# PTSD Unraveled

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# **PTSD** Overview

# Defining PTSD Today

DSM-5 Classification

PTSD is classified under trauma- and stressor-related disorders in the DSM-5. It is triggered by exposure to traumatic events such as death, serious injury, or sexual violence, and is characterized by persistent symptoms that significantly impair functioning.

Symptom Duration

For a diagnosis of PTSD, symptoms must persist for more than one month. This duration criterion helps differentiate PTSD from acute stress reactions that may resolve quickly.

Functional Impact

PTSD leads to significant functional impairment in various areas of life, including work, social relationships, and daily activities. This impact is a key factor in determining the severity of the disorder.



### Carra Compositario

### Core Symptom Clusters



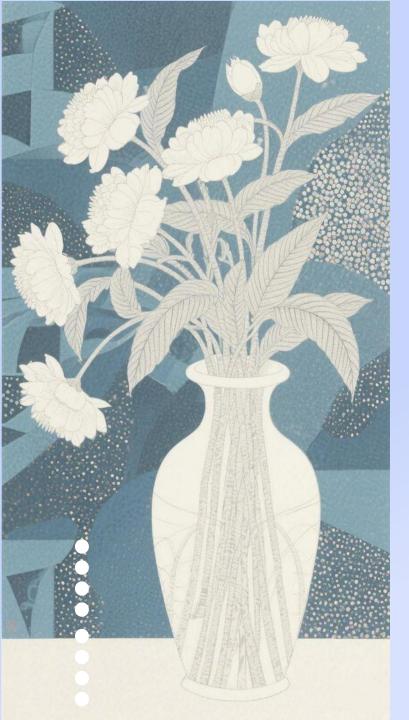
### Avoidance and Hyperarousal

Avoidance behaviors involve steering clear of trauma reminders, while hyperarousal manifests as increased irritability and sleep disturbances. These clusters contribute to the complexity of PTSD.

### **Intrusion Symptoms**

Intrusion symptoms include flashbacks and nightmares, where traumatic memories intrude into daily life. These experiences can be highly distressing and disrupt normal functioning.





### Global Epidemiology

#### Lifetime Prevalence

The lifetime prevalence of PTSD is estimated at 6–9% in general populations. However, this rate is higher in specific groups such as combat veterans and sexual assault survivors.

### Gender Differences

PTSD is more prevalent in females compared to males. This difference may be attributed to higher exposure to certain types of trauma and biological factors.

### Onset and Chronicity

Symptoms of PTSD can onset immediately after trauma or have a delayed onset. If untreated, PTSD can become chronic, leading to long-term functional impairment.

### Comorbid Conditions

PTSD often co-occurs with other conditions such as depression, substance use disorders, and anxiety disorders. This comorbidity can complicate treatment and recovery.

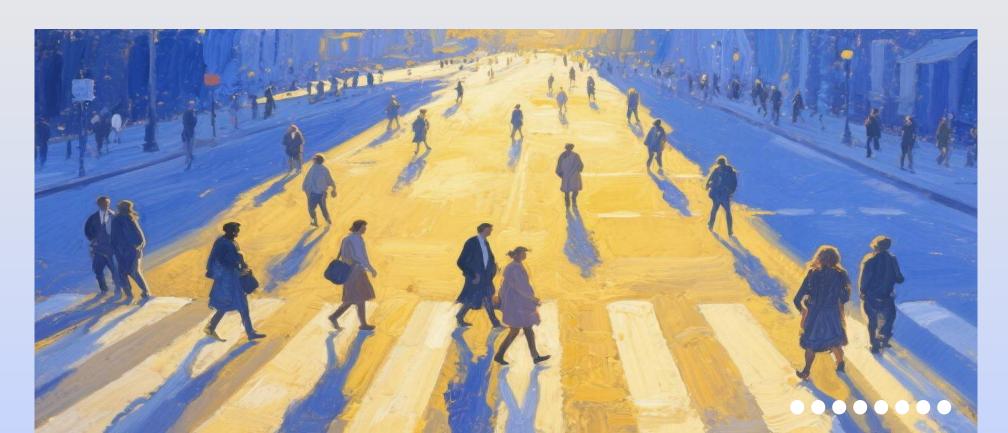
# Trauma Mechanisms



# Neurobiological Impact

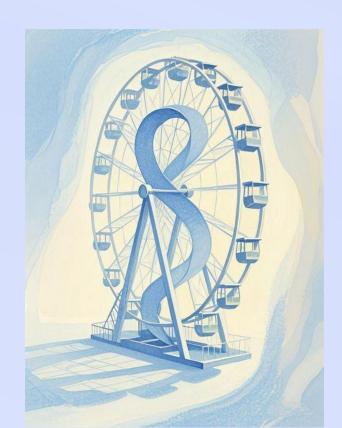
### Neurobiological Changes

PTSD is associated with significant neurobiological changes, including hyper-responsive amygdala, reduced hippocampal volume, and dysregulated HPA axis. These changes underpin the symptoms of PTSD and contribute to its chronicity.



