loop, along with the negative cognition of "fear of going to sleep." Studies using brief CBT (desensitization and imagery rehearsal) have demonstrated large reduction in nightmares. Many studies, including Forbes et al. (2001), suggest that PTSD is associated with a propensity toward image, particularly where the post-traumatic symptom picture is characterized by nightmares and flashbacks. IRT incorporates a system to increase the imagery control.

IRT is aimed at changing the content of the patient's nightmare to promote mastery over the content-threat, thereby altering the meaning, importance, and orientation to the nightmare. The key to successful treatment is the use of imagery. IRT focuses on the following main approaches:

- Deemphasizes exposure by avoiding discussion of trauma or traumatic content of nightmares
- Focuses on habitual components of disturbing dreams and sleeplessness
- Provides no group psychotherapy
- Offers minimal instruction for dealing with unpleasant imagery
- Emphasizes relaxation
- Conveys no specific non-sleep-related instructions for managing post-traumatic stress, anxiety, or depressive symptoms

DISCUSSION

Krakow and colleagues have conducted a number of studies involving IRT and PTSD, to include the following:

Krakow et al., (2001a) studied crime victims with nightmares, insomnia, and PTSD, who averaged thirteen years of chronicity. They demonstrated moderate to large improvement in their symptoms and psychiatric distress after receiving cognitive therapy treatment approaches. The authors found that targeted treatment of sleep problems was associated with improvement in distress.

Over 4 years (1995-1999) 168 women in New Mexico were studied; 95 percent had moderate-to-severe PTSD, 97 percent had experienced rape or other sexual assault, 77 percent reported life-threatening sexual assault, and 58 percent reported repeated exposure to sexual abuse in childhood or adolescence. Participants were randomized to receive treatment (n = 88) or to the wait-list control group (n = 80). Outcome measures included questionnaires that rated sleep quality, frequency of nightmares, and severity of PTSD symptoms at 3- and 6-month follow-up. A total of 114 participants completed follow-up at 3 and/or 6 months. Comparing baseline to follow-up, treatment significantly reduced nights per week with nightmares and number of nightmares per week and improved sleep and PTSD symptoms. Control participants showed small, nonsignificant improvements for the same measures. An intent-to-treat analysis (n = 168) confirmed significant differences between treatment and control groups for nightmares, sleep, and PTSD with moderate effect sizes for treatment and small effect

sizes for controls. The authors concluded that IRT is a brief, well-tolerated treatment that appears to decrease chronic nightmares, improve sleep quality, and decrease PTSD symptom severity.

DSM-IV-TR suggests that nightmares occurring with another psychiatric disorder are not a distinctly treatable condition and its remission occurs only through treatment of the primary disorder, such as anxiety disorder, and PTSD.

Krakow et al. (1995) studied 58 chronic nightmare sufferers who were randomly assigned to a treatment group (n = 39) or a wait-list control group (n = 19). Subjects in the treatment group were taught imagery rehearsal. The subjects were assessed pre-treatment and at 3 months follow-up for nightmare frequency, self-rated distress and subjective sleep quality. Compared to the control group, the treatment group showed significant and clinically meaningful decreases in nightmares. Significant improvement in self-rated sleep quality occurred in those treated compared with controls (P = 0.004); and, reduction in nightmares was a significant predictor of improvement in sleep (r = 0.55, P = 0.0001). The authors concluded that, for some chronic sufferers, nightmares may be conceptualized as a primary sleep disorder which can be effectively and inexpensively treated with CBT.

Krakow and colleagues (2001b) studied IRT for the treatment of chronic nightmares in a sample of adolescent girls (treatment group: n = 9; control group: n = 10). These girls had previously suffered a high prevalence of unwanted sexual experiences in childhood and adolescence, and thus many suffered from nightmares, sleep complaints, and post-traumatic stress symptoms. IRT was provided in a 1-day (6-h) workshop. Imagery rehearsal consisted of three steps, all of which are performed in the waking state: (a) select a nightmare, (b) "change the nightmare any way you wish," and (c) rehearse the images of the new version ("new dream") 5 to 20 min each day. The control group participants received no intervention. At baseline, these girls had been suffering from nightmares, on average, for 4.5 years, and they reported experiencing 20 nightmares per month, which occurred at a frequency of at least one bad dream every other night. At 3 months, self-reported, retrospectively assessed nightmare frequency measured in nights per month decreased 57 percent (p =.01, d = 1.4) and measured in nightmares per month decreased 71 percent (p =.01, d = 1.7) in the treatment group, compared with no significant changes in the control group. No significant changes were noted for sleep and PTSD measures in either group. The authors concluded that IRT was an effective treatment option for chronic nightmares in this adjudicated adolescent population.

Forbes et al. (2001) did a follow-up study to asses the efficacy of imagery rehearsal in reducing the frequency and intensity of targeted combat-related nightmares in a group of Vietnam veterans with PTSD. Veterans were specifically instructed to write down their nightmare and subsequently read it aloud to the group. Three treatment groups, comprising 4 veterans in each, completed standardized treatment across 6 sessions. Treatment effects were investigated using nightmare diaries and established instruments. The data demonstrate significant reductions in nightmares targeted, and improvements in PTSD and comorbid symptomatology. The authors recommended that, on the basis of the promising preliminary data, a RCT be established to assess imagery ability and attitude toward nightmares.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	IRT be considered for treatment of PTSD (nightmare and sleep disruption in particular).	Krakow et al., 1995; 2001a; 2001b Forbes et al, 2001	I	Fair	B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

G. Psychodynamic Therapy

BACKGROUND

In 1895, Joseph Breuer and Sigmund Freud based their *Studies on Hysteria* on the proposition that traumatic life events can cause mental disorder (Breuer & Freud, 1955). This principle, radical for its time, grew in scope and

application over the next century and strongly influenced military psychiatry in World War I (Kardiner, 1941; Rivers, 1918) and World War II (Grinker & Spiegel, 1945). Psychodynamic principles were later applied to the psychological problems of Holocaust survivors (Krystal, 1968; De Wind, 1984), Vietnam veterans (Lindy, 1996), rape survivors (Rose, 1991), adult survivors of childhood sexual trauma (Courtois, 1999; Roth & Batson, 1997; Shengold, 1989), and survivors of other traumatic events (Horowitz, 1997). Psychodynamic ideas have also helped providers manage the sometimes complex issues that may surface in the relationship between survivor and psychotherapist (Pearlman & Saakvitne, 1995; Wilson & Lindy, 1994). The following statements summarize the basic elements of psychodynamic psychotherapy:

