



# A SYSTEMATIC REVIEW ON POST- TRAUMATIC STRESS DISORDER

<sup>1</sup>Sowmiya Dinesh

<sup>1</sup>Assistant Professor,

<sup>1</sup>Department of Mental Health Nursing,

<sup>1</sup>Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, TamilNadu.

**Abstract:** Post-traumatic stress disorder is a psychiatric condition that develops following exposure to a particularly terrible or traumatic incident in life. Every year on June 27, PTSD Awareness Day is observed. This day aids in raising awareness of this illness. A traumatic event can result in a condition called post-traumatic stress disorder (PTSD). Flashbacks, triggers, and PTSD may all make daily life very challenging. Around 1915, it was identified as a condition. "Shell shock" was the original term used to describe PTSD. It aided in classifying those who were exhibiting dread and flashbacks after World War I. Since then, the causes of PTSD have grown. Any form of traumatic experience can put one at risk for developing PTSD. It's the second most common mental disorder after depression.

**Index Terms - Stress, flashbacks, trauma.**

## I. INTRODUCTION

The common mental health issue of post-traumatic stress disorder is strongly correlated with psychiatric morbidity. PTSD was originally described in the third edition of the DSM in 1980, even though it had been noticed throughout history. Since then, there has been a growing body of scholarship on the subject. Recently, there has been a sharp increase in interest in and knowledge of the risk factors for PTSD as well as its therapies.

### Definition:

Post-traumatic stress disorder (PTSD) may develop in some people after extremely traumatic events, such as combat, a terrorist attack, crime, an accident, or a natural disaster.

### Prevalence statistics worldwide:

The prevalence of PTSD worldwide is about 3.9% of the general population. In people who had experienced trauma, the prevalence rate is higher at 5.6%. Between 1989 and 2019, about 316 million adult war survivors worldwide had PTSD and/or major depression

- PTSD has a point prevalence rate of 26.51% among people who live in countries or regions affected by war.
- Of those with PTSD, 55.26% also presented with major depression.

### Etiology:

- **Neurobiological models:** There is evidence of neural changes in people with PTSD that are consistent with circuitry known to be implicated in fear conditioning: the amygdala, prefrontal cortex, and the hippocampus. Many studies indicate that PTSD is associated with a smaller size of the hippocampus, with meta-analyses reporting that this finding is observed bilaterally. A recent consortium study including 1,868 participants (794 with PTSD) found an average smaller size of the hippocampus in those with the disorder. The extent to which a smaller hippocampus is a consequence of PTSD or a risk factor has yet to be definitively addressed. One study compared monozygotic co-twins who either did or did not serve in Vietnam, and found that veterans with PTSD had smaller hippocampi than Vietnam veterans without PTSD, but the co-twins of those with PTSD who had not served in Vietnam had hippocampi that were just as small. There is also much evidence of reduced volume of prefrontal regions in PTSD, consistent with proposals that PTSD patients have problems with extinction learning.
- **Genetic factors:** The well-documented fact that the vast majority of people who are exposed to trauma do not develop PTSD highlights that there are key individual differences in propensity to manifest this disorder. Much evidence indicates that genetic factors play an important role, accounting for 30-72% of the vulnerability to develop PTSD. Many studies have attempted to link PTSD with genetic candidates, and not surprisingly genes associated with PTSD are also linked with other common psychiatric disorders, including major depression, generalized anxiety disorder, panic disorder, and substance use.

- **Cognitive behavioral models:** There is abundant evidence of the predictive role of catastrophic appraisals in the development and maintenance of PTSD, as well as of their decline after successful therapy. These appraisals tend to result in strong avoidance of potential threats, which impairs emotional processing of trauma memories and extinction learning.

- Domestic violence
- Emotional abuse
- Rape
- War
- Childhood neglect
- Childhood physical abuse
- Being threatened with weapon
- Physical attack
- Loved one's sudden death

#### Risk Factors:

- ✓ Combat-related trauma
- ✓ Adverse childhood experiences
- ✓ Sexual assault
- ✓ Family dynamics
- ✓ Less education
- ✓ Intense fear or helplessness
- ✓ Argument
- ✓ Traumatic experiences in childhood
- ✓ Media stories'
- ✓ Life stressors

#### Clinical Manifestations:

##### a) Physical Symptoms:

- ✓ Difficulty breathing
- ✓ Profuse Sweating
- ✓ Rapid heart rate
- ✓ Elevated blood pressure
- ✓ Migraines
- ✓ Exaggerated startle response
- ✓ Difficulty in sleeping

##### b) Cognitive and Emotional Symptoms:

- ✓ Easily agitated
- ✓ Trouble concentrating
- ✓ Negative expectations about oneself or distorted blame
- ✓ Inability to experience positive emotions
- ✓ Nightmares or flashbacks of past experience with strong emotional response
- ✓ Feeling overwhelmed

##### c) Behavioral symptoms:

- ✓ Avoidance of feelings, thoughts, people, places or events
- ✓ Being hyper-alert
- ✓ Being detached and withdrawn
- ✓ Alcohol consumption'
- ✓ Drug use
- ✓ Changes in activities or loss of interest in hobbies
- ✓ Disciplinary issues

#### Diagnostic Investigations:

- ✓ History collection
- ✓ Mental Status Examination
- ✓ **According DSM-5 criteria:**
  1. Criteria A: Traumatic stressor
  2. Criteria B: Intrusive re-experiencing of the event(such as traumatic nightmares or flashbacks)
  3. Criteria C: Avoidance of reminders of the traumatic event
  4. Criteria D: Alterations in arousal and reactivity(such as hyper vigilance, exaggerated startle response or irritability)