Genetic Epigenetic Risk

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### Heritability

Twin studies suggest a heritability of 30–40% for PTSD. Genetic factors play a significant role in determining susceptibility to the disorder.

### Polymorphisms

Polymorphisms in genes such as FKBP5 and COMT are associated with PTSD. These genetic variations influence how individuals respond to traumatic stress.

### Epigenetic Changes

Trauma can induce epigenetic changes, such as methylation, affecting gene expression. These changes can influence the development and persistence of PTSD.

# Cognitive & Emotional Models

### Cognitive Model

The cognitive model of PTSD, proposed by Ehlers and Clark, emphasizes negative appraisals of trauma and disorganized memory. These factors contribute to the persistence of symptoms.

### Emotional Processing Theory

Emotional processing theory suggests that PTSD results from maladaptive fear networks. Effective treatment involves reprocessing traumatic memories to reduce their emotional impact.



**Assessment Pathways** 



### Structured Clinical Interview

### CAPS-5

The Clinician-Administered PTSD Scale (CAPS-5) is a structured interview used to assess PTSD symptoms. It provides a comprehensive evaluation of symptom severity and frequency.



The Structured Clinical Interview for DSM-5 (SCID-5) is used to establish a diagnosis of PTSD. It includes questions about trauma exposure and symptomatology.

### Differential Diagnosis

Differential diagnosis is crucial to distinguish PTSD from other disorders such as acute stress disorder and adjustment disorder. Accurate diagnosis guides effective treatment.

### Cultural Considerations

Cultural and developmental factors must be considered during assessment. These factors influence how trauma and symptoms are perceived and reported.



# Validated Screening Tools

### Screening Tools

Validated screening tools such as the PCL-5, DTS, and IES-R are used to rapidly identify PTSD cases. These tools are essential in primary care and disaster settings.

# Functional & Psychophysiology

Psychophysiological Assessment

Psychophysiological measures like heart-rate variability and skin conductance can assess PTSD. These measures provide objective data on the body's response to trauma.

Ecological Momentary Assessment

Ecological momentary assessment via smartphone captures real-time data on PTSD symptoms. This method provides insights into symptom fluctuations in daily life.

Occupational Functioning

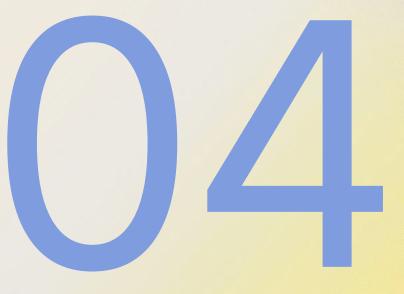
Assessing occupational functioning is crucial in PTSD. It helps determine the impact of the disorder on work performance and guides vocational rehabilitation.





# **Proven Treatments**





### Trauma-Focused CBT

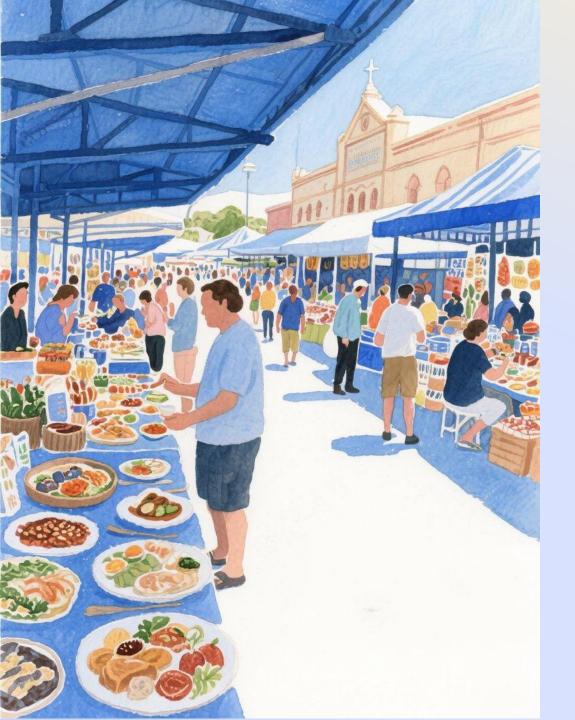
### Components of TF-CBT

Trauma-focused CBT includes psychoeducation, relaxation techniques, cognitive restructuring, and exposure therapy. These components work together to reduce PTSD symptoms.

