Optum

Optum Behavioral Health Solutions
Evidence-Based Practices

Posttraumatic Stress Disorder

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Posttraumatic Stress Disorder Description

Posttraumatic stress disorder (PTSD) is the development of distinctive symptoms following exposure to one or more traumatic events. The event(s) may involve military combat, sexual or physical assault, disasters, childhood sexual abuse, adverse childhood experiences, sudden death of a loved one, mass conflict and displacement, actual or threatened death, serious or life-threatening injury or threat of severe injury, sudden-onset medical illness, and hospitalization. A hallmark of the PTSD diagnosis is that the trauma exposure occurs before the onset of pertinent symptoms. An individual may develop PTSD symptoms as a witness to the traumatic event or learn of a traumatic event that occurred to a close family member or close friend. Symptoms vary, some individuals experience recurrent, intrusive distressing memories. While others experience negative emotional states such as fear, horror, anger, guilt, or shame. Yet in other individuals, hyperarousal and reactivity symptoms are noted, while in others, persistent avoidance patterns are present. A combination of these symptoms and behavioral patterns are reported by some individuals. A common persistent symptom is distressing dreams that replay the traumatic event. Children older than 6 years old often experience frightening, recurrent dreams with unrecognizable content. In addition, for all age groups in children, repetitive play may occur in which themes and aspects of the traumatic event(s) are expressed.

Children aged 6 and younger tend to exhibit reexperiencing symptoms of the trauma that manifest through play, either directly or figuratively or through storytelling. A feature of this age group is that the children may not have a fearful reaction at the time of the trauma or when reexperiencing the trauma. Because of young children’s lack of ability to express themselves, negative alterations in mood or cognition often involve mood changes. Parents may observe a wide range of emotional or behavioral shifts in young children. According to research, rates of trauma events are comparable in boys and girls, boys are more likely to experience physical violence, while girls are more likely to be victims of sexual violence. Physical abuse by a caregiver, witnessing domestic violence, and kidnapping are trauma events that occur more often in younger children. Nearly half of all child trauma survivors have encountered trauma exposure before 8 years old. There is a greater likelihood of the adolescent age group experiencing the trauma events of automobile accidents, rape and sexual assault, physical assault by non-family members, hospitalization for a serious injury or a relative's hospitalization, and unexpected death of a loved one.

In the United States, PTSD is diagnosed in approximately 10.5 million adults (3.5%) each year, and approximately 20.4 million (6.8%) will meet criteria over the course of their lifetimes. The lifetime prevalence of PTSD among men is 3.6% and among women is 9.7%. The 12-month prevalence is 1.8% among men and 5.2% among women. In children and teens, studies show that about 15% to 43% of girls and 14% to 43% of boys experience at least one trauma. Of those children and teens who have experienced trauma, 3% to 15% of girls and 1% to 6% of boys develop the diagnosis of PTSD.

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Evaluation and Diagnosis

Evaluation

When evaluating for the diagnosis of posttraumatic stress disorder (PTSD), several factors must be considered to ensure an accurate diagnosis with an effective treatment and discharge plan. PTSD is associated with impaired functioning across social, interpersonal, developmental, educational, physical health, and occupational domains. In adults, adolescents, and children the following should be evaluated:

- Assess for any suicidal thoughts and behaviors, including historically. According to research, PTSD is associated with a high risk of suicidal thoughts, suicide attempts, and death from suicide.
- The presence of behavioral symptoms:
  - Irritable or aggressive behavior
  - Reckless or self-destructive behavior
  - Hypervigilance
  - Exaggerated startle response
  - Problems with concentration, memory problems, confusion
  - Difficulty falling or staying asleep or restless sleep, nightmares
- Assess for emotional symptoms such as:
  - agitation
  - anxiety
  - depression
  - fear
  - feeling overwhelmed
  - grief
  - guilt
  - labile emotions
- Determine if physical symptoms are present:
  - chills
  - difficulty breathing
  - elevated blood pressure
  - fainting
  - fatigue and weakness
  - grinding teeth
  - muscle tremors
  - nausea, poor appetite
  - pain
  - profuse sweating
- Assess if the individual is “self-medicating” to cope with symptoms using excessive alcohol consumption, cigarette smoking, or illicit drugs. Research reveals that a diagnosis of PTSD increases the risk of individuals self-medicating with alcohol or other substances.
- Determine the clinically significant distress of the traumatic event upon occupational and interpersonal functioning.
- Assessment of young children is best accomplished with a parent or caregiver.
- Assess for psychiatric co-morbidities:
  - In adults evaluate for depression, anxiety, bipolar, or substance use disorders.
  - In children, research indicates that it is common to have at least one other diagnosis such as oppositional defiant disorder and separation anxiety disorder. In adolescents, assess for anxiety, depression, externalizing behavior problems, and substance use disorders.
- The following are validated assessment tools to screen for the diagnosis of PTSD:
  - The five-item Primary Care PTSD Screen (PC-PTSD-5) is a validated assessment tool that identifies the DSM-5-TR criteria for a PTSD diagnosis.
  - The Clinician-Administered PTSD Scale (CAPS or CAPS-CA5 for children and adolescents) and the PTSD Symptom Scale – Interview version are considered the most effective for PTSD diagnosis confirmation for both military and non-military trauma survivors.
  - The PTSD Checklist for DSM-5 (PCL-5) is useful to identify symptom severity over time.

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- The PTSD Reaction Index for Children and Adolescents (PTSD-RI) is an assessment tool that can be administered to children and adolescents or to parents. The PTSD-RI can be administered via self-report or interview.

Diagnostic Criteria

Posttraumatic Stress Disorder in Individuals is described by the DSM-5-TR™ as the following:

Note: The following criteria apply to adults, adolescents, and children older than 6 years. For children 6 years and younger, see the corresponding notes for exceptions.

- A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
  - Directly experiencing the traumatic event(s).
  - Witnessing, in person, the event(s) as it occurred to others.
  - Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
  - Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).
    Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.
- B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:
  - Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).
    Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed. In children 6 years and younger, spontaneous and intrusive memories may not necessarily appear distressing and may be expressed as play reenactment.
  - Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).
    Note: In children, there may be frightening dreams without recognizable content. In children 6 years and younger it may not be possible to ascertain that the frightening content is related to the traumatic event.
  - Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)
    Note: In children, trauma-specific reenactment may occur in play.
  - Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
  - Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
- C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:
  - Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
  - Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
  - In children 6 years and younger:
    - Avoidance of or efforts to avoid people, conversations, or interpersonal situations that arouse recollections of the traumatic event(s).
    - Negative Alterations in Cognitions
    - Substantially increased frequency of negative emotional states (e.g., fear, guilt, sadness, shame, confusion).
    - Markedly diminished interest or participation in significant activities, including constriction of play.
    - Socially withdrawn behavior.
    - Persistent reduction in expression of positive emotions
- D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
  - Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).
  - Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “My whole nervous system is permanently ruined”).

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- Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
  - Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
  - Markedly diminished interest or participation in significant activities.
  - Feelings of detachment or estrangement from others.
  - Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
- E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
  - Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects. In children 6 years and younger, behavior can be expressed with extreme temper tantrums.
  - Reckless or self-destructive behavior.
  - Hypervigilance.
  - Exaggerated startle response.
  - Problems with concentration.
  - Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).
- F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.
- G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.
- *Specify* whether:
  - With dissociative symptoms: The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:
  - Depersonalization: Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
  - Derealization: Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

  Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).
- *Specify* if:
  - With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

- Differential Diagnoses for all age groups include:
  - Adjustment disorders
  - Acute stress disorder
  - Anxiety disorders and obsessive-compulsive disorder
  - Major depressive disorder
  - Attention-deficit/hyperactivity disorder
  - Personality disorders
  - Dissociative disorders
  - Functional neurological symptom disorder (conversion disorder)
  - Psychotic disorders
  - Traumatic brain injury

Evidence-Based Interventions

Phases of Treatment

Treatments for the diagnosis of posttraumatic stress disorder (PTSD) generally occur in three phases (acute, continuation and maintenance). Treatment choice in any of these phases involves a combination of pharmacotherapy and trauma-focused psychotherapies. The goals of treatment are symptom reduction, remission and a return to baseline function. Treatment

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selection should be directed by symptom severity (mild, moderate, severe), individual preference, as well as the results from the clinical evaluation. The following outlines the typical course of treatment followed by evidence-based treatment options.

