Posttraumatic stress disorder in adults: Psychotherapy and psychosocial interventions

AUTHORS: Murray B Stein, MD, MPH, Sonya Norman, PhD
SECTION EDITOR: Peter P Roy-Byrne, MD
DEPUTY EDITOR: Michael Friedman, MD

All topics are updated as new evidence becomes available and our peer review process is complete.

Literature review current through: **Oct 2023.**
This topic last updated: **Nov 01, 2023.**

INTRODUCTION

Posttraumatic stress disorder (PTSD) is a severe, often chronic and impairing disorder, which develops in some persons following exposure to a traumatic event involving actual or threatened injury to themselves or others. PTSD is characterized by intrusive thoughts, nightmares, and flashbacks of past traumatic events. Additionally, negative mood and cognitions, avoidance of reminders of trauma, hypervigilance, and sleep disturbance may be present. The symptoms cause significant distress or impairment in social, occupational, or interpersonal functioning.

Effective treatments for PTSD include medications and psychotherapies. While many patients adequately recover after a course of effective treatment, a substantial proportion of patients have persistent symptoms or continue to meet diagnostic criteria. It may be necessary to switch or combine treatments to achieve a satisfactory therapeutic response.

This topic reviews psychosocial interventions for PTSD in adults: their components, efficacy, and delivery. The approach to selecting treatment for PTSD, the epidemiology, pathophysiology, clinical manifestations, assessment, diagnosis and pharmacotherapy of PTSD are reviewed separately. Acute stress disorder and the prevention of the development of PTSD, dissociative aspects of PTSD, and PTSD in children and adolescents are also reviewed separately.

- (See "Posttraumatic stress disorder in adults: Treatment overview".)

- (See "Posttraumatic stress disorder in adults: Epidemiology, pathophysiology, clinical features, assessment, and diagnosis".)
- (See "Acute stress disorder in adults: Epidemiology, clinical features, assessment, and diagnosis".)
- (See "Acute stress disorder in adults: Treatment overview".)
- (See "Dissociative aspects of posttraumatic stress disorder: Epidemiology, clinical manifestations, assessment, and diagnosis".)
- (See "Posttraumatic stress disorder in children and adolescents: Treatment overview".)
- (See "Supported employment for patients with severe mental illness".)

PSYCHOLOGY OF PTSD

Individuals with posttraumatic stress disorder (PTSD) are hypothesized to develop cognitive and behavioral avoidance strategies in an attempt to avoid distressing emotional reactions. The presence of these extensive avoidance responses can interfere with the natural processing of negative emotions and with learned fear extinction by limiting the amount of exposure to realistically safe reminders of the traumatic event.

Prospective studies indicate that PTSD symptoms such as re-experiencing, avoidance, and hyperarousal occur in the in the immediate aftermath of severe trauma [1]. For most individuals, these symptoms steadily resolve over time, while those who meet diagnostic criteria for PTSD continue to experience the symptoms. PTSD can thus be viewed as a failure of recovery caused in part by a failure of fear extinction following trauma [1,2].

TRAUMA-FOCUSED THERAPY AS FIRST-LINE TREATMENT

For most adults with posttraumatic stress disorder (PTSD), we suggest first-line treatment with a trauma-focused psychotherapy rather than other types of therapies or pharmacologic management. Trauma-focused therapies are the most extensively studied therapy for the treatment of PTSD. Clinical trials and meta-analyses have found trauma-focused psychotherapies including cognitive-behavioral therapy (CBT), prolonged exposure therapy, and eye movement desensitization and reprocessing (EMDR) therapy to be effective in the treatment of PTSD [1-7]. Written exposure therapy has also been shown to be effective in the treatment of PTSD [8,9].

Trauma-focused therapies focus on the trauma and its subsequent effects on the individual consistently throughout treatment [10]. This approach helps the patient to correct erroneous

cognitions and decrease symptoms through exposure to reminders of the traumatic event. Types of trauma-focused therapies are discussed below. The approach to treatment selection including pharmacologic management is discussed elsewhere. (See "Posttraumatic stress disorder in adults: Treatment overview" and 'Types of trauma-focused therapies' below.)

