7.1 Chapter Overview

The last 30 years of scientific inquiry has firmly established the profound impact toxic stress and traumatic events have on the mind and body. Experiencing early adverse events, toxic stress, and/or traumatic events can alter the physiology of the body and make people more susceptible to a range of chronic diseases, depressive and anxiety disorders, addiction, violence, and suicide (Burke-Harris 2018; CDC 2020; Felitti and Anda 2010; Perry and Szalavitz 2017; Van der Kolk, 2015). The impact of the COVID-19 pandemic will resonate in health and behavioral health treatment systems for years to come by increasing the number of persons coping with trauma in the population much like the events of 9-11 and the wars in Vietnam, Afghanistan, and Iraq. COVID-19 will impact rates of trauma and toxic stress exposure in the population in a number of ways. First, lockdowns will result in an increase in the experience and intensity of intimate partner violence as families are trapped at home with abusive partners in high-stress situations with no means for escape. This will increase rates of exposure to violence, leading to higher rates of post-traumatic stress disorder (PTSD) and placing survivors at risk for health and mental health problems that may last for years. The lockdown will also lead to backlog of cases resulting in a disruption in detection and identification of IPV in the community as health and behavioral health appointments are cancelled. It will also disrupt the ability of victims to access services and resources such as shelters, health care, legal advocacy, and childcare. The increase in toxic stress exposure to children that result from these disruptions will have lifelong impacts on their health and well-being.

Second, survivors of COVID-19, particularly those in intensive care units (ICUs) and who were placed on ventilators, are already reporting an increase in PTSD and depressive symptoms. The experience of being in an ICU and on a ventilator is known to produce trauma symptoms, particularly nightmares and flashbacks. The increase in persons in ICUs and on ventilators will likely result in a corresponding
increase in PTSD prevalence in the population. Likewise, PTSD seen in the healthcare workforce is likely to increase. The experiences of healthcare workers and first responders experiencing the constant fear of infection due to a lack of personal protective equipment (PPE), and their exposure to vast numbers of patient deaths will increase the likelihood of PTSD and other behavioral health issues in this population. Third, family members who lost loved ones to the virus and were unable to say goodbye and process their grief may also experience increased rates of PTSD, depression, anxiety, and substance use. Last, the stress experienced by tens of millions of people, particularly in Black and Brown communities, due to the health and economic impact of this pandemic may have behavioral health implications for years to come.

These are just some of the implications of this still unfolding crisis. But the COVID-19 pandemic exists within a network of other intersecting epidemics that have roiled the United States for generations and magnify the impact of COVID-19. The epidemic of police violence perpetrated on Black Americans and the inequities in health, education, and wealth experienced by generations of Black families due to racist policies and practices are two interrelated examples. The epidemic of community violence as a result of the poverty generated by these same inequities that has resulted in generations of stressed and traumatized youth and adults is another. A fourth example is the increases in substance use and suicide, particularly by firearms, that have impacted all communities across the United States. The sheer magnitude of these challenges can be overwhelming. Indeed, the current US healthcare system is not equipped currently to deal with it effectively. Addressing trauma in the community from a behavioral health practice standpoint requires an approach to practice that is trauma-informed and universally integrated across healthcare settings. In this chapter, I will review the impact of trauma on the mind and body and how to screen, assess, and treat trauma in a way that is sensitive, compassionate, and effective.

### 7.1.1 Trauma-Related Definitions and Terms

#### 7.1.1.1 Traumatic Events

An event is considered traumatic if it is perceived to be potentially life-threatening and overwhelms our ability to cope. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines trauma as “Exposure to actual or threatened death, serious injury, or sexual violence.” (APA 2013; p. 271). Exposure is defined as directly experiencing trauma, witnessing trauma happening to someone else, learning that a traumatic event has happened to someone close to you (e.g., parent, child, spouse, sibling, close friend, or relative), or repeatedly experiencing extreme details or the effects of traumatic events such as seeing or collecting remains, providing first aid or medical care to persons experiencing life-threatening events, or responding to the scene of disasters, wars, violent acts, or fires (APA 2013).
Table 7.1 lists examples of traumatic events that impact health within several major domains. Examples of traumatic events are numerous and include experiencing war, famine and disease, interpersonal violence (e.g., physical abuse, rape, sexual abuse, extreme neglect, robbery, assault, kidnapping), accidents (e.g., motor vehicle, falls, heavy machinery), fire and explosions, and natural disasters (e.g., flood, earthquakes, hurricanes, tornados).

While the DSM-5 requires traumatic events to be potentially life-threatening, events such as experiencing discrimination, learning that your spouse has been having an affair or wants a divorce, getting fired, loss of one’s home, loss of an ability (e.g., eyesight, paralysis), or learning one has a chronic disease can be so life-shattering and unexpected that they overwhelm our ability to cope. These events, too, can lead to significant trauma symptoms. Experiencing forms of interpersonal violence are more likely to lead to post-traumatic effects. For instance, complex traumatic stress is experiencing repeated, long-term interpersonal violence. Complex trauma is most often associated with the childhood experience of sexual or physical abuse and neglect in the home or in homes where there is intimate partner violence (NCTSN 2020).

The effects of traumatic experiences can be diverse and long-lasting. First and foremost, trauma, particularly interpersonal violence, disrupts the ability to form and maintain healthy relationships with other people. Trauma can lead to negative beliefs about the self, others, and the world that lead to a sense of personal helplessness, shame and worthlessness, fear and mistrust for others, and a sense of hopelessness for the future. Experiencing trauma can also lead to emotional dysregulation,
dissociation, negative effects on memory and concentration, and a reduction in the ability to cope with future stress and adversity. These effects can lead to depressed mood, anxiety, hypervigilance, and avoidant behaviors such as substance use and social withdrawal (SAMHSA 2014a, b).

7.1.1.2 Adverse Childhood Events

Adverse childhood events (ACEs) are defined as the experience of one or more negative or toxic life stressors that have been found to have long-ranging effects on health. Table 7.2 lists examples of ACEs that impact health within several major domains. These experiences include physical, sexual, or emotional abuse; physical or emotional neglect; living in a household with a person who has a mental illness, substance use disorder, or who is in prison; parental divorce; and death of a caregiver, among other events. Some of these experiences are not considered life-threatening as defined by the DSM-5; however, they exert a long-term negative impact on emotional and physical health (Burke-Harris 2018; Felitti and Anda 2010).

| Table 7.2 | Adverse childhood events impacting behavioral health |
|---|---|
| **Domains** | **Events** |
| Child maltreatment | Emotional abuse |
|  | Sexual abuse |
|  | Physical abuse |
|  | Physical neglect |
|  | Emotional neglect |
| Toxic family stress | Household mental illness or substance abuse |
|  | Someone close had a bad accident or illness |
|  | Parents always arguing |
|  | Mother treated violently |
|  | Parental divorce |
|  | Household member incarcerated |
|  | No good friends (at time of interview) |
| Peer, school, and community-based toxic stress | Property victimization (non-sibling) |
|  | Peer victimization (non-sibling) |
|  | Community violence exposure |
|  | Socioeconomic status |
|  | Below-average grades |
| Other domains needing further study | Death of a parent |
|  | Lack of access to food |
|  | Experiencing discrimination |

Based on Finkelhor et al. (2015)
7.1.1.3 Post-Traumatic Stress Disorder

Post-traumatic stress disorder (PTSD) is the experience of a range of debilitating and distressing symptoms at least one month after exposure to a traumatic event that causes significant distress and functional impairment. These symptoms occur across four different clusters and include symptoms related to intrusive memories of the event, continued hyperarousal and vigilance following the event, negative mood (e.g., sadness, anger, fearfulness) and cognitive symptoms (e.g., dissociation, hopelessness, helplessness, shame, guilt), and avoidance of trauma cues or reminders of the event (e.g., people, places, objects) that can include substance use and social withdrawal.

7.1.1.4 Trauma-Informed Care

The experience of trauma and untreated symptoms related to full, or partial, PTSD can increase the risk for comorbid health and behavioral health issues and hinder recovery from these conditions (Pietrzak et al. 2011; Schnurr 2015). Trauma-informed practice environments prioritize the safety of clients and promote trust, collaboration, healing, empowerment, and recovery from the effects of trauma. Providers or organizations that operate from a trauma-informed care (TIC) lens: (1) recognize the impact of trauma on health and behavioral health and integrate trauma awareness into all practices, policies, and procedures; (2) understand the strategies that lead to recovery; (3) routinely screen and assess for the signs and symptoms of trauma; (4) eliminate practices that have the potential to be re-traumatizing to clients; and (4) deploy practices that are responsive to those who may have experienced trauma and that create a practice environment that promotes safety, empowerment, and healing (SAMHSA 2014a, b).

7.1.2 The Epidemiology of Trauma

7.1.2.1 PTSD and Health

Trauma activates the natural stress response system that prepares the body to fight an adversary, run away from danger, or freeze in the face of danger. These responses are rooted in our limbic system and brain stem—areas that control emotion (e.g., anger, disgust, fear) and autonomic responses (e.g., heart rate, breathing, blood pressure, consciousness). Traumatic stress is often sensory in that it activates our sense of sight, sound, smell, taste, and touch, and records signals from those senses in our memory. These memories can lead to somatic reactions to reminders or cues of the event such as emotional dysregulation (e.g., fear, anxiousness, hypervigilance, anger), intrusive and sometimes dissociative thoughts (e.g., flashbacks, numbing), and behavioral reactions (e.g., avoidance, aggression, withdrawal,
freezing, substance use). Trauma memories serve a survival function and are designed to prevent a recurrence of trauma or death through increased vigilance, arousal, and avoidance. However, when these memories are triggered by cues in the environment and lead to distress when no danger exists or that is out of proportion to any potential danger, they can impair functioning and lead to the development of PTSD (APA 2013; Burke-Harris 2018; Van der Kolk 2015). Traumatic events involving interpersonal violence, especially sexual violence, intimate partner violence, and community violence, are the most likely events to lead to PTSD and can have a long-term impact on the health and well-being of many of our clients (Goldstein et al. 2016).

For instance, PTSD is associated with higher rates of chronic diseases such as cardiovascular and cerebrovascular disease, cancer, hypertension, metabolic disease, and autoimmune diseases (Gradus et al. 2015; Howard et al. 2018; Husarewycz et al. 2014; Kessler et al. 1995; Remch et al. 2018; Song et al. 2018; Spitzer et al. 2009). Violence can also lead to higher rates of visible and invisible injuries such as traumatic brain injury (Halbauer et al. 2009). All of these factors can compromise health and impact the ability of people to take care of themselves, engage in preventative care, and adhere to treatment resulting in persistent morbidity, disability, and early mortality (Burke-Harris 2018; Felitti and Anda 2010; CDC 2020; Leeies et al. 2010; Perry and Szalavitz 2017; Van der Kolk 2015).

### 7.1.2.2 Prevalence of Trauma and PTSD

The majority of people who experience a traumatic event do not develop PTSD. However, PTSD is a highly prevalent behavioral health condition in the community that is often comorbid with other behavioral health conditions (Goldstein et al. 2016). In the United States, nearly 70% of people experience a lifetime traumatic event. Lifetime prevalence rates of PTSD range from 6% to 8% nationally and 12-month rates for PTSD are nearly 5% (Goldstein et al. 2016; Kilpatrick et al. 2013). Women experience higher PTSD prevalence rates than men and the potential of experiencing PTSD increases with increased exposure to traumatic events (Kilpatrick et al. 2013). Over half of the general population (53%) will experience some form of interpersonal violence (58.6% of women and 47.1% of men). Almost a third of the general population (30%) and over 40% of women will experience a sexual assault. Over 40% of people and 45% of women will experience physical assault. Approximately half will experience a disaster, accident, or fire (Kilpatrick et al. 2013).

