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Review Article

Post Traumatic Stress Disorder and Associated Psychological Disorders: A Comprehensive Review

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ABSTRACT

Post-traumatic stress disorder (PTSD) is a complex mental health condition that can develop after experiencing or witnessing a traumatic event. The symptoms of PTSD include intrusive thoughts, avoidance, negative changes in mood and cognition and changes in arousal and reactivity. PTSD is commonly caused by traumatic events such as combat exposure, assault, natural disasters, accidents, or sudden loss. Explored are its symptoms, causes, and diverse treatment options, emphasizing both pharmacological (e.g., SSRIs, SNRIs, and prazosin) and non-pharmacological approaches (e.g., CBT, EMDR, and MBIs). The intricate interplay of biological and psychological factors contributing to PTSD's onset, along with nuanced DSM-5 diagnostic criteria, highlights the disorder's complexity. Vigilant screening for PTSD is crucial, given the prevalence of traumatic events. Integrated care is essential, recognizing the nexus between PTSD and associated disorders such as acute stress disorder, generalized anxiety disorder, depressive disorders, and substance use disorders. This review underscores the imperative for a holistic, patient-centered approach, integrating clinical advances for improved PTSD identification, treatment, and overall mental health outcomes.

INTRODUCTION

Post-traumatic stress disorder (PTSD) is a complex mental health condition that can develop after experiencing or witnessing a traumatic event. In this comprehensive review, we will explore PTSD and its associated psychological disorders, including their symptoms, causes, and treatment options. PTSD is prevalent in both clinical settings and the general public. Physicians and mental health specialists frequently see patients with substance abuse, have depression, or exhibit a variety of physical symptoms. Screening for PTSD and a history of stressful occurrences is crucial. Patients with PTSD frequently arrive in primary care with headaches, sleep disorders, and pain. People with PTSD tend to show up to mental

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health clinics depressed, substance dependent, and self-harming.1

Post-Traumatic Stress Disorder (PTSD):

The symptoms of post-traumatic stress disorder can manifest as soon as one month following a stressful experience, but they can also take years to manifest. Relationships, the workplace, and social situations all suffer greatly from these symptoms. Additionally, they may make it difficult for you to carry out your regular everyday activities. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has included PTSD in the new category of Trauma- and Stress-related Disorders.

Ethology:

There are a multitude of factors that can contribute to an individual developing posttraumatic stress disorder. Experiencing a traumatic incident, such as being physically harmed or facing a serious threat, going through a near-death experience, trauma related to combat, sexual assault, strained relationships, abusing children, or recovering from a medical condition, are among them. Patients who experience maladaptive responses to the stress and are unable to recover from it develop chronic PTSD.2 Biological and psychological factors, such as gender (more common in women), childhood trauma, pre-existing mental illness, low socioeconomic status, low level of education, and a lack of social support, are risk factors for the development of post-traumatic stress disorder (PTSD). The nature and extent of the trauma also play a role in identifying the risk factors for post-traumatic stress disorder (PTSD).3

Epidemiology:

The prevalence of traumatic events in the lives of individuals ranges from 61% to 80%.4 According to studies, 5% to 10% of people experience posttraumatic stress disorder after experiencing trauma, with women experiencing this condition at higher rates than men.5

Symptoms:

The symptoms of post-traumatic stress disorder (PTSD) include the incessant reliving of the traumatic incident, intrusive thoughts, nightmares, flashbacks, dissociation (a separation from reality or oneself), and severe negative emotional (such as grief or guilt) and physiological responses when the painful reminder is encountered.6 Aside from issues with sleep and focus, other symptoms include impatience, hyper vigilance, heightened responsiveness, heightened startle reaction, and avoiding traumatic triggers. Social, vocational, and other domains of functioning are significantly impacted. For a patient to be diagnosed as PTSD, the duration of the symptoms must be more than one month.7 To diagnose posttraumatic stress disorder, a thorough medical history must be taken. The patient may decide not to bring up the traumatic experience because it can be difficult for them to explain at times, depending on its nature and intensity. Nonetheless, obtaining a precise diagnosis depends on how the symptoms appear and how long they last. Health care providers ought to find out about any symptoms of depression or anxiety, past attempts or thoughts of suicide, substance misuse, and firearm accessibility.8