Types of trauma-focused therapies

Cognitive-behavioral therapy — CBT for PTSD includes both cognitive and behavioral components. In cognitive therapy, the therapist helps the patient identify and correct distorted, maladaptive beliefs [11]. Behavioral therapy uses thought exercises or real experiences to facilitate symptom reduction and improved functioning. Additional components such as education, relaxation exercises, coping skills training, stress management, or assertiveness training are often included in CBT.

Specific protocols of trauma-focused CBT vary in their composition. Cognitive processing therapy is the most widely studied CBT for PTSD; however, trials have examined various and mixed forms of CBT. Examples include individual, group, couples, CBT-exposure, CBT-mixed, and brief eclectic in individual and combined forms. Due to the heterogeneity of treatment forms, specific efficacy rates are difficult to determine.

- **Cognitive processing therapy** – Components of cognitive processing therapy include psychoeducation, written accounts about the impact of the traumatic event on one's life, and cognitive restructuring. Cognitive restructuring focuses on addressing maladaptive beliefs about the traumatic event and the implications of the trauma on one's life. Individuals examine thoughts and feelings and learn to challenge maladaptive thoughts and overgeneralized beliefs about safety, trust, power, control, and intimacy. In some versions, the individual writes a detailed account of the trauma and reads it in the presence of the therapist. (See 'Types of exposure therapy' below.)

  In a meta-analysis including five trials including 399 subjects with PTSD, treatment with cognitive processing therapy resulted in reduction of PTSD symptoms (measured by the Clinician-Administered PTSD Scale [CAPS-5]) versus inactive comparator (standardized mean difference -1.35, 95% CI -1.77 to -0.94) [6]. A subset of these studies found that the improvements were maintained at three and six months. Additionally, in the meta-analysis, more individuals in cognitive processing therapy lost their diagnosis of PTSD versus inactive comparator (risk difference 0.44, 95% CI 0.26-0.62).

  Cognitive processing therapy can be administered in an individual or group setting although evidence suggests individual therapy may be more effective. For example, in a trial, 268 active military personnel with PTSD were randomly assigned to group or

individual cognitive processing therapy twice weekly for six weeks. While both treatment groups showed improvements in level of depression and suicidal ideation, those in the individual treatment showed greater improvement PTSD severity at two-week and six-month follow-up [12].

Exposure-based therapies — Exposure therapy assists patients in confronting their avoided memories and situations in a therapeutic manner [6,7]. Re-experiencing the trauma memories through exposure allows the trauma to be emotionally processed so that the memories become less distressing. Through exposure, the individual learns to cope with situations that they may have been avoiding due to erroneous beliefs [13-16].

Types of exposure therapy — Exposure therapies differ in the number and types of components, including the number and frequency of exposure sessions, homework assignments, and methods of exposure. Following the exposure therapy session, the individual's emotional response to the exposure is processed through discussion with the therapist and maladaptive thoughts such as guilt, self-blaming are addressed.

Two of the most studied forms of exposure therapy are described below:

- **Prolonged exposure therapy** – Prolonged exposure therapy typically consists of 8 to 15 sessions of 60 to 90 minutes which focus on exposure to the trauma memory through retelling the story of the traumatic event and gradual exposure to people, places and events that are avoided because of the PTSD [17]. Evidence of efficacy for prolonged exposure had been demonstrated in populations experiencing multiple types of trauma and comorbidities including substance use disorder (SUD), personality disorder, and psychosis [6,18]. Exposure types vary and depend on what the patient is avoiding, patient willingness, and accessibility of reminders of the trauma.

- **Written exposure therapy** – Written exposure therapy is a brief therapy in which individuals write about their traumatic event in response to specific prompts [19]. Therapists discuss the writing with patients and encourage them to pay attention to thoughts and emotions that it evokes. Written exposure therapy uses imaginal exposure.