- Based on the assumption that addressing unconscious mental contents and conflicts (including those that may have been blocked from consciousness as part of a maladaptive response) can help survivors better cope with the effects of psychological trauma
- Explores psychological meanings of post-traumatic responses by sifting and sorting through fears, fantasies, and defenses stirred up by the traumatic event
- Spans a continuum ranging from supportive to expressive but usually includes a mixture of both
- Transference and countertransference are recognized and managed by the therapist but may or may not be brought to the patient's attention
- Approached within the context of a therapeutic relationship that emphasizes safety and honesty and which is, in itself, a crucial factor in the patient's response

Course of Treatment for psychodynamic therapy:

- Most commonly involves one to two meetings per week and can be relatively short term (10 to 20 sessions) and focal or long term (lasting years) and open ended
- Sessions usually last 45 to 50 minutes and, although they average once a week, may be held more or less frequently depending on the patient's needs and tolerance
- Can be conducted individually, in groups, or in family settings on an inpatient or outpatient basis

DISCUSSION

Individual case reports comprise the bulk of the psychodynamic literature on the treatment of psychological trauma, but a small group of empirical investigations and case series with controlled variables and validated outcome measures are available to support recommending psychodynamic therapy as a treatment option for PTSD.

Controlled investigations of the efficacy of psychodynamic therapies are few. Individual case reports comprise the bulk of the psychodynamic literature on the treatment of psychological trauma, but a small group of empirical investigations and case series with controlled variables and validated outcome measures support recommending psychodynamic therapy as a treatment option for PTSD

Brom and colleagues (1989) conducted a RCT that compared psychodynamic psychotherapy to hypnotherapy, trauma desensitization, and a wait list control group in the treatment of patients with PTSD. They found that symptoms of intrusion and avoidance improved significantly in each of the treatment groups but not in the control group. Psychodynamic psychotherapy was more effective than the other treatments in terms of improved coping ability and greater self-esteem. Subjects in the psychodynamic psychotherapy group showed more improvement in the post-termination phase than did subjects in the other two treatment groups. Participants in all three treatment conditions were more improved than those in the wait-list condition (10 percent improvement), but no differences across the three treatments were observed, with 29 percent improvement for those in psychodynamic therapy, 34 percent for hypnotherapy, and 41 percent for desensitization (Rothbaum, 2001).

While research evidence and clinical experience suggest that psychodynamic psychotherapy can be effectively combined with other forms of psychotherapy and with psychopharmacological interventions for depression (DiMascio et al., 1979; van Praag, 1989), this approach has not been sufficiently researched in work with PTSD.

Psychodynamic ideas have, in some instances, been misapplied in clinical work with trauma survivors giving rise to concern about the creation or elaboration of so-called *false memories* (Roth & Friedman, 1997). It may be that trauma survivors are particularly prone to this phenomenon given their tendency towards dissociation. It is important that clinicians be properly trained before undertaking psychodynamic treatment of trauma survivors.

Because of its focus on basic problems in interpersonal relationships, psychodynamic psychotherapy may be useful in working with patients with complex PTSD.Clinical case studies suggest that psychodynamic psychotherapy may be of particular value in work with adult survivors of childhood sexual abuse (Courtois, 1999; Roth & Batson, 1997; Shengold, 1989). Psychodynamic psychotherapy may also be useful in treating patients suffering complex PTSD stemming from other stressors but there is, as yet, little research evidence to support this recommendation.

EVIDENCE

	Recommnedation	Sources	QE	Overall Quality	R
1	Psychodynamic psychotherapy for the treatment of PTSD.	Brom et al., 1989	I	Good	B
2	Psychodynamic psychotherapy for patients with complex PTSD.	Courtois, 1999 Roth & Batson, 1997 Shengold, 1989	II-2	Fair	B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

H. Patient Education

OBJECTIVE

Provide a therapeutic intervention that reduces the symptoms and functional impairments of PTSD.

BACKGROUND

Psychoeducation is a broad term that is often included as a component of other treatment interventions. The expert consensus guidelines on PTSD describe psychoeducation as educating patients and their families about the symptoms of PTSD and the various treatments that are available. They note that it is a useful adjunct therapy for patients with PTSD. In addition to education, reassurance is given that trauma related symptoms are normal and expectable shortly after a trauma and can often be overcome with time and treatment. Education about the symptoms and treatment of comorbid disorders may also be included. Psychoeducational group treatment models for PTSD treatment have been described for women with multiple traumas as well as combat veterans (Foa et al., 1999; Lubin et al., 1998).

DISCUSSION

Psychoeducation is regarded as a useful therapy by many clinicians, although it has not been the subject of any organized review, or well designed RCTs. There is one published efficacy trial of a psychoeducational group therapy for women who survived multiple traumas. Twenty-nine women were treated in a 16-week, trauma-focused inter-active psychoeducational group. The groups met for a brief psychoeducational lecture (15 minutes), followed by an interactive discussion with the therapist. However, there were cognitive behavioral components of the treatment. The cohort was all women, mean age 41, mean years since last trauma was 14, there were many comorbid disorders, over 80 percent were in ongoing individual therapy, and nearly 80 percent were taking psychotropics. The subjects demonstrated significant reductions in their PTSD symptoms on all subscales of the Clinician Administered PTSD Scale (CAPS), with a 50 percent reduction in symptoms from baseline. The recommendations for patient education are consistent with the clinical expert consensus guidelines (Foa et al., 1999).

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Psychoeducation is recommended.	Foa et al., 1999 Lubin et al 1998	III II-2	Poor Fair	C B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

I. Group Therapy

OBJECTIVE

Provide a supportive environment in which a patient with PTSD may participate in therapy with other PTSD patients.

BACKGROUND

The material in this annotation is taken primarily from David Foy and colleagues' discussion of Group Therapy in the recent practice guideline, Effective Treatment for PTSD (Foy et al., 2000). This guideline represents the most recent and most comprehensive review of current treatments for PTSD available in the literature. Only one descriptive study of a group therapy program (Donovan et al., 2001) is more recent than the guideline.

The authors briefly review the use of group therapy for PTSD. They note that it first began to be used as a "front-line treatment" for PTSD in the 1970's, and that it has continued to be used, and researched, up to the present. They note the intuitive appeal of providing this form of therapy to patients who, by the nature of their disorder, have to deal with "isolation, alienation, and diminished feelings" (Foy et al., 2000). They further acknowledge the possibility that group therapy may foster "survivor helping survivor" feelings in participants.

