

Post-Traumatic Stress Disorder

Course Goals & Objectives

Course Description

Post-Traumatic Stress Disorder is an asynchronous online continuing education program for physical therapists and physical therapist assistants. The course presents contemporary information about post-traumatic stress disorder including sections on DSM-5 classification, etiology, symptomology, diagnosis, and treatment.

Course Rationale

The purpose of this course is to present current information about post-traumatic stress disorder to physical therapists and physical therapist assistants. Physical therapists and physical therapist assistants will find this information pertinent and useful when addressing the challenges and needs specific to individuals with PTSD.

Course Goals & Objectives

At the end of this course, the participants will be able to:

1. define PTSD using the new DSM-5 criteria
2. Identify risk factors associated with PTSD
3. identify the clinical signs of PTSD
4. differentiate the screening and assessment tools used to identify PTSD
5. recognize comorbidities associated with PTSD
6. identify signs associated with individuals who may pose a danger to themselves or others
7. differentiate the psychotherapy treatment options available to treat PTSD
8. differentiate the pharmacological treatment options available to treat PTSD
9. recognize the challenges faced by families affected by PTSD

Course Provider – Innovative Educational Services

Course Instructor - Michael Niss, DPT

Target Audience – physical therapists and physical therapist assistants

Course Educational Level – Introductory / intermediate

Course Prerequisites – None

Method of Instruction/Availability – Online text-based course available continuously.

Criteria for Issuance of CE Credits - A score of 70% or greater on the course post-test

Continuing Education Credits – 3 hours

Fees - \$29.95

Conflict of Interest – No conflict of interest exists for the presenter or provider of this course.

Refund Policy - Unrestricted 100% refund upon request. The request for a refund by the learner shall be honored in full without penalty or other consideration of any kind. The request for a refund may be made by the learner at any time without limitations before, during, or after course participation.

Post-Traumatic Stress Disorder

Course Outline

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Overview and History

In 1980, the American Psychiatric Association added PTSD to the third edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-III). Although controversial when first introduced, the PTSD diagnosis has filled an important gap in psychiatric theory and practice. From an historical perspective, the significant change ushered in by the PTSD concept was the stipulation that the etiological agent was outside the individual (i.e., a traumatic event) rather than an inherent individual weakness (i.e., a traumatic neurosis). The key to understanding the scientific basis and clinical expression of PTSD is the concept of “trauma.”

In its initial DSM-III formulation, a traumatic event was conceptualized as a catastrophic stressor that was outside the range of usual human experience. The framers of the original PTSD diagnosis had in mind events such as war, torture, rape, the Nazi Holocaust, the atomic bombings of Hiroshima and Nagasaki, natural disasters (such as earthquakes, hurricanes, and volcano eruptions), and human-made disasters (such as factory explosions, airplane crashes, and automobile accidents). They considered traumatic events to be clearly different from the very painful stressors that constitute the normal vicissitudes of life such as divorce, failure, rejection, serious illness, financial reverses, and the like. (Adverse psychological responses to such “ordinary stressors” would, in DSM-III terms, be characterized as Adjustment Disorders rather than PTSD.) This dichotomization between traumatic and other stressors was based on the assumption that, although most individuals have the ability to cope with ordinary stress, their adaptive capacities are likely to be overwhelmed when confronted by a traumatic stressor.

PTSD is unique among psychiatric diagnoses because of the great importance placed upon the etiological agent, the traumatic stressor. In fact, one cannot make a PTSD diagnosis unless the patient has actually met the “stressor criterion,” which means that he or she has been exposed to an historical event that is considered traumatic. Clinical experience with the PTSD diagnosis has shown, however, that there are individual differences regarding the capacity to cope with catastrophic stress. Therefore, while some people exposed to traumatic events do not develop PTSD, others go on to develop the full-blown syndrome. Such observations have prompted the recognition that trauma, like pain, is not an external phenomenon that can be completely objectified. Like pain, the traumatic experience is filtered through cognitive and emotional processes before it can be appraised as an extreme threat. Because of individual differences in this appraisal process, different people appear to have different trauma thresholds, some more protected from and some more vulnerable to developing clinical symptoms after exposure to extremely stressful situations. Although there is currently a renewed interest in subjective aspects of traumatic exposure, it must be emphasized that events such as rape, torture, genocide, and severe war zone stress are experienced as traumatic events by nearly everyone.

