Posttraumatic Stress Disorder (PTSD)

SE Rosenberg, University of California San Francisco, San Francisco, CA, USA

This article is a revision of the previous edition article by Gregory A Leskin, Javaid I Sheikh, volume 4, pp 45–48, © 2003, Elsevier Inc.

Introduction

Posttraumatic stress disorder (PTSD) is a syndrome that results from an individual experiencing or witnessing a traumatic event, such as a natural disaster, military combat, assault, or a motor vehicle accident. Clinicians should first screen patients to determine if they have a transient stress reaction. Second, patients who screen positive for a stress reaction should be evaluated for acute stress disorder, PTSD, and cooccurring conditions, including depression, anxiety, and substance abuse. Finally, the clinician should assess psychosocial functioning, interpersonal problems, and social support. Standardized, validated measures should be used for initial assessment, to monitor treatment progress and to evaluate treatment outcome.

Assessment for Screening

The objective of screening is to identify individuals exposed to traumatic events who are at risk for developing acute stress disorder or PTSD and require further evaluation for differential diagnosis and treatment planning. Psychological distress is a normal reaction to a traumatic event for the majority of individuals who suffer or witness it. The purpose of screening is to distinguish individuals who will likely have only transient distress from those who may require additional evaluation to rule out PTSD and other stress-related mental, substance use, and neurological disorders.

The majority of patients with stress-related conditions present to primary care providers complaining of somatic and psychological symptoms, such as sleep disturbance, fatigue, depression, anxiety, and problems with concentration. To screen for individuals at risk for PTSD, practitioners can use the Primary Care PTSD Screen and the PTSD Checklist, validated screening tools available from the National Center for PTSD.

The Primary Care Posttraumatic Stress Disorder Screen

The Primary Care PTSD Screen is a tool for determining whether an individual has an acute stress reaction – a typically transient condition in response to extreme stress – or needs additional diagnostic assessment for PTSD and cooccurring depression, anxiety, and substance use disorders. The Primary Care PTSD Screen poses the following questions: "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 thoughts about it when you did not want to? (2) Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? (3) Were constantly on guard, watchful, or easily startled? (4) Felt numb or detached from others, activities, or your surroundings?" Three out of four questions endorsed 'yes' is considered a positive screen.

The Posttraumatic Stress Disorder Checklist

The PTSD Checklist is a 17-item self-report measure with broad coverage of PTSD symptoms. There are three versions of the PTSD Checklist: (1) military, for active service members and veterans; (2) civilian, which asks about symptoms in relation to unspecified stressful experiences; and (3) specific, which asks about symptoms in relation to an identified stressful experience and aims to link symptom endorsements to that specified event.

Individuals who screen positive on the Primary Care PTSD or the PTSD Checklist should be referred for a comprehensive diagnostic evaluation. Individuals with an acute stress reaction, a transient condition, should be provided education and contact information if symptoms worsen.

Assessment for Diagnosis

To guide accurate diagnosis and clinical decision-making, individuals being evaluated following a trauma or who screen positive for a trauma-related condition, should receive a thorough assessment of their symptoms. Diagnostic assessment should assist the clinician with determining whether the patient has an acute stress disorder or PTSD. If the patient has either conditions, an evaluation of cooccurring disorders, including substance use, depression, and anxiety is indicated as well as assessment of interpersonal problems and available social support.

Acute Stress Disorder

Acute stress disorder is diagnosed when symptoms have lasted for more than 4 days but less than one month after exposure to a traumatic event. Dissociative symptoms are prominent and may include numbing, being in a daze, feeling that familiar surroundings are unreal, feeling not one's usual self and amnesia for important aspects of the trauma. Additional symptoms include reexperiencing the stressor in nightmares or flashbacks, avoidance of reminders of the trauma, anxiety, sleep difficulties, irritability, poor concentration, and hypervigilance. The symptoms cause significant emotional distress or occupational or psychosocial impairments.

Posttraumatic Stress Disorder

PTSD is diagnosed when the patient meets criteria from three clusters of symptoms, which are present for more than 30 days

 doi:10.1016/B978-0-12-385157-4.01074-5

after the trauma. The onset of symptoms may be delayed for months or years after the traumatic event. Intrusion or reexperiencing symptoms include distressing memories of the trauma, flashbacks, nightmares, or physiological reactivity to reminders of the traumatic event. Avoidance symptoms include avoiding people, places, activities, thoughts, and memories associated with the trauma and withdrawing from family and friends. Hyperarousal symptoms include vigilance for treats, irritability, startle reactions, and angry outbursts.

Assessment should begin with the clinician eliciting and carefully listening to the patient's story of the traumatic event. The patient should be asked what happened, how it affected them at the time and how they coped following the event. The clinician should obtain a psychiatric and psychosocial history, including prior traumatic events, family dysfunction, and adverse childhood experiences. Unpredictable, uncontrollable traumatic events that cause a feeling of helplessness increase the risk of PTSD. Some individuals exposed to prolonged interpersonal victimization called 'complex PTSD' or 'disorders of extreme stress' may not meet the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for a single discrete trauma but may experience all the symptoms of PTSD and can benefit from treatment. Lack of social support impedes recovery from PTSD. The psychosocial functioning of patients should be evaluated, including interpersonal problems that interfere with relationships with family and friends.