Foy et al. (2000) characterize group approaches as "supportive," "psychodynamic," or "cognitive-behavioral." While all three approaches share certain features such as homogeneous groups, acknowledgement of the trauma, and normalization of traumatic response, they also differ in significant ways:

Supportive approach

- "Covering" approach in which the emphasis is placed on addressing current life issues
- Interventions explore middle-range affects such as frustration, with the goal of diffusing more extreme affects
- Less reliance on formal content or structured materials than psychodynamic or cognitive-behavioral groups
- Low demand on clients for homework or mastery of materials
- Designed to maintain a sense of interpersonal comfort and to keep transference at a low to moderate level
- Orients members toward current coping
- Can be conducted in a range of clinical and paraclinical settings

Psychodynamic ("Trauma focus") approach

- "Uncovering" approach designed to address members' specific traumatic experiences and memories
- Helps patients find meaning in the traumatic experience
- Encourages patients to confront the continuing issues presented by the experience
- Allows patients to trace painful affects back to their self-views and views of others, which may be irrational
- Seeks to provide appropriate affective involvement, monitored to control any overwhelming feelings and to offset the risk for precipitating dissociative reactions

Cognitive-behavioral ("Trauma focus") approach

- "Uncovering" approach designed to address members' specific traumatic experiences and memories
- Primary goals are to reduce symptoms, enhance members' self-control, and improve quality of life
- Emphasizes application of systematic, prolonged exposure and cognitive restructuring to each individual's traumatic experience
- Provides relapse prevention training through emphasis on mobilizing coping resources
- May feature an autobiographical emphasis
- Incorporates trauma processing

RECOMMENDATIONS

1. Consider group treatment for patients with PTSD
2. Current findings do not favor any particular type of group therapy over other types.

DISCUSSION

Foy et al. (2000) note that although group therapy is in common use for PTSD patients, very little research has been done to validate the effectiveness of group therapy, or to delineate those characteristics of therapy that lead to improved clinical outcomes. Their review is based on two RCTs, five nonrandomized trials, and seven pre-/post-treatment single-group studies. In light of the small number of studies, they recommend that group therapy be seen as potentially effective.

The guideline authors provide a useful guide to selecting candidates for group therapy:

Indications for Group Therapy (from Foy et al., 2000)

- Flexibility in personal schedule in order to meet group at appointed times
- Able to establish interpersonal trust with other group members and leaders
- Prior group experience, including 12-step groups
- Completion of a preparatory course of individual therapy
- Not actively suicidal or homicidal
- Shares similar traumatic experiences with other group members
- Compatible for gender, ethnicity, and sexual orientation with other members
- Willing to abide by rules of group confidentiality
- Not severely paranoid or sociopathic
- Has stable living arrangements

Contraindications for Group Therapy (from Foy et al., 2000)

- Active psychosis
- Severe organicity or limited cognitive capacity
- Pending litigation or compensation seeking

Indications for Trauma Focus versus Supportive Groups (from Foy et al., 2000)

- Individual can tolerate high anxiety arousal or other strong affects
- No active suicidality or homicidality
- Substance abuse or other comorbidities are under control
- Individual accepts rationale for trauma uncovering work
- Willingness to self-disclose personal traumatic experiences
- No current life crises

Two recent studies not included in the Effective Treatments for PTSD guideline provide a small amount of additional evidence for the effectiveness of group therapy. In the Rogers et al. (1999) study, 12 Vietnam War veterans were randomly assigned to either a single group session of exposure, or a single group session of eye movement desensitization and reprocessing (EMDR). In this study, at follow-up both groups "showed

improvement on the Impact of Event Scale." The EMDR group experienced "greater positive changes in within-session Subjective Units of Discomfort levels and on self-monitored severity of intrusive recollection."

Donovan et al. (2001) present a descriptive study of a treatment approach that, "defined by a detailed manual, integrates elements of cognitive-behavioral skills training, constructivist theory approaches, SA relapse prevention strategies, and peer social support into a group-focused program." They review outcome data for 46 male patients who received treatment between 1996 and 1998. The authors found that at six- and twelve-month follow-up, patients experienced significant improvement in Clinician-Administered PTSD Scale and Addiction Severity Index scores.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Consider group treatment for patients with PTSD	Donovan et al., 2001 Foy et al., 2000 Rogers et al., 1999	III II I	Fair	B
2	Current findings do not favor any particular type of group therapy	Foy et al., 2000	II	Poor	I

QE = Quality of Evidence; R = Recommendation (see Appendix A)

J. Dialectical Behavior Therapy

BACKGROUND

Dialectical behavior therapy (DBT) is a comprehensive cognitive-behavioral treatment for complex, difficult-to-treat mental disorders, specifically designed to treat chronically suicidal individuals, and patients with multi-disordered individuals with borderline personality disorder (BPD).

DBT has since been adapted for other seemingly intractable behavioral disorders involving emotion dysregulation, including substance dependence in individuals with BPD and binge eating, to other clinical populations (e.g., depressed, suicidal adolescents), and to a variety of settings (e.g., inpatient, partial hospitalization, forensic).

While considerable evidence supports the use of exposure-based treatment for PTSD, its utilization may pose some problems for patients where the symptoms of PTSD are complicated. High rates of attrition, suicidality, dissociation, destructive impulsivity, and chaotic life problems are reasons cited by clinicians for abandoning empirically supported exposure treatment. Some practitioners have suggest that the approach of DBT, designed to address many of these issues, offers useful strategies for addressing the needs of patients considered poor candidates for exposure therapy.

The DBT approach incorporates what is valuable from other forms of therapy, and is based on a clear acknowledgement of the value of a strong relationship between therapist and patient. Therapy is structured in stages and at each stage a clear hierarchy of targets is defined. The techniques used in DBT are extensive and varied, addressing essentially every aspect of therapy. These techniques are underpinned by a dialectical philosophy that recommends a balanced, flexible and systemic approach to the work of therapy. Patients are helped to understand their problem behaviors and then deal with situations more effectively. They are taught the necessary skills to enable them to do so and helped to deal with any problems that they may have in applying those skills.. Advice and support is available between sessions. Patient is encouraged and helped to take responsibility for dealing with life's challenges.

DISCUSSION

Although DBT is becoming more common as a technique for treating patients with BPD, no clinical trials have been reported in the literature for the use of DBT in patients with PTSD. The following studies concern patients

with BPD who attempt some form of self-injury; however, for patients with PTSD and comorbid BPD, these studies may be applicable to the treatment decision process.

