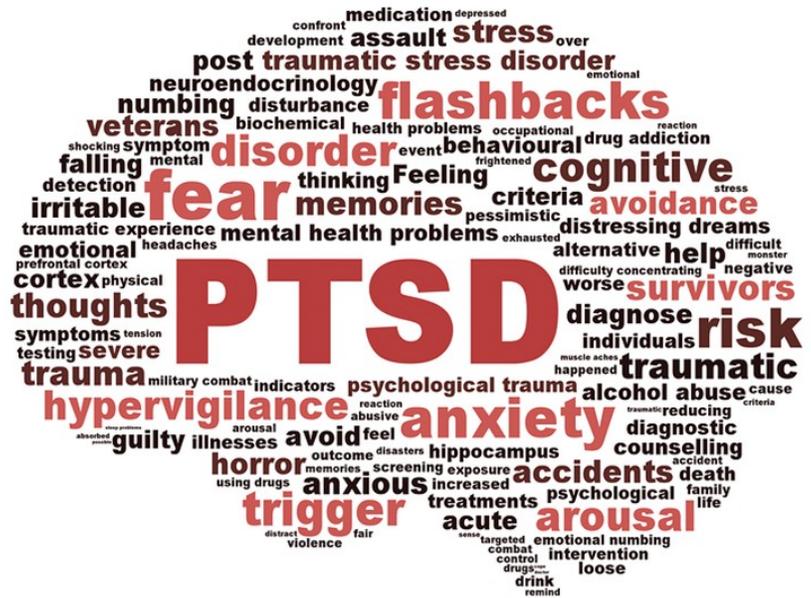


TBI and PTSD: Navigating the Perfect Storm

So often people talk about the effects of traumatic brain injury or the consequences of post-traumatic stress disorder as separate conditions — which they are. But for the person who is living with the dual diagnosis of TBI *and* PTSD, it can be hard to separate them.

Just as meteorologists predict “the perfect storm” when unusual and unprecedented conditions move in to create catastrophic atmospheric events, so can the combination of PTSD and TBI be overpowering and destructive for all in its path. The person with TBI and PTSD is living in a state unlike anything previously experienced. For the family, home is no longer the safe haven but an unfamiliar front with unpredictable and sometimes frightening currents and events.



While awareness of PTSD has greatly increased with recently returning service members and veterans, it is not new and nor limited to combat. Anyone — children, adolescents, adults, elderly — who is exposed to a life-threatening trauma can develop PTSD. Car crashes, shootings, floods, fires, assaults, or kidnapping can happen to anyone anywhere. But the rate of PTSD after brain injury is much higher in veterans than civilians due to their multiple and prolonged exposure to combat. According to O’Connor and Drebing, it is estimated that up to 35% of returning veterans with mild brain injury also have PTSD.

What’s unique about PTSD?

Symptoms of PTSD include:

- Unwanted and repeated memories of the life-threatening event
- Flashbacks where the event is relived and person temporarily loses touch with reality
- Avoidance of people, places, sights, or sounds that are reminders
- Feelings of detachment from people, even family, and emotional numbness
- Shame about what happened and was done
- Survivor guilt with loss of friends or comrades
- Hypervigilance or constant alertness for threats.

Individuals with PTSD are at increased risk for depression, physical injuries, substance abuse, and sleep problems, which in turn can affect thoughts and actions. These risk factors also occur with brain injury.

PTSD is a mental disorder, but the associated stress can cause physical damage. TBI is a neurological disorder caused by trauma to the brain. It can cause a wide range of impairments and changes in physical abilities, thinking and learning, vision, hearing, smell, taste, social skills, behaviors, and communication. The brain is so complex, the possible effects of a traumatic injury are extensive and different for each person.

When PTSD and TBI coexist, it’s often difficult to sort out what’s going on. Changes in cognition such as memory and concentration, depression, anxiety, insomnia, and fatigue are common with both diagnoses. One basically feeds and reinforces the other, so it’s a complicated mix — it’s the perfect storm. It may help to consider and compare changes commonly seen with TBI and PTSD.