Individuals with PTSD have elevated rates of high-risk behaviors, including cigarette smoking and harmful use of alcohol and drugs. Individuals with PTSD have an elevated risk for suicidal ideation and suicide attempts. Suicide risk factors include the presence of depression or psychosis, alcohol abuse, a history of prior suicide attempts, formulation of a plan, availability of means for suicide (e.g., guns or pills), disruption of an important relationship and failure at an important personal endeavor. PTSD is a risk factor for suicidal ideation among veterans; veterans with depression and alcohol abuse have the highest risk for suicide.

Semistructured Diagnostic Interviews

Clinicians should use semistructured interviews to elicit symptoms of PTSD and cooccurring mental disorders. The clinician should asses the onset, frequency, course, and severity of the symptoms, as well as evaluate the level of distress and psychosocial functional impairments. The Clinician Administered PTSD Scale (CAPS), developed by the National Center for PTSD, is the 'gold standard' for diagnosis of PTSD. The CAPS is a 30-item structured interview that corresponds to the DSM-IV criteria for PTSD. The CAPS assesses the frequency and intensity of each PTSD symptom, and the impact of symptoms on social and occupational functioning.

The Structured Clinical Interview for DSM-IV (SCID) takes 60–90 min to administer and is a reliable and valid measure of mental and substance use disorders according to the DSM-IV criteria. The World Health Organization Composite International Diagnostic Interview (CIDI) is a comprehensive, fully structured interview designed to be used by trained lay interviewers for the assessment of mental disorders, according to the definitions and criteria of International Classification of Diseases, 10th revision (ICD-10) and DSM-IV.

Psychological Tests and Patient-Reported Outcome Measures

For military or civilian disability and workman's compensation claimants, clinicians should administer either the Minnesota Multiphasic Personality Inventory (MMPI) or the Personality Assessment Inventory (PAI). These are the best validated tests of personality and psychopathology and both tests contain scales that measure the degree to which claimants may exaggerate – or conversely minimize – psychopathology.

The MMPI is the most widely used self-report personality inventory for assessing PTSD and cooccurring mental and substance use disorders in military, civilian, forensic, and disability settings. The MMPI has over a hundred scales that measure mental and substance use disorders as well as risk of harm to self or others. The MMPI validity scales measure the endorsement of infrequent symptoms; scales also measure underreporting or minimizing symptoms and the tendency to endorse test items that portray the individual in a socially desirable light.

The PAI, similar to the MMPI, covers PTSD symptoms, mental and substance use disorders, and suicide risk. The PAI has excellent validity scales that measure an individual's tendency to create a favorable impression or to maximize or exaggerate the presentation of symptoms. The PAI has reliable and valid measures that assess perceived social support and psychosocial functioning.

Interpersonal problems are very common in patients with PTSD. Individuals with PTSD have increased rates of marital, family, and interpersonal problems. By interfering with relationships, interpersonal problems can adversely affect the availability of social support – a powerful determinant of recovery from PTSD. The Inventory of Interpersonal Problems (IIP) is the most widely used measure of interpersonal problems. Multiple versions and formats exist, including the original 127-item version, a 64- and 32-item version (which have been translated into many languages). The 25-item version measures interpersonal sensitivity, interpersonal ambivalence, interpersonal aggression, need for social approval, and lack of sociability. The IIP is widely used internationally for initial assessment and treatment outcome evaluation.

The Patient Reported Outcomes Measurement Information System (PROMIS) is a system of patient-reported health status measures for physical, mental, and social well-being. PROMIS measures can be used in clinical studies of the effectiveness of treatment for PTSD and cooccurring mental and substance use disorders, and to evaluate how various treatments might affect health-related quality of life. Because PROMIS measures are brief and have standard terminology and metrics, they are especially valuable for comparative effectiveness research.

Diagnostic Evaluation for Mild Traumatic Brain Injury

The high incidence of head injuries among veterans has provided new insights into PTSD and mild traumatic brain injury

(mTBI). The leading causes of traumatic brain injury in the military are blasts, fragments, and bullets. Causes of mTBI in the military and for civilians include motor vehicle crashes and falls. Civilian sports-related injuries are also common causes. Common physical symptoms associated with mTBI include headache, dizziness and balance disorder, nausea, fatigue, and sleep disturbance. Cognitive symptoms associated with mTBI include impaired executive functions; processing speed impairments; and problems with attention, memory, and judgment (these symptoms also occur in mood and anxiety disorders). Behavioral symptoms include irritability, agitation, impulsivity, and aggression. Evaluation of mTBI includes determining if the patient had loss of consciousness for less than 30 min, loss of memory for events immediately before or after the injury for less than 24 h, alteration of consciousness less than 24 h, normal computed tomography imaging, and a Glasgow Coma Scale score between 13 and 15 within the first 24 h.

