Fast Facts About PTSD

A Guide for Nurses and Other Health Care Professionals

Lisa Y. Adams
OTHER FAST FACTS BOOKS

Fast Facts About PTSD: A Guide for Nurses and Other Health Care Professionals (Adams)

Fast Facts for the NEW NURSE PRACTITIONER: What You Really Need to Know in a Nutshell, 2e (Aktan)

Fast Facts for the ER NURSE: Emergency Department Orientation in a Nutshell, 3e (Buettner)

Fast Facts About GI AND LIVER DISEASES FOR NURSES: What APRNs Need to Know in a Nutshell (Chaney)

Fast Facts for the MEDICAL–SURGICAL NURSE: Clinical Orientation in a Nutshell (Ciocco)

Fast Facts on COMBATING NURSE BULLYING, INCIVILITY, AND WORKPLACE VIOLENCE: What Nurses Need to Know in a Nutshell (Ciocco)

Fast Facts for the NURSE PRECEPTOR: Keys to Providing a Successful Preceptorship in a Nutshell (Ciocco)

Fast Facts for the OPERATING ROOM NURSE: An Orientation and Care Guide in a Nutshell (Criscitelli)

Fast Facts for the ANTEPARTUM AND POSTPARTUM NURSE: A Nursing Orientation and Care Guide in a Nutshell (Davidson)

Fast Facts for the NEONATAL NURSE: A Nursing Orientation and Care Guide in a Nutshell (Davidson)

Fast Facts About PRESSURE ULCER CARE FOR NURSES: How to Prevent, Detect, and Resolve Them in a Nutshell (Dziedzic)

Fast Facts for the GERONTOLOGY NURSE: A Nursing Care Guide in a Nutshell (Eliopoulos)

Fast Facts for the LONG-TERM CARE NURSE: What Nursing Home and Assisted Living Nurses Need to Know in a Nutshell (Eliopoulos)

Fast Facts for the CLINICAL NURSE MANAGER: Managing a Changing Workplace in a Nutshell, 2e (Fry)

Fast Facts for EVIDENCE-BASED PRACTICE: Implementing EBP in a Nutshell, 2e (Godshall)

Fast Facts for Nurses About HOME INFUSION THERAPY: The Expert’s Best Practice Guide in a Nutshell (Gorski)

Fast Facts About NURSING AND THE LAW: Law for Nurses in a Nutshell (Grant, Ballard)

Fast Facts for the L&D NURSE: Labor & Delivery Orientation in a Nutshell, 2e (Groll)

Fast Facts for the RADIOLOGY NURSE: An Orientation and Nursing Care Guide in a Nutshell (Grossman)

Fast Facts on ADOLESCENT HEALTH FOR NURSING AND HEALTH PROFESSIONALS: A Care Guide in a Nutshell (Herrman)

Fast Facts for the FAITH COMMUNITY NURSE: Implementing FCN/Parish Nursing in a Nutshell (Hickman)

Fast Facts for the CARDIAC SURGERY NURSE: Caring for Cardiac Surgery Patients in a Nutshell, 2e (Hodge)
Fast Facts About the NURSING PROFESSION: Historical Perspectives in a Nutshell (Hunt)
Fast Facts for the CLINICAL NURSING INSTRUCTOR: Clinical Teaching in a Nutshell, 3e (Kan, Stabler-Haas)
Fast Facts for the WOUND CARE NURSE: Practical Wound Management in a Nutshell (Kifer)
Fast Facts About EKGs FOR NURSES: The Rules of Identifying EKGs in a Nutshell (Landrum)
Fast Facts for the CRITICAL CARE NURSE: Critical Care Nursing in a Nutshell (Landrum)
Fast Facts for the TRAVEL NURSE: Travel Nursing in a Nutshell (Landrum)
Fast Facts for the SCHOOL NURSE: School Nursing in a Nutshell, 2e (Loschiavo)
Fast Facts for MANAGING PATIENTS WITH A PSYCHIATRIC DISORDER: What RNs, NPs, and New Psych Nurses Need to Know (Marshall)
Fast Facts About CURRICULUM DEVELOPMENT IN NURSING: How to Develop & Evaluate Educational Programs in a Nutshell (McCoy, Anema)
Fast Facts for DEMENTIA CARE: What Nurses Need to Know in a Nutshell (Miller)
Fast Facts for HEALTH PROMOTION IN NURSING: Promoting Wellness in a Nutshell (Miller)
Fast Facts for STROKE CARE NURSING: An Expert Guide in a Nutshell (Morrison)
Fast Facts for the MEDICAL OFFICE NURSE: What You Really Need to Know in a Nutshell (Richmeier)
Fast Facts for the PEDIATRIC NURSE: An Orientation Guide in a Nutshell (Rupert, Young)
Fast Facts About the GYNECOLOGICAL EXAM FOR NURSE PRACTITIONERS: Conducting the GYN Exam in a Nutshell (Secor, Fantasia)
Fast Facts for the STUDENT NURSE: Nursing Student Success in a Nutshell (Stabler-Haas)
Fast Facts for CAREER SUCCESS IN NURSING: Making the Most of Mentoring in a Nutshell (Vance)
Fast Facts for the TRIAGE NURSE: An Orientation and Care Guide in a Nutshell (Visser, Montejano, Grossman)
Fast Facts for DEVELOPING A NURSING ACADEMIC PORTFOLIO: What You Really Need to Know in a Nutshell (Wittmann-Price)
Fast Facts for the HOSPICE NURSE: A Concise Guide to End-of-Life Care (Wright)
Fast Facts for the CLASSROOM NURSING INSTRUCTOR: Classroom Teaching in a Nutshell (Yoder-Wise, Kowalski)