Methods of exposure — Types of exposure used in exposure therapy include:

- **Imaginal exposure** – Imaginal exposure is typically based on the patient's recall of the traumatic event, re-experienced through verbal description, writing, or other means.

- **In vivo exposure** – In in vivo exposure, patients confront a real-life, generally safe situation that they typically avoid because it reminds them of the event – as an example,

by going into crowded situations if the trauma involved crowds.

- **Virtual reality exposure** – A method for providing exposure therapy is through virtual reality, which is well suited to recreate scenarios that may help facilitate imagine exposure, such as combat, catastrophic disasters, or severe motor vehicle accidents [20-24]. Virtual reality exposure therapy uses a head-mounted computer display to present the PTSD patient with visual, auditory, tactile, and other sensory material that stimulate traumatic memories and affective response (picture 1) [25]. Case series and uncontrolled trials suggest that virtual reality exposure may be an effective treatment for PTSD [20,21,24,26-28].

Efficacy of exposure therapy — Exposure therapy for PTSD has been studied in over 25 randomized trials and is found to be an effective treatment for PTSD [6,29]. In a meta-analysis of seven trials including 387 individuals, exposure therapy was found to improve PTSD symptoms compared with waitlist or usual care (standardized mean difference -1.27, 95% CI -1.54 to -1.0) [29]. Additionally, in three trials including 197 individuals, 66 percent more individuals with exposure therapy lost their diagnosis of PTSD versus waitlist control group. This corresponds to a number needed to treat of two.

Prolonged exposure therapy is the most studied exposure therapy protocol for PTSD and has been found to be effective in populations exposed to multiple traumas and with multiple comorbidities. For example, in a randomized trial including 277 females with chronic PTSD (including sexual assault and military combat) the group receiving prolonged exposure therapy had a greater reduction in PTSD symptoms (25 versus 17 points on the CAPS-5) and were more likely to no longer meet diagnostic criteria for PTSD than those receiving the supportive intervention, present-centered therapy (41 versus 28 percent) [30]. Prolonged exposure continued to show greater benefit three months following treatment.

However, many factors prevent those who could benefit from treatment from accessing or completing the treatment. Limited time is an important factor. Written exposure therapy is an alternative treatment that requires less time to complete and does not require between session assignments.

As examples:

- In a randomized trial, including 126 subjects, written exposure therapy was reported to be noninferior to cognitive processing therapy in terms of improvements in PTSD symptoms while being associated with fewer treatment dropouts as compared to cognitive processing therapy treatment (6 versus 40 percent) [8].

- In another randomized trial, 178 veterans with PTSD were assigned to 5 to 7 sessions of written exposure (45 to 60 minutes each) versus 8 to 15 sessions (90 minutes each) of prolonged exposure therapy with between session in vivo exposure. Written exposure therapy was reported to be noninferior to prolonged exposure therapy with less attrition [9]. The primary outcome was the change in the PTSD symptom severity as measured by the CAPS-5 from baseline to 20-week assessment. Changes in PTSD symptom severity from baseline to all subsequent assessments among those treated with writing exposure therapy were noninferior to individuals treated with prolonged exposure.

Home-based telemedicine may mitigate substantial barriers to care for individuals with PTSD. In a randomized trial, 172 females with military sexual trauma were treated with home-based versus in-person delivery of prolonged exposure therapy [31]. While home-based delivery of prolonged exposure therapy did not lead to more completed sessions than in-person prolonged exposure therapy, at six-month posttreatment follow-up, PTSD outcomes as measured by the PTSD Checklist (PCL-5) were similarly improved.

Eye movement desensitization and reprocessing — EMDR is a form of psychotherapy that has components of CBT and exposure therapy but also incorporates saccadic eye movements during exposure [32].

