

# Understanding TBI and PTSD

by Drs. Emilie Godwin and Nancy Hsu

People often wonder if a person can have both a Traumatic Brain Injury (TBI) and also suffer from Post-Traumatic Stress Disorder (PTSD). Not only is it possible, but it is somewhat common.

Although many people believe that PTSD is something only experienced by combat veterans, in reality it can occur following any trauma where a person believes that there is an immediate threat of harm, injury, or death. The U.S. Dept. of Veterans Affairs estimates PTSD has a lifetime prevalence rate of 8.7 % (ptsd.va.gov). This means that about 9 out of every 100 people in the population will meet the criteria for PTSD at some point in their lifetime. On the other hand, current studies suggest that about one out of six people with TBI will experience PTSD after their injury (CDC; Granacher, 2008). Therefore, it is not only possible for survivors to struggle with PTSD, it is somewhat likely.

Although PTSD is a relatively common occurrence after brain injury, it often goes undiagnosed. When this happens, both patients and their families may spend months or even years without understanding how PTSD affects recovery from TBI. Additionally, because there are many TBI and PTSD symptoms that overlap with one another, survivors with a history of undiagnosed PTSD commonly report having been told that their TBI symptoms are “more severe than they should be” or are “lasting longer than they should.” This can cause great distress for survivors and family members alike. It may also leave them feeling confused, criticized, and powerless to make changes in their lives.

When survivors or family members suspect that PTSD may be present, the first step is to seek evaluation by a mental health professional familiar with the combined diagnoses of TBI and PTSD. Understanding how TBI and PTSD interact can help survivors and caregivers in finding appropriate treatment and knowing what their needs are.

Unfortunately, information for patients and caregivers that addresses both TBI and PTSD together remains scarce. In order to address this information gap, we’ve put together some of the most common questions people may have to begin addressing this important topic. *[Ed. note: Drs. Hsu and Godwin are also the developers of VCU’s TBI/PTSD Dual Diagnosis Psychotherapy Clinic].*

## ***Could you please describe what it means to have a PTSD diagnosis?***

(Dr. Hsu): Current criteria state that a PTSD diagnosis may be indicated when a person experiences, witnesses, or learns about an event that they believe to be a physical, or in some cases a psychological threat to life; and that, as a result of this event, the person develops the following cluster of disruptive symptoms for longer than one month:

- inescapable, frightening thoughts of danger that occur frequently and are significantly distressing (*e.g., intrusion*);
- persistent attempts to avoid trauma-related thoughts or feelings, trauma-related physical/psychological reminders; and/or situations that are perceived as a potential “life threat” (*avoidance*);
- dominating moods and thoughts that are overwhelmingly negative and include themes of guilt or blame (*negative alterations in cognitions/mood*); and,
- feeling overwhelmingly “on edge,” “wired,” and/or “reactive” (*arousal/reactivity*.)

### ***Can you describe what life is like from the perspective of someone with PTSD?***

(Dr. Godwin): When a person has been diagnosed with PTSD, they will frequently have feelings, thoughts, and behaviors that would be considered normal and appropriate for a life-or-death situation. However, when these reactions regularly occur in the context of day-to-day life, they are seen as being unfounded and extreme. To put it simply, these feelings, thoughts, and behaviors occur because an individual's internal "fight-or-flight" mechanism has been activated by a traumatic event, but the mechanism failed to properly shut off once the threat was gone.

### ***What other challenges are common when a person has PTSD?***

(Dr. Godwin): To understand life with PTSD, it is easiest if you start by imagining how you might feel if you were in a threatening situation. If you have ever watched on as you believed a tragedy was about to occur, you may recall that the world seemed to slow down and that you felt as if you were separate from the events around you. As a result, PTSD can cause people to feel detached from the world around them, have trouble remaining involved in activities, and report difficulty experiencing loving feelings for others.

Another experience people have in life or death situations is that their senses are on "high alert" and they pay very close attention to the environment, rapidly scanning and re-scanning for anything that indicates threat. This describes the "always on guard" behavior that people will observe when someone has PTSD.

PTSD causes individuals to have frequent, poorly controlled panic attacks. When something triggers the fight-or-flight response but there is no obvious reason or threat, people experience confusion, anxiety, and panic. This results in a powerful sense that something is about to cause mortal danger, but often there are no clues as to what the threat is or how to address it.

There is also a "rebound effect" that causes the frightening thoughts and ideas associated with PTSD to continuously appear in people's minds.

People will naturally attempt to avoid or shut down frightening thoughts when they have them. However, psychologists have long known that the more a person tries to avoid a specific thought, the more they will have that thought. People will get stuck in this cycle of trying to avoid a thought, only to experience the thought more regularly, which creates more fear and panic.

Finally, the physical symptoms associated with PTSD are often described by survivors as being similar to having the flu while also feeling constant excessive energy- being "wired and tired." Common additional symptoms include: poor sleep despite chronic fatigue, weight gain combined with cravings for sugary or salty foods, intestinal/ stomach symptoms, low or no sexual drive, and heightened sensory awareness which includes greater pain reactivity.

### ***What makes having a TBI and PTSD different?***

(Dr. Hsu): The biggest challenge that comes from having both PTSD and TBI is the significant overlap of symptoms. These include: frustration, confusion, irritability, losing train of thought, misplacing things, loss of interest in people and activities, and feeling sad or blue. These can be expected following either brain injury or development of PTSD. When a person has both TBI *and* PTSD, these overlapping symptoms are experienced with a much greater intensity. Another challenge is that the negative thinking patterns of PTSD are harder to correct for individuals who have cognitive symptoms as a result of TBI. Finally, the ever present anxiety and fear that is part of PTSD adds to the social discomfort TBI survivors often experience, resulting in isolation and a reduced willingness to ask for help.

***What treatment options are there when a person has both TBI and PTSD?***

(Dr. Hsu): Although treatment for PTSD has been well researched, researchers have just recently started to investigate which treatments are best when TBI is also a factor. However, early studies are indicating that a PTSD intervention called Prolonged Exposure Therapy may be a good option for survivors. As a result of this research, this is the model that we are using at the VCU clinic. Prolonged Exposure Therapy (PET) is based on the idea that in PTSD the fight-or-flight response does not turn off appropriately in part due to the use of avoidance strategies. Basically, the thinking is that every time a person avoids a trigger such as a memory, or a crowd of people, and then no harm comes to the person, the brain learns that avoidance of the trigger is what kept the person safe. This results in the belief that identifying and then avoiding triggers has life or death importance. In PET, therapists guide individuals through exercises in which the person is exposed to non-dangerous triggers while program strategies help the person to resist the urge to avoid. This allows the brain to learn that these triggers are safe and avoidance is an unnecessary strategy in these situations.

(Dr. Godwin): Also, the research combined with what we see in our clinic suggests that PET may be a good fit for individuals with combined TBI/PTSD. This indicates that there may be other exposure-based approaches that would also be appropriate options for treatment.

However, the most effective route to improving access to good treatment will continue to be increasing public knowledge of combined TBI/PTSD. Survivors, caregivers, and brain injury professionals who regularly face the challenges that come with these dual diagnoses can help make this happen by making a commitment to themselves that they will actively work to spread the word and continue the conversation.

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