In a meta-analysis of RCTs of "psychosocial and/or psychopharmacological treatment versus standard or less intensive types of aftercare" for patients who had shown self-harm behaviors, Hawton et al. (2000) compared DBT vs standard after care and found that DBT significantly reduced rates of further self-harm (0.24; 0.06 to 0.93)." The authors caution, however, that "there still remains considerable uncertainty about which forms of psychosocial and physical treatments of self-harm patients are most effective, inclusion of insufficient numbers of patients in trials being the main limiting factor."

van den Bosch et al.(2002) and Verheul et al. (2003) reported on the effectiveness of DBT in a group of 58 female BPD patients. For these women, DBT therapy "resulted in better retention rates and greater reductions of self-mutilating and self-damaging impulsive behaviours compared with usual treatment, especially among those with a history of frequent self-mutilation" (Verheul et al., 2003). In the same study group, van den Bosch et al. (2002) compared the results of therapy in women with and without comorbid substance abuse. They found that comorbid substance abuse did not dilute the effect of the DBT, but that the DBT therapy had no effect on the womens' substance problems. Evans et al. (1999) compared the provision of self-help booklets alone to six sessions of cognitive therapy linked to the booklets, which contained elements of DBT (MACT) in 34 patients who had attempted self-harm. The authors reported that MACT therapy led to a lowering of the number of suicidal acts per month, and also improved self-rated depressive symptoms.

Linehan and colleagues (1993) conducted a RCT of 39 women with BPD, who were randomly assigned to DBT or usual care for one year, then followed-up at six and twelve months following treatment. The authors reported that DBT patients had significantly less parasuicidal behavior, less anger, and better self-reported social adjustment during the initial 6 months and significantly fewer psychiatric inpatient days and better interviewer-rated social adjustment during the final 6 months; overall, DBT subjects had significantly higher Global Assessment Scale scores during the follow-up year.

Telch et al. (2001) and Safer et al. (2001) expanded the DBT concept to treatment of women with binge eating disorder. In both studies, women were randomly assigned to DBT or a wait list (Telch study – 44 women; Safer study – 31 women) and the authors results were similar; patients improved significantly in reduction of binge/purge behaviors, but did not differ on any secondary measures.

Bohus et al. (2000) treated 24 female chronically suicidal patients with DBT and found significant improvements in ratings of depression, dissociation, anxiety and global stress and a highly significant decrease in the number of parasuicidal acts.

Gould et al. (2003) and Miller and Glinski (2000) identify DBT as a promising treatment for suicide, however, they acknowledge the need for RCTs. In their overview of the use of DBT, Koerner and Linehan (2000) also stress the need for longitudinal follow-up studies to determine suicide rates and maintenance of treatment gains.

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Consider DBT for patients with a borderline personality disorder typified by parasuicidal behaviors.	Evans et al., 1999 Hawton et al., 2000 Linehan et al., 1993 Safer et al., 2001 Telch et al., 2001 van den Bosch et al., 2002 Verheul et al., 2003	I	Fair	B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

K. Hypnosis

OBJECTIVE

A therapeutic intervention that may be an effective adjunctive procedure in the treatment of PTSD.

BACKGROUND

Hypnosis is not a therapy per se, but an adjunct to psychodynamic, cognitive-behavioral, or other therapies, and has been shown to enhance significantly their efficacy for a variety of clinical conditions (Kirsch et al., 1998; Spiegel & Spiegel, 1987). In the specific context of post-traumatic symptomatology, hypnotic techniques have been used for the psychological treatment of shell shock, battle fatigue, traumatic neuroses, and more recently, PTSD, and dissociative symptomatology.

Hypnosis is defined by the APA as "a procedure during which a health professional or researcher suggests that a client, patient, or subject experience changes in sensations, perceptions, thought, or behavior." The hypnotic context is generally established by an induction procedure (Kirsch, 1994). An induction procedure typically entails instructions to disregard extraneous concerns and focus on the experiences and behaviors that the therapist suggests or that may arise spontaneously.

Hypnosis should only be used by credentialed health care professionals, who are properly trained in the clinical use of hypnosis and are working within the areas of their professional expertise.

DISCUSSION

Most of the case studies that reported that hypnosis was useful in treating posttrauma disturbances following a variety of traumas lack methodological rigor, and therefore strong conclusions about the efficacy of hypnosis to treat PTSD cannot be drawn (Rothbaum, 2001).

Brom and colleagues (1989), in a RCT, showed that hypnosis and desentization significantly decreased intrusion, whereas psychodynamic therapy was useful for reducing avoidance symptoms in patients with various types of post-traumatic symptomatology. A recent meta-analysis of controlled clinical trials (Sherman, 1998) compared the effects of the Brom et al. trial and those of other controlled studies and found that the major advantage of using hypnosis may come at follow-up rather than at the end of treatment; this is consistent with meta-analyses of hypnosis for conditions other than PTSD (Kirsch et al., 1999).

Various meta-analyses of studies on the treatment of anxiety, pain, and other conditions imply that hypnosis can substantially enhance the effectiveness of psychodynamic and CBTs (Kirsch, 1996; Kirsch et al., 1999; Smith et al., 1980). However, most of the literature on the use of hypnosis for PTSD is based on service and case studies.

Hypnotic techniques have been reported to be effective for symptoms often associated with PTSD such as pain (Daly & Wulff, 1987; Jiranek, 1993; Richmond et al., 1996), anxiety (Kirsch et al., 1995) and repetitive nightmares (Eichelman, 1985; Kingsbury, 1993).

There are a number of indications for using hypnosis in the treatment of PTSD (Foa et al., 2000):

1. Hypnotic techniques may be especially valuable for symptoms often associated with PTSD, such as dissociation and nightmares, for which they have been successfully used.
2. PTSD patients who manifest at least moderate hypnotizability may benefit from the addition of hypnotic techniques to their treatment.
3. Because confronting traumatic memories may be very difficult for some PTSD patients, hypnotic techniques may provide them with a means to modulate the emotional and cognitive distance from such memories as they are worked through therapeutically.

There are a number of contraindications for using traditional hypnotic techniques in the treatment of PTSD (Foa et al., 2000):

1. In the rare cases of individuals who are refractory or minimally responsive to suggestions, hypnotic techniques may not be the best choice, beause there is some evidence that hypnotizability is related to treatment outcome efficacy (Levitt, 1994; Spiegel et al., 1981 & 1993).
2. Some PTSD patients may be reluctant to undergo hypnosis, either because of religious belief or other reasons. If the resistance is not cleared after dispelling mistaken assumptions, other suggestive techniques can be tried, including emotional self-regulation therapy (ESRT), which is done with open eyes and uses sensory recall exercises rather than a hypnotic induction (Bayot et al., 1997; Kirsch et al., 1999).
3. For patients who have low blood pressure or are prone to fall asleep, hypnotic procedures such as "alert hand," which emphasize alertness and acitivity rather than relaxation, may be substituted (Cardena et al., 1998).