The diagnostic criteria for the diagnosis of PTSD as per DSM-5 include:

Criterion A: Stressor

Experiencing real or imminent danger, harm, or sexual violence can manifest in various ways, such as:

1. Direct exposure to the traumatic event.
2. Observing the event happening to someone else in person.
3. Acquiring knowledge that a close family member or intimate friend has encountered actual or threatened trauma, accidental or violent death.
4. Indirect exposure to disturbing specifics of the traumatic incident, which may include professionals routinely confronted with details

of child abuse, the collection of human remains, or handling pieces of evidence. It is important to note that this excludes exposure through television, movies, electronic devices, or images.9

Criterion B: Intrusion Symptoms

Experiencing one or more of the following symptoms in connection with a traumatic event, and emerging after the occurrence of the trauma:

1. Involuntary and recurring thoughts related to the traumatic event, often expressed in children over 6 years through repetitive play reflecting aspects of the trauma.
2. Disturbing nightmares that may repeat, featuring content linked to the traumatic event. In children, these dreams may be frightening, with or without recognition of the content.
3. Dissociative reactions like flashbacks, where the individual feels or behaves as if the traumatic event is recurring. These reactions can range from brief episodes to complete loss of self-awareness or awareness of the surroundings. Children may re-enact such events through play.
4. Significant and prolonged psychological distress when exposed to reminders of the trauma.
5. Noticeable physiological reactions, such as increased heart rate and blood pressure, when exposed to reminders of the traumatic event.10

Criterion C: Avoidance

Consistent avoidance of stimuli connected to the traumatic event, demonstrated by one or both of the following:

1. Attempts to steer clear of distressing memories or thoughts linked to the traumatic event.
2. Efforts to avoid external reminders, encompassing people, places, activities, conversations, or situations that evoke distressing memories or thoughts related to the traumatic event.

Criterion D: Negative Alterations in Mood

Negative changes in mood and cognition emerging or worsening after a traumatic event, as indicated by two or more of the following:

1. Difficulty recalling crucial aspects of the traumatic event, possibly due to dissociative amnesia, excluding head injury, drugs, or alcohol as causes.
2. Sustained and distorted negative beliefs or expectations about oneself or the world, exemplified by statements like "I am bad" or "The world is entirely dangerous."
3. Continued distorted thinking, leading to self-blame or attributing responsibility to others for causing the traumatic event.
4. Persistent negative emotional states, encompassing feelings of fear, guilt, anger, or shame.
5. Significant decline in interest in once-enjoyable activities.
6. Feelings of alienation, estrangement, or detachment from others.
7. Persistent inability to experience positive emotions such as happiness, satisfaction, or love.

Criterion E: Alterations in Arousal and Reactivity

Changes in reactivity and arousal linked to trauma that initiated or intensified after the traumatic event, as manifested by two or more of the following:

1. Outbursts of irritability or aggression without apparent provocation.
2. Engagement in reckless or self-destructive behaviour.
3. Hypervigilance.
4. Exaggerated response to sudden stimuli, displaying an intensified startle response.
5. Difficulties in concentration.

6. Disturbances in sleep patterns, including trouble falling or staying asleep and restless

Criterion F: Duration

Persistence of symptoms in Criterion B, C, D, and E for more than one month.

Criterion G:

Significant functional impairment or anguish is brought on by the disturbance in a number of spheres of life, including social and professional ones.

Criterion H:

The disturbance is not attributable due to substance use, medication, or another medical illness.11, 12

MANAGEMENT

Pharmacological Management:

1. **Selective Serotonin Reuptake Inhibitors (SSRIs):**

SSRIs, such as fluoxetine, sertraline, or paroxetine are considered first-line pharmacotherapy for PTSD. These medications can help alleviate symptoms of depression, anxiety, and intrusive thoughts associated with PTSD.13 American Psychiatric Association (APA) treatment guidelines for patients with post-traumatic stress disorder (PTSD) and acute stress disorder were published in 2004. According to these guidelines, SSRIs—sertraline, paroxetine, and off-label fluoxetine—are the best drugs for treating PTSD in patients for a number of reasons:

- They alleviate symptoms across all three PTSD symptom clusters, including re-experiencing, avoidance, and hyper arousal.
- Effective for comorbid psychiatric disorders often seen alongside PTSD, such as depression, panic disorder, social phobia, and obsessive–compulsive disorder.
- Potential to decrease clinical symptoms like suicidal, impulsive, and aggressive behaviors, which can complicate the management of PTSD.
- Linked to a comparatively low incidence of side effects.14

2. **Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs):**

Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs), specifically venlafaxine and duloxetine, have been explored for their efficacy in treating Post-Traumatic Stress Disorder (PTSD). These medications target both serotonin and norepinephrine, neurotransmitters associated with mood regulation and stress response.

- **Venlafaxine:**

Dosage: The recommended dosage for venlafaxine in PTSD treatment typically starts at 75 mg per day, with gradual titration up to a maximum of 225 mg per day. The extended-release form may be administered once daily.15

- **Duloxetine:**

Dosage: Duloxetine is generally initiated at 30 mg per day, with an option to increase to 60 mg per day based on individual response. It is usually taken once daily.16

3. **Prazosin:**

An alpha-1 adrenergic antagonist, has been investigated for its potential in alleviating symptoms of Post-Traumatic Stress Disorder (PTSD). It primarily targets the hyperarousal symptoms associated with PTSD, such as nightmares and sleep disturbances.

Dosage:

- The initial dose of prazosin for PTSD is typically low, starting around 1 mg at bedtime.
- The dosage is then titrated gradually, and the therapeutic response is monitored.
- The optimal dosage varies among individuals, and it is essential to determine the most effective and tolerable level.17

Non-Pharmacological Management:

1. **Cognitive-Behavioural Therapy (CBT) as Treatment for PTSD:**

Cognitive-Behavioural Therapy (CBT) is a widely recognized and empirically supported therapeutic approach for treating Post-Traumatic Stress Disorder (PTSD). It is a structured and goal-oriented form of psychotherapy that targets the cognitive and behavioural aspects of trauma-related symptoms.

Cognitive Restructuring:

CBT often involves cognitive restructuring to address distorted thought patterns related to the trauma. Individuals learn to identify and challenge negative thoughts, replacing them with more balanced and adaptive cognitions.

Exposure Therapy:

Exposure therapy is a key component of CBT for PTSD. It involves gradually and safely confronting trauma-related memories, thoughts, and situations, allowing individuals to process and integrate these experiences.

Behavioural Techniques:

Behavioural techniques, such as relaxation and stress management strategies, are employed to help individuals cope with heightened arousal and anxiety associated with PTSD.

Skills Training: CBT provides skills training to enhance problem-solving, communication, and interpersonal skills, promoting adaptive coping mechanisms.18

2. Eye Movement Desensitization and Reprocessing (EMDR):

EMDR is a therapy that combines elements of cognitive therapy with rhythmic eye movements or other forms of bilateral stimulation. It helps individuals' process traumatic memories and reduce their emotional intensity.19

Eight-Phased Approach:

EMDR follows an eight-phased approach, beginning with history-taking and treatment planning, followed by desensitization and reprocessing of traumatic memories, and concluding with the integration phase to ensure stability.

Bilateral Stimulation: A distinctive feature of EMDR is the use of bilateral stimulation, typically in the form of lateral eye movements guided by the therapist. This process is believed to facilitate the brain's processing of distressing memories, reducing their emotional charge.

Desensitization and Reprocessing:

During desensitization and reprocessing, individuals focus on distressing memories while simultaneously engaging in bilateral stimulation. This process aims to help the brain reorganize and adaptively process traumatic information.