PTSD increases the odds of experiencing other behavioral health disorders including all anxiety disorders, major depressive disorders, substance use disorders, antisocial and borderline personality disorders. Persons with PTSD are 3 times more likely to have a co-occurring mood disorder, over 2.5 times more likely to have anxiety disorder, and 1.5 times more likely to have a substance use disorder (Goldstein et al. 2016). Despite the prevalence of PTSD, only 60% of persons with the condition receive treatment with a 4.5-year delay, on average, between onset and treatment (Goldstein et al. 2016).
7.1.2.3 Adverse Childhood Experiences and Health

Adverse childhood events (ACEs) are childhood experiences that are considered toxic or traumatic and can have a drastic impact on health (Felitti et al. 1998). The negative impact on health can develop regardless of whether a person develops full or even partial PTSD. These events are often silenced and buried in people’s lives, but nonetheless have important health effects later in life. The ACE study, a large longitudinal study of over 17,000 middle-class, employed, college-educated people with good health insurance, found that experiencing any of the ten adverse childhood events mentioned below can have important health consequences later in life (Anda et al. 2006; Felitti et al. 1998; Whitfield et al. 2003). Examples of these events include growing up in a household where the person experienced: (1) emotional abuse; (2) physical abuse; (3) sexual abuse; (4) emotional neglect; (5) physical neglect; (6) parental separation or divorces; (7) domestic violence; (8) a person with a substance use disorder or problem drinking; (9) a depressed, mentally ill, or suicidal family member; and (10) someone in the house that had gone to prison. ACEs were found to be very common with about two-thirds of the sample having experienced at least one ACE (and 87% of those had more than one), and one in eleven people having experienced six or more ACEs (Felitti and Anda 2010). The impact of trauma on the brain and body can place people at risk for a range of negative behavioral, social, and physical health problems later in life (Anda et al. 2006; Whitfield et al. 2003).

For instance, childhood exposure to interpersonal violence led to increased rates of depression, substance use, and experiencing or perpetrating interpersonal violence in adulthood (Edwards et al. 2003; Whitfield et al. 2003). A higher number of ACEs were also linked to higher rates of cancer (Brown et al. 2013), COPD (Anda et al. 2008), heart disease (Dong et al. 2004), diabetes (Deschenes et al. 2018), and autoimmune diseases such as rheumatoid arthritis (Dube et al. 2009).

It is also important to note that the impact of ACEs on health occurs in a dose-response relationship. Figure 7.1 lists the dose response impact of ACEs on several health outcomes. For instance, four or more ACEs increased the risk for chronic obstructive pulmonary disease (COPD) by 390%, hepatitis by 240%, depression by 460%, and attempted suicide by an ominous 1220%. A person with an ACE score of 6 was 4600% more likely to be an IV drug user and 3100% (31-fold) to 5000% (50-fold) more likely to attempt suicide than a person with 0 ACEs (Dube et al. 2001). For every increase in ACE score, the risk for suicide attempts increased 60%. Experiencing any one of the ten identified ACEs increased suicide attempts 200–500% (2–5 fold) (Dube et al. 2001). Experiencing any six ACEs shortened life expectancy by 20 years.

Adverse childhood experiences disrupt neurological development through chronic activation of the stress response systems. This overactivation can lead to bio-psychosocial problems such as emotional dysregulation, hypervigilance, aggressive behavior, and low impulse control. These problems, in turn, can result in impairment in the ability to connect with other people and to the adoption of high-risk behaviors that can cause chronic comorbidity and early death (Burke-Harris...
For instance, it was found that higher ACE scores were associated with a higher prevalence of unhealthy coping behaviors such as smoking (Anda et al. 1999), alcohol and drug use (Dube et al. 2003; Strine et al. 2012), and obesity (Williamson et al. 2002). However, when controlling for these behaviors, the impact of ACEs was still profound. This is due to the impact of chronic stress on the brain and nervous system. Major chronic unrelieved stress leads to overactivation of the hypothalamic pituitary adrenal axis (HPA axis), the release of pro-inflammatory chemicals, and the suppression of immune system functioning that can lead to many of these health and behavioral health problems. This means that the experience of ACEs can change the body and brain via the stress response system in such a profound way that the experience of these events by themselves can lead to high morbidity and mortality if left untreated (Burke-Harris 2018).

### 7.2 Trauma-Informed Care

Trauma-informed approaches are heavily influenced by the ecological systems framework discussed in Chap. 2, which views human development and behavior as the result of the dynamic relationships that exist between an individual and their environment (Bronfenbrenner 1979, 2009; Bronfenbrenner and Morris 2007). Well-being is impacted by the fit between the biopsychosocial needs of the individual,
and the resources and conditions available to them in their physical and social environments. Assessment and treatment should, therefore, focus on helping establish a good fit between individual characteristics (e.g., age, gender, culture, health and mental health, temperament and traits, education, and socioeconomic status, interpersonal relationships (e.g., social support, safety), and various social determinants of health (e.g., housing, income, neighborhood/community, and access to basic resources including health care). The Substance Abuse and Mental Health Services Administration (SAMHSA) has identified four assumptions and six principles of trauma-informed care (TIC) (2014). These will be reviewed next.

### 7.2.1 Trauma-Informed Care Definition and Assumptions

Trauma-informed care (TIC) is an approach to service delivery that fully recognizes the short-term and long-term impact of trauma on the health and well-being of service recipients, and responds with practices that promote safety, collaboration, trust, and empowerment (Elliott et al. 2005; Niolon et al. 2017; SAMHSA 2014a, b). SAMHSA has identified four assumptions that define trauma-informed care for organizations and providers. Table 7.3 lists the principles and practices of each of those assumptions. First, providers and organizations realize that trauma is prevalent in the lives of clients and that experiencing trauma exerts an impact on the health and well-being of client systems. Trauma sensitivity and awareness are integrated into all aspects of care, including screening and assessment, treatment, and follow-up care. A practice at the heart of trauma-informed care is asking the question *What happened? What happened to this person? What happened to this family? What happened to this school? What happened to this community?* Trauma awareness means positioning the behaviors of clients, families, organizations, and communities as reactions and attempts to adapt to the impact of traumatic stress. In other words, when providers practice TIC, they assume that trauma, experienced individually or collectively, and not traits inherent to the person or group, is the driving force behind behaviors that lead to negative health consequences. Framing behaviors in this way can diffuse judgmental feelings and responses by providers, reducing the risk of re-traumatization of the client (SAMHSA 2014a, b).

Second, being aware and sensitive to the prevalence and impact of trauma requires providers and organizations to be able to recognize trauma in those they serve. This is accomplished through the routine deployment of trauma-informed screening and assessment procedures designed to identify the presence of PTSD or other health effects related to stress and trauma (SAMHSA 2014a, b). Third, trauma-informed programs, organizations, and systems respond to trauma by integrating trauma-informed services across all levels of care. Health and behavioral health settings that are trauma-informed have in place trained staff, policies, procedures, and practices designed to create a safe, welcoming environment and provide clients with access to effective treatments and services that address the multidimensional impact of trauma on individual, social, and environmental levels (SAMHSA 2014a, b).
Lastly, trauma-informed providers, organizations, and systems resist practices that are toxic and re-traumatizing to clients and staff by creating practice environments that are safe, nurturing, and conducive to the development of well-being (SAMHSA 2014a, b). These four assumptions represent the basic foundation underlying trauma-informed care. Trauma-informed care is also guided by several practice principles that I will review in the next section.

### 7.2.2 Principles of Trauma-Informed Care

Trauma-informed care is guided by six overarching practice principles that are infused into all levels of care. First, TIC organizations are dedicated to the promotion of physical, emotional, psychological, and interpersonal safety of clients served by the organization and the staff providing those services. Second, TIC organizations ensure that all clinical and organizational decisions prioritize transparency and trust with providers and clients. Third, trauma-informed organizations rely on peer providers with lived experience of trauma to use their stories to engage clients in treatment, build trust and hope, and promote healing and recovery. Fourth, trauma-informed care is person-centered and prioritizes collaboration and
mutuality with clients. This means that service relationships are partnerships where power is shared.

Fifth, TIC organizations place an emphasis on empowerment and choice. This means that services are designed to promote recovery, health, and healing, and that clients can choose from a range of options that are aligned with their preferences and needs. Providers rely on shared decision-making models during care planning and treatment to ensure that clients are able to make informed decisions about the course of their care every step of the way. Sixth, trauma-informed programs provide culturally-tailored services that are sensitive and responsive to multiple intersecting identities such as race, ethnicity, culture, language, gender identity, and sexual orientation. Providers are trained to recognize and address bias, and care is provided with recognition of historical trauma caused by racist, heterosexist, sexist, and patriarchal policies and practices. TIC organizations eliminate practices and policies that reinforce stereotypes and lead to biased care, and implement policies, practices, procedures, and structures designed to ensure care that is responsive, affirming, and inclusive to the needs of service recipients with multiple identities (SAMHSA 2014a, b).

7.2.3 Implementation of Trauma-Informed Care Practice and Policies

Trauma-informed organizations ensure that trauma-informed care practices are fully integrated into the systems, structures, policies, and procedures of the program (Mancini and Miner 2013). Areas in which trauma-informed practices are integrated include intake procedures, staff training and professional development, screening and assessment procedures, policies regarding how to ensure safety and confidentiality of clients, hiring and retention policies of staff, physical space, monitoring and addressing compassion fatigue and burnout among staff, referral procedures, and continuous quality improvement initiatives. Programs also assess and address policies and practices that can be re-traumatizing such as the use of seclusion and restraints, power dynamics of provider-client relationships, lack of inclusive forms, lack of power over decision-making, being rushed through clinical appointments, physical touching and being placed in vulnerable positions, forced removal of clothing and invasive procedures, lack of privacy, and overly-personal questions. Trauma-informed practices utilize welcoming environments that are calm, affirming, and soothing. Providers take a holistic view of the client and engage in screening and assessment procedures for trauma in a safe, slow, and private manner. Providers utilize a collaborative approach offering clients choices among a range of holistic treatment options (e.g., group or individual counseling, yoga, nutrition, peer support, acupuncture, and meditation) offered on-site or through a warm referral process.
The implementation of trauma-informed care covers a number of domains identified by the Substance Abuse and Mental Health Services Administration (SAMHSA 2014a, b). First, trauma-informed care should be embraced by the highest levels of leadership. Peers with lived experience in trauma should be included in organizational decision-making processes, staff training, and the delivery and evaluation of services. Empowered champions for trauma-informed care should be positioned throughout the organization to increase acceptance and adoption of TIC practices. Second, TIC approaches should be part of the operations of the organization written specifically into all policy and procedure manuals and be a part of the organization’s mission and vision. Third, the physical environment of the organization should be safe, welcoming, and collaborative. Fourth, TIC approaches should guide all decisions regarding organizational partnerships and collaborations. Referrals to outside services should only be to trauma-informed agencies and service sectors. Fifth, all providers receive continuous training in screening, assessment, and treatment services that are trauma-sensitive and culturally responsive. Sixth, trauma sensitivity is a consideration in hiring, supervision, and evaluation of all staff and leadership. Seventh, procedures are in place to ensure that staff have adequate access to self-care strategies and resources. Last, trauma-informed care is integrated into records, billing, and monitoring systems (Mancini and Miner 2013; SAMHSA 2014a, b).

