PTSD: The Symptoms and How to Treat

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Traumatic stress is part of a normal human response to overwhelming experiences. In the aftermath of a traumatic event, most people will have similar experiences, such as intrusive thoughts, nightmares, disruptive sleep and irritability. This usually resolves within a few weeks, and 70% to 90% of people do not develop post-traumatic stress disorder (PTSD). PTSD is diagnosed when certain symptoms continue for longer than four weeks and cause distress and/or dysfunction. It is important to note that while PTSD is a common sequela of trauma, any mental health disorder (*e.g.*, depression, anxiety, panic, substance use disorders) can result from a traumatic experience. Most studies indicate that the prevalence of PTSD is between 1% to 14% in the general population, with the most-quoted figure of 8% (compared to 17% for major depression).

What are the risk factors?

Many risk factors for PTSD have been identified and can be generally categorized as "pre-," "peri-" and "post-traumatic."

Pre-traumatic factors include female gender, childhood trauma and abuse along with poor coping style.

Peri-traumatic risk factors include the type of trauma (sexual assault putting people most at risk), peri-traumatic dissociation, feelings of helplessness and severity of acute response.

Post-traumatic risk factors include poor social supports, delay in treatment and ongoing social stressors. It is important to note that while these risk factors are well documented, they only increase relative risk of developing PTSD.

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What is PTSD?

Table 1 shows the criteria needed to diagnose PTSD. Both 'A' criteria are required. The problem in PTSD is not the memories of the event but the unprocessed, intensely negative emotions attached to the memory. B, C and D symptoms must be related to the event (*e.g.*, sleep disruption is due to nightmares of the event).

Table 1

Post-traumatic stress disorder (PTSD) diagnostic criteria adapted from the *Diagnostic and Statistical Manual of Mental Disorders* - American Psychiatric Association

A. Traumatic event: 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(s) 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. (In children, this may be expressed instead by disorganized or agitated behaviour)
B. Re-experiencing: The traumatic event is persistently re-experienced in 1 (or more) of the following ways:	1: Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. (In young children, repetitive play may occur in which themes or aspects of the trauma are expressed) 2: Recurrent, distressing dreams of the event. (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). In young children, trauma-specific reenactments 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. Avoidance/Numbing: Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by ≥ 3 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: Feelings 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. Hyper-arousal: Persistent symptoms of increased arousal (not present before the trauma), as indicated by ≥ 2 of the following:	1: Difficulty falling or staying asleep 2: Irritability or outbursts of anger 3: Difficulty concentrating 4: Hypervigilance 5: Exaggerated startle response

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Table 2
Phase-oriented approach to treatment

Phase I: Stabilization	This phase lasts about 1-3 months. Trauma memories are not accessed during this phase. Emphasis is placed on correcting sleep disorders, eliminating self-medicating behaviours, correcting diet and encouraging exercise. Self-soothing techniques are introduced (deep breathing, grounding and muscle relaxation). Psychosocial issues are addressed so they do not interfere with Phase II work. Medication is particularly helpful in this phase. Patients are seen weekly to every second week.
Phase II: Trauma processing	This phase lasts about 3-9 months. Traumatic memories are revisited and ideally transformed into less traumatic memories. The emotions that are imprinted onto the memory are processed. Cognitive behavioural therapy prolonged exposure (PE) and eye movement desensitization and reprocessing (EMDR) are used. PE involves the linking of thoughts, feelings and behaviours. Dysfunctional thoughts that perpetuate illness are identified, exposure of avoided situations is undertaken, emotional engagement with trauma memory is explored and there is a correction of dysfunctional cognitions that follow trauma. In order to decrease anxiety and reactivity, the details of the trauma, including emotional reactions, should be reconstructed. EMDR is an approach intended to accelerate the recovery process by stimulating the client's information processing system so that traumatic memories can be appropriately processed. It is probably a form of non-verbal exposure and is often used when progress in PE stalls. Patients are seen weekly.
Phase III: Maintenance and relapse prevention	This phase lasts about 1-3 months. Patients are seen less and less frequently until case closure. Medications are generally tapered to discontinuation during this phase.

In addition to these criteria, symptoms must persist for longer than four weeks after the event and cause significant distress or impaired functioning in one or more areas, such as occupation, family/social or activities of daily living. Other medical and emotional causes for the symptoms must be ruled out.

How does PTSD change over time?

A poorly recognized aspect of PTSD is how symptoms fluctuate over time and this explains why many sufferers do not come for help for a significant period of time after the traumatic event. They often perceive themselves as "getting over" the event because there is decreased re-experiencing, mainly due to increased avoidance. There is often more emotional numbing, social withdrawal (an alienation from other people) and a "delusion" that the world is unbearably hostile. This can, in some cases, result in a complete social breakdown with a loss of family, friends and work. There is a persistence of disordered affect and hyperarousal.

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What is the treatment?

In many ways PTSD is the prototypical psychiatric illness, in that effective treatment often involves a combination of biological and psychological treatment. Treatment targets include the PTSD symptoms themselves, comorbid symptoms, disability and associated behaviour. Treatment generally involves a phase-oriented approach, often divided into three phases (Table 2).

What are the biological therapies?

Many medications have been studied in this population. Current recommendations include using selective serotonin reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors or norepinephrine and dopamine reuptake inhibitors as core treatment, often with an adjunctive hypnotic (zopiclone, trazodone). Sleep difficulty is often the most treatment-resistant symptom. As with many anxiety disorders, patients with PTSD are quite sensitive to side-effects, thus it is recommended that medication trials begin with low doses and are slowly titrated upwards.

Other medications have been employed, often in off-label use, to target specific, particularly troublesome symptoms. Medications such as prazosin and nabilone have been used with some success in patients with persistent nightmares. Atypical antipsychotics in lower doses have been used for emotional dysregulation (*i.e.*, overwhelming anxiety, anger, rumination and nightmares). Mood stabilizers (*i.e.*, valproate) can also be trialed for mood dysregulation (*i.e.*, overwhelming anger or anxiety).

What is psychotherapy?

Recovery in PTSD cannot occur from medications alone. Processing of the intense emotions that occurred during the traumatic event is essential for long-term recovery and this can only be achieved through psychotherapy. The best efficacy evidence exists for two types of therapy: cognitive behavioural therapy (CBT) and eye movement desensitization and reprocessing. The specific CBT used in PTSD is termed prolonged exposure. It is generally accepted that psychotherapy proceeds in a "phase-oriented" manner. Phases involve an early or "stabilization phase," a second or "trauma processing phase," in which the traumatic event is revisited in a controlled manner and a final or "maintenance phase."

Take-home message

Trauma happens to many competent, healthy, strong, good people. Having symptoms after a traumatic event is not a sign of personal weakness. People who react to traumas are not going crazy; it is part of common symptoms connected with being in a traumatic situation.

The vast majority of people exposed to trauma do not develop illness. However, many people can have longstanding problems following exposure to trauma.

PTSD can be a chronic and highly debilitating condition when it is not treated and is often complicated by comorbidity. However, treatment improves on the natural course and outcome of PTSD and those with PTSD need not suffer from a lifetime of re-experiencing, avoidance and a chronically hyper-aroused state.

Treatment can be long and is usually a combination of psychopharmacology and psychotherapy.

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