Acute Phase

The goal of the acute phase is to achieve reduction and/or remission of PTSD symptoms and return to baseline functioning for the individual. Research reveals that only 7% of individuals seek professional treatment within the first year of PTSD symptoms onset. Individuals and symptoms vary, however, in this phase individuals are usually seen for treatment every two to four weeks. Treatment options to consider include:

- First-line treatment according to symptom severity is a combination of:
  - Pharmacotherapy for adults such as selective serotonin/norepinephrine reuptake inhibitors (SSRI and SNRIs) and alpha-adrenergic receptor blockers
  - And
  - Trauma-focused psychotherapies for all age-groups

Continuation Phase

The goal of the continuation phase is to prevent relapse of PTSD symptoms. Individuals and symptoms vary, however, an average of 1-2 visits per month is commonly needed for reduction or remission of symptoms. Recent studies found that symptom remission is achieved for approximately 25% of individuals at 6 months and 40% at 12 months. Treatment strategies include:

- The use of a validated instrument for measurement of progress and symptom severity such as:
  - The PTSD Checklist for DSM-5
  - The Clinician-Administered PTSD Scale, a clinician-administered interview
  - PTSD Reaction Index for Children and Adolescents (PTSD-RI)
- The recommended duration of pharmacotherapy to establish optimal dosing, an adequate course and successful response, can be at least 1-2 years.
- Monitoring with regular follow-ups to monitor lingering PTSD symptoms, ongoing trauma, psychiatric co-morbidities, medication adherence, and side effects.
- Continued psychotherapy with regular sessions to reinforce coping strategies and address persistent stressors.
- Encourage lifestyle modifications such as regular exercise, healthy diet, and sleep hygiene.
- Determine if treatment discontinuation is possible.

Maintenance Phase

The goal of the maintenance phase is to prevent recurrence of future PTSD symptoms and the associated functional impairment(s). The duration of the maintenance phase varies from approximately 6 to 12 months or can be longer-term. There is a researched and documented chronic nature regarding PTSD with 30% of individuals never able to accomplish remission. Long-term management with pharmacotherapy, psychotherapy, or both, is common for many individuals. Treatment strategies with consideration of progress and symptom severity include:

- Maintenance pharmacotherapy with the continued use of antidepressants at the optimal dose.
- Maintenance psychotherapy with periodic sessions to maintain learned skills and provide ongoing support.
- Psychoeducation about the signs of relapse and the importance of treatment adherence.
- Continued emphasis and lifestyle modifications.
- Regular check-ins to assess mood, medication, sleep hygiene, and early signs of relapse.
- Determine if discontinuing treatment is possible.

Treatment Selection

- Pharmacotherapy
  - Treatment with medications is a shared-decision between the doctor and the patient, centered on the doctor's recommendation(s), symptom severity, and patient preference.
  - The medications with the most clinical evidence for treating PTSD are the antidepressant category of selective serotonin reuptake inhibitors (SSRIs). The SSRIs sertraline (Zoloft) and paroxetine (Paxil) obtained FDA approval for the indication of treating PTSD. Effective response rates and tolerability have been reported with SSRI medications such as fluoxetine (Prozac), fluvoxamine (Luvox), citalopram (Celexa), escitalopram (Lexapro), paroxetine (Paxil), and sertraline (Zoloft).