The technique involves the patient imagining a scene from the trauma, focusing on the accompanying cognition and arousal, while the therapist moves two fingers across the patient's visual field and instructs the patient to track the fingers. The sequence is repeated until anxiety decreases, at which point the patient is instructed to generate a more adaptive thought. An example of a thought initially associated with the traumatic image might include, "I'm going to die," while the more adaptive thought might end up as, "I made it through. It's in the past."

Most, but not all, systematic reviews and meta-analyses have concluded that EMDR is an efficacious treatment for PTSD. In a meta-analysis that included six studies and 183 participants with PTSD, EMDR was found to improve severity of PTSD symptom versus waitlist or usual care (standardized mean difference -1.17, 95% CI -2.04 to -0.30) [4]. Several major practice guidelines, but not all, have similarly concluded that EMDR is efficacious for PTSD [3,7,33-37]. Some researchers have suggested that exposure is the effective component of EMDR, and eye movements may not be necessary [3], but this hypothesis requires further study.

Choosing among trauma-focused therapies — The choice of trauma-focused therapy is one of shared decision making and is based on patient presentation, patient preference, and therapist expertise.

While meta-analyses have shown moderate to high strength evidence in support of the efficacy of trauma-focused psychological interventions in the treatment of PTSD, few studies have directly compared their efficacy. As a result, the strength of the evidence in favor of any specific therapy versus another is low [4,6]. Consistent differences in efficacy have not been described [3,8,13,25,29,30,37-40].

Modifications for specific patient populations — Comorbidities are common among patients with PTSD. Trauma-focused CBTs, while useful in the treatment of PTSD, may also be useful in facilitating the treatment of comorbid conditions [18]. Protocols that integrate a trauma-focused CBT with evidence-based therapy for a common comorbidity show efficacy for treating both disorders.

Comorbid substance use disorder — Concurrent treatment for PTSD and SUD using prolonged exposure (also known as COPE) is a hybrid approach that may be effective in reducing the severity of PTSD without triggering a return to or worsening of the SUD [41].

Individuals with comorbid PTSD and SUD tend to have more severe symptomatology, greater functional impairment, poor treatment outcomes, and heightened vulnerability to relapse [42,43].

In one study of 110 participants with comorbid PTSD and SUD, individuals were randomly assigned to COPE therapy versus relapse prevention therapy versus active monitoring [44]. At the 12-week endpoint, individuals in both treatment groups showed reduction in PTSD severity versus active monitoring. However, individuals with more severe symptoms of PTSD (full versus subthreshold PTSD) showed greater gains through COPE therapy than through relapse prevention therapy. At three-month follow-up individuals in both active treatment groups maintained their treatment gains and were superior to control group in reducing days of primary substance use.

In another study that randomized 119 patients with PTSD and alcohol use disorder to COPE or a coping skills therapy, COPE showed greater symptom reduction and greater likelihood of remission than skills therapy [45].

Comorbid TBI — Hybrid psychotherapeutic approaches may offer additional improvements over standard therapy such as cognitive processing therapy in the treatment of PTSD with comorbid traumatic brain injury (TBI) in military personnel returning from combat.

For example, in a clinical trial, 100 veterans with PTSD and mild to moderate TBI randomly were randomly assigned to receive cognitive processing therapy or the hybrid cognitive processing therapy-compensatory cognitive training [46]. At the end of treatment (12 weeks) and at three-

month follow-up, both groups showed improvements in postconcussive symptoms, PTSD symptoms, and quality of life. However, individuals in the combined therapy group showed additional improvements in neuropsychological domains of attention/working memory, verbal learning, and memory and novel problem solving. (See 'Cognitive-behavioral therapy' above and "Posttraumatic stress disorder in adults: Epidemiology, pathophysiology, clinical features, assessment, and diagnosis", section on 'Co-occurring conditions'.)

Comorbid personality disorders — Dialectical behavior therapy for PTSD (DBT-PTSD) may have a specific role for managing patients with complex presentations of PTSD (ie, those with concurrent features of personality disorder).