There is considerable overlap of symptoms between mTBI and PTSD. Depression and anxiety symptoms are common with mTBI and PTSD. Difficulties with attention and concentration, memory, impulsivity, mood lability, and depression occur in both, and may lead to social isolation, interpersonal problems, and psychosocial impairments at work and at home. However 'reexperiencing' symptoms of PTSD, including nightmares, intrusive images, repeated thoughts, and flashbacks of the traumatic event, are not characteristic of mTBI.

Treatment Planning

Patients who actively participate in taking decisions about diagnostic testing and treatment fare better than patients who are less engaged. Informing patients about the results of screening, diagnostic, and psychosocial assessment facilitates collaborative decision making among doctors, patients, and family members. Many effective therapies for PTSD exist. Cognitive Behavioral Therapy (CBT) helps patients become aware of, and understand, how their thoughts and beliefs cause emotional distress. Patients are taught to challenge dysfunctional thoughts and attitudes (cognitive restructuring), for example, blaming themselves for not being able to prevent the trauma or to rescue others. Prolonged exposure therapy focuses on the feelings – fear, anger, anxiety – that occur following a trauma. Patients are taught relaxation skills, and then asked to imagine what happened during the trauma. By recalling the trauma in a state of relaxation, patients become desensitized to the upsetting emotions. Stress Inoculation Therapy teaches patients how to relax and uses breathing control, as well as role playing to develop coping skills. For some patients, psychotropic medication in combination with psychotherapy is effective.

Psychodynamic therapy enables the client to examine and understand emotional reactions, unresolved conflicts, and interpersonal problems related to the traumatic event. By making links between the traumatic event and exploring new ways to deal with emotional distress and interpersonal problems, dynamic therapists aim to help traumatized individuals develop and maintain satisfying relationships and to restore a sense of meaning and purpose in their lives. Group therapy and family therapy have been successfully employed for patients with PTSD and multiple co-occurring disorders. Mindfulness-based meditation and yoga can help clients with managing stress, reducing anxiety, and improving concentration.

Future Directions

Wars, terrorism, and natural disasters affect millions of people across the world. The global burden of stress-related conditions is considerable and so is the need for mental and behavioral health services. No country can afford to provide professional health care services of unproven efficacy. The demand for accountable, evidence-based behavioral health care services will be addressed with mobile devices running applications over Web browser interfaces. Population screening and mobile stress management tools, such as the 'PTSD Coach' developed by the US Department of Veterans Affairs, will be widely deployed. Clinicians will spend less time entering data into Electronic Health Records and more time using clinical decision support systems that facilitate patient engagement and collaborative care.

See also: Anxiety. Cognitive Behavioral Therapy (CBT). Concussion. Depression and Dysthymia. Emotions. Mental Status Testing. Personality Disorders. Psychiatry Diagnosis. Psychotherapy, Psychodynamic. Risk Assessment for Suicide and Violence. Substance Abuse

Further Reading

American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn. Washington, DC: American Psychiatric Association.

Antony MM and Rowa K (2005) Evidence-based assessment of anxiety disorders in adults. *Psychological Assessment* 17: 256–266.

Brewin CR (2001) A cognitive neuroscience account of posttraumatic stress disorder and its treatment. *Behaviour Research and Therapy* 39: 373–393.

Horowitz LM, Rosenberg SE, Baer B, Ureno G, and Villasenor V (1988) Inventory of interpersonal problems: Psychometric properties and clinical application. *Journal of Consulting and Clinical Psychology* 56: 885–892.

Keane TM, Marshall A, and Taft C (2006) Posttraumatic stress disorders: Epidemiology, etiology and treatment outcome. *Annual Review of Clinical Psychology* 2: 161–197.

van der Kolk BA, Roth S, Pelcovitz D, Sunday S, and Spinazzola J (2005) Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress* 18: 389–399.

Krupnick JL (2002) Brief psychodynamic treatment of PTSD. *Journal of Clinical Psychology* 58: 32–919.

Marmar CR, Neylan TC, and Schoenfeld FB (2002) New directions in the pharmacotherapy of posttraumatic stress disorder. *Psychiatric Quarterly* 73: 259–270.

Ozer E, Best S, Lipsey T, and Weiss D (2003) Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin* 129: 52–73.

Weathers FW, Ruscio AM, and Keane TM (1999) Psychometric properties of nine scoring rules for the Clinician-Administered Posttraumatic Stress Disorder Scale. *Psychological Assessment* 11: 124–133.

Relevant Websites

http://www.ptsd.va.gov/public/pages/PTSDcoach.asp
Department of Veterans Affairs and Department of Defense.
http://www.ptsd.va.gov/professional/index.asp
Department of Veterans Affairs and Department of Defense. National Center for PTSD.
http://www.nihpromis.org
National Institutes of Health.
www.healthquality.va.gov/
US Department of Veterans Affairs: VA/DoD Clinical Practice Guidelines.