TBI**PTSD**

	TBI	PTSD
Memory	A period of amnesia for what went on just before (retrograde amnesia) or after (anterograde amnesia) the injury occurred is common. The length of time (minutes, hours, days, or weeks) of amnesia is an indicator of the severity of the brain injury. For example, the person may have no memory of what happened just before or after the car crash or IED explosion.	In contrast, the person with PTSD is plagued and often haunted by unwanted and continuing intrusive thoughts and memories of what happened. The memories keep coming at any time of day or night in such excruciating detail that the person relives the trauma over and over again.
Sleep	Sleep disorders are very common after brain injury. Whether it is trouble falling asleep, staying asleep, or waking early, normal sleep patterns are disrupted, making it hard to get the restorative rest of sleep so badly needed.	The mental state of hypervigilance interferes with slowing the body and mind down for sleep. Nightmares are so common with PTSD that many individuals dread going to bed and spend long nights watching TV or lying on the couch to avoid the night's terrors. Waking up with night sweats so drenching that sheets and clothing are soaked. Flashbacks so powerful that bed partners have been struck or strangled while sleep battles waged.
Isolation	Many survivors of TBI recall the early support and visits of friends, relatives, and coworkers who gradually visited or called less often over time. Loss of friends and coworkers leads to social isolation, one of the most common long-term consequences of TBI.	The isolation with PTSD is different as it is self-imposed. For many it is simply too hard to interact with people. The feeling of exposure outside the safe confines of the house is simply too great. The person may avoid leaving the house as a way of containing stimuli and limiting exposure to possible triggers of memories. As a result, the individual's world becomes smaller and smaller.
Emotions	When the areas of the brain that control emotions are damaged, the survivor of a TBI may have what is called "emotional lability." This means that emotions are unpredictable and swing from one extreme to the other. The person may unexpectedly burst into tears or laughter for no apparent reason. This can give the mistaken impression that the person is mentally ill or unstable.	Emotional numbness and deadened feelings are a major symptom of PTSD. It's hard for the person to feel emotions or to find any joy in life. This emotional shutdown creates distance and conflicts with spouses, partners and children. It is a major cause of loss of intimacy with spouses.
Fatigue	Cognitive fatigue is a hallmark of brain injury. Thinking and learning are simply harder. This cognitive fatigue feels "like hitting the wall," and everything becomes more challenging. Building rest periods or naps into a daily routine helps prevent cognitive fatigue and restore alertness.	The cascading effects of PTSD symptoms make it so difficult to get a decent night's sleep that fatigue often becomes a constant companion spilling over into many areas. The fatigue is physical, cognitive, and emotional. Feeling wrung out, tempers shorten, frustration mounts, concentration lessens, and behaviors escalate.
Depression	Depression is the most common psychiatric diagnosis after brain injury; the rate is close to 50%. Depression can affect every aspect of life. While people with more severe brain injuries have higher rates of depression, those with mild brain injuries have higher rates of depression than persons without brain injuries.	Depression is the second most common diagnosis after PTSD in OEF and OIF veterans. It is very treatable with mental health therapy and/or medication, but veterans in particular often avoid or delay treatment due to the stigma of mental health care.
Anxiety	Rather than appearing anxious, the person acts as if nothing matters. Passive behavior can look like laziness or "doing nothing all day," but in fact it is an initiation problem, not an attitude. Brain injury can affect the ability to initiate or start an activity; the person needs cues, prompts, and structure to get started.	Anxiety can rise to such levels that the person cannot contain it and becomes overwhelmed by feelings of panic and stress. It may be prompted by a specific event, such as being left alone, or it can occur for no apparent reason, but the enveloping wave of anxiety makes it difficult to think, reason or act clearly.

TBI**PTSD**

Talking about the Trauma	The person may retell an experience repetitively in excruciating detail to anyone who will listen. Such repetition may be symptomatic of a cognitive communication disorder, but it may also be due to a memory impairment. Events and stories are repeated endlessly to the frustration and exasperation of caregivers, friends, and families who have heard it all before.	Avoidance and reluctance to talk about the trauma of what was seen and done is a classic symptom of PTSD, especially among combat veterans
Anger	Damage to the frontal lobes of the brain can cause more volatile behavior. The person may be more irritable and anger more easily, especially when overloaded or frustrated. Arguments can escalate quickly, and attempts to reason or calm the person are often not effective.	Domestic violence is a pattern of controlling abusive behavior. PTSD does not cause domestic violence, but it can increase physical aggression against partners. Weapons or guns in the home increase the risks for family members. Any spouse or partner who feels fearful or threatened should have an emergency safety plan for protection.
Substance Abuse	The effects of alcohol are magnified after a brain injury. Drinking alcohol increases the risks of seizures, slows reactions, affects cognition, alters judgment, interacts with medications, and increases the risk for another brain injury. The only safe amount of alcohol after a brain injury is none.	Using alcohol and drugs to self-medicate is dangerous. Military veterans drink more heavily and binge drink more often than civilian peers. Alcohol and drugs are being used often by veterans to cope with and dull symptoms of PTSD and depression, but in fact create further problems with memory, thinking, and behavior.
Suicide	Suicide is unusual in civilians with TBI.	Rates of suicide have risen among veterans of OEF and OIF. Contributing factors include difficult and dangerous nature of operations; long deployments and multiple redeployments; combat exposure; and diagnoses of traumatic brain injury, chronic pain, post-traumatic stress disorder, and depression; poor continuity of mental health care; and strain on marital and family relationships. Veterans use guns to commit suicide more frequently than civilians.

Summary

There is no easy “either/or” when it comes to describing the impact of TBI and PTSD. While each diagnosis has distinguishing characteristics, there is an enormous overlap and interplay among the symptoms. Navigating this “perfect storm” is challenging for the survivors, the family, the caregivers, and the treatment team. By pursuing the quest for effective treatment by experienced clinicians, gathering accurate information, and enlisting the support of peers and family, it is possible to chart a course through the troubled waters to a safe haven.

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