7.3 Post-Traumatic Stress Disorder (PTSD)

Diagnostic Criteria

A diagnosis of PTSD requires the persistent experience of symptoms related to the experience of a traumatic event for at least one month. There are four main clusters of PTSD symptoms: (1) intrusion/re-experiencing; (2) arousal/hypervigilance; (3) negative alternations in cognition and mood; and (4) avoidance. Figure 7.2 lists the main symptoms for PTSD within each of these four clusters. Symptoms should be severe enough to cause significant distress and impairment in functioning (i.e., interpersonal relationships, employment, daily activities). The DSM-5 has a modified set of diagnostic criteria for children under the age of seven. For adults, adolescents, and children over the age of 6, the following criteria are required for a diagnosis of PTSD. Table 7.4 lists the major diagnostic criteria for post-traumatic stress disorder.

7.3.1 Criteria A: Exposure to a Traumatic Event

A traumatic event is defined as actual or threatened exposure to death, injury, or violence and can include direct experience, witnessing first-hand traumatic events experienced by others, being made aware of traumatic events that have happened to close persons, or being repeatedly exposed to the details of traumatic events
experienced by others (APA 2013). Examples of traumatic events include: experiencing or witnessing interpersonal and community violence such as sexual assault, physical assault, assault with a weapon, combat or exposure to war, kidnapping or being detained, natural disasters, fire and explosions, serious accidents, life-threatening illness or injury, witnessing sudden violent death or serious injury, and witnessing intense human suffering (APA 2013; Blake et al. 1995).

The two most profound clusters of traumatic events that have the highest probability of leading to PTSD are experiencing sexual trauma and when traumatic events happen to close loved ones such as spouses, children, and parents. Experiencing sexual violence holds the highest likelihood of developing PTSD, with 33% of persons experiencing this form of violence developing PTSD. Thirty percent of persons who experience the sudden loss of a loved one or whose loved one experiences a life-threatening injury, illness, or trauma will go on to develop PTSD symptoms. Approximately 11–12% of persons experiencing or witnessing interpersonal and community-based violence or war may go on to develop PTSD (Kessler et al. 2014).

7.3.2 Criteria B: At Least One Intrusion or Re-experiencing Symptom

One of the hallmarks of PTSD is the presence of intrusive thoughts and re-experiencing of the traumatic event. For a PTSD diagnosis, a person must experience at least one symptom from this cluster following a traumatic event (APA 2013).
Table 7.4  Post-traumatic stress disorder diagnostic criteria

| Criteria A: Exposure to traumatic event(s) | Actual or threatened exposure to death, injury, or violence  
Exposure can include direct experience, witnessing, learning about traumatic events happening to close persons, or repeated exposure to the details of trauma |
| Criteria B: One or more intrusion symptoms | Recurrent, involuntary, unwanted, distressing memories, thoughts, images of the event  
Repeated, vivid nightmares of the event  
Dissociative flashbacks or re-experiencing the event as if it is re-occurring  
Experiencing cognitive, emotional, or physiological reactions to reminders/cues of the event |
| Criteria C: Evidence of avoidance of reminders of the event | Repeated attempts to avoid internal reminders of the event (e.g., thoughts, feelings, images) through substance use, self-harm, high-risk behaviors  
Repeated attempts to avoid external reminders of the event such as people, places, situations, or objects through isolation, social withdrawal, relocation, or other means of strategic avoidance |
| Criteria D: Two or more symptoms of negative alterations in cognitions and mood | Inability to remember an important aspect of the traumatic event(s)  
Negative beliefs about the self, others, or world  
Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) (e.g., it’s all my fault or I am forever damaged)  
Lack of interest or pleasure in activities  
A persistent negative emotional state: sadness, anxiety, anger, guilt/shame  
Emotional numbness or the inability to experience positive emotions such as joy or satisfaction  
Dissociation or feeling detached or estranged from other people |
| Criteria E: Two or more symptoms of heightened arousal and reactivity | Problems sleeping  
Exaggerated startle response  
Persistent hypervigilance for danger or feeling “on guard”  
Recklessness  
Feeling on edge or persistently irritable |

Based on APA (2013)
Intrusion symptoms can include prolonged, frequent, and vivid nightmares about the event; dissociative flashbacks where the person re-experiences the elements of the event as if it were happening again; and constant intrusive thoughts and memories of the event (e.g., can’t stop thinking about it). Another important element of intrusion symptoms is cognitive, affective, or physiological reactions to cues or reminders of the event. For instance, a person who has experienced rape may have a psychological or physiological stress response if they smell the same or similar cologne as their attacker, leading to flashbacks, hypervigilance or nervousness, nausea, fear, sadness, or irritability that can interfere with functioning. It should be noted that the person may not be aware of what is happening or that this particular cue is significant, despite experiencing these emotional or physiological reactions (APA, 2013).

7.3.3 Criteria C: Persistent Avoidance of Reminders Related to the Event

Memories and reminders of the traumatic event are persistently distressing to persons with PTSD over time. A sign of PTSD is engaging in repeated efforts to avoid internal (e.g., distressing memories or feelings) or external reminders or cues associated with the event (e.g., places, people, or situations). This avoidance can result in maladaptive coping behaviors that can include alcohol and substance use, social withdrawal, and isolation. Avoidance behaviors can include either attempts to avoid unwanted memories of the event, or external triggers of the event such as people, place, things, and situations (APA, 2013).

7.3.4 Criteria D: At Least Two Negative Alterations in Cognitions and Mood Symptoms

This cluster of symptoms was newly introduced to DSM-5 to capture the psychological distress and dysphoria that is a key feature of the trauma experience and PTSD. Persons with PTSD may experience a range of negative thoughts, feelings, and beliefs about the traumatic event. This cluster includes a wide range of symptoms associated with the traumatic event such as experiencing: (1) dissociative amnesia regarding the details of the event; (2) feelings of guilt, self-blame, shame, and negative self-concept due to the event; (3) negative emotions such as anhedonia, depressed mood, anxiety, and fear; and (4) detachment and feelings of numbness or the inability to experience positive emotions (APA, 2013).
7.3.5 Criteria E: At Least Two Alterations in Reactivity and Arousal Symptoms

Persons with PTSD often experience a prolonged activation of the stress response system that can lead to high rates of health problems. Signs and symptoms of hyper-arousal include irritability and anger, sleep disturbances, behavior that is reckless to self or others, increased vigilance for danger, and an exaggerated startle response (APA 2013).

7.4 Screening and Assessment for Traumatic Stress and PTSD

Universal screening and assessment for traumatic stress and PTSD in health and behavioral health settings is a key part of trauma-informed care. Effective screening and assessment for traumatic stress are rooted in safety, trust, respect, and compassion. Clients need to feel that they are in a safe place to disclose traumatic experiences and that their stories will be heard and validated. Clients also need to trust that their responses are confidential and must be made fully aware of any limitations to confidentiality or reporting requirements before being asked about trauma. Providers need to ensure that they ask about trauma in a private setting, utilize active listening skills, and show respect and compassion. Language interpreters should be independent professionals, rather than family or friends of the client. Persons who disclose trauma need to feel like it was a good idea to tell their story. Trauma assessment should also be ongoing as the relationship between provider and client develops over time. Initial screening for trauma should be in a sensitive way, and conversations about the impact of stress and trauma on health can signal to reluctant clients that they are in a safe place to discuss their trauma. Providers should provide education to clients about the role of trauma in health regardless of whether they disclose experiencing trauma. If they do disclose, providers should normalize the symptoms that often are associated with traumatic events. Positive screenings should lead to further assessment and access to trauma services provided onsite or a referral to outside behavioral health settings that specialize in trauma-focused care. Screening and assessment should include assessing for ACEs, traumatic events, and symptoms of PTSD. Table 7.5 lists information about several common screening and assessment instruments for PTSD. Each of these instruments will be discussed in more detail in the sections that follow.
The experience of adverse childhood events and traumatic events has been linked to a range of health issues. The experience of four or more adverse childhood events (ACEs) has been associated with higher rates of cancer, behavioral health issues

| Scale name                                      | Description                                                                                                                                                                                                 | References              |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Life events checklist                          | Screens for exposure for 17 common traumatic events including natural disasters, various forms of violence, illness, accidents, and war                                                                   | Weathers et al. (2013a) |
| Primary care PTSD screen for DSM-5 (PC-PTSD-5) | Brief, 5-item screen for possible PTSD. Uses “yes” and “no” items that screen for intrusive thoughts, avoidance, hypervigilance, numbness or detachment, and guilt or self-blame. A “yes” to any three items indicates a positive screen. | Prins et al. (2016)    |
| The PTSD checklist for DSM-5 (PCL-5)           | The PCL-5 is a 20-item self-report assessment checklist that corresponds to the 20 symptoms of the DSM-5 across four diagnostic symptom clusters: intrusion/re-experiencing, hyperarousal, negative alteration in cognition and mood, and avoidance. The PCL-5 scores can be summed and compared to a clinical cut-off to assess severity, or the scale can be used as a diagnostic instrument. Preliminary severity cut scores range from 28 to 37 depending on the population and setting. | Weathers et al. (2013)  |
| Clinician-administered PTSD scale for DSM-5 (CAPS-5) | The CAPS-5 is a 20-item semi-structured clinical interview that measures PTSD diagnosis and also offers a severity score. It is considered the gold standard for research and clinical assessment of PTSD. The symptoms correspond to the 20 main PTSD symptoms in the DSM-5 across four clusters (intrusion, avoidance, arousal, and negative alterations in cognition and mood). Symptom frequency and severity are measured using a 5-point scale (0 = absent; 1 = mild/sub-threshold; 2 = moderate/threshold; 3 = severe/markedly elevated; and 4 = extreme/incapacitated). In order to indicate the presence of clinical symptoms, a score of ‘2’ or higher is required. | Weathers et al. (2013b) |
| Posttraumatic stress disorder symptoms scale interview for DSM-5 (PSSI-5) | The PSSI-5 is a 24-item semi-structured interview schedule that assesses the presence of a traumatic event and measures the 20 DSM-5 symptoms for PTSD. Symptoms are assessed on a 5-point scale that measures frequency and severity ranging from 0 (not at all) to 4 (6 or more times a week/severe). Scores of 1 or higher indicate the presence of symptoms. Scores can range from 0 to 80. The clinical cut-off score for a probable diagnosis of PTSD is 23. | Foa et al. (2016a)      |
| Post-traumatic diagnostic scale for DSM-5 (PDS-5) | The PDS-5 is a 24-item self-report measure that assesses the presence of a traumatic event and measures the 20 DSM-5 symptoms for trauma. This measure is the self-report version of the PSSI-5 interview schedule. The clinical cut-off score for a probable diagnosis of PTSD is 28. | Foa et al. (2016b)      |

### 7.4.1 Adverse Childhood Experiences

The experience of adverse childhood events and traumatic events has been linked to a range of health issues. The experience of four or more adverse childhood events (ACEs) has been associated with higher rates of cancer, behavioral health issues...
such as depression, heart disease, diabetes, and suicide, controlling for negative health behaviors and socioeconomic issues (Felitti et al. 1998). The original ACE questionnaire uses “yes” and “no” questions to assess whether clients have ever experienced any of the original ten ACEs, which included the experiences of intimate partner violence, emotional and physical abuse and neglect, sexual assault, divorce, having a person in the household who has been in jail, used alcohol or drugs, or had a mental illness. The concept of ACEs has been expanding to include items measuring peer victimization, peer rejection or isolation, and community violence (Cronholm et al. 2015). This has led to the revised inventory of adverse childhood events (Finkelhor et al. 2015). The addition of these items has increased the sensitivity of the original measure to predicting mental health issues. The addition of low SES has also increased predictive ability of the measure for health issues (Finkelhor et al. 2015). Both versions of the scale can be found online and at the Centers for Disease Control and Prevention (CDC) website.