Efficacy: Numerous studies support the efficacy of EMDR in reducing PTSD symptoms. EMDR has been found to be as effective as other established treatments, including cognitive-behavioural therapy, with some studies suggesting quicker symptom reduction.20

3. Mindfulness-Based Interventions (MBIs) :

Mindfulness-Based Interventions (MBIs), rooted in mindfulness meditation practices, have emerged as promising therapeutic approaches for individuals with Post-Traumatic Stress Disorder (PTSD). MBIs often include mindfulness meditation techniques, where individuals cultivate awareness of their thoughts, feelings, and bodily sensations. This practice aims to create a non-reactive and accepting relationship with one's experiences.21 Mindfulness-Based Cognitive Therapy (MBCT) combines mindfulness practices with elements of cognitive-behavioural therapy. It has shown efficacy in preventing the recurrence of depressive episodes and may have benefits for individuals with PTSD by targeting negative thought patterns. Research indicates that MBIs can induce positive changes in brain regions associated with emotional regulation and self-awareness. These changes may contribute to the alleviation of PTSD symptoms.22

ASSOCIATED PSYCOLOGICAL DISORDERS:

1. Acute Stress Disorder (ASD):

ASD is characterized by the presence of dissociation, intrusive memories, negative mood, arousal, and avoidance symptoms. ASD symptoms typically manifest within the first month after trauma. Diagnosis involves the presence of dissociation and at least nine other symptoms across specified clusters. If symptoms persist beyond the initial month, a diagnosis of PTSD may be considered. Timely and appropriate interventions shortly after the traumatic event can mitigate the development of ASD. Exposure techniques and cognitive restructuring help individuals process and integrate the traumatic experience.23

2. Generalized Anxiety Disorder (GAD):

Generalized Anxiety Disorder (GAD) may co-occur with Post-Traumatic Stress Disorder (PTSD), creating a complex clinical presentation. Individuals with PTSD may experience heightened anxiety, excessive worry, and anticipatory anxiety beyond the context of the traumatic event, contributing to the development of GAD.24 GAD symptoms include persistent and excessive worry, restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbances. When these symptoms are significantly influenced by the traumatic experience, a dual diagnosis of PTSD and GAD may be appropriate.25

3. Depressive Disorders:

Depressive disorders often co-occur with Post-Traumatic Stress Disorder (PTSD), amplifying the complexity of symptomatology and treatment. Trauma exposure can contribute to the development or exacerbation of depressive symptoms, creating a dual diagnosis that requires comprehensive intervention. Depressive symptoms associated with PTSD may include persistent sadness, loss of interest, changes in sleep and appetite, fatigue, feelings of worthlessness, and difficulty concentrating. The overlap of these symptoms with PTSD can complicate diagnosis and necessitate a thorough assessment.26

4. Substance Use Disorders (SUD):

The co-occurrence of substance use disorders (SUD) and Post-Traumatic Stress Disorder (PTSD) is prevalent, with trauma exposure contributing to the development and maintenance of substance abuse. Individuals with PTSD may turn to substances as a means of coping with the distressing symptoms associated with trauma. Substance use can provide temporary relief but often exacerbates mental health issues in the long term. Simultaneous treatment for both PTSD and SUD is crucial. Integrated approaches, such as Integrated Cognitive-Behavioral Therapy, aim to address the interplay between trauma and substance use by targeting coping strategies and maladaptive behaviors. Creating a therapeutic environment that recognizes the impact of trauma is essential. Trauma-informed care emphasizes safety, trustworthiness, choice, collaboration, and empowerment, fostering a supportive context for recovery.27

CONCLUSION:

Post-traumatic stress disorder (PTSD) is a pervasive mental health condition with far-reaching implications for individuals and society. This comprehensive review has explored the multifaceted aspects of PTSD, including its symptoms, causes, and diverse treatment options. From the intricate interplay of biological and psychological factors contributing to PTSD's onset to the nuanced diagnostic criteria outlined in DSM-5, this review underscores the complexity of this disorder. The prevalence of traumatic events in individuals and the varied symptomatology highlight the need for vigilant screening and a thorough understanding of PTSD's impact on diverse populations. Both pharmacological and

non-pharmacological interventions, such as SSRIs, SNRIs, cognitive-behavioral therapy (CBT), eye movement desensitization and reprocessing (EMDR), and mindfulness-based interventions (MBIs), offer avenues for effective management. Recognizing the nexus between PTSD and associated psychological disorders, including acute stress disorder, generalized anxiety disorder, depressive disorders, and substance use disorders, emphasizes the importance of integrated care. In conclusion, this review underscores the imperative for a holistic, patient-centered approach, integrating advances in clinical understanding for improved PTSD identification, treatment, and enhanced overall mental health outcomes.

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