EVIDENCE

	Recommednation	Sources	QE	Overall Quality	R
1	Hypnosis may be used to alleviate PTSD symptoms.	Brom et al., 1989 Sherman, 1998	I	Fair	B

QE = Quality of Evidence; R = Recommendation (see Appendix A)

L. Psychosocial Adjunctive Methods/Services

OBJECTIVE

Provide a therapeutic intervention that facilitates generalizing skills for coping with PTSD from clinic to home/work/community.

BACKGROUND

Patients with chronic PTSD may develop a persistent incapacitating mental illness marked by severe and intolerable symptoms; marital, social, and vocational disability; and extensive use of psychiatric and community services. These patients may sometimes benefit more from case management and psychosocial rehabilitation than from psycho-or pharmacotherapy.

RECOMMENDATIONS

1. Consider psychosocial rehabilitation techniques once the client and clinician identify the following kind of problems associated with the diagnosis of PTSD: persistent high-risk behaviors, lack of self care/independent living skills, homelessness, interactions with a family that does not understand PTSD, socially inactive, unemployed, and encounters with barriers to various forms of treatment/rehabilitation services.
2. Client and clinician should determine whether such problems are associated with core symptoms of PTSD and, if so, then ensure that rehabilitation techniques are used as a contextual vehicle for alleviating PTSD symptoms.
3. Psychosocial rehabilitation should occur concurrently or shortly after a course of treatment for PTSD, since psychosocial rehabilitation is not trauma-focus.

DISCUSSION

There are seven models of psychosocial rehabilitation services that are currently recommended as an adjunct to accompany other forms of treating PTSD. None of these models have undergone randomized, controlled trials for patients with PTSD. However, all these models have been supported by surveys and studies. Positive results with other disorders (e.g., schizophrenia) provide additional support for using these techniques in the treatment of PTSD.

If psychosocial rehabilitation services are to be implemented, the client first identifies that a particular problem exists, and then the client and clinician set personal goals and adapt appropriate rehabilitation techniques/services for PTSD. When to initiate these techniques is decided by the client and individually

tailored to each stage of recovery (Wang et al., 1996). Psychosocial rehabilitation techniques are contraindicated when client and clinician conclude that the problems are resolved.

Models of Psychosocial Rehabilitation Services

1. Self-Care and Independent Living Skills Techniques
    - While social rehabilitative therapies (i.e., teaching social, coping, and life function skills) have been proven effective in chronic schizophrenic and other persistently impaired psychiatric cohorts, they have yet to be formally tested with PTSD clients. Since they appear to generalize well from clients with one mental disorder to another, it is reasonable to expect that they will also work with PTSD clients. There is clinical consensus that appropriate outcomes would be improvement in self-care, family function, independent living, social skills, and maintenance of employment.
    - Given the positive impact of independent skills training techniques for mental disorders in general (Halford et al., 1995), PTSD-centered modules should be developed and tested for effectiveness.
2. Supported Housing
    - Forms of housing considered more effective are those in which clinical services are integrated or efforts are made by treating staff to foster community living (Goldfinger et al., 1997; Schutt & Garrett, 1992)
    - Existing literature for persons with other forms of mental illness demonstrates that case management linked to specialized clinical services is more effective than "single-room occupancy" or "warehousing" in shelters without other forms of support (Goldfinger et al., 1997).
3. Marital/Family Skills Training
    - Marital and family treatments for trauma survivors fall into one of two general categories: systemic approaches designed to treat marital or family disruption, and supportive approaches designed to help family members offer support for an individual being treated for PTSD. These treatments are usually provided as an adjunct to other forms of treatment that are designed to directly address the PTSD symptoms.
    - A single, low-quality RCT compared the addition of family therapy to individual therapy for war veterans with PTSD (Glynn et al., 1999). It found no significant benefit to the addition of behavioral family therapy (BFT), largely due to a high dropout rate, nor did it add significantly to the treatment of PTSD with direct therapeutic exposure (DTE) (an individual psychotherapy technique).
    - There are no research studies on the effectiveness of marital/family therapy for the treatment of PTSD. However, because of trauma's unique effects on interpersonal relatedness, clinical wisdom indicates that spouses and families be included in treatment of those with PTSD. Of note, marriage counseling is typically contraindicated in cases of domestic violence, until the batterer has been successfully (individually) rehabilitated.
4. Social Skills Training
    - Effectiveness of social skills training has been well demonstrated over many years in many RCTs but not specifically for PTSD (Dilk & Bond, 1996).
    - Effectiveness of social skills training has been demonstrated for reducing social isolation of persons with severe mental disorders (e.g., schizophrenia); similar techniques may be promising for PTSD, particularly if adapted to address antecedent conditions involved in trauma and its consequences (Rothbaum & Foa, 1996).
5. Vocational Rehabilitation
    - Effectiveness of vocational rehabilitation techniques in treating mental disorders has been demonstrated under controlled experimental conditions (Bell & Lysaker, 1996; Bell et al., 1996; Bell et al., 1993; Bond et al., 1997) and controlled, clinical studies (Anthony et al., 1995; Drake, 1996; Lehman, 1995; Lysaker et al., 1993).
6. Case Management
   Although case management has been shown to be useful for a range of other psychiatric disorders, there is currently no evidence available from RCTs or from systematic reviews to support or reject the use of case management for PTSD patients.

- Among populations with histories of trauma, the assertive community treatment models have been empirically validated under controlled (but not with random assignment) conditions (Mueser et al., 1998).
- Most of the research that empirically validates case management has been conducted among persons with severe mental disorders (Mueser et al., 1998), presumably including persons with co-occurring PTSD and other disorders.
- Evidence suggests that outcomes are more favorable for intensive case management (well-trained clinician teaches client psychosocial rehabilitation skills in the client's home/community) than for simple case management (clinician links client to needed services).
- Case management has been demonstrated to reduce inpatient hospitalizations and severe symptoms, as well as to stabilize housing for formerly homeless persons; however, there is little evidence to suggest that case management improves vocational adjustment/social functioning (Mueser et al., 1998).

M. Spiritual Support

OBJECTIVE

Reduce Symptoms of PTSD and improve patient's functioning through social and spiritual support.

BACKGROUND

Spiritual & existential issues: "Given the complex range of PTSD symptomatology, a successful treatment program will address not only the emotional issues that characterize the disorder but also its psychophysiological, cognitive, and interpersonal processes and existential meanings" (Hunter, 1996).

RECOMMENDATIONS

1. Provide access to religious/spiritual resources, if sought.

DISCUSSION

Trauma as Shattered Life Assumptions: Recent research on cognitive processes in victimization indicates that major changes in the individual's basic life assumptions may occur. These assumptions involve the security and meaningfulness of the world and one's sense of self-worth in relation to perception of the environment (Janoff-Bulman, 1979). Specifically, these assumptions are: (1) that one's environment is physically and psychologically safe; (2) that events are predictable, meaningful and fair; (3) that one's own sense of self-worth is positive in relation to experiences with other people and events (Hunter, 1996).