Forthcoming FAST FACTS Books

Fast Facts for the OPERATING ROOM NURSE: An Orientation and Care Guide in a Nutshell, 2e (Criscitelli)
Fast Facts for TESTING AND EVALUATION IN NURSING: Teaching Skills in a Nutshell (Dusaj)
Fast Facts for the CRITICAL CARE NURSE: Critical Care Nursing in a Nutshell, 2e (Landrum)
Fast Facts About CURRICULUM DEVELOPMENT IN NURSING: How to Develop and Evaluate Educational Programs in a Nutshell, 2e (McCoy, Anema)

Fast Facts About the GYNECOLOGIC EXAM: A Professional Guide for NPs, PAs, and Midwives, 2e (Secor, Fantasia)

Visit www.springerpub.com to order.
Lisa Y. Adams, PhD, MSc, RN, has a 25-year history of progressive leadership positions in the areas of seniors, mental health, and addictions. She has conducted eight peer-reviewed research studies and has published 22 articles, and is currently working with a professor from Harvard University to publish many more. Dr. Adams is an active volunteer in a variety of organizations in Newfoundland, Canada, and is a member of many professional associations in both Canada and the United States. She is also an award-winning author who has been recognized by the Journal of American Nursing for her previously published book, Workplace Mental Health Manual for Nurse Managers (Springer Publishing, 2014).
This book is dedicated to all of those who are suffering or have suffered with PTSD, particularly frontline emergency responders and military personnel with combat experience, and also to the innocent citizens who have suffered at the hands of terrorists and to those caught in unnecessary wars. The world needs to pay attention to your suffering and respond with love, compassion, and hope so that you may rise above the mental anguish and hurt and grow stronger as people, citizens, and spiritual beings.
Contents

Preface xiii

Share Fast Facts About PTSD: A Guide for Nurses and Other Health Care Professionals

Part I THE BEGINNINGS OF PTSD

1. Understanding Stress, Mental Health, and Mental Illness 3
2. Trauma 13

Part II THE IMPACT OF PTSD

3. PTSD 101 25
4. Who Suffers or Is at Risk? 49
5. The Impact of Traumatic Events 77
6. The Long-Term Impact of PTSD 89

Part III THE INTRICACIES OF PTSD

7. Prevention of PTSD 103
8. Clinical Interventions 111
9. Treatment Interventions 127
10. Coping With PTSD 151
11. Community Involvement 167

© Springer Publishing Company
12. Cultural Implications 183
13. Special Population Considerations 189
14. Future Trends and Directions for Treating PTSD 215

Index 225
Mental health and mental illness are everyone’s business and permeate all sectors of society and all people. Although beliefs about mental health vary across cultures, generations, and ages, the reality of post-traumatic stress disorder (PTSD) has emerged as a growing concern in recent years. The definition of mental health as employed by the World Health Organization (WHO, 2014, para. 1) is “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.” All components of this definition present the challenges that individuals with PTSD face daily.

One thing that is universally accepted about PTSD is the effort required by health care professionals to care for individuals suffering from different degrees of PTSD. Although many interventions exist for health care professionals to use for their patients with PTSD, it is critical to remember that all individuals respond differently not only to the trauma and stress experienced, but also to the treatment regimens and support that are available to them. Hence, an individualized approach to assessment, diagnosis, and treatment is always a must.

It is hoped that this guide will help the health care clinician better understand the effects of trauma, what the assessment of PTSD should entail, and what interventions are most effective. Recognizing, understanding, and having an increased awareness of PTSD, as well as identifying who it impacts and how it does so, are important if health care clinicians are to work together to implement appropriate interventions.
and obtain the best possible outcomes for all involved. Although this guide is surely nonexhaustive, it is a great starting point for those working with individuals who are suffering from PTSD.

Lisa Y. Adams

Reference

Share

Fast Facts About PTSD: A Guide for Nurses and Other Health Care Professionals
Reactions (responses) to trauma can be immediate or delayed. Many reactions can be triggered by persons, places, or things associated with the trauma. Some reactions may appear totally unrelated to the event, person, or object at hand. However, it is important to remember that these are “normal” reactions to “abnormal” events. The experience of even one traumatic event can have devastating consequences for the individual involved. However, trauma can affect individuals in various ways, targeting their physical, psychological/emotional, neurological, social, and spiritual health.