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- The serotonin-norepinephrine reuptake inhibitor (SNRI) venlafaxine (Effexor), has shown efficacy in the treatment of PTSD.
- The alpha-adrenergic receptor blocker, prazosin, has been utilized to treat significant sleep disturbance that can occur with PTSD.

- Psychotherapies
  - Recent research has revealed that psychotherapies yield better outcomes with better durability when compared to pharmacotherapies. Treatment durability of psychotherapies have shown efficacy for 12 months.
  - The U.S. Veterans Affairs Department of Defense (VA/DoD, 2023) strongly supports individual psychotherapies as more beneficial than pharmacology interventions for treatment.
  - Trauma-focused cognitive-behavioral therapy (CBT) is considered the most clinically effective non-pharmacologic treatment. In addition, the behavioral therapies cognitive processing therapy (CPT) and prolonged exposure (PE) are recommended as clinically effective. Both group and individual settings have shown clinical benefits.
  - Eye movement desensitization and reprocessing (EMDR) is considered an effective treatment option.
  - The recommended first-line of treatment for children and adolescents is trauma-focused cognitive behavioral therapy.
    - Pharmacotherapy can be considered for children and adolescents as an alternative if symptoms are too severe for psychotherapy. The medications guanfacine and clonidine have shown efficacy and are generally well-tolerated.

- Measurement of Progress and Treatment Response
  - For adults, a useful tool is the Emory Treatment Resistance Interview for PTSD (ETRIP) and is recommended to assess beneficial responses from initial treatment approaches. Additional validated tools include the PTSD Checklist for DSM-5 and the Clinician-Administered PTSD Scale, a clinician-administered interview.
  - For children and adolescents validated tools utilized are the following:
    - Pediatric Traumatic Stress Screening Tool
    - UCLA PTSD Reaction Index (brief and full versions)
    - For children ages 7-17 years, Child PTSD Symptom Scale or the Child and Adolescent Trauma Screen-2
    - For children younger than 7 years old, Young Child PTSD Checklist (parent-reported)
    - For any of these instruments, a reduction in the score of greater than 40% defines a treatment response.

- Switching/Augmenting the Course of Treatment
  - In adults with a poor or minimal response to initial trauma-focused CBT, it is recommended to switch to a different trauma-focused therapy such as cognitive processing therapy. For a partial response it is recommended to augment with another trauma-focused therapy.
  - For adults with a poor to minimal response to initial SSRI medication it is recommended to switch to a different SSRI or an SNRI. If response remains poor, it is recommended to consider augmenting with a second-generation antipsychotic such as quetiapine or risperidone.
  - For children with poor or no response, the following is recommended:
    - Revising psychotherapy to treat the child's specific enduring symptoms such as focusing on parenting skills for angry outbursts, irritability, and poor sleep.
    - The psychotherapy approach is modified to address maladaptive cognitions associated with re-experiencing, avoidance, fear, and anxiety.
    - A change of setting should be considered, for example, changing from trauma-focused group CBT to individual trauma-focused CBT.
    - Pharmacotherapy can be considered for children and adolescents with severe symptoms such as with the medications guanfacine and clonidine.

Emerging and Investigational Technology

Psychedelic-assisted psychotherapy is presently being researched in clinical trials for treating PTSD. The psychedelic-assisted therapy sessions are often 8-hour long sessions monitored by a clinician. As psychedelics gain clinical support as viable psychiatric treatments, many ethical and practical issues related to their potential clinical use remain unsolved. Uncertainty continues about long-term durability, effectiveness in comparison with active comparators, optimal dosing, and safety risks. The current research is primarily focused on the following:

- 3,4 methylenedioxymethamphetamine (MDMA) was designated as break-through therapy by the FDA in 2017 for the treatment of PTSD. There are numerous current and active clinical trials.

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- Psilocybin is derived from a psychoactive mushroom species and was designated as break-through therapy by the FDA in 2019 for the treatment of major depressive disorder. There are numerous current and active clinical trials regarding efficacy for the treatment of PTSD.

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Revision History

Date	Summary of Changes
08/2024	Version 1

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