**✓ ICD-11 criteria:**

1. Clinical judgement of a potentially traumatic event
2. One from two re-experiencing symptoms: (nightmares or flashbacks)
3. One from two active avoidance symptoms: (external avoidance or internal Two hyper-arousal symptoms: (hyper-vigilance or exaggerated startle)
4. Symptoms must last for at least several weeks
5. There needs to be functional impairment

**Medical Management:**

- Antidepressants such as selective serotonin re-uptake inhibitors (SSRIs), serotonin and norepinephrine re-uptake inhibitors (SNRIs) and monoamine oxidase (MAO) inhibitors.
- Sympatholytic drugs such as alpha-blockers
- Antipsychotics
- Anticonvulsants
- Benzodiazepines
- Currently, paroxetine (Paxil) and sertraline (Zoloft) are the only medications that have been approved by the U.S. Food and Drug Administration for the treatment of PTSD.

**Psychological Interventions:**

- Cognitive behavioral therapy (CBT)
- Cognitive processing therapy (CPT),
- Cognitive therapy (CT)
- Cognitive restructuring (CR)
- Coping skills therapy (including stress inoculation therapy)
- Exposure-based therapies
- Eye movement desensitization and reprocessing (EMDR)
- Hypnosis and hypnotherapy
- Brief eclectic psychotherapy.

**Prognosis:**

When left untreated, PTSD can deteriorate over time. But even if the traumatic event happened many years ago, counselling can still be helpful. Treatment can be curative for some people. Others may experience less severe symptoms as a result.

**Reference:**

1. Jitender Sareen;"Post-traumatic Stress Disorder in Adults: Impact, Comorbidity, Risk Factors, and Treatment";<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4168808/>
2. <https://cfah.org/ptsd-statistics/>
3. <https://mind.help/topic/post-traumatic-stress-disorder/causes/The> Mind Journal Articles
4. Joseph Geraci,et.al.,"Understanding and Mitigating Post-Traumatic Stress Disorder",January 2011;<https://www.researchgate.net/publication/303839813>.
5. Post-Traumatic Stress Disorder: Diagnosis and Management - Scientific Figure on ResearchGate. Available from: [https://www.researchgate.net/figure/DSM-5-PTSD-Diagnostic-Criteria\\_tbl1\\_337570454](https://www.researchgate.net/figure/DSM-5-PTSD-Diagnostic-Criteria_tbl1_337570454) [accessed 16 Aug, 2022]
6. **Meaghan L O'Donnell, et.al.**,"Is Australia in the post-traumatic stress disorder petri dish?";[Volume: 49 issue: 4,](#) page(s): 315-316
7. Article first published online: February 19, 2015; Issue published: April 1, 2015;Australian & New Zealand Journal of Psychiatry.
8. Williamson V, Murphy D, Greenberg N (2019) Post-Traumatic Stress Disorder: Diagnosis and Management. Integr J Orthop Traumatol Volume 2 (5): 1–3.
9. Miao, XR., Chen, QB., Wei, K. *et al.* Posttraumatic stress disorder: from diagnosis to prevention. *Military Med Res* **5**, 32 (2018). <https://doi.org/10.1186/s40779-018-0179-0>
10. BRADLEY D. GRINAGE, M.D.;"Diagnosis and Management of Post-traumatic Stress Disorder";American Family Physician Lifestyle Medicine Journal;Dec 15,2003.
11. Bryant RA, Creamer M, O'Donnell M et al. Acute and chronic posttraumatic stress symptoms in the emergence of posttraumatic stress disorder: a network analysis. *JAMA Psychiatry* 2017;**74**:135-42.

12. True WR, Rice J, Eisen SA et al. A twin study of genetic and environmental contributions to liability for posttraumatic stress symptoms. *Arch Gen Psychiatry* 1993;**50**:257-64.
13. Sartor CE, McCutcheon VV, Pommer NE et al. Common genetic and environmental contributions to post-traumatic stress disorder and alcohol dependence in young women. *Psychol Med* 2011;**41**:1497-505.
14. Koenen KC, Fu QJ, Ertel K et al. Common genetic liability to major depression and posttraumatic stress disorder in men. *J Affect Disord* 2008;**105**:109-15.
15. Smith ME. Bilateral hippocampal volume reduction in adults with post-traumatic stress disorder: a meta-analysis of structural MRI studies. *Hippocampus* 2005;**15**:798-807.
16. Logue MW, van Rooij SJH, Dennis EL et al. Smaller hippocampal volume in posttraumatic stress disorder: a multisite ENIGMA-PGC study: subcortical volumetry results from Posttraumatic Stress Disorder Consortia. *Biol Psychiatry* 2018;**83**:244-53.
17. Gilbertson MW, Shenton ME, Ciszewski A et al. Smaller hippocampal volume predicts pathologic vulnerability to psychological trauma. *Nature Neurosci* 2002;**5**:1242-7.
18. Kitayama N, Quinn S, Bremner JD. Smaller volume of anterior cingulate cortex in abuse-related posttraumatic stress disorder. *J Affect Disord* 2006;**90**:171-4.
19. Kleim B, Grey N, Wild J et al. Cognitive change predicts symptom reduction with cognitive therapy for posttraumatic stress disorder. *J Consult Clin Psychol* 2013;**81**:383-93.
20. Foa EB, Steketee G, Rothbaum BO. Behavioral/cognitive conceptualizations of post-traumatic stress disorder. *Behav Ther* 1989;**20**:155-76.