In both the short term and long term, the impact of stress is invasive. Throughout alternating between short bursts of painful memories and periods of avoidance and numbing, the sense of feeling keyed-up persists. The traumatized person has experienced an event that potentially threatened his or her life, or the life of someone else, so the mind and body stay on alert to make sure not to miss any sign that such an event may recur in future. It is safer to get it wrong by overestimating a potential threat than to risk the possibility of missing any future threat. The persistent activation of this threat detection system, however, leaves the traumatized person feeling nervous or on edge much of the time. In addition, the threat detection system is so sensitive that it constantly goes off when there is no danger, in a way that interferes with the person’s capacity to live a normal and happy life. A similar explanation exists with regard to anger. Anger was useful in battle or other situations of threat. It hypes us up and promotes our survival—it may often be an adaptive way to respond to a life-threatening situation and certainly better than being immobilized with fear. Again, however, it is no longer useful for our survival once
Initially, there is not a lot of physical symptomatology to notice, as much of it occurs in the brain. However, in the presence of a threat or trauma, one can be witnessed trying to physically run away from the perceived danger source. Within the body, the full response to stress occurs under the fight-or-flight mechanism. Therefore, what will typically happen is the shutting down of unnecessary bodily processes. As blood is shunted to the brain, muscles, and heart where it is needed most to escape from fight, its supply to the gastrointestinal tract, other organs, and the skin will be stalled.

Depending on the duration of this immediate phase, organs and other important bodily processes may become jeopardized. For example, the occurrence of sepsis following physical trauma results from the multifocal initiation of inflammatory processes. Not only do white blood cells migrate rapidly to the injured area, but the release of proteins also occurs, particularly the HMGB1 protein that can cause a full-body septic inflammation, which is often life-threatening (Toledo, 2012).

Essentially, the body endures the traumatic event(s) that created not only undue stress, physically and psychologically, but also precipitated many other physiological and possibly pathological responses that continue to subject the body to even more stress. But the immediate impact of PTSD does not stop here.
One of the main impacts left by PTSD is neurologically based. Reactions to trauma vary from person to person, from minor disruptions in an individual’s life to debilitating responses. Across the continuum, people may experience anxiety, terror, shock, shame, emotional numbness, disconnection, intrusive thoughts, helplessness, and powerlessness. An important variable is the age at which the trauma occurs. For children, early trauma can have especially negative consequences, impacting the development of the brain and normal developmental progression. Memory is often affected—people may not remember parts of what happened, but at the same time may be overwhelmed by sporadic memories that return in flashbacks. Nightmares, depression, irritability, and jumpiness are common. All of these responses can interfere with an individual’s sense of safety, self, and self-efficacy, as well as the ability to regulate emotions and navigate relationships.

Cognition has also been a target of trauma. Immediately after trauma, an individual can lose his or her sense of reality, and feel confused and disoriented to the surrounding because of stimulus overload. An inability to focus and concentrate, difficulty in completing complicated tasks that require critical thinking, and memory losses have all been identified as a result of trauma. Kevin Tracey, a neurosurgeon at the Feinstein Institute for Medical Research, suggests that declining cognition occurs and does so as a result of a specific protein, the HMGB1 protein, that emerges during the onset of inflammation and sepsis that causes cognitive dysfunction (Toledo, 2012).

Psychologically, many factors contribute to the development of mental illness. These range from neglect to abuse, creating low self-esteem and confidence. For example, a child subjected to psychological trauma such as emotional abuse, physical abuse, and/or sexual abuse (Katz, Cojucar, Beheshti, Nakamura, & Murray 2012) has increased susceptibility to the development of a mental illness. Neglect (Katz et al., 2012), the early loss of a parent (Katz et al., 2012), poor ability to relate to others (Katz et al., 2012), feelings of inadequacy, anxiety, low self-esteem, low confidence, anger, and loneliness can all predispose a person to the development of a mental illness (Katz et al., 2012).
Psychological trauma can be overwhelming in an emotional, cognitive, and physical sense (Box 5.1). People who have been traumatized may alternate between feeling empty or “numb” and being flooded by intense feelings of fear, anger, shame, and other emotions (Toronto Psychology Centre, 2016).