Social system interventions involve community action, organization and mobilization; education and consultation with advice for leaders; mobilization of action plans and recover process; facilitation of adaptation and mastery in social change; development of community networks; development of a positive recover organization; communication; and community theater and art geared to working through and recovering from the trauma.

Providing space and opportunities for prayers, mantras, rites and rituals and end-of-life care as determined important by the patient (Lee, 1997; Canda & Phaobtong, 1992)

EVIDENCE

	Recommendation	Sources	QE	Overall Quality	R
1	Provide opportunities to vent & defuse, to share feelings and talk.	Bogia & Preston, 1985 Everly, 2000 Hunter	II	Fair	C

QE = Quality of Evidence; R = Recommendation (see Appendix A)

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

APPENDICES

APPENDIX A
Guideline Development Process

The development of the VA/DoD Clinical Practice Guideline for the Management of Traumatic Stress Symptoms was initiated in May 2002 and continued through May 2003. The development process followed the steps described in "Guideline for Guidelines" an internal working document of VHA's National Clinical Practice Guideline Council, which requires an ongoing review of the work in progress.

Target Audience

The guideline is designed for providers in primary care clinics and mental health centers, including PTSD special programs and VET centers. Specific modules in this guideline:

- Address prevention and health surveillance that may affect any person in the DoD or VA setting
- Outline the actions of individuals who provide early interventions or consultations in the immediate response to trauma events, mass catastrophic events, or combat situations during ongoing military operations
- Provide recommendations for the treatment of PTSD

Guideline Development Process

The Offices of Quality and Performance and Patient Care Service, in collaboration with the network Clinical Managers, the Deputy Assistant Under Secretary for Health, and the Medical Center Command of the DoD identified clinical leaders to champion the guideline development process. During a preplanning conference call, the clinical leaders defined the scope of the guideline and identified a group of clinical experts from the VA and DoD that formed the Guideline Development Working Group.

The Working Group participated in several face-to-face sessions to reach a consensus about the guideline recommendations and to prepare a draft document. The draft was revised by the experts through numerous conference calls and individual contributions to the document.

The final draft was reviewed mental health and primary care experts in the VA and DoD. Their feedback was integrated into the final draft. Nonetheless, this document is a work in progress. It will be updated every two years, or when significant new evidence is published.

The guideline is the product of many months of diligent effort and consensus building among knowledgeable individuals from the VA, DoD, academia, and guideline facilitators from the private sector. An experienced moderator facilitated the multidisciplinary Working Group. The list of participants is included in the introduction to the guideline.

Formulating of Questions

The Working Group developed eighteen researchable questions and associated key terms after orientation to the seed guidelines and to goals that had been identified by the Working Group. The questions specified (adapted from the Evidence-Based Medicine (EBM) toolbox, Centre for Evidence-Based Medicine, (http://www.cebm.net):

- Population – characteristics of the target patient population
- Intervention – exposure, diagnostic, or prognosis
- Comparison – intervention, exposure, or control used for comparison
- Outcome –outcomes of interest

These specifications served as the preliminary criteria for selecting studies.

Selection of Evidence

Published, peer-reviewed, randomized controlled trials (RCTs) were considered to constitute the strongest level of *evidence* in support of guideline recommendations. This decision was based on the judgment that RCTs provide the clearest, scientifically sound basis for judging comparative efficacy. The Working Group made this decision recognizing the limitations of RCTs, particularly considerations of generalizability with respect to patient selection and treatment quality. Meta-analyses that included random controlled studies were also considered to be the strongest level of evidence, as well as reports of evidence-based systematic reviews.

A systematic search of the literature was conducted. It focused on the best available evidence to address each key question and ensured maximum coverage of studies at the top of the hierarchy of study types: evidence-based guidelines, meta-analyses, and systematic reviews. When available, the search sought out critical appraisals already performed by others that described explicit criteria for deciding what evidence was selected and how it was determined to be valid. The sources that have already undergone rigorous critical appraisal include Cochrane Reviews, Best Evidence, Technology Assessment, and EPC reports.

The search continued using well-known and widely available databases that were appropriate for the clinical subject. In addition to Medline/PubMed, the following databases were searched: Database of Abstracts of Reviews of Effectiveness (DARE) and Cochrane Central Register of Controlled Trials (CCTR). For Medline/PubMed, limits were set for language (English), date of publication (1998 through July 2002) and type of research (RCT and meta-analysis). For most of the pharmacotherapy topics the only limit was date, 1990 through March 2003).

Once definitive reviews or clinical studies that provided valid relevant answers to the question were identified, the search ended. The search was extended to studies/reports of lower quality (observational studies) only if there were no high quality studies.

Exclusion criteria included reviews that omitted clinical course or treatment. Some retrieved studies were rejected on the basis of published abstracts, and a few were rejected after the researchers scanned the retrieved citation for inclusion criteria. Typical exclusions included studies involving children and adolescents.

The results of the search were organized and reported using reference manager software. At this point, additional exclusion criteria were applied. The bibliographies of the retrieved articles were hand-searched for articles that may have been missed by the computer search. Additional experts were consulted for articles that may also have been missed.

Literature Review and Inclusion Criteria

The articles identified during the literature reviews formed the basis for formulating the guideline recommendations. The literature search for the guideline development was validated by: (1) comparing the results to a search conducted by the independent research and appraisal team; (2) a review of the database by the expert panel; and (3) requesting articles pertaining to special topics from the experts in the working group.

Preparation of Evidence Tables (reports)

A group of clinician reviewers and other researchers in health care, with experience in evidence-based appraisal, independently read and coded each article that met inclusion criteria. Each article was turned into a one-page summary of the critical appraisal by the research team and added to a central electronic database. Clinicians from the Center for Evidence-Based Practice at the State University of New York [SUNY], Upstate

Medical University, Department of Family Medicine contributed several of the appraisal reports. Each of the evidence reports covered:

- Summary of findings
- Methodology
- Search terms
- Resources searched
- Summary table of findings
- Critical appraisal of each study

Recommendation and Overall Quality Rating

Evidence-based practice involves integrating clinical expertise with the best available clinical evidence derived from systematic research. The Working Group reviewed the evidence and graded it using the rating scheme developed by the United States Preventive Service Task Force (USPSTF) (2001). The experts themselves, after an orientation and tutorial on the evidence grading process, formulated Quality of Evidence ratings (see Table 1), a rating of Overall Quality (see Table 2), a rating of the Net Effect of the Intervention (see Table 3), and an overall Recommendation (see Table 4).