The diagnostic criteria for PTSD were revised in DSM-III-R (1987), DSM-IV (1994), DSM-IV-TR (2000), and DSM-5 (2013). A very similar syndrome is classified in ICD-10

(The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines). Diagnostic criteria for PTSD include a history of exposure to a traumatic event and symptoms from each of three symptom clusters: intrusive recollections, avoidant/numbing symptoms, and hyper-arousal symptoms. A fifth criterion concerns duration of symptoms.

Current Definition

The fifth revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) was released in May 2013. This revision includes changes to the diagnostic criteria for PTSD and Acute Stress Disorder.

PTSD (as well as Acute Stress Disorder) moved from the class of anxiety disorders into a new class of "trauma and stressor-related disorders." All of the conditions included in this classification require exposure to a traumatic or stressful event as a diagnostic criterion. The rationale for the creation of this new class is based upon clinical recognition of variable expressions of distress as a result of traumatic experience. The necessary criteria of exposure to trauma links the conditions included in this class; the homogeneous expression of anxiety or fear-based symptoms, anhedonic and dysphoric symptoms, externalizing anger or aggressive symptoms, dissociative symptoms, or some combination of those listed differentiates the diagnoses within the class.

Diagnostic criteria for PTSD include a history of exposure to a traumatic event that meets specific stipulations and symptoms from each of four symptom clusters: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. The sixth criterion concerns duration of symptoms; the seventh assesses functioning; and, the eighth criterion clarifies symptoms as not attributable to a substance or co-occurring medical condition.

Two specifications are noted including delayed expression and a dissociative subtype of PTSD, the latter of which is new to DSM-5. In both specifications, the full diagnostic criteria for PTSD must be met for application to be warranted.

Criterion A: stressor

The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, as follows: (1 required)

1. Direct exposure.
2. Witnessing, in person.
3. Indirectly, by learning that a close relative or close friend was exposed to trauma. If the event involved actual or threatened death, it must have been violent or accidental.
4. Repeated or extreme indirect exposure to aversive details of the event(s), usually in the course of professional duties (e.g., first responders, collecting body parts; professionals repeatedly exposed to details of child abuse). This does not include

indirect non-professional exposure through electronic media, television, movies, or pictures.

Criterion B: intrusion symptoms

The traumatic event is persistently re-experienced in the following way(s): (1 required)

1. Recurrent, involuntary, and intrusive memories. Note: Children older than 6 may express this symptom in repetitive play.
2. Traumatic nightmares. Note: Children may have frightening dreams without content related to the trauma(s).
3. Dissociative reactions (e.g., flashbacks) which may occur on a continuum from brief episodes to complete loss of consciousness. Note: Children may reenact the event in play.
4. Intense or prolonged distress after exposure to traumatic reminders.
5. Marked physiologic reactivity after exposure to trauma-related stimuli.

Criterion C: avoidance

Persistent effortful avoidance of distressing trauma-related stimuli after the event: (1 required)

1. Trauma-related thoughts or feelings.
2. Trauma-related external reminders (e.g., people, places, conversations, activities, objects, or situations).

Criterion D: negative alterations in cognitions and mood

Negative alterations in cognitions and mood that began or worsened after the traumatic event: (2 required)

1. Inability to recall key features of the traumatic event (usually dissociative amnesia; not due to head injury, alcohol or drugs).
2. Persistent (and often distorted) negative beliefs and expectations about oneself or the world (e.g., "I am bad," "The world is completely dangerous.").
3. Persistent distorted blame of self or others for causing the traumatic event or for resulting consequences.
4. Persistent negative trauma-related emotions (e.g., fear, horror, anger, guilt or shame).
5. Markedly diminished interest in (pre-traumatic) significant activities.
6. Feeling alienated from others (e.g., detachment or estrangement).
7. Constricted affect: persistent inability to experience positive emotions.

Criterion E: alterations in arousal and reactivity

Trauma-related alterations in arousal and reactivity that began or worsened after the traumatic event: (2 required)

1. Irritable or aggressive behavior.
2. Self-destructive or reckless behavior.
3. Hypervigilance.
4. Exaggerated startle response.
5. Problems in concentration.
6. Sleep disturbance.

Criterion F: duration

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

Criterion G: functional significance

Significant symptom-related distress or functional impairment (e.g., social, occupational).

Criterion H: attribution

Disturbance is not due to medication, substance use, or other illness.