7.4.2 Traumatic Events

A common screen for DSM-5 traumatic events is the Life Events Checklist (LEC-5) (Weathers et al. 2013a). This checklist is part of two well-validated screening and assessment instruments: The PTSD Checklist for DSM-5 (PCL-5) (Weathers et al. 2013) and the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) (Blake et al. 1995). The LEC was originally developed as part of the CAPS. The LEC-5 screens for 17 common traumatic experiences including: experiencing various forms of interpersonal violence (e.g., physical and sexual assault, kidnapping, war, being threatened), natural disasters, fire, accidents, and life-threatening medical conditions. The purpose of the LEC is to identify the experience of a potentially traumatic event and as a result, it does not have a specific score or scoring procedure.

7.4.3 Post-Traumatic Stress Disorder

Primary Care Post-Traumatic Stress Disorder Screen for DSM-5 One of the most common screening tools in health settings for PTSD is the Primary Care-Post Traumatic Stress Disorder Screen for DSM-5 (PC-PTSD-5) (Prins et al. 2016). This is a five-item “yes” and “no” screen that assesses whether a client has experienced significant symptoms associated with a traumatic event(s) in the past month. The symptoms assessed by the scale are: (1) experienced nightmares about the event(s) or unwanted thoughts about the event; (2) engaged in attempts to avoid situations or thoughts that serve as reminders of the event or had to try hard not to think about the event; (3) experienced hypervigilance such as being “on guard,” watchful, or easily startled; (4) experienced a sense of being numb or detached from activities or environment; and (5) experienced a sense of guilt or was unable to stop blaming
themselves or others for what happened or the effects of what happened. A positive screen is a “yes” to any three items and indicates the need for further assessment for PTSD. This instrument has shown excellent psychometric properties in primary care settings and good sensitivity (score of 3) and specificity with a cut score of 4 for maximum efficiency. The screen has shown good diagnostic accuracy and is very effective in routine settings (Prins et al. 2016). The scale is in the public domain and can be accessed at the National Center for PTSD in the US Department of Veterans Affairs.

This screening instrument and others can lead to important clarifying conversations about trauma in the client’s life. First, be sure to clarify whether the client experienced a traumatic event by asking the client to identify the event they feel has led to their symptoms. Be sure that the event is life-threatening. Experiencing troubling or stressful events that are not necessarily traumatic, but lead to depressed or anxious symptoms may be better classified as an adjustment disorder (APA, 2013). It is also important to ask how symptoms have interfered with work or interpersonal functioning. Lastly, it is important to assess whether any traumatic events the client identified are continuing to happen such as ongoing violence. Clients who disclose ongoing violence should be provided resources and referrals to legal and advocacy services, social services, behavioral health counseling and crisis response services, shelters, childcare services, and hotlines if safe to do so. If it is not safe to give the client brochures, providers should give them to the client verbally and offer the client the option to use the provider’s office phone to make contact with referrals. Trauma-informed practice requires health settings that screen for trauma to offer services to survivors of violence on-site or through an active warm referral process. If the incident requires mandated reporting, consult with the client on how best to file the report in such a way that their safety is enhanced rather than diminished.

The PTSD Checklist for DSM-5 (PCL-5) The PCL-5 is a 20-item checklist that corresponds to the 20 symptoms of the DSM-5 across four diagnostic symptom clusters: intrusion/re-experiencing, hyperarousal, negative alteration in cognition and mood, and avoidance (Weathers et al. 2013). This measure uses the Life Events Checklist (LEC-5) to identify traumatic events. It is a self-report measure in which respondents identify how much distress each symptom has caused them in the past month on a 5-point scale that ranges from (0) not at all to (4) extremely. The PCL is easy to administer and score and has shown solid psychometric properties and diagnostic utility (Blevins et al. 2015; Bovin et al. 2016; Wortmann et al. 2016). Like the PC-PTSD-5, this measure is in the public domain and can be accessed at the National Center for PTSD in the US Department of Veterans Affairs.

The PCL-5 scores can be summed and compared to a clinical cut-off to assess severity or the scale can be used as a diagnostic instrument. Diagnosis of PTSD may be made if scores of 2 (Moderately) or higher are indicated on at least one intrusion symptom (Cluster B); one avoidance symptom (Cluster C); two arousal symptoms (Cluster D); and two negative alterations in cognition and mood symptoms (Cluster E). Preliminary Severity cut-off scores range from 28 to 37 depending on the
population (military vs civilian), setting (medical clinic vs. VA), and reason for assessment. (Blevins et al. 2015).

**Clinician Administered PTSD Scale for DSM-5 (CAPS-5)** The CAPS-5 is a 20-item semi-structured clinical interview that measures PTSD diagnosis and also offers a severity score (Weathers et al. 2018). It is considered the gold standard for research and clinical assessment of PTSD. The symptoms correspond to the 20 main PTSD symptoms in the DSM-5 across four clusters (i.e., intrusion, avoidance, arousal, and negative alterations in cognition and mood). Symptom frequency and severity are measured using a 5-point scale (0 = absent; 1 = mild/sub-threshold; 2 = moderate/threshold; 3 = severe/markedly elevated; and 4 = extreme/incapacitated). In order to indicate the presence of clinical symptoms, a score of ‘2’ or higher is required. Scoring for the CAPS-5 has been streamlined to combine frequency and intensity symptoms, and clinicians have a frequency and severity guideline that instruct them on how to score the scale. For instance, a score of 2 requires a minimum frequency of twice a month and a minimum intensity of “clearly present.” A score of 3 requires a minimum frequency of twice a week and a minimum intensity of “pronounced.” The CAPS-5 has shown good psychometric properties. It has good test-retest reliability (r = 0.78) and good internal consistency (0.88) for the severity score and showed good convergent validity with the PCL-5 (Weathers et al. 2013a, b). The CAPS is more time-consuming and is a more complicated measure to implement and score than other self-reports measures. Clinical training is required to utilize the scale effectively. The CAPS can be obtained from the National Center for PTSD in the US Department of Veterans Affairs. It is not available in the public domain.

**Post-Traumatic Stress Disorder Symptoms Scale Interview for DSM-5 (PSSI-5)** The PSSI-5 is a 24-item semi-structured interview schedule that assesses the presence of a traumatic event and measures the 20 DSM-5 symptoms for PTSD (Foa et al. 2016a). Symptoms measured are for the index traumatic event or the event that produces the most severe self-reported symptoms if multiple traumatic events have been experienced. The 20 symptoms correspond to the four DSM-5 symptoms clusters. Symptoms are assessed on a 5-point scale that measures frequency and severity ranging from 0 (not at all) to 4 (6 or more times a week/Severe). Scores of 1 or higher indicate the presence of symptoms. Scores can range from 0 to 80. Two items measure distress and interference with functioning, and a score of 2 or higher on either item is positive for clinical distress or interference in functioning. Two other items indicate duration of symptoms and delayed onset. Similar to DSM-5, a positive assessment requires the presence of one intrusion symptom, one avoidance symptom, two symptoms of negative cognition and mood, and two symptoms of arousal experienced for one or more months. The clinical cut-off score for a probable diagnosis of PTSD is 23, and the scale has shown excellent psychometric properties as a reliable and valid scale of PTSD. The sensitivity of the PSSI-5 is 0.82 and specificity is 0.71. The PSSI-5 showed good internal consistency (0.89) and test-retest reliability (r = 0.87) and showed good convergent validity with other
measures of PTSD (Foa et al. 2016a). However, as compared to the CAPS-5, the 29% false positive rate of the PSSI-5 might be due to a lower scoring threshold leading to the propensity for an increased risk of false positives (Weathers et al. 2013b). This scale is not in the public domain and must be requested by the authors.

**Post-Traumatic Diagnostic Scale for DSM-5 (PDS-5)** The PDS-5 is a 24-item self-report measure that assesses the presence of a traumatic event and measures the 20 DSM-5 symptoms for trauma. This measure is the self-report version of the PSSI-5 interview schedule. The items measuring symptoms are the same as the PSSI-5 and utilize the same scoring anchors and thresholds. The clinical cut-off score for a probable diagnosis of PTSD is 28, and the scale has shown excellent psychometric properties with an internal consistency score of 0.95 and a test-retest reliability score of 0.90. The scale showed good convergent validity with the PSSI \( r = 0.85 \) and the PCL-S \( r = 0.90 \). The PDS-5 showed a 78% agreement with the PSSI and is a valid self-report scale of PTSD (Foa et al. 2016b). This scale is not in the public domain and must be requested by the authors.

### 7.5 Treatment Guidelines for PTSD (NICE Guidelines 2005)

Treatment guidelines for PTSD for behavioral health providers include a range of treatment and practices that have shown to be effective in addressing the impacts of trauma and PTSD in the population. Routine health and behavioral health settings are key places where PTSD intervention can occur. As mentioned previously, many people with PTSD do not receive treatment or deal with the symptoms of PTSD for many years before receiving treatment. Table 7.6 lists the recommended guidelines for PTSD treatment drawn largely from the National Institute for Clinical Excellence (NICE). Specific guidelines to consider for treatment include the following:

**Conduct Universal Screening and Education for Trauma and IPV for All Clients** These are important integrated treatment strategies to identify and address PTSD in routine health settings to help people avoid years of needless suffering. Trauma and IPV should be a part of normal and routine patient education. The role of trauma and health should be provided to all patients regardless of disclosure. Trauma-informed practices should be followed, which include assessing clients (especially children) separately from partners and caregivers. Primary care providers should ask clients about trauma symptoms and traumatic events in a sensitive and person-centered manner. Clients who screen positive for trauma should automatically have further assessment. For assessed clients who have PTSD or partial PTSD symptoms, care should be coordinated either within the team or through warm referral processes with trusted outside providers that specialize in trauma treatment for which there exist a formal referral arrangement. Providers should also consider the needs of families and caregivers, and assess and address practical and social support issues as they arise.
Watchful Waiting

For clients who have recently experienced a traumatic event, *watchful waiting* is the preferred method. This involves close monitoring of symptom emergence and follow-up of clients over several weeks or months. Encourage proper sleep, healthy diet, regular meals, exercise, preferred activities or hobbies, and utilization of social support. Screening for PTSD symptoms and then treating with evidence-based interventions once symptoms appear is the preferred approach (Rose et al. 2002).

For situations involving IPV, providers should conduct a safety assessment, show concern, and provide access to IPV services including counseling, legal advocacy, childcare, and social services (housing/shelter, income support, food access) on-site or through warm referral process. For clients who prefer not to engage in services due to safety concerns or other reasons, providers should offer harm reduction.