Evidence Grading System

TABLE 1: Quality of Evidence (QE)

I	At least one properly done RCT
II-1	Well designed controlled trial without randomization
II-2	Well designed cohort or case-control analytic study
II-3	Multiple time series, dramatic results of uncontrolled experiment
III	Opinion of respected authorities, case reports, and expert committees

TABLE 2: Overall Quality

Good	High grade evidence (I or II-1) directly linked to health outcome
Fair	High grade evidence (I or II-1) linked to intermediate outcome; *or* Moderate grade evidence (II-2 or II-3) directly linked to health outcome
Poor	Level III evidence or no linkage of evidence to health outcome

TABLE 3: Net Effect of the Intervention

Substantial	More than a small relative impact on a frequent condition with a substantial burden of suffering; *or* A large impact on an infrequent condition with a significant impact on the individual patient level.
Moderate	A small relative impact on a frequent condition with a substantial burden of suffering; *or* A moderate impact on an infrequent condition with a significant impact on the individual patient level.
Small	A negligible relative impact on a frequent condition with a substantial burden of suffering; *or* A small impact on an infrequent condition with a significant impact on the individual patient level.
Zero or Negative	Negative impact on patients; *or* No relative impact on either a frequent condition with a substantial burden of suffering; *or* An infrequent condition with a significant impact on the individual patient level.

TABLE 4: Final Grade of Recommendation

	The net benefit of the intervention			
Quality of Evidence	**Substantial**	**Moderate**	**Small**	**Zero or Negative**
Good	*A*	*B*	*C*	*D*
Fair	*B*	*B*	*C*	*D*
Poor	*I*	*I*	*I*	*I*

A A strong recommendation that the intervention is always indicated and acceptable
B A recommendation that the intervention may be useful/effective
C A recommendation that the intervention may be considered
D A recommendation that a procedure may be considered not useful/effective, or may be harmful.
I Insufficient evidence to recommend for or against – the clinician will use clinical judgment

Abstract of the USPSTF:

- Once assembled, admissible evidence is reviewed at three strata: (1) the individual study, (2) the body of evidence concerning a single linkage in the analytic framework, and (3) the body of evidence concerning the entire preventive service. For each stratum, the Task Force uses explicit criteria as general guidelines to assign one of three grades of evidence: good, fair, or poor.

- Good or fair quality evidence for the entire preventive service must include studies of sufficient design and quality to provide an unbroken chain of evidence-supported linkages that generalize to the general primary care population and connect the preventive service with health outcomes. Poor evidence contains a formidable break in the evidence chain, such that the connection between the preventive service and health outcomes is uncertain.

- For services supported by overall good or fair evidence, the Task Force uses outcomes tables to help categorize the magnitude of benefits, harms, and net benefit from implementation of the preventive service into one of four categories: substantial, moderate, small, or zero/negative.

The Task Force uses its assessment of the evidence and magnitude of net benefit to make a recommendation, coded as a letter: from A (strongly recommended) to D (recommend against). It gives an "I" recommendation in situations in which the evidence is insufficient to determine net benefit (Harris et al., 2001).

Lack of Evidence – Consensus of Experts

The majority of the literature supporting the science for these guidelines is referenced throughout the document and is based upon key RCTs and longitudinal studies published from 1998 through July 2002. Following the independent review of the evidence, a consensus meeting was held to discuss discrepancies in ratings and formulate recommendations. Where existing literature was ambiguous or conflicting, or where scientific data was lacking on an issue, recommendations were based on the clinical experience of the Working Group. These recommendations are indicated in the evidence tables as based on "Working Group Consensus".

Algorithm Format

The goal in developing the guideline for managing traumatic stress symptoms was to incorporate the information from several existing reports, recommendations, and statements into a format which would maximally facilitate clinical decision making. The use of the algorithm format was chosen because of the evidence that such a format improves data collection, diagnostic and therapeutic decision-making and changes patterns of resource use. The algorithm format may help the clinician sort out the logic and sequence of the decision-making process for choosing the appropriate interventions to help survivors during the disorientation that often follows a trauma.

The algorithmic format allows the provider to follow a linear approach to critical information needed at the major decision points in the clinical process, and includes:

- An ordered sequence of steps of care
- Recommended observations
- Decisions to be considered
- Actions to be taken.

A clinical algorithm diagrams a guideline into a step-by-step decision tree. Standardized symbols are used to display each step in the algorithm (SMDMC, 1992). Arrows connect the numbered boxes indicating the order in which the steps should be followed.

Rounded rectangles represent a clinical state or condition.

Hexagons represent a decision point in the guideline, formulated as a question that can be answered Yes or No. A horizontal arrow points to the next step if the answer is YES. A vertical arrow continues to the next step for a negative answer.

Rectangles represent an action in the process of care.

Ovals represent a link to another section within the guideline.

A letter within a box of an algorithm refers the reader to the corresponding annotation. The annotations elaborate on the recommendations and statements that are found within each box of the algorithm. Included in the annotations are brief discussions that provide the underlying rationale and specific evidence tables. Annotations indicate whether each recommendation is based on scientific data or expert opinion. A complete bibliography is included in the guideline.

APPENDIX B
Acronym List

ABCs	Airway, breathing, circulation
AHCPR	Agency for Healthcare Policy and Research
APA	American Psychiatric Association
ASD	Acute stress disorder
ASR	Acute stress reaction
AUDIT	Alcohol Use Disorders Identification Test
CAGE	Alcohol abuse/dependence screening test mnemonic
CAPS	Clinician Administered PTSD Scale
CBC	Complete blood count
CBT	Cognitive Behavioral Therapy
CCTR	Cochrane Central Register of Controlled Trials
CDR	Commander
CNS	Central nervous system
COSR	Combat and operational stress reactions
CISD	Critical Incident Stress Debriefing
CT (Interventions)	Cognitive Therapy
CT	Computed tomography
CV	Cardiovascular
DARE	Database of Abstracts of Reviews of Effectiveness
DAST	Drug Abuse/Dependence Screener
DBT	Dialectical Behavioral Therapy
DoD	Department of Defense
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders (4th edition)
DTE	Direct Therapeutic Exposure
EBM	Evidence-based medicine
EBPTU	Evaluation and Brief PTSD Treatment Unit
EEG	Electroencephalography
EKG	Electrocardiogram
EMDR	Eye Movement Desensitization and Reprocessing
EMTs	Emergency Medical Teams
ESRT	Emotional Self-Regulation Therapy
EtoH	Ethanol
ET	Exposure Therapy
FDA	U. S. Food and Drug Administration
GAF	Global Assessment of Function
GI	Gastrointestinal
GU	Genitourinary
HCG	Human Choriogonadotropin
HIV	Human immunodeficiency virus
IRT	Image Rehearsal Therapy
LOC	Level of consciousness
LOF	Level of function
MAOIs	Monoamine oxidase inhibitors
MAST	Michigan Alcohol Screening Test
MDD	Major Depressive Disorder
MHP	Mental health providers
MI	Myocardial infarction
MMSE	Mini-Mental State Examination
MRI	Magnetic resonance imaging
MSE	Mental status examination
NIMH	National Institute of Mental Health
NS	Nervous system
OMO	Ongoing military operations