**BOX 5.1 PSYCHOLOGICAL–EMOTIONAL RESPONSES TO TRAUMA (LEVIN, 2011)**

- Shock and disbelief
- Fear and/or anxiety
- Grief, disorientation, denial
- Hyper alertness or hypervigilance
- Irritability, restlessness, outbursts of anger or rage
- Emotional swings—like crying and then laughing
- Worrying or ruminating—intrusive thoughts of the trauma
- Nightmares
- Flashbacks—feeling like the trauma is happening now
- Feelings of helplessness, panic, feeling out of control
- Increased need to control everyday experiences
- Minimizing the experience
- Attempts to avoid anything associated with trauma
- Tendency to isolate oneself
- Feelings of detachment
- Concern over burdening others with problems
- Emotional numbing or restricted range of feelings
- Difficulty trusting and/or feelings of betrayal
- Difficulty concentrating or remembering
- Feelings of self-blame and/or survivor guilt
- Shame
- Diminished interest in everyday activities or depression
- Unpleasant past memories resurfacing
- Suicidal thoughts
- Loss of a sense of order or fairness in the world
- Expectation of doom and fear of the future
- Anger toward religion or belief system
- Loss of beliefs
- Desire for revenge

*Source: Levin (2011).*
SOCIAL EFFECTS

The experience of PTSD can have immediate effects on people socially. An individual can be so scared, disillusioned, and confused that he or she becomes withdrawn from others. Trauma survivors who have PTSD may have trouble with their close family relationships or friendships. Their symptoms can cause problems with trust, closeness, communication, and problem solving, which may affect the way trauma survivors act with others. In turn, the way a loved one responds to them affects the trauma survivors. A circular pattern may develop that could harm relationships (Anxiety and Depression Association of America, 2016). As found by Baker (2014) the impact of PTSD in witnessing a great deal of family violence suggests the effects of the violence will linger for years and impact across generations because of the stress on families and children.

PSYCHIATRIC EFFECTS

The physiological adaptations that some people develop in response to trauma and to perceived ongoing threats produce an underlying state of “dysregulation”—difficulty controlling or regulating emotional reactions or behaviors. This dysregulation of the brain and body systems perpetuates mental, emotional, and physical distress (B. C. Ministry of Health, 2016). The majority of people with PTSD meet the diagnostic criteria for other psychiatric disorders (Cohen, 2016; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). In the immediate short term, what is typically seen are anxiety disorders, such as panic attacks and acute stress disorders. It is often the acute stress disorders that progress to become a full diagnosis of PTSD. Within a short time frame, individuals begin to manifest other mental illnesses, such as depression, agoraphobia, obsessive-compulsive disorder, and/or social phobias and somatization disorders.

Fast Facts

Although the immediate impact of PTSD is often acute, it can represent more long-term effects if not dealt with effectively and in a timely manner.
SUICIDE

Like PTSD, the act or attempt of suicide can cross all forms of trauma, populations, and age groups. Whether the trauma is a result of a natural disaster (Caldera, Palma, Penayo, & Kullgren, 2001), childhood abuse (Cohen, 2016), childhood bullying (Centers for Disease Control and Prevention, 2014), or combat duty (Shane & Kime, 2016), suicide is perhaps one of the greatest fears for someone who is suffering from PTSD. When individuals with PTSD find themselves on the verge of being suicidal and taunted repeatedly with thoughts of suicide, they feel they have nowhere left to turn. For the involved family and/or loved ones, the act of suicide is heart-wrenching. It often leaves friends and families wondering why, maybe they could have done more to help, and so forth. They feel lost, empty, dumbfounded, and shocked. But no words can really describe how those left behind feel. Media around the world bombardus with headlines of how soldiers, justice personnel, emergency services workers, and many other victims of trauma have attempted to commit or successfully committed suicide.

Perhaps the most well-known trauma that has fed such news reports in recent years is that of combat personnel and soldiers returning from duty, only to be faced with the inability to cope with what they had experienced overseas or elsewhere (Castro & Kintzle, 2014). According to Brunet and Monson (2014), it should come as no surprise that several people who died by suicide were former Canadian Armed Forces personnel—a more than twofold increase in dying by suicide compared to the general population. However, this twofold increase in death by suicide as a result of PTSD occurred irrespective of whether the PTSD was developed as part of a military deployment or otherwise. Furthermore, they also found that most people who reported suicidal ideations did not attempt suicide. In a recent study concerning a large military sample, 38.5% of individuals expressing suicidal ideations developed a plan and 34% with a plan made an attempt on their life within the following year. A study by Conner et al. (2014), although adjusting for other mental illnesses, revealed that PTSD was not a risk for suicide overall but once PTSD was linked to a major depression disorder, the risk of suicide increased substantially (Brunet & Monson, 2014). Such a finding is supported elsewhere, where the co-occurrence of PTSD with major depression disorder enhances the risk for suicidal behavior (Oquendo et al., 2005).