### Efficacy and Durability

TF-CBT has shown large effect sizes in treating PTSD. Its benefits are durable, with long-term reductions in symptom severity and improved quality of life.





### **EMDR Protocol**

Eight-Phase EMDR

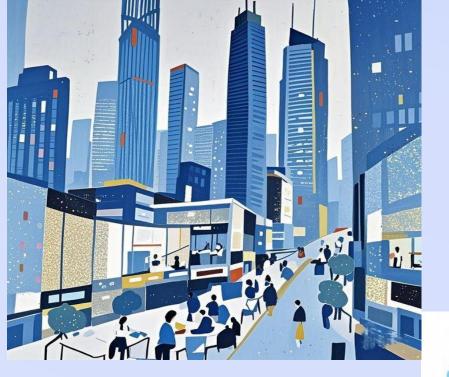
EMDR involves eight phases, including history-taking, preparation, assessment, desensitization, installation, body scan, closure, and re-evaluation. This structured approach targets traumatic memories.

Bilateral Stimulation

Bilateral stimulation, such as eye movements or tapping, is a key component of EMDR. It helps reprocess traumatic memories, reducing their emotional intensity.

Evidence Base

EMDR is supported by extensive research showing its efficacy in reducing PTSD symptoms. It is recognized as a first-line treatment for PTSD.







### First-Line Medications

SSRIs and SNRIs are first-line medications for PTSD. They help manage symptoms by regulating neurotransmitters. Prazosin is also used for nightmares, with careful consideration of dosing and side effects.

### Digital & Novel Therapies

#### Internet-Delivered CBT

Internet-delivered CBT offers accessible treatment options for PTSD. It uses online platforms to deliver cognitive-behavioral interventions, increasing reach and convenience.

VR Exposure Therapy Virtual reality exposure therapy immerses patients in virtual environments to safely confront traumatic memories. This innovative approach enhances exposure therapy's effectiveness.



### MDMA-Assisted Psychotherapy

MDMA-assisted psychotherapy is an emerging treatment for PTSD. It uses MDMA to facilitate therapeutic processing of trauma, showing promise in clinical trials.

### Stellate Ganglion Block

The stellate ganglion block is a novel intervention for PTSD. It involves a nerve block that may reduce symptoms, offering a potential treatment option for those who do not respond to traditional therapies.

Living & Recovery





### **Grounding Techniques**

Grounding techniques such as the 5-4-3-2-1 method help manage PTSD triggers. They bring attention to the present moment, reducing anxiety and distress.

### Self-Regulation Skills

### Mindfulness and Meditation

Mindfulness meditation practices can reduce PTSD symptoms. They promote relaxation and improve emotional regulation, enhancing overall well-being.

### **Physical Exercise**

Regular physical exercise is beneficial for PTSD recovery. It reduces stress, improves mood, and enhances physical health, contributing to overall resilience.

# Social Support Systems

Family Psychoeducation
Family psychoeducation helps relatives
understand PTSD. It provides them with tools
to support their loved ones, reducing stigma
and enhancing treatment engagement.

Peer Support Groups
Peer support groups offer a sense of
community for individuals with PTSD. Sharing
experiences and coping strategies in a
supportive environment can foster recovery.



### Resilience & Post-Traumatic Growth

### Pathways to Growth

Resilience and post-traumatic growth involve finding meaning in trauma, setting valued goals, and contributing to the community. These processes transform PTSD into personal strength.



# **Future Horizons**





### Biomarker-Guided Treatment

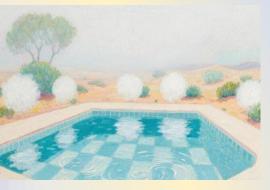
Precision psychiatry uses biomarkers to guide PTSD treatment. Genetic and neuroimaging data can predict treatment response, reducing trial-and-error and improving outcomes.

### Adaptive Treatment Algorithms

Adaptive treatment algorithms tailor interventions based on patient progress. These algorithms optimize treatment plans, enhancing efficacy and efficiency.









# Global Trauma Response



# Early Interventions

Scalable early interventions are crucial after mass trauma events. They aim to prevent PTSD development and provide immediate support to affected individuals.

# Task-Shifting

Task-shifting to community health workers can expand access to PTSD care. This approach leverages local resources to provide support in underserved areas.

# Policy Advocacy

Policy advocacy is essential to secure funding and human rights for PTSD care. It ensures that individuals receive the support they need to recover and reintegrate into society.

# Thank You