**Table 7.6 Practice guidelines for PTSD**

| Guideline                                      | Description                                                                                                                                 |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Universal screening and education              | Providers screen and assess for trauma and intimate partner violence for all clients. Screening and assessment are done in a private setting alone with the client. Providers utilize empathic, active listening practices during assessment. Providers provide universal education to clients about healthy and unhealthy relationships, the impact of trauma and IPV on health. Providers give clients informational brochures (e.g., safety cards) about safe relationships and where to get help if services are needed. |
| Watchful waiting after a traumatic event       | For clients who have experienced a traumatic event: (1) closely monitor for the emergence of symptoms for several weeks; and (2) encourage proper sleep, healthy diet, regular meals, exercise, preferred activities or hobbies, and utilization of social support system. For survivors of IPV: (1) conduct safety assessment; (2) show concern and empathy; (3) provide access to IPV services (e.g., counseling, housing/shelter, legal advocacy, social services, child care); (4) provide harm reduction with follow up for those unable or unwilling to utilize services (e.g., emergency contraception, hotline numbers, and safety cards). |
| Avoid critical incident stress debriefing (CISD) | Single-session CISD after a traumatic event is ineffective in preventing PTSD symptoms and may be harmful, and is therefore not recommended. Watchful waiting with follow-up is the preferred method. |
| Provide access to evidence-based treatment services | For clients who experience full or partial PTSD symptoms, encourage social support and provide access to evidence-based treatments for PTSD including: (1) prolonged exposure (PE); cognitive processing therapy (CPT); trauma-focused cognitive behavioral therapy (TF-CBT); eye movement desensitization and reprocessing therapy (EMDR); and cognitive behavioral interventions for trauma in schools (C-BITS). |
| PTSD comorbidity                                | For PTSD and mild-to-moderate depression, consider treating PTSD first. For PTSD and severe depression, treat depression first if depressive symptoms interfere with PTSD treatment. For PTSD and suicidality, treat suicidality first. For PTSD and substance use disorders, treat substance use first or simultaneously. |

Based on NICE (2005)

**Watchful Waiting** For clients who have recently experienced a traumatic event, *watchful waiting* is the preferred method. This involves close monitoring of symptom emergence and follow-up of clients over several weeks or months. Encourage proper sleep, healthy diet, regular meals, exercise, preferred activities or hobbies, and utilization of social support. Screening for PTSD symptoms and then treating with evidence-based interventions once symptoms appear is the preferred approach (Rose et al. 2002).

For situations involving IPV, providers should conduct a safety assessment, show concern, and provide access to IPV services including counseling, legal advocacy, childcare, and social services (housing/shelter, income support, food access) on-site or through warm referral process. For clients who prefer not to engage in services due to safety concerns or other reasons, providers should offer harm reduction.
services such as emergency contraception and safety cards with hotline numbers and community resources. Providers should follow-up with the client at the next visit and extend an offer to refer for services as needed.

**Avoid Critical Incident Stress Debriefing (CISD)** CISD is often provided to survivors in the aftermath of a life-threatening incident. Examples of persons receiving CISD can include survivors of a mass shooting or violent encounter, students after a school suicide, or bank employees following an armed robbery. In CISD, trained specialists meet with survivors soon after the event to assess its impact on survivors and their sense of safety, provide an opportunity for survivors to discuss the event and share their feelings and thoughts, provide survivors with information about trauma reactions and what to expect in the coming days, and assist in re-entry into the setting. There is no evidence that CISD after a traumatic event is effective in preventing PTSD symptoms and there is some evidence that the approach can be harmful. Therefore, single session CISD with persons who experience a traumatic event is not recommended. *Watchful waiting* with follow-up is the preferred method.

**Offer Access to Evidence-Based Treatments and Increase Social Support** After detection, there are a range of effective treatments that help people reduce and cope with the symptoms of PTSD (APA, 2017). It is also important to increase social support networks as increased social support has been found to enhance the positive effect of treatment (Price et al. 2018). Some of the most proven effective and evidence-based treatments for PTSD are: (1) prolonged exposure (Foa et al. 2007); (2) eye movement and desensitization and reprocessing therapy (EMDR) (Bisson and Andrew 2007; Shapiro 2017); trauma-focused cognitive behavioral therapy (Mannarino et al. 2012); cognitive processing therapy (Resnick et al. 2016); and school-based cognitive behavioral approaches for children (Difede et al. 2014; Jaycox et al. 2012; Jonas et al. 2013). Non-directive or supportive therapy shows no evidence of alleviating PTSD symptoms (Bisson et al. 2013).

Medications for sleep (hypnotics) should be considered on a short-term basis. Currently, no pharmacological treatments have been approved specifically for PTSD. Antidepressants can be used with clients who experience significant comorbid depression, significant hyperarousal that interferes with treatment, or who have not responded to psychological PTSD symptoms or are not interested in psychological treatment for PTSD (NICE Guidelines 2005). For comorbid depression and PTSD, providers should consider treating PTSD first as this can result in a resolution of depression symptoms. For clients with very severe depressive symptoms that make PTSD treatment difficult, treating depression first is best. For PTSD and suicidality, suicidality should be addressed first. For those with comorbid PTSD and substance use issues that may interfere with PTSD treatment, providers should treat substance use issues first or simultaneously. Recognition of traumatic grief and PTSD treatment can exist side by side.
7.6 Treatment Approaches for Post-Traumatic Stress Disorder

7.6.1 Theoretical Orientation

Several psychotherapies have been identified that are strongly recommended in the treatment of PTSD. The four most commonly identified psychotherapies are: (1) prolonged exposure (PE) (Foa et al. 2007); (2) eye movement and desensitization and reprocessing therapy (EMDR) (Bisson and Andrew 2007; Bisson et al. 2013; Shapiro 2017); (3) trauma-focused cognitive behavioral therapy (TF-CBT) (Mannarino et al. 2012); and (4) cognitive processing therapy (CPT) (Resnick et al. 2016). All of the above treatments are rooted in cognitive behavioral therapy (CBT) and are usually delivered in 10–15 sessions. The core theory of CBT approaches is that thoughts, emotions, and behaviors are connected and distorted thinking patterns about the self, others, and the world lead to negative emotions and maladaptive behaviors. The key to more positive emotions and more healthy behaviors is to identify and challenge distorted or negative thinking patterns.

Two main theories help to explain PTSD in persons who experience traumatic events and underlie each of the above approaches. The social cognitive theory of PTSD suggests that people try to integrate and make sense of their trauma with previously held beliefs about the self, others, and world. A person’s perceived self-efficacy or the beliefs in one’s ability to effectively cope with traumatic stress and loss mediates how well a person copes with stress and whether a person experiences post-traumatic stress reactions (Benight and Bandura 2004). When self-efficacy beliefs around control, trust, and safety are unrealistic, the person can develop a distorted and maladaptive understanding of their experience. This can then lead to the emergence and maintenance of negative cognitions and emotions associated with PTSD such as shame, anger, self-loathing, fear, guilt, and self-blame which then lead to maladaptive coping behaviors such as avoidance, withdrawal, substance use, and aggression. The experience of the physiological experiences of trauma such as flashbacks, hyperarousal, and numbing or dissociation can reinforce these maladaptive coping behaviors (Benight and Bandura 2004). For instance, beliefs about control, safety, and trust in others can be shattered by trauma, leading to confusion and self-blame. Similarly, trauma can confirm previously held unrealistic beliefs about the self, others, and world such as, “I am worthless/unlovable,” “People are dangerous or out for themselves,” or “bad things happen to bad people,” or “I am helpless.” This can lead to anger, depression, self-blame (e.g., I deserved it), substance use, fear, and social withdrawal. Identifying and challenging these unrealistic beliefs leads to a reduction in feelings of helplessness, worthlessness, brokenness, and unlovability and a subsequent reduction in anxiety, depression, and substance use symptoms and behaviors commonly comorbid with PTSD (Benight and Bandura 2004).

Low perceived self-efficacy for coping with the effects of the traumatic event can lead to avoidance, rumination, and stress. High perceived coping self-efficacy is a
key mediator for recovery from traumatic experiences. Persons who believe that they can overcome the effects of trauma, particularly those with social support, have better recovery outcomes and are less likely to experience prolonged PTSD. Persons with low perceived coping self-efficacy, either due to their previous beliefs being shattered or confirmed by the traumatic event, struggle to recover. Providers can enhance the perceived self-efficacy of their clients and a sense of control through the development of mastery experiences related to coping behaviors. Helping people develop effective coping skills through mastery experiences can challenge negatively held perceptions regarding their ability to cope with stress and trauma, and increase their perceived coping self-efficacy by providing evidence that they can manage their fears, control symptoms, and improve psychosocial functioning. This can be done through graduated imaginal and in vivo exposure to fear stimuli where stress responses to fear stimuli are neutralized and people develop a sense of mastery over their lives, while developing more realistic understandings about their experiences and ability to cope. The focus of treatment then is to help people develop a sense of control and agency through enhancing their perceived self-efficacy by providing clients with guided mastery experiences (Benight and Bandura 2004).

Emotional processing theory is the second theory that positions PTSD as the result of the development of a fear structure residing in one’s memory consisting of a network of associations, feelings, physiological responses, and thoughts related to the traumatic event (Foa and Kozak 1986; Rauch and Foa 2006). This structure is activated when a person comes into contact with reminders of the traumatic event. Once activated, the underlying fear structure produces PTSD intrusion symptoms such as unwanted thoughts, feelings, and images that lead to anxiety, hyperarousal, and avoidance behaviors such as social withdrawal, substance use, and avoidance of objects, situations, and places. Desensitization to the stimuli through systematic, repeated, and prolonged imaginal and in vivo exposure, and processing of traumatic memories in a safe space dismantles this fear structure. New, competing meanings and perceptions of the event (e.g., thoughts, meanings, feelings, and behaviors related to traumatic stimuli) are thought to emerge through repeated imaginal and in vivo exposure (Foa et al. 2006). The next sections will expand on five leading psychotherapies for the treatment of PTSD: prolonged exposure, cognitive processing therapy, EMDR, trauma-informed CBT, and Cognitive Behavioral Intervention for Trauma in Schools (C-BITS). Table 7.7 lists descriptions of several effective approaches to PTSD. Each of these approaches will be discussed more specifically in the sections that follow.

7.6.2 **Prolonged Exposure**

Prolonged exposure therapy for PTSD (PE) is one of the most effective frontline treatments for PTSD across a range of populations (Foa et al. 2007; Foa et al. 2009; IOM 2008; Rauch et al. 2012; Powers et al. 2010). PE has been effectively
implemented in primary care settings (Cigrang et al. 2011) and has been shown to reduce comorbid depression, anxiety, and PTSD symptoms in persons with co-occurring substance use disorders (Rothbaum et al. 2005; Sannibale et al. 2013; Fo et al. 2013; Mills et al. 2012; Coffey et al. 2016). Foa and Kozak (1986) first proposed that PTSD symptoms are rooted in a fear structure maintained and reinforced through avoidance behaviors. Prolonged exposure addresses this fear structure through three mechanisms: (1) psychoeducation about trauma, symptoms, and treatment; (2) in vivo and imaginal exposure; and (3) emotional processing.

People who suffer from PTSD often have cognitive distortions about the self, others, and world related to the event. One example is a belief that they possess low perceived coping self-efficacy and see themselves as completely incompetent and incapable of handling or managing the impact of the traumatic event (Benight and Bandura 2004). Trauma survivors may also see their symptoms as evidence of insanity, brokenness, or weakness. Another unrealistic belief is an overestimation of danger and a view of the world and other people as completely dangerous or untrustworthy (Foa and Riggs 1995). The combinations of these maladaptive thoughts can lead to incapacitating symptoms of PTSD such as avoidance of people, places, and things; using drugs and alcohol to cope with symptoms; and chronic feelings of depression, shame, guilt, and fear (Foa and Kozak 1986; Rauch and Foa 2006).

PE therapists seek to modify fear structures and cognitive distortions by exposing the person to the feared stimuli or memory and challenging their typical avoidant coping responses. The effectiveness of PE is predicted on the processes of habituation and emotional processing that lead to a reduction in symptom severity and avoidance behaviors. Activation of the fear structure through repeated and prolonged exposure of the client to trauma stimuli within a safe and supportive environment leads to habituation or a decrease in emotional reactivity and intensity of the emotional and physiological symptoms. As exposure to traumatic stimuli begins to be associated with less physiological reactivity and pain, clients develop more realistic information into their beliefs about self and others in relation to the traumatic event. In other words, they begin to “get used” to the content as it becomes less and less physiologically triggering and reactive (Rauch and Foa 2006). As people become more habituated, they develop a sense of self-efficacy and mastery and are less likely to believe that they are incompetent, broken, or damaged or that the world and other people are completely dangerous (Benight and Bandura 2004). As clients’ perceived self-efficacy increases, they engage in less avoidance behaviors. As clients’ beliefs in their own competence gets stronger and their reactivity to trauma cues is further reduced, they are more likely to competently manage thoughts and emotions when they come across reminders of the trauma in real-life situations. The reduction of these negative beliefs then leads to improvement in other trauma-related symptoms such as depression and anxiety (Foa and Rauch 2004).
## Table 7.7 Evidence-based treatments for post-traumatic stress disorder

| Intervention | Description | References |
|--------------|-------------|------------|
| Prolonged exposure | Addresses fear structure and cognitive distortions through three mechanisms: (1) psychoeducation about trauma, symptoms, and treatment; (2) repeated in vivo and imaginal exposure exercises; and (3) emotional processing. Reduces PTSD intrusion, avoidance, and arousal symptoms through repeated exposure exercises. Imaginal exposure involves verbally recounting the details of the event and processing the thoughts and emotions that emerge. In vivo exposure is conducted in between sessions to cues related to the trauma. Reduces negative alterations in cognitions and mood and increases self-efficacy through cognitive reframing and emotional processing. Effective for a range of populations including adults, veterans, survivors of interpersonal violence, and persons with comorbid substance use issues. Can be used in inpatient, outpatient, and primary care settings. | Foa EB, Hembree E, Rothbaum BO. *Prolonged Exposure Therapy for PTSD: Emotional Processing of Traumatic Experiences, Therapist Guide*, Oxford University Press, New York 2007 |
| Cognitive processing therapy | Changes maladaptive thinking patterns about the trauma in relation to self, others, and the world to more realistic beliefs that can lead to less emotional reactivity (e.g., fear, anger, and depression) through cognitive reframing and development of more adaptive coping behaviors. Cognitive processing therapy has five focus areas: (1) safety, (2) trust, (3) control, (4) self-esteem, and (5) intimacy. CPT relies on: (1) psychoeducation, (2) imaginal exposure through writing about the trauma (optional), and (3) in-session and home-based activities using thought change records to identify and challenge maladaptive thinking patterns in the five focus areas and replace them with more realistic thoughts that are grounded in facts, evidence, and reality. CPT improves self-efficacy/mastery, coping skills, and the survivor's ability to form healthy relationships while reducing PTSD symptoms (e.g., intrusion, avoidance, negative alterations in cognitions and mood, hyperarousal, depression, and anxiety). Effective for adults and veterans, and appropriate for a range of inpatient and outpatient clinical settings. | Resnick et al. (2016). *Cognitive processing therapy for PTSD: A comprehensive manual*. New York, NY: Guilford Press |
| Trauma-focused CBT | TF-CBT incorporates elements of cognitive processing therapy, relaxation, and imaginal exposure and coping skill development. TF-CBT improves ability to enhance safety and manage symptoms and behaviors through (1) psychoeducation about the cognitive processing therapy model; (2) development of coping skills including relaxation and communication around the trauma; (3) parallel family counseling sessions that help caregivers process grief, improve communication around the trauma with their child, and reinforce the work that goes on in therapy; (4) use of imaginal exposure through the cognitive and emotional processing of a written trauma narrative; and (5) effective in reducing PTSD, anxiety, depressive symptoms, and behavioral issues. Effective for children and adolescents who have experienced physical and sexual abuse, and behavioral issues. Approach can be used in inpatient, residential, and outpatient therapy settings. | Mannarino et al. (2012). *Trauma-focused cognitive-behavioral therapy for children: Sustained impact of treatment 6 and 12 months later*. Child Maltreatment, 17(3), 231-241. Doi: https://doi.org/10.1177/1077559512451787 |

(continued)
### EMDR
Uses a combination of (1) imaginal exposure; (2) emotional and cognitive processing; (3) bi-lateral eye movements where clients visually track an object (e.g., pen, fingers) that the therapist moves slowly, laterally, across their visual field during exposure exercises; and (4) in vivo exposure that focuses on desensitization of external cues for PTSD symptoms between sessions.

During imaginal exposure, clients are asked to repeatedly revisit intense moments of the traumatic event in their mind and narrate the thoughts they experienced during the event and the thoughts they currently hold about the event while they simultaneously track an object that the therapist slowly moves across their visual spectrum. The theory of EMDR is the bilateral movement helps clients reduce emotional reactivity related to the trauma, process and resolve traumatic memories, and reframe negative, maladaptive thoughts related to the event such as mistrust of others, self-blame, incompetence, guilt, shame, taking too much responsibility for the event, or lack of control over one’s life.

Effective for a range of populations including children, adults, and veterans. A brief approach that can be used in inpatient and outpatient settings.

Shapiro (2017). Eye movement desensitization and reprocessing: Basic protocols, principles, (3rd Ed.) Guilford, New York.

### C-BITS
C-BITS is a brief, 10–12 session, school-based intervention that provides structured sessions with youth between 9 and 18 years of age who have suffered from trauma. Group sessions consist of: (1) psychoeducation about trauma and how it impacts the mind and body; (2) identifying and reframing maladaptive thoughts related to safety, control, and self-blame; (3) teaches coping skills related to problem-solving, emotional regulation, and relaxation; and (4) addresses trauma symptoms through construction and analysis of a trauma narrative that is done one-on-one with a therapist. Therapists also teach psychoeducation and behavior management skills to parents and teachers in parallel sessions.

Effective for school-aged children and adolescents.

Jaycox et al. (2012). Cognitive behavioral intervention for trauma in schools. Journal of Applied School Psychology, 28, 239–255.
7.6.3 Psychoeducation

During a course of therapy, information about the cognitive, emotional, and behavioral aspects of trauma and how PE works to mitigate these effects are explained to the client in the first few sessions and reinforced throughout therapy. For instance, during psychoeducation providers explain how fear structures are reinforced through avoidance and how exposure to traumatic memories can challenge this avoidance directly in a safe space and lead to a reduction in symptoms and the creation and integration of a healthier and more realistic counter-narrative to the trauma.

7.6.4 Exposure

Exposure takes two forms. In vivo exposure is when clients refrain from avoiding traumatic external stimuli such as places, objects, sounds, and smells associated with the trauma. Clients are asked to routinely and slowly expose themselves to these feared stimuli gradually and in a safe manner. Clients may develop a hierarchy of feared stimuli that they rate from a scale of 1 (low fear) to 100 (high or extreme fear). Clients then work their way up from low fear-producing stimuli to high fear-producing stimuli. Exposure should never place the client at risk for re-traumatization or re-victimization. A second type of exposure is imaginal exposure. When using imaginal exposure, the therapist asks the client to relive the trauma memory by reimagining the traumatic event and narrating the details of what happened, what they were thinking, and how they felt. Clients are asked to engage with the emotional content of the trauma, and as they recite the memory, they will be asked to describe how they felt at particular moments of the traumatic event (Rauch and Foa 2006). The client will narrate each episode of the trauma from beginning to end using present tense language and highlight parts of the trauma narrative that were particularly intense and distressing. During the narration, the therapist will ask the client to “rate” their distress using a subjective unit of distress scale (SUDS), which is a simple scale of 1–100 with lower scores indicating less distress and higher scores indicating more distress. A SUDS rating is taken at baseline, during distressing elements of the trauma, and then at the end.

7.6.5 Emotional Processing

During and after exposure, therapists work with clients to process emotions related to the trauma through a discussion of how the trauma has impacted their lives and the thoughts and feelings they experience in relation to the trauma. Effective emotional processing of beliefs about the trauma and subjective distress after exposure sessions have been associated with increased improvement in symptoms (Cox et al.
Therapists ask clients to talk about how their beliefs about themselves and others in regard to safety, control, self-efficacy, and relationships have changed since the trauma and then how these views have shifted since the start of therapy. Therapists encourage two to three exposure exercises during each therapy session and also encourage clients to engage in in vivo exposure in between sessions if it is safe to do so. Repeated exposure over time usually results in habituation and a reduction in intensity and intrusiveness of symptoms in 10–12 sessions. Therapists will also teach clients grounding techniques to combat dissociation and numbing that may be associated with trauma as well as relaxation techniques and the use of coping cards in order to help client manage hyperarousal symptoms during and between sessions (Rauch et al. 2012).

7.6.6 **Eye Movement Desensitization and Reprocessing (EMDR)**

EMDR is highly effective in reducing PTSD, anxiety, dissociation, and depressive symptoms with results similar to PE (Bisson and Andrew 2007; IOM 2008; Rothbaum et al. 2005). EMDR involves the combination of cognitive processing and imaginal exposure and is designed to open up new opportunities to re-process past traumatic events and make more adaptive associations between events and thoughts. The approach also focuses on desensitization of external cues for PTSD symptoms (Shapiro 2017). EMDR can take from 8 to 12 sessions depending on the number of traumatic events. Single traumatic events can be addressed in about 6 sessions. More complex or multiple traumas may take longer to address. EMDR providers take a thorough client history of trauma experiences and identify specific traumatic events and thoughts. Clients also receive psychoeducation on how trauma impacts the mind and body, the EMDR approach, and skills to manage distressing symptoms both at home and during sessions. These skills can include progressive relaxation or mindfulness-based approaches to managing distress.

EMDR is designed to help clients reduce emotional reactivity related to the trauma, process and resolve traumatic memories, and reframe negative, maladaptive thoughts related to the event. The client is asked to engage in an imaginal exposure exercise where they revisit the traumatic event in their mind and narrate the thoughts they experienced during the event and the thoughts they currently hold about the event. These thoughts may include themes such as mistrust of others, self-blame, incompetence, guilt, shame, taking too much responsibility for the event, or lack of control over one’s life. They are also asked to identify bodily, physical, and emotional sensations related to the distress. Clients are asked to identify a more positive belief they would like to hold about the event and themselves in relation to the traumatic event. They are asked to rate the level of their belief in the positive thought on a scale of 1–10, with 1 being no belief and 10 being complete belief in the thought.
As the client focuses on the thoughts, anxiety and heightened physical hyper-arousal from the event, they are simultaneously asked to focus their attention on visually tracking an object (e.g., pen, fingers) that the therapist slowly moves laterally across their visual field. The client is asked to just notice their bodily sensations and thoughts as they focus on the event and track the object. The provider and client may engage in these stimulation sessions for various lengths. At the end, the provider asks the client to just let go of all of their thoughts, take deep breaths, and then just notice and report what feelings, thoughts, images, or sensations come into their minds. This process occurs until habituation, or the reduction in arousal, is achieved. The client and therapist may engage in repeated sets during one session. Once the anxiety has been reduced, the client is asked to name a maladaptive thought experienced during the trauma and replace it with a more adaptive thought. For instance, “It’s all my fault,” is replaced with “I did the best I could with the knowledge I had at the time,”, or “It was an accident – I am not responsible for what happened.” The maladaptive thought of “bad things happen to bad people” may be replaced with “bad things can happen to anyone,” or “something bad happened to me, but it does not define who I am.” The thought “I was weak and powerless” can be replaced with “I have survived something terrible. It has not broken me and it is in the past.” When the anxiety or distress has been reduced for the target memory, the provider will ask the client to re-rate their level of belief in the positive thought they identified and then use that thought to focus on additional distressing memories.

The theory behind EMDR is that the bilateral movement helps to both distract the client and reduce emotional tension, while helping the client to access the traumatic memory. Accessing the memory provides the client with an opportunity to make associations between the memory and more adaptive thoughts or information. The taking in of new information and making new, more adaptive associations leads to resolution or a more complete and accurate understanding of the events. This resolution can then lead to a sense of relief and a reduction in distress, arousal, and avoidance behaviors (Shapiro 2017).

### 7.6.7 Cognitive Processing Therapy (CPT)

Experiencing traumatic events can impact how you view yourself (e.g., competent vs incompetent), others (e.g., trustworthy vs untrustworthy), and the world (e.g., safe vs dangerous). Cognitive processing therapy focuses on scrutinizing and challenging maladaptive thoughts related to the trauma that can lead to negative emotions and problematic, unhealthy avoidance behaviors (Resnick et al. 2016). Maladaptive beliefs about the self, others, and world that exist prior to the trauma can be either confirmed or shattered by the event, leading to maladaptive thinking and coping patterns. For instance, the goal of CPT is to change maladaptive thinking patterns about the trauma to more realistic beliefs that can lead to less emotional reactivity (e.g., fear, anger, depression) and teach more adaptive coping behaviors. The approach uses psychoeducation, imaginal exposure through writing about the
trauma, and a series of in-session and home-based activities using thought-change records and other worksheets and assignments designed to identify and challenge maladaptive thinking patterns and replace them with more realistic thoughts that are grounded in facts, evidence, and reality. The approach is designed to improve self-efficacy, safety, coping skills, and the survivor’s ability to form healthy, trusting relationships while also reducing avoidance, depression, and anxiety symptoms (Resnick et al. 2014, 2016).

Treatment begins with a careful history of traumatic events and psychoeducation about how trauma and maladaptive thinking patterns impact the self and relationships with others based in emotional processing and social cognitive learning theory. The therapy quickly moves to the development of an impact statement written by the client that outlines their views of why the trauma happened and how the trauma has changed their lives in relation to self-esteem, functioning, relationships, emotions, thoughts, and behaviors. The client is then asked to write a full account of the traumatic event that includes sensory details such as sights, sounds, smells, as well as thoughts and emotions experienced during the event. The client is asked to read the account every day, and they are encouraged to experience the feelings they have without avoiding them. The client also revises the account as new details and information emerges. The provider then collaborates with the client to identify maladaptive thinking patterns and cognitive distortions. Cognitive distortions include all-or-nothing thinking, overgeneralizing, negative filtering, or thinking that is biased toward overemphasis on negative information and ignoring evidence of positive traits, accomplishments, or developments.

Cognitive processing therapy has five focus areas: (1) safety, (2) trust, (3) control, (4) self-esteem, and (5) intimacy. The first focus area, safety, includes many common maladaptive thoughts about safety in relation to self and others. In this focus area, providers and clients identify and challenge unrealistic beliefs about safety so that they are more balanced. These beliefs can include irrational expectations about personal vulnerability, the perceived ability to control one’s safety, and the overestimation of the dangerousness of other people and the outer world. These irrational beliefs can lead to anxiety, social withdrawal, and impairment of interpersonal functioning (Resnick et al. 2016).

The second focus area deals with the trust of one’s own judgment and the intent of other people. Trauma can lead to maladaptive beliefs around trust such as, “I must exercise perfect judgment all the time,” “I cannot trust myself to make any decisions,” and “I cannot trust others intentions because people are only out for themselves.” These thoughts can cause problems in interpersonal functioning and lead to self-doubt, anger, fear of being left behind, anxiety, and suspiciousness (Resnick et al. 2014, 2016).

The third focus area identifies and challenges maladaptive thoughts around power and control. These usually deal with beliefs about over-control (e.g., I need to have perfect control at all times over all situations), or helplessness (I have no control over anything that happens to me). Symptoms associated with these beliefs can include numbing, problems with boundaries, avoidance, or feelings of anger, passivity, submissiveness/lack of assertiveness, self-destructive behaviors, and
anger. In this section, people learn balance and how to know what they can and cannot control, how to share power and set limits with others to improve functioning in relationships (Resnick et al. 2014, 2016).

The fourth area focuses on identifying and challenging unrealistic and negative beliefs about the self, such as beliefs of worthlessness and unlovability that can lead to shame, guilt, anxiety, depression, self-destructive behavior, fear of being alone, panic, dependency in relationships, and avoidance through drugs or alcohol. Trauma can shatter positive beliefs about the self, or it can radically (and unrealistically) ratify previously held negative views of the self. Maladaptive beliefs can include “bad things happen to bad people so I am bad because this happened to me,” or “what happened is all my fault and I deserved it.” Corrective thoughts can include “bad things happen to good people,” “My trauma doesn’t make me a bad person or undeserving of happiness,” “People make mistakes, they aren’t defined by them and no one deserves to be harmed,” and “Bad things happen and sometimes there is no explanation.” Self-esteem is also related to a person’s perceived ability to cope with the effects of trauma. This module focuses on identifying and challenging unrealistic views of the self and building self-soothing skills (Resnick et al. 2014, 2016).

The fifth area focuses on repairing the ability to connect with the self and others that involve both feeling comfortable with oneself and developing healthy intimate relationships with others. Trauma disrupts the ability to form relationships and connections with oneself and other people leading to loneliness, alienation, emptiness, and social isolation. This increases the risk of self-destructive behaviors, including substance use and suicide as well as anger, aggression, and emotional numbing. Healthy intimate relationships involve taking risks and being vulnerable, which are areas that are impacted by trauma. This area challenges unrealistic thoughts about intimate relationships (e.g., “My problems are all my fault”) and helps people develop the communication skills needed to nurture intimate relationships (Resnick et al. 2014, 2016).

In each of the above areas, clients learn how to identify and challenge maladaptive thinking patterns. After learning about common cognitive distortions that keep people stuck, clients learn skills in identifying and challenging these distortions when they happen in real time. Through the repeated deployment of thought change records and Socratic questioning as homework, clients identify, challenge, and reframe distorted thinking patterns in real-life situations and then discuss these events in session. Questions used to challenge problematic beliefs and thinking patterns include: What is the evidence for and against your beliefs? Does your belief include all of the facts and information or does it focus on only one part of the story? Are there other ways of thinking about this? What cognitive distortions might be operating here? Is there evidence of extreme beliefs (e.g., always, perfect, never)? Is this belief more rooted in facts or feelings/habits? What would be an alternative way of thinking about this situation in a more balanced way that includes all of the facts? These questions are used to loosen associations between maladaptive thoughts and emotional reactions and invites the client to substitute and try out an alternative thought that is more fact-based and balanced, leading to a reduction in negative emotions, reactivity, and avoidance (Resnick et al. 2014, 2016).
7.6.8 **Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)**

TF-CBT is a very well-established cognitive behavioral therapy and is a top-tier evidence-based practice for treating trauma in children and youth (Bisson and Andrew 2007; Silverman et al. 2008). TF-CBT has been found to reduce PTSD-related symptoms such as abuse-related distress, behavioral issues, anxiety, and depression (Mannarino et al. 2012). It incorporates elements of cognitive processing therapy, relaxation, and imaginal exposure. In TF-CBT, clients are first provided psychoeducation about trauma symptoms, health, and the cognitive behavioral model of PTSD. They are then taught several coping skills designed to improve their ability to enhance safety and manage symptoms and behaviors such as relaxation, deep breathing, assertiveness, forming healthy relationships, and establishing a safety plan. Once children have a firm grasp of trauma’s effect on the mind and body and have practices and learned coping behaviors, they are asked write a narrative (e.g., story, picture book, poem, lyrics) about their trauma that identifies all of the different parts of the memory including sensory information, thoughts, behaviors, and feelings. The client is asked to then revise the narrative again and again as the therapist and child work together to reframe negative thoughts about the event regarding safety, trust, responsibility, healthy relationships, and self-esteem. At the end of the story, the child re-writes the future in positive terms in order to integrate the event as something that is only one part of the child’s life. The child reads the story repeatedly with the therapist one-on-one. The child will also read the story to caregivers at the end of therapy when appropriate. Parents are given family counseling sessions that help them talk about the event with their child and reinforce the work that goes on in therapy (Cohen et al. 2006, 2012; Deblinger et al. 2011; Mannarino et al. 2012).

TF-CBT occurs in three general phases. In phase one, providers focus on developing coping skills with clients. During this phase the client and provider build trust and develop a supportive, therapeutic working relationship. Usually, the first component of this phase is psychoeducation about trauma, the cognitive model of trauma and identifying the cues that can trigger traumatic responses (Cohen et al. 2006). During psychoeducation providers and clients work together to identify key themes about the trauma or themes that cut across multiple traumas. These themes will be addressed throughout therapy and guide treatment choices. For instance, themes about lack of safety and being able to trust others, or themes of self-blame may be important areas of exploration throughout therapy. Providers also offer parallel skills sessions with non-offending caregivers, offering them psychoeducation about trauma, parenting skills designed to create safe and supportive environments and to correct maladaptive thinking patterns toward themselves (e.g., “I should have protected him better,” This is my fault”) and the youth (e.g., “He’s using the trauma as an excuse”), and to utilize effective methods for managing behavioral issues and emotional dysregulation.
Clients are also taught relaxation skills and coping skills to manage negative thinking patterns and emotional dysregulation. Relaxation skills can include breathing exercises, progressive muscle relaxation, yoga, and mindfulness approaches and imagery work. Affective coping skills are taught and modeled to teach youth how to appropriately express positive and negative emotions. This may include teaching youth how to identify emotions and express them appropriately through role-plays and modeling. To increase the ability to tolerate distressing emotions and manage affective dysregulation, providers teach youth distraction strategies (e.g., exercise, playing games, contacting friends), mindfulness strategies (e.g., identifying feelings or sensations and viewing them without judgment), strategies to identify emotions in other people, and cognitive coping strategies that help youth identify negative thoughts and replace them with a more accurate and positive thoughts or interpretations. These coping skills are also reviewed with caregivers in parallel sessions so that they can utilize and reinforce them in the home.

This phase concludes with a focus on enhancing safety and developing safety plans. Safety plans include: (1) understanding how to protect one’s self and avoid danger through personal safety skills; (2) accessing external resources for assistance with needs (i.e., how to ask for help); (3) addressing self-harm and reckless behaviors; (4) educating caregivers about triggers; (5) appropriate behavioral responses to dysregulation that can lead to an enhanced sense of safety and security; (6) identifying and developing nurturing relationships with trusting and safe adults in the community; and (7) developing a repertoire of activities that enhance well-being and help to develop healthy interpersonal relationships. For clients with complex trauma and ongoing threats such as being in a residential care facility, enhancing safety and developing a safety plan may be covered in the first part of phase one (Cohen et al. 2012).

Phase two involves developing and processing the trauma narrative (TN). The skills in phase one are implemented in order to prepare youth to successfully navigate the stress and emotional content of processing trauma memories. Youth can begin phase 2 when they have a good ability to self-regulate emotions. This phase is not always provided in TF-CBT. Studies have found that providing TF-CBT without this phase has been associated with better behavioral management and fewer externalizing behaviors in the home. This may be due to the overemphasis in parenting behaviors. However, inclusion of the TN has been associated with less anxiety, fear, and abuse-specific distress (Deblinger et al. 2011).

The trauma narrative can be written as a storybook, play, poem, or song or other written form of narrative depending on the age of the child. Single event traumas focus on the sensory, emotional, and cognitive aspects of the event itself, while complex trauma can involve themes that have been identified by the client that cut across multiple traumas. Development of the trauma narrative occurs as a collaboration over several sessions between provider and client. The provider also shares elements of the narrative development process with the caregiver in parallel sessions. This is done to prepare the caregiver to hear the narrative in a conjoint session with the client and to educate and inform the caregiver about how the trauma was
experienced by the youth. Silence and avoidance are often a part of trauma, and caregivers may not understand the nuances of how the client has experienced the events. The purpose of developing the trauma narrative is for the youth to develop new meaning and understanding of the trauma as well as become habituated to the event through repeated imaginal exposure while the narrative is written. Like prolonged exposure, this phase may also involve the creation of a fear hierarchy and gradual in-vivo exposure exercises to external elements related to the trauma that are subjects of avoidance by the client such as situations (e.g., being alone, the dark), places (e.g., school, playground), or people.

Phase three includes consolidation and closure exercises. In this phase the client shares their trauma narrative with their caregiver in a conjoint session. The purpose of sharing the narrative with a caregiver is to transfer trust built with the therapist to the caregiver and for the youth to trust that the caregiver can handle the trauma and respond supportively. The therapist continues to meet with the youth as they implement what was learned in session and to troubleshoot any setbacks or problems that may arise. Grief work may also be implemented in this phase to help the youth cope with losses they have experienced that they have not been able to adequately process due to their trauma.

EMDR and TF-CBT have both been found to significantly improve clinical symptoms and may be associated with positive improvements in brain connectivity and functioning (Diehle et al. 2015; Santarnecchi et al. 2019). One benefit of each approach is the “distance” that they create between the client and the trauma. For instance, TF-CBT creates distance through writing of the trauma narrative vs speaking it. While EMDR’s exposure has the client speak about the event, the client is asked only to relay the most distressing part of the trauma in short, staccato bursts while being distracted with the bilateral visual tracking.

### 7.6.9 Cognitive Behavioral Intervention for Trauma in Schools (C-BITS)

Accessing treatment for trauma in children can be difficult, especially for low-income and underserved youth who have experienced stress and trauma and often lack access to behavioral health services. As a result, there has been a rise in school-based programs designed to offer free, brief, culturally tailored treatment in school settings. Schools represent a stable environment where youth can access highly competent mental health services during school hours that can improve symptoms and behavior without burdening caregivers with extra costs related to treatment fees, child and elder care, transportation, and taking unpaid sick time. School-based treatments are inexpensive, effective, and accessible. Providing mental health services in schools can provide youth with access to mental health services to address educational and behavioral health problems they would not otherwise be able to access (Alegria et al. 2015; Atkins et al. 2006; Pfeiffer and Goldbeck 2017). These
early intervention opportunities can reduce health disparities in children of color and can lead to educational and socioeconomic benefits (Alegria et al. 2015; Sawhill and Karpilow 2014).

One such approach is the Cognitive Behavioral Intervention for Trauma in Schools (C-BITS) (Allison and Ferreira 2017; Jaycox et al. 2012; Kataoka et al. 2003; Stein et al. 2003). C-BITS has been found to improve psychosocial and academic functioning and reduce symptoms of trauma and depression in youth and has also been found to be effective in immigrant and refugee populations (Allison and Ferreira 2017; Jaycox et al. 2012; Kataoka et al. 2003; Stein et al. 2003). C-BITS is a brief, 10–12 session, school-based intervention that provides structured sessions with youth between 9 and 18 years of age. Group sessions consist of: (1) psychoeducation about trauma and how it impacts the mind and body; (2) identifying and reframing maladaptive thoughts related to safety, control, and self-blame (3) teaching coping skills related to problem-solving, emotional regulation, and relaxation; and (4) addressing trauma symptoms through construction and analysis of a trauma narrative that is done one-on-one with a therapist. Therapists also teach psychoeducation and behavior management skills to parents and teachers in parallel sessions. The approach is very effective in reducing symptoms, increasing psychosocial functioning, and has an excellent retention rate (Allison and Ferreira 2017; Jaycox et al. 2010).

Other school-based options for children can include the use of somatic approaches. Trauma can lead to increase in physiological arousal (e.g., elevated heart rate, racing thoughts, anxiety, aggression, freezing or numbing, and dissociation) (Ogden and Minton 2000). This arousal can endure long after the event has taken place, disrupting a child’s ability to function and regulate emotions, leading to problem behaviors, learning difficulties, depression, and anxiety (Buckner et al. 2009; Warner et al. 2013). This dysregulation can also interfere with a child’s ability to successfully engage with language-based cognitive behavioral trauma interventions because they require a high degree of emotional and physical regulation (Perry 2009; Raio et al. 2013). Interventions that rely primarily on physical and somatic activities such as grounding exercises (e.g., lightly tapping on extremities and putting feet firmly on the floor), stretching and movements exercises (e.g., yoga, martial arts), and relaxation and mindfulness exercises (e.g., deep breathing, muscle relaxation), can help children learn coping skills that can help them regulate their emotions and prepare them for language-based interventions (Corrigan et al. 2011; Mancini 2020; Farina and Mancini 2017; Perry 2009; van der Kolk 2015; Warner et al. 2014).

7.7 Summary and Conclusions

The experience of trauma and adverse events in childhood represent one of the most significant social predictors of negative health outcomes. Trauma can lead to a range of physical and behavioral health problems including depression, anxiety, PTSD,
addiction, diabetes, cancer, and heart disease. These poor health outcomes combined with higher rates of suicide, substance use, smoking, sedentary life style, and unhealthy eating lead to significant rates of morbidity and early mortality. The experience of ACEs significantly increases the risk of illness and early death. Fortunately, several cognitive behavioral-based interventions have been shown to decrease the symptomatic effects of traumatic stress including prolonged exposure, trauma-focused CBT, cognitive processing therapy, EMDR, and C-BITS. Unfortunately, like many other behavioral health disorders, accessing effective treatment has been a problem for people who suffer the consequences of trauma. Trauma-informed care approaches in health and school-based settings that include creating safe care environments that routinely utilize screening and assessment approaches can identify people in need of treatment. Once identified, helping people access treatment on-site or through coordinated referrals can lower the risk of illness and premature mortality in clients who suffer from partial and full PTSD. Trauma prevention includes investment in programs that promote healthy parenting, prenatal and postnatal care, access to child care and early childhood education, and the creation of healthy, resourced schools where children and youth can easily access trauma-informed approaches to care that represent efficacious and cost-effective ways to reduce the impact of trauma on children and families and promote healthy communities.

Case Study 7.1: Dr. Tracey Williams

Dr. Tracey Williams1 is a 35-year-old black transgender & gender nonconforming (TGNC) person referred to an outpatient behavioral health counseling agency from the victims’ advocacy bureau for behavioral health symptoms related to a recent traumatic event. Tracey identifies as gender non-binary and uses the pronouns they/them/their. Tracey is a peer counselor and instructor in the human services department of a large community college system. Tracey is also a certified yoga instructor. Tracey is an advocate for young, transgender youth. They also lead a yoga class exclusively for transgender persons. They enjoy biking, working out, cooking, painting, and teaching. They say that their teaching is the most important act they do as a human being. It is their passion and their life’s work. Tracey and their partner were both assaulted by a group of four, white cis-gendered men in their twenties while walking home from a restaurant one evening. The men passed them on the opposite side of the street and then followed them for several blocks yelling racist slurs and anti-TGNC insults. They eventually surrounded Tracey and their partner and told them they were going to “get what they deserve.” Two of the men held Tracey while the other two punched and kicked their partner who suffered facial lacerations, a fractured left orbital, and several bruised ribs. Tracey was also slapped and punched several times in the face and kicked while they were on the ground, suffering lacerations, bruises, a mild concussion, and a cracked tooth. The assault

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1All names and other identifiers of this case have been changed to protect privacy and confidentiality.
was interrupted when a passing car stopped and the men scattered. The passengers called 911. The police have not found the assailants.

At intake, Tracey states: “I was sure I was going to die and I am quite convinced that if that car did not stop when it did they would have raped one or both of us first, before killing us. That’s what they told us they were going to do. I do not doubt their intent. I remember bits and pieces of the actual assault. The fear I felt when they were following us. Their words were vile, but quite frankly, I’ve heard it all before. It was the edge in their voice. It was...determined, drunk and angry. I have learned to recognize that edge from the more routine hate that I receive. I knew then they weren’t going away. I remember the smell of the awful, cheap cologne the one who held my arms was wearing. I remember watching them beat my partner. I remember when they punched them in the face, the sound of it, and the way their head snapped back. I thought they were dead at that moment and I remember wishing right then and there that they would just kill me, too. The police came. More white men with their smirks and lack of compassion. As a black trans person – the police are not my friends. Hospital staff. Same. You would expect a bit of sensitivity given that this was an attempted lynching. Some acknowledgement of the horror we just experienced as a couple. Nothing. Robots. I may expect it – but it still shocks me – the lack of compassion I experience - the depth of it. I’ve learned through past therapy that it says more about them than me. But I still feel rage. What happened to us was a hate crime and it didn’t even make the local paper. A hate crime and they have no leads even though they have a description from four witnesses. I think about what happened all day. Every day and every night I wait for them to come back to finish the job. I see them everywhere I go - grocery store, gym, running in the park. I stopped going out. I don’t want to go out any more. I feel like my body is a target more than usual. I feel like they are still out there because they are and that they could just come up on me one day and say, “hey, remember us?” And not just them, but anyone. If it happened once, why not again with a new set of psychos? I feel like anyone can do anything to me and get away with it. I am on guard all day long. I’m irritable and exhausted. I have nightmares every night. I think they are going to be one of my students or I will see one of them on campus. They were about that age. Maybe I will hear their laughter – I still hear it every day. I do know that when one of my students walks in with that same nasty cologne on I am going to lose it, I just know it. The daily experience of being black and trans is something I have weathered my whole life, but now I just can’t cope with it. I don’t go out anymore. I work from home as much as I can. My partner and I fight all the time because their “over it” and I want to talk about it and they don’t. They aren’t over it, by the way. Their nightmares are worse than mine. They’re in denial. But that is how they deal with things. They have a gun now that they carry and they say it makes them feel safer. Part of me is a little jealous – I wish it were that easy for me. It has been over two months of this. I am exhausted. When will it end?”

The counselor asks Tracey what they want to accomplish as part of their therapy. Tracey does not mix their words.

Tracey: I have been in counseling my whole life. I know what is possible. I want to feel safe. I want to sleep. I want the thoughts and the ruminations to stop. I do not want to take psychiatric medication. I want to be able to concentrate and work and write. I want to go about my business without fear. I want to stop being angry and afraid at people who are not worth it. I want to breathe deep. I want to smile and laugh and talk to my partner about what has happened to us and to talk to our friends about what happened to us. I am frozen in time. I want to thaw. Can you help me do that, please? I like the symbols you have around here that tell me that this is supposedly a safe space for someone like me, but I have learned that the mental health profession struggles helping people with identities like mine. If you cannot help me, please tell me now so I can find someone who can. I do not have time to waste.
Case Analysis and Guiding Questions

What does trauma-informed care look like for Tracey?

What specific symptoms is Tracey currently experiencing?

Do their symptoms meet criteria for one or more behavioral health disorders and, if so, which one(s)?

What are specific treatment outcome goals and objectives that would be relevant for Tracey given the information provided in this case?

What symptoms will you specifically target?

What interventions will you utilize that were covered in this chapter to address those symptoms?

What strengths and resources will you rely on when working with Tracey?

How will you ensure that Tracey receives care that is affirming, sensitive, and responsive to their multiple identities?

What obstacles exist for providers who are cis-gendered in forming a therapeutic and affirming relationship with Tracey?

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