As an example, a trial randomly assigned 193 female patients with childhood abuse-associated PTSD plus three or more criteria for the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) diagnosis of borderline personality disorder to cognitive processing therapy versus DBT-PTSD [47]. While both groups showed improvements in PTSD severity, subjects in the DBT-PTSD group had higher rates of symptomatic remission (58 versus 41 percent) and lower rates of early dropout (26 versus 39 percent) than subjects in the cognitive processing therapy group.

NON-TRAUMA-FOCUSED PSYCHOTHERAPIES AND PSYCHOSOCIAL INTERVENTIONS

While some types of non-trauma-focused therapies have been shown to be effective in reducing symptoms of posttraumatic stress disorder (PTSD), their effects are smaller than those for trauma-focused therapies and there are fewer clinical trials supporting their use [4]. However, trauma-focused therapies are not always available and not always desired by patients. As with trauma-focused therapies, patient preference and expertise of the therapist in one particular therapy are factors in the shared decision making.

- **Present-centered therapy** – Present-centered therapy is a time-limited treatment for PTSD that focuses on increasing adaptive responses to current life stressors and difficulties that are directly or indirectly related to trauma or PTSD symptoms. A Cochrane meta-analysis showed present-centered therapy had greater reductions in PTSD symptoms than inactive controls but inferior reductions to trauma-focused cognitive-behavioral therapies [48].

- **Interpersonal therapy** – Interpersonal therapy appears to be effective but has limited data supporting its use for PTSD. It may be an acceptable alternative for individuals who

are unwilling to accept an exposure-based therapy. Interpersonal psychotherapy focuses on disorder-specific symptoms and impairment in the context of current interpersonal relationships.

A 14-week noninferiority trial compared interpersonal psychotherapy, prolonged exposure therapy, and relaxation therapy (as an active control) in 110 unmedicated patients with PTSD [49]. All three treatments were associated with improvements in symptoms of PTSD, as measured by the Clinician-Administered PTSD Scale, with interpersonal therapy showing the highest rates. Rates for interpersonal therapy, prolonged exposure therapy, and relaxation therapy were 63 versus 47 versus 38 percent, respectively.

- **Mindfulness-based stress reduction** – Mindfulness-based stress reduction teaches patients to attend to the present moment in a nonjudgmental, accepting manner.

  In a clinical trial, 116 veterans with PTSD were randomly assigned to receive nine sessions of either mindfulness-based stress reduction or present-centered group therapy [50]. After nine weeks of treatment and two months of follow-up, patients assigned to receive the mindfulness intervention showed a greater decrease in self-reported PTSD symptoms and were more likely to show clinically significant improvement in PTSD symptoms compared with control group participants (48.9 versus 28.1 percent). However, the two groups did not differ significantly in the proportion of patients who continued to meet diagnostic criteria for PTSD.

OTHER INTERVENTIONS AND THERAPIES WITH LIMITED ROLE

Other therapies are sometimes used to treat posttraumatic stress disorder (PTSD), but evidence of their efficacy is lacking. We do not recommend their use except in situations where trauma-focused and non-trauma-focused interventions have been tried and failed. (See 'Non-trauma-focused psychotherapies and psychosocial interventions' above.)

Some of these are described below:

- **Coping skills training** – Coping skills training is often part of a more comprehensive therapy program. Components include role playing, assertiveness training, stress management, relaxation exercise, biofeedback, and education about sleep hygiene.

- **Acceptance and commitment therapy (ACT)** – ACT involves teaching acceptance while at the same time working on behavior change towards value-driven goals. Uncontrolled trials

have indicated positive changes in PTSD symptoms, depression, and functioning following ACT [51-53].

- **Psychodynamic psychotherapy** – Psychodynamic therapy in the treatment of PTSD focuses on improving ego strength and capacity for interpersonal relatedness. Existing evidence is insufficient to evaluate the efficacy of psychodynamic therapy for PTSD [3,4,25]. Only one randomized trial has been conducted, lacking a nontreatment control, which found that patients receiving psychodynamic therapy showed rates of improvement similar to patients receiving hypnosis or systematic desensitization [25].