Although suicide rates among middle-aged nurses in the United States have declined in recent years (Anderson, Kochanek, & Murphy, 1995), the suicide rate among middle-aged female nurses has increased.
(Hawton & Vislisel, 1999). According to Feskanich et al. (2002), a severe level of stress at home or at work was associated with an increased risk of suicide for female nurses. Forty-four percent of the women reported the same stress level at home and at work. Incidence rates for suicide were highest among those who reported severe (24.8 per 100,000) or minimal (13.3 per 100,000) levels of stress both at home and at work, with increased risks in the minimal and severe categories for both home and work stress. Even after adjusting for smoking, coffee consumption, alcohol intake, and marital status, risks remained high. The reason for this increase is believed to result from increased occupational stress levels and easier access to drugs (Feskanich et al., 2002). They further suspect that “the increased risk of suicide among the women who reported minimal stress at home or at work may reflect denial or it may be associated with other risks for suicide, such as social isolation and depression” (Feskanich et al., 2002, p. 95). In a literature review by Hawton and Vislisel (1999), it was found that “there is evidence from several countries that female nurses are at increased risk of suicide.” Although there is very little information about the specific causes of suicide, smoking and consumption of caffeine are significant risk factors.

Even among refugees, suicide became a troubling reality for many. The atrocities experienced by refugees from the war-torn countries resulted in 79% of them developing PTSD, with a significant proportion (79%) reporting a high incidence of suicidal thoughts and attempts (Ferrada-Noli, Asberg, Ormstad, Lundin, & Sundbom, 1998a). From this study, more specifically, 40% made suicide attempts, 29% developed detailed suicide plans, and 31% had recurrent suicidal thoughts (Ferrada-Noli, Asberg, Ormstad, Lundin, & Sundbom, 1998b).

Because homicide and/or suicide are the worst possible outcomes for someone suffering from PTSD, it is important to discuss how to diagnose and prevent it.

**SUICIDE ASSESSMENT AND RISK**

Assessment for the risk of suicide among individuals suffering from PTSD is a priority intervention. A health care clinician needs to be scrupulous in his or her assessment of suicide risk because many of the signs of impending suicide attempts are subtle and discreet. Many of these warning signs are not overly alarming individually, but collectively they become very concerning. The warning signs of a possible suicide or suicide attempt are described in Box 5.2.
In my own clinical experience working with patients who are potentially suicidal, I’ve come to expect the “unexpected.” A patient who was admitted with a diagnosis of major depressive disorder had a hospital inpatient stay for about 5 weeks. Her mood and affect seemed to improve somewhat, and she was ultimately approved for a day pass to leave the hospital for a period of time. She returned to the hospital unit that evening; her mood was elated, her affect bright, and she was excited and optimistic with big plans for her future.

**BOX 5.2 WARNING SIGNS OF SUICIDE**

- Loss of interest in things the person used to care about
- Irritability and edginess increases
- Giving things away
- Visiting or calling people and saying “Goodbye”
- Methodically making amends, settling quarrels
- Withdrawal and isolation from friends and family
- Sudden decline in functioning at school or work
- Suddenly happier, right after a long, deep depression
- Change in appearance—hygiene, and so forth
- Increased risk-taking behavior (e.g., use of drugs, reckless driving)
- Talking about feeling hopeless, helpless, or worthless
- Hoarding of pills, hiding of weapons
- Talking about suicide and/or what it would be like to die (pre-occupied with death)
- Self-injury
- Threatening suicide

**Indirect statements**

- “What’s the use of going on.”
- “My parents would be happier if I’d never been born.”
- “I just can’t take it anymore.”

**Direct statements**

- “Sometimes I just feel like killing myself”
- “If I killed myself, then people would be sorry”
- “You won’t have to worry about me much longer”
Later that evening, she decided to go outside to smoke a cigarette, which was not an uncommon request for her, as she was an avid smoker. She never came back, but was instead found dead in a local body of water. What happened? While out on her day pass, she ultimately decided that her life and the people and events in her life were not improved, which perhaps reinforced for her that she was going to commit suicide. Furthermore, while out on the day pass, unknownst to the hospital clinicians, she had gotten her affairs in order. This is just one example of a real situation that can occur when someone has decided to commit suicide. When clinicians see a much happier and brighter affect and mood in their patient, it should not be taken at face value but instead further investigated and the patient should be monitored very closely.

SEVERITY OF RISK OF SUICIDE

Once the possibility of suicide is established, the severity of risk must then be assessed. Questions often asked in the suicide assessment to determine severity or degree of risk are described in Box 5.3.

BOX 5.3 DEGREE/SEVERITY OF SUICIDE RISK

- Does the person have a plan?
- If yes, what is the plan and does the person have access to items necessary for this plan?
- How often does the person think about suicide?
- How badly does the person wish to end his or her life?
- Has the person felt suicidal in the past, or is this the first time?
- Has the person ever attempted suicide before? When?
- Is the person using drugs or alcohol—does he or she have access?
- Will the person be home alone?
- Does the person take medications for mental health concerns—has he or she been taking them?
WHO IS MOST LIKELY TO COMMIT SUICIDE?