OTC	Over-the-counter
PCL-C	PTSD Checklist – Civilian Version
PCL-M	PTSD Checklist – Military Version
PCL-S	PTSD Checklist – Stressor Specific Version
PCP	Primary care provider
PE	Physical examination
PE (Interventions)	Prolonged Exposure
PIES	Proximity, Immediacy, Expectancy, Simplicity
PTSD	Post-traumatic Stress Disorder
QE	Quality of evidence
RCS	Readjustment Counseling Services
RCT	Randomized controlled trial
RTD	Return-to-duty
SC	Supportive Counseling
SIADH	Syndrome of inappropriate antidiuretic hormone
SIPU	Specialized Inpatient PTSD Unit
SIT	Stress Inoculation Therapy
SM	Service member
SR	Strength of recommendation
SSRI	Selective Serotonin Reuptake Inhibitors
SUD	Substance Use Disorder
SUNY	State University of New York
TCAs	Tricyclic Antidepressants
TSH	Thyroid Stimulating Hormone
USPSTF	U.S. Preventive Service Task Force
VA	Veterans Affairs
VAMC	Veterans Affairs Medical Center
VHA	Veterans Health Administration

APPENDIX C
PTSD Screening Tools

Primary Care PTSD Screen (PC-PTSD)

The table below shows the Primary Care PTSD Screen (PC-PTSD) that has been designed for use in primary care and other medical settings. The PC-PTSD is brief and problem-focused. The screen does *not* include a list of potentially traumatic events. There are two reasons for this:

- Studies on trauma and health in both male and female patients suggest that the active mechanism linking trauma and physical health is the diagnosis of PTSD. In other words, the relationship between trauma and health appears to be mediated through a current PTSD diagnosis.
- A symptom-driven screen, rather than a trauma-focused screen, is attractive to primary care staff who may not be able to address a patient's entire trauma history during their visit with the patient. Such a trauma inquiry might be especially problematic with a VA population where the average number of traumatic events meeting criterion A for PTSD is over four.

A positive response to the screen does not necessarily indicate that a patient has Post-traumatic Stress Disorder. However, a positive response does indicate that a patient *may* have PTSD or trauma-related problems and further investigation of trauma symptoms by a mental-health professional may be warranted.

Primary Care PTSD Screen In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, *in the past month,* you…
1. Have had nightmares about it or thought about it when you did not want to? YES NO
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? YES NO
3. Were constantly on guard, watchful, or easily startled? YES NO
4. Felt numb or detached from others, activities, or your surroundings? YES NO
Current research suggests that the results of the PC-PTSD should be considered "positive" if a patient answers "yes" to any two items.

PTSD CheckList – Civilian Version (PCL-C)

Patient's Name: _____

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful life experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem *in the last month.*

No.	Response:	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing *memories, thoughts*, or *images* of a stressful experience from the past?					
2.	Repeated, disturbing *dreams* of a stressful experience from the past?					
3.	Suddenly *acting* or *feeling* as if a stressful experience *were happening again* (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of a stressful experience from the past?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of a stressful experience from the past?					
6.	Avoid *thinking about* or *talking about* a stressful experience from the past or avoid *having feelings* related to it?					
7.	Avoid *activities* or *situations* because *they remind you* of a stressful experience from the past?					
8.	Trouble *remembering important parts* of a stressful experience from the past?					
9.	Loss of *interest in things that you used to enjoy*?					
10.	Feeling *distant* or *cut off* from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short*?					
13.	Trouble *falling* or *staying asleep*?					
14.	Feeling *irritable* or having *angry outbursts*?					
15.	Having *difficulty concentrating*?					
16.	Being "*super alert*" or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

Weathers, F.W., Huska, J.A., Keane, T.M. *PCL-C for DSM-IV.* Boston: National Center for PTSD – Behavioral Science Division, 1991.

This is a Government document in the public domain.

PTSD CheckList – Military Version (PCL-M)

Patient's Name: _____

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem in *the last month.*

No.	Response:	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing *memories*, *thoughts*, or *images* of a stressful military experience?					
2.	Repeated, disturbing *dreams* of a stressful military experience?					
3.	Suddenly *acting* or *feeling* as if a stressful military experience *were happening again* (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of a stressful military experience?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of a stressful military experience?					
6.	Avoid *thinking about* or *talking about* a stressful military experience or avoid *having feelings* related to it?					
7.	Avoid *activities* or *situations* because *they remind you* of a stressful military experience?					
8.	Trouble *remembering important parts* of a stressful military experience?					
9.	Loss of *interest in things that you used to enjoy*?					
10.	Feeling *distant* or *cut off* from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short*?					
13.	Trouble *falling* or *staying asleep*?					
14.	Feeling *irritable* or having *angry outbursts*?					
15.	Having *difficulty concentrating*?					
16.	Being *"super alert"* or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

Weathers, F.W., Huska, J.A., Keane, T.M. *PCL-M for DSM-IV.* Boston: National Center for PTSD – Behavioral Science Division, 1991.

This is a Government document in the public domain.

PTSD CheckList – Stressor Specific Version (PCL-S)

The event you experienced was: _____ on: _____

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem in *the last month.*

No.	Response:	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing *memories*, *thoughts*, or *images* of the stressful experience?					
2.	Repeated, disturbing *dreams* of the stressful experience?					
3.	Suddenly *acting* or *feeling* as if the stressful experience *were happening again* (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of the stressful experience?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of the stressful experience?					
6.	Avoid *thinking about* or *talking about the* stressful experience or avoid *having feelings* related to it?					
7.	Avoid *activities* or *situations* because *they remind you* of the stressful experience?					
8.	Trouble *remembering important parts* of the stressful experience?					
9.	Loss of *interest in things that you used to enjoy*?					
10.	Feeling *distant* or *cut off* from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short*?					
13.	Trouble *falling* or *staying asleep*?					
14.	Feeling *irritable* or having *angry outbursts*?					
15.	Having *difficulty concentrating*?					
16.	Being *"super alert"* or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

Weathers, F.W., Huska, J.A., Keane, T.M. *PCL-S for DSM-IV.* Boston: National Center for PTSD – Behavioral Science Division, 1991.

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