- **Eclectic psychotherapy** – In surveys of mental health clinicians in the United States and Canada, a majority of clinicians (psychiatrists, psychologists, social workers, and others) identified themselves as practicing an eclectic or integrative form of psychotherapy [54-56]. Eclectic and integrative therapists draw concepts and techniques from a variety of different types of therapy, including dynamic, cognitive, and behavioral approaches [57]. These approaches vary by therapist, and their efficacy for PTSD has not been studied systematically.

- **Equine-assisted therapy** – An open trial (ie, no control condition) of a manualized equine-assisted therapy suggests that equine-assisted therapy may be a safe and potentially beneficial treatment for veterans with PTSD; however, randomized controlled trials are needed to determine the efficacy of this type of intervention for treating PTSD [58].

- **Service animals** – Emotional support animals have sometimes been used as a complementary intervention for treatment of PTSD. However, given concerns that service or emotional support animals may act to perpetuate PTSD symptoms, they should be used with caution. For example, support dogs may perpetuate hypervigilance by attenuating stressful situations that the individual might otherwise learn to cope with by through repeated exposure.

  In observational studies, their efficacy in the reduction of PTSD symptoms as a complementary intervention is supported. As an example, in a study including 112 military members who had received a PTSD service dog, there was an association between having the service dog and lower overall PTSD symptom severity [59].

ASSESSMENT OF RESPONSE

Posttraumatic stress disorder (PTSD) symptom severity can be assessed through diagnostic interview or with brief self-report measures. The Clinician Administered PTSD Scale-5 is

considered the gold standard for clinician rated assessment while the PTSD Symptom Checklist-5 is a brief self-assessment measure [60-64].

Assessing symptoms before and after psychotherapy is important to ensure an accurate diagnosis and for treatment planning. Most trauma-focused psychotherapy protocols recommend assessing symptoms at every or every other session. This allows the therapist and patient to assess progress toward goals, make adjustments to treatment if needed, and determine when treatment is complete.

Some patients achieve full symptom remission through treatment while others may experience a clinically meaningful reduction that improves their quality of life even though they maintain some symptoms or even a PTSD diagnosis. Others may not respond to treatment at all.

Assessment of response is used to inform both the patient and provider about response to treatment and functional severity. Assessment results should be shared with patients in a therapeutic manner such as in teaching patients about PTSD and in acknowledging improvements through treatment.

For example, reviewing assessment results can highlight changes that were or were not achieved and prompt discussion about how new habits and therapeutic gains can be maintained. This may be particularly helpful in individuals who minimize their progress.

Subsequent severity ratings with the same instrument provide information on the continuing progress and if adjustments in treatment need to be made.

Clinical evaluation and assessment instruments for PTSD are reviewed further separately. (See "Posttraumatic stress disorder in adults: Epidemiology, pathophysiology, clinical features, assessment, and diagnosis", section on 'Assessment'.)

MANAGEMENT OF SUBOPTIMAL RESPONSE

The choice of nonpharmacologic treatment option for individuals with suboptimal response to initial treatment is based on the patient preference and the expertise of the therapist in administering the treatment. Options include includes increasing frequency of psychotherapy, or changing psychotherapy (eg, trying eye movement desensitization and reprocessing or exposure therapy in an individual with suboptimal improvement to cognitive-behavioral therapy).

Evidence for the treatment of posttraumatic stress disorder (PTSD) with combined psychotherapy and pharmacotherapy compared with psychotherapy alone are mixed [65,66].

Based on our clinical experience, augmentation of an evidence-based psychotherapy for PTSD can help some patients who do not responds to psychotherapy alone. The use of medications to augment psychotherapy for patients with PTSD is reviewed separately. (See 'Assessment of response' above and "Posttraumatic stress disorder in adults: Treatment overview", section on 'Management of suboptimal response'.)