Suicide is most prevalent in certain populations in society. Although rates are generally highest in teenagers, adolescents, and the elderly, White elderly men older than 65 have the highest rate of suicide. In addition to this finding, the risk of suicide appears to be highest in the following subpopulations of people (Goldberg, 2016):

- Older people who have lost a spouse through death or divorce
- People who have attempted suicide in the past
- People with a family history of suicide
- People with a friend or coworker who committed suicide
- People with a history of physical, emotional, or sexual abuse
- People who are unmarried, unskilled, or unemployed
- People with long-term pain or a disabling or terminal illness
- People who are prone to violent or impulsive behavior
- People who have recently been released from psychiatric hospitalization (this often is a very frightening period of transition)
- People in certain professions, such as police officers and health clinicians who work with terminally ill patients, emergency response (ER) personnel, and military who are on the front lines of disaster, trauma, and warfare
- People who have either been part of or witnessed trauma, violence, and/or disasters
- Those with substance abuse disorders and/or behaviors

Fast Facts

The act of suicide by an individual who has PTSD represents that he or she feels that there has nowhere left to turn.

References


Reactions to trauma and the impact from it do not necessarily begin immediately after trauma. We have already discussed some of the more immediate symptoms, so we now focus our attention on the delayed symptoms of posttraumatic stress disorder (PTSD). Sometimes, symptoms may not appear until years after the event. These symptoms cause significant problems in social or work situations and in relationships (Mayo Clinic, 2016a). Particularly with the high levels of distress associated with memories of severe trauma, such thoughts and feelings tend to be pushed away into the subconscious mind in an effort to protect the person from the distress. The result is that although the memory may go away for a period of time, the need for it to be dealt with has not been addressed and the memory keeps coming back. The movement backward and forward from intrusive thoughts and feelings about the trauma to avoidance and numbing can continue almost indefinitely unless the cycle is addressed in some way.

In addition to the delayed effects of the experienced trauma, some individuals live with the disadvantage of continued trauma that endures a prolonged period of time. As devastating as single-blown traumas are, the traumatic experiences that result in the most serious mental health problems are prolonged and repeated, sometimes extending over years of a person’s life (Terr, 1991). People respond differently to trauma based on the lived experiences they have already endured, as well as the severity, duration, and personal closeness of the trauma. Although there are some common underlying themes or characteristics in how people respond to trauma, one of the biggest outcomes is whether or not people develop PTSD as a result of the
The brain is the center of perception, cognitive processing, mental thought processes, and behaviors that become manifested as a result. Research data from various studies of functional neuroanatomy and neurochemistry indicate various dysfunctions in certain areas of the brain in individuals who suffer from chronic PTSD. These abnormalities cause the evolution of symptoms of PTSD, deterioration of cognitive functions, and, hence, decreased quality of life of the survivors. The intensity of these symptoms is in direct correlation with the degree of dysfunction in the central nervous system (Bravo-Mehmedbasic, Kucukalic, Kulenovic, & Sulijc, 2010).

In the study led by Loganovsky and Zdanevich (2013) investigating the effects of the Chernobyl disaster and the impact of radiation, it was found that PTSD following radiation emergency is characterized by comorbidity of psychopathology, neurocognitive deficit, and

In this chapter, you will learn:

- How PTSD creates a long-lasting and sometimes lifetime impact on an individual
- How, like the short-term impact, the long-term impact of PTSD engulfs every aspect of one’s life and living
- How psychiatric comorbidities often go hand in hand with PTSD
- How one’s quality of life is significantly disrupted by PTSD—so much so that functioning at normal everyday activities is challenging
cerebrovascular pathology with an additional increased risk of cerebral atherosclerosis and stroke. The cerebral basis of this PTSD results from the abnormal communication between the pyramidal cells of the neocortex and the hippocampus, and deep brain structures. Changes in bioelectrical brain activity were also found in this study.

SOCIAL IMPACT

The impact of PTSD has far-reaching societal effects. Successful social relations always help to control and buffer against the stress we experience in life. However, social relationships that people build, or the lack thereof, is another fallout for how we face stress that can jeopardize our mental health. Experiencing stress and mental health concerns for prolonged periods of time can actually cause us to distance ourselves from some of our friends. We spend so much of our time absorbed and/or worried about what is happening in our lives, our perceptions become significantly narrowed, and we cannot see the larger picture of how our friends can actually help us during these difficult, mentally challenging times. As suggested by Davis, Lind, and Sorensen (2013), individuals who rely on supportive social networks as a coping mechanism have lower levels of depersonalization. Unequivocally, when social support is lacking, it exacerbates our perception of stress and the onset of mental health concerns even more and is often positively correlated with emotional exhaustion, burnout, and depersonalization (Davis et al., 2013). One’s stressed mental health can also result in work–family conflict (Geiger-Brown & Lipscomb, 2010).

PHYSICAL HEALTH

Physical health and mental health always go hand in hand; one affects the other when compromised. Physical health is affected in many ways by traumatic events. Trauma survivors may experience chronic pain, gynecological difficulties, gastrointestinal problems, asthma, heart palpitations, headaches, and musculoskeletal difficulties. Chronic danger and anticipation of violence stress the immune system and can lead to an increased susceptibility to autoimmune disorders, such as chronic fatigue and other illnesses (Poole, 2014). For war veterans in particular, Vasterling et al. (2008) uncovered that postdeployment PTSD severity was associated with changes in somatic health-related functioning and hence impacted individuals’ health-related daily
functioning. Jakupcak, Luterek, Hunt, Conybeare, and McFall (2008) add that even when accounting for demographic factors, combat and chemical exposure, and health risk behaviors, PTSD symptom severity was significantly associated with poorer health functioning.

When people experience PTSD stress, their threshold of bodily defenses and functions are compromised (Box 6.1). This includes their physical health that is cardiac, cardiovascular, immunity, or gastrointestinal in nature. Hence, heart diseases (NIOSH, 2008; Scott et al., 2013), infections (Scott et al., 2013), sleep difficulties (NIOSH, 2008), autoimmune diseases (Scott et al., 2013), headaches (NIOSH, 2008), impaired gastrointestinal function (Geiger-Brown & Lipscomb, 2010; NIOSH, 2008), and musculoskeletal problems (Geiger-Brown & Lipscomb, 2010) can all occur. When this stress becomes chronic, such as that experienced by many subjected to warfare and childhood abuse, the concern magnifies (Scott et al., 2013).

Hoge, Terhakopian, Castro, Messer, and Engel (2007) suggest that even years after the war and/or combat has occurred, associations between combat-related PTSD and physical health problems persist, which reveals that PTSD was significantly associated with lower ratings of general health, more sick call visits, more missed workdays, more physical symptoms, and high somatic symptom severity, even after controlling for being wounded or injured. Evidence illustrating the increased incidence of persons experiencing cardiovascular disease, respiratory disease, and other physical illness following traumatic events has also been found (Scott et al., 2013), as was stroke (Chen et al., 2015).

**BOX 6.1 PHYSICAL RESPONSES TO TRAUMA**

- Aches and pains such as headaches, backaches, and stomach aches
- Sudden sweating and/or heart palpitations (fluttering)
- Changes in sleep patterns, appetite, interest in sex
- Constipation or diarrhea
- Easily startled by noises or unexpected touch
- More susceptible to colds and illnesses
- Increased use of alcohol or drugs and/or overeating

*Source: Levin (2011).*
Three key events occur in the long-term fallout of PTSD. Although these events may occur early in the trauma experience, the body’s physiological makeup and processes can delay the effects for each of the organs, genes, system defenses, and cognition. For example, following a severe traumatic event or repetition of such events, organ function can decline. In a disorder that became known as the multiple organ dysfunction syndrome (MODS) in the aftermath of trauma, various organs become deprived of the oxygen supply as the body goes into shock as a result of the trauma. The advent of MODS can occur either very early or later in the recovery from the trauma. In any event, organs deteriorate at various rates. For example, the lungs and kidneys begin to decline first, and are followed shortly thereafter by the liver and intestines (Toledo, 2012).

One’s genetic makeup can also become compromised as a result of trauma. Our genes drive our immunity and bodily defenses. However, following trauma, genes behave quite differently than expected. Regardless of whether patients were known to heal quickly or slowly, the same genetic mutations occurred following trauma (Xiao et al., 2011). This finding is perhaps closely linked to the inflammatory response that occurs immediately following trauma.

**PSYCHIATRIC COMORBIDITIES**

The occurrence of mental illnesses after trauma is common. Trauma can be life changing, especially for those who have faced multiple traumatic events, repeated experiences of abuse, or prolonged exposure to abuse. Furthermore, with the onset of PTSD, individuals often resort to ineffective coping strategies such as substance abuse and drinking alcohol to help them through such troubled times and symptoms. Hence, what often results are psychiatric comorbidities (Baker, 2014; Sareen, 2014).

Many mental illnesses can occur over the long term and over a lifetime for individuals because of the stress and PTSD symptomatology they develop. As the body and brain undergo a dysregulation in response to trauma (Poole, 2014), the involved cognitive processes and responses to external stimuli create ongoing and perpetual behavioral changes and perceptions that can predispose an individual to a lifetime of such change. Over the long term, mental illnesses such as depression, anxiety disorders, and somatization disorders occur (Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). Furthermore, other enduring patterns of behaviors or traits may appear
The long-term impact of PTSD becomes particularly noticeable among frontline health care providers and emergency response (ER) personnel. As health care clinicians, we often just brush off our own stress and soldier onward. According to Fjeldheim et al. (2016), even at the training phase of their careers, a high rate of depression (28%), alcohol abuse (23%), and chronic perceived stress (7%) and low levels of social support were found among paramedics. Furthermore, almost one out of three ER nurses met subclinical levels of anxiety, depression, and somatic complaints and 8.5% met clinical levels of PTSD (Adriaensnens, de Gucht, & Maes, 2012). According to Veterans Affairs Canada, 30% of Royal Canadian Mounted Police disability pensioners suffered mental health conditions, such as depression and anxiety disorders. Depression is the leading cause of workplace disability and is more prevalent than PTSD in police and military organizations, although the two conditions often occur together.

PTSD often occurs with depression, substance abuse, or other anxiety disorders (Anxiety and Depression Association of America, 2015). PTSD can disrupt your whole life: your job, your relationships,
your health, and your enjoyment of everyday activities (Mayo Clinic, 2016b).

According to Blore, Sim, Forbes, Creamer, and Kelsall (2015), no one is exempt from the psychiatric comorbidities that accompany PTSD, but substance abuse is particularly well recognized. “Many people with PTSD attempt to cope or ‘self-medicate’ with excessive amounts of alcohol and inappropriate drug use (including prescribed drugs)” (Veterans Affairs Canada, 2017, “Substance Abuse,” para. 1). Individuals with PTSD are more likely than the general population to resort to substance abuse (Pietrzak, Goldstein, Southwick, & Grant, 2012). The use of alcohol, in particular, raises other issues of concern as alcohol itself is a depressant.

The presence of other mental health conditions not only makes a diagnosis increasingly difficult, but also delays treatment and/or intervention, making assessment and screening procedures increasingly difficult for the clinician. According to Dore, Mills, Murray, Teesson, and Farrugia (2012), PTSD symptoms are associated with greater trauma exposure and moderate-to-severe depressive symptoms and a history of self-harm or attempted suicide. Similarly, for women who became engaged in heroin use (Chou, Beeler-Stinn, Diamond, and Cooper-Sadlo, 2014) and in predicting the use and abuse of drugs for adolescence (Donbaek, Elkit, & Pedersen, 2014), and substance abuse by war veterans (Butler, Taylor, & Ozietta, 2015), the underlying theme of trauma seems to dominate. What is important to realize here is that drugs and alcohol are often used as a mechanism, albeit ineffective, to help individuals cope with stress.

The use of alcohol raises other issues of concern. Although people feel that they obtain much pleasure from drinking alcohol, alcohol itself is a central nervous system depressant. Although alcohol serves to provide a temporary short-term feeling of euphoria, its long-term effect slows the central nervous system. Studies consistently show that alcohol consumption increases in the first year after a disaster, whether they are manmade or natural (Keyes, Hatzenbuehler, Grant, & Hasin, 2012); thus, the growing recognition of alcohol abuse is a concerning societal trend. Furthermore, maltreatment in childhood also increases the risk for both adolescent and adult alcohol consumption (Keyes et al., 2012), and adult alcohol abuse disorders (Enoch et al., 1992), particularly when adults were in combat. According to Thomas et al. (2014), alcohol use and its associated aggressive behaviors occurred in 50% of all adults returning from combat.

As suggested by Davidson (2000), trauma has an enormous impact on both individuals and society as a whole. Recognition of the extent
of this impact by the medical profession has been relatively slow but, with our growing appreciation of the prevalence of trauma exposure in civilian as well as combat populations, the true scale of trauma-related psychiatric consequences is beginning to emerge.

**SOCIETAL MORBIDITIES**

As people grow up from living an abused childhood, soldiers return from combat, and survivors of terrorism, natural disasters, and accidents pursue their lives, the impact of PTSD and its symptomatology remains in their families, communities, and workplaces. One of the risks rarely investigated for its impact is the health services systems that actually provide the care to these individuals. As suggested by Baker (2014), the Global War on Terror returnees are using medical services and applying for disability at higher rates than those who served in previous conflicts. Furthermore, if the costs for veterans’ care peak 30 to 40 years or longer following the conflict as anticipated, it will inflict an enormous burden on services and resources. Therefore, it would be most prudent for governments, policy makers, and bureaucrats to mobilize government agencies, create public–private partnerships, and invest resources now to mitigate the approaching tsunami of veterans’ health care needs, the impact on our social services, and the devastating costs to society. This is significant, given that many countries around the world are now tightening their fiscal spending allowances, declaring bankruptcy, and/or witnessing never-before-seen levels of exponential unemployment, activist uprisings, and a shrinking currency. As suggested by Davidson (2000), there is a detrimental cost to society with high financial and social consequences from the significantly elevated rates of hospitalization, suicide attempts, and alcohol abuse.

**QUALITY OF LIFE**

As suggested by Bravo-Mehmedbasic et al. (2010), subjects who are suffering from chronic PTSD have a lower subjective perception of their quality of life. They add, however, that combined psychopharmacological and psychotherapeutic treatment over a period of 6 months can lead to improvement in the perception of quality of life. Lončar et al. (2014) add that for those who were prisoners of war,
the traumatic experience of war triggered all forms of PTSD symptomatology, hence impacting their quality of life. As added by Davidson (2000), individuals experiencing severe psychiatric stress compounded by significant comorbid illness have critical impacts on their quality of life, which result in grave functional and emotional impairment.

### Fast Facts

Over the long term, quality of life and functioning at everyday activities can become compromised by PTSD.

### References