Changes from DSM-IV to DSM-5

Overall, the symptoms of PTSD are mostly the same in DSM-5 as compared to DSM-IV. A few key alterations include:

- The 3 clusters of DSM-IV symptoms are divided into 4 clusters in DSM-5: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. DSM-IV Criterion C, avoidance and numbing, was separated into two criteria: Criteria C (avoidance) and Criteria D (negative alterations in cognitions and mood). The rationale for this change was based upon factor analytic studies, and now requires at least one avoidance symptom for PTSD diagnosis.
- Three new symptoms were added:
 - Criteria D (negative alterations in cognitions and mood): persistent and distorted blame of self or others; and, persistent negative emotional state
 - Criteria E (alterations in arousal and reactivity): reckless or destructive behavior
- Other symptoms were revised to clarify symptom expression.
- Criterion A2 (requiring fear, helplessness or horror happen right after the trauma) was removed in DSM-5. Research suggests that Criterion A2 did not improve diagnostic accuracy.
- A clinical subtype "with dissociative symptoms" was added. The dissociative subtype is applicable to individuals who meet the criteria for PTSD and experience additional depersonalization and derealization symptoms (3).
- Separate diagnostic criteria are included for children ages 6 years or younger (preschool subtype).

Dissociative Subtype of PTSD

The recognition of a dissociative subtype of PTSD as part of the DSM-5 PTSD diagnosis was based on three converging lines of research: 1) symptom assessments, 2) treatment outcomes, and 3) psychobiological studies. Even though dissociative symptoms such as flashbacks and psychogenic amnesia are included as part of the core PTSD symptoms, evidence suggests that a subgroup of PTSD patients exhibits additional symptoms of dissociation, including depersonalization and derealization, thus warranting a subtype of PTSD specifically focusing on these two symptoms.

Recognizing a dissociative subtype of PTSD has the potential to improve the assessment and treatment outcome of PTSD.

The role of dissociation as the most direct defense against overwhelming traumatic experience was first documented in the seminal work of Pierre Janet. Recent research evaluating the relationship between post-traumatic stress disorder (PTSD) and dissociation has suggested that there is a dissociative subtype of PTSD, defined primarily by symptoms of derealization (i.e., feeling as if the world is not real) and depersonalization (i.e., feeling as if oneself is not real). Confrontation with overwhelming experience from which actual escape is not possible, such as childhood abuse, torture, as well as war trauma challenges the individual to find an escape from the external environment as well as their internal distress and arousal when no escape is possible. States of depersonalization and derealization provide striking examples of how consciousness can be altered to accommodate overwhelming experience that allows the person to continue functioning under fierce conditions.

- An 'out-of-body' or depersonalization experience during which individuals often see themselves observing their own body from above has the capacity to create the perception that 'this is not happening to me' and is typically accompanied by an attenuation of the emotional experience.
- Similarly, states of derealization during which individuals experience that 'things are not real; it is just a dream' create the perception that 'this is not really happening to me' and are often associated with the experience of decreased emotional intensity.

The addition of a dissociative subtype to the PTSD diagnosis is expected to further advance research examining the etiology, epidemiology, neurobiology, and treatment response of this subtype and facilitate the search for biomarkers of PTSD.

As compared to individuals with PTSD alone, patients with a diagnosis of the dissociative subtype of PTSD showed:

- Repeated traumatization and early adverse experience prior to onset of PTSD.
- Increased psychiatric comorbidity, in particular specific phobia and borderline and avoidant personality disorders among women, but not men.
- Increased functional impairment.
- Increased suicidality (including suicidal ideation, plans, and attempts).

Complex PTSD

Many traumatic events (e.g. car accidents, natural disasters, etc.) are of time-limited duration. However, in some cases people experience chronic trauma that continues or repeats for months or years at a time. The current PTSD diagnosis often does not fully capture the severe psychological harm that occurs with prolonged, repeated trauma. People who experience chronic trauma often report additional symptoms alongside formal PTSD symptoms, such as changes in their self-concept and the way they adapt to stressful events.

Dr. Judith Herman of Harvard University suggests that a new diagnosis, Complex PTSD, is needed to describe the symptoms of long-term trauma. Another name sometimes used to describe the cluster of symptoms referred to as Complex PTSD is Disorders of Extreme Stress Not Otherwise Specified (DESNOS). A work group has also proposed a diagnosis of Developmental Trauma Disorder (DTD) for children and adolescents who experience chronic traumatic events.

During long-term traumas, the victim is generally held in a state of captivity, physically or emotionally, according to Dr. Herman. In these situations, the victim is under the control of the perpetrator and unable to get away from the danger.

Examples of such traumatic situations include:

- Concentration camps
- Prisoner of War camps
- Prostitution brothels
- Long-term domestic violence
- Long-term child physical abuse
- Long-term child sexual abuse
- Organized child exploitation rings

An individual who experienced a prolonged period (months to years) of chronic victimization and total control by another may also experience the following difficulties:

- Emotional Regulation. May include persistent sadness, suicidal thoughts, explosive anger, or inhibited anger.
- Consciousness. Includes forgetting traumatic events, reliving traumatic events, or having episodes in which one feels detached from one's mental processes or body (dissociation).
- Self-Perception. May include helplessness, shame, guilt, stigma, and a sense of being completely different from other human beings.
- Distorted Perceptions of the Perpetrator. Examples include attributing total power to the perpetrator, becoming preoccupied with the relationship to the perpetrator, or preoccupied with revenge.
- Relations with Others. Examples include isolation, distrust, or a repeated search for a rescuer.
- One's System of Meanings. May include a loss of sustaining faith or a sense of hopelessness and despair.

Because people who experience chronic trauma often have additional symptoms not included in the PTSD diagnosis, clinicians may misdiagnose PTSD or only diagnose a personality disorder consistent with some symptoms, such as Borderline, Dependent, or Masochistic Personality Disorder.

Care should be taken during assessment to understand whether symptoms are characteristic of PTSD or if the survivor has co-occurring PTSD and personality disorder. Clinicians should assess for PTSD specifically, keeping in mind that chronic trauma survivors may experience any of the following difficulties:

- Survivors may avoid thinking and talking about trauma-related topics because the feelings associated with the trauma are often overwhelming.
- Survivors may use alcohol or other substances as a way to avoid and numb feelings and thoughts related to the trauma.
- Survivors may engage in self-mutilation and other forms of self-harm.
- Survivors who have been abused repeatedly are sometimes mistaken as having a “weak character” or are unjustly blamed for the symptoms they experience as a result of victimization.

Acute Stress Disorder

Acute stress disorder (ASD) is a mental disorder that can occur in the first month following a trauma. DSM-IV introduced the diagnosis of acute stress disorder (ASD). At the time there was relatively little research substantiating the role or definition of diagnosis, but its introduction promoted an unprecedented amount of research into acute stress reactions after trauma.

The symptoms that define ASD overlap with those for PTSD. One difference, though, is that a PTSD diagnosis cannot be given until symptoms have lasted for one month. Also, compared to PTSD, ASD is more likely to involve feelings such as not knowing where you are, or feeling as if you are outside of your body. Research has found that over 80% of people with ASD have PTSD six months later. Not everyone with ASD will get PTSD, though.

DSM-5 has markedly modified the goals and criteria for ASD. The diagnosis no longer attempts to predict chronic PTSD, but rather identifies those survivors who are suffering severe acute stress reactions in the period prior to when a diagnosis of PTSD can be made (i.e., 1 month).

Etiology

Genetic

Currently, many scientists are focusing on genes that play a role in creating fear memories. Understanding how fear memories are created may help to refine or find new interventions for reducing the symptoms of PTSD. For example, PTSD researchers have pinpointed genes that make:

Stathmin, a protein needed to form fear memories. In one study, mice that did not make stathmin were less likely than normal mice to “freeze,” a natural, protective response to danger, after being exposed to a fearful experience. They also showed less innate fear by exploring open spaces more willingly than normal mice.

GRP (gastrin-releasing peptide), a signaling chemical in the brain released during emotional events. In mice, GRP seems to help control the fear response, and lack of GRP may lead to the creation of greater and more lasting memories of fear. Researchers have also found a version of the 5-HTTLPR gene, which controls levels of serotonin — a brain chemical related to mood—that appears to fuel the fear response. Like other mental disorders, it is likely that many genes with small effects are at work in PTSD.

Brain Mapping

Studying parts of the brain involved in dealing with fear and stress also helps researchers to better understand possible causes of PTSD. One such brain structure is the amygdala, known for its role in emotion, learning, and memory. The amygdala appears to be active in fear acquisition, or learning to fear an event (such as touching a hot stove), as well as in the early stages of fear extinction, or learning not to fear. Storing extinction memories and dampening the original fear response appears to involve the prefrontal cortex (PFC) area of the brain, involved in tasks such as decision-making, problem-solving, and judgment. Certain areas of the PFC play slightly different roles. For example, when it deems a source of stress controllable, the medial PFC suppresses the amygdala an alarm center deep in the brainstem and controls the stress response. The ventromedial PFC helps sustain long