SOCIETY GUIDELINE LINKS

Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Trauma-related psychiatric disorders in adults".)

INFORMATION FOR PATIENTS

UpToDate offers two types of patient education materials, “The Basics” and “Beyond the Basics.” The Basics patient education pieces are written in plain language, at the 5th to 6th grade reading level, and they answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials. Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are written at the 10th to 12th grade reading level and are best for patients who want in-depth information and are comfortable with some medical jargon.

Here are the patient education articles that are relevant to this topic. We encourage you to print or e-mail these topics to your patients. (You can also locate patient education articles on a variety of subjects by searching on “patient info” and the keyword(s) of interest.)

- Basics topic (see "Patient education: Post-traumatic stress disorder (The Basics)")

SUMMARY AND RECOMMENDATIONS

- **Psychology of posttraumatic stress disorder (PTSD)** – Individuals with PTSD develop cognitive and behavioral avoidance strategies in an attempt to avoid distressing emotional reactions. Avoidance can interfere with natural processing of negative emotions and learned fear extinction by limiting exposure to safe reminders of the traumatic event. (See 'Psychology of PTSD' above.)

- **Trauma-focused therapies as first-line treatment** – For most adults with PTSD, we suggest treatment with a trauma-focused psychotherapy rather than other psychotherapies (**Grade 2C**). (See 'Trauma-focused therapy as first-line treatment' above.)

  - Trauma-focused psychotherapies include cognitive-behavioral therapy (CBT), exposure therapy, written exposure therapy, and eye movement desensitization and reprocessing therapy. While trauma-focused therapies have been shown to be effective in the treatment of PTSD, few studies have directly compared psychological interventions for PTSD and consistent differences are not reported. As such, the strength of the evidence in support of any specific therapy over another is low. (See 'Types of trauma-focused therapies' above.)

  - Choice among trauma-focused therapies is one of shared-decision, patient preference, therapist expertise, and practical limitations (eg, time available for treatment). (See 'Choosing among trauma-focused therapies' above.)

- **Modifications for specific patient populations** – Comorbidities are common among patients with PTSD. Some protocols that integrate a trauma-focused CBT with evidence-based therapy for a common comorbidity show efficacy for treating both disorders. These include treating PTSD with comorbid traumatic brain injury, substance use disorders, and personality disorders. (See 'Modifications for specific patient populations' above.)

- **Non-trauma-focused therapies and interventions** – When trauma-focused therapies cannot be used, other non-trauma interventions such as present-centered therapy, interpersonal therapy, and mindfulness-based stress reduction are reasonable alternatives. However, their effect sizes are smaller than those for trauma therapy and data supporting their use are limited. (See 'Non-trauma-focused psychotherapies and psychosocial interventions' above.)

- **Assessment and management of response** – PTSD symptom severity can be assessed through diagnostic interview using the Clinician Administered PTSD Scale-5 or with brief self-report measures such as the PTSD Symptom Checklist for the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Most trauma-focused psychotherapy protocols include symptom assessment at every or every other session. At a minimum, assessing symptoms before and after psychotherapy is important to ensure an accurate diagnosis and for treatment planning. (See 'Assessment of response' above.)

  - Assessment of response is used to inform both the patient and provider about response to treatment and functional severity. Assessment results should be shared

with patients in a therapeutic manner such as in teaching patients about PTSD and in acknowledging improvements through treatment. (See 'Assessment of response' above.)

- Response to initial treatment of PTSD varies. In individuals whose response is suboptimal, nonpharmacologic options include increasing number of sessions of psychotherapy, and changing psychotherapy. (See 'Management of suboptimal response' above.)

ACKNOWLEDGMENT

The UpToDate editorial staff acknowledges Barbara Rothbaum, PhD, who contributed to an earlier version of this topic review.

Topic 14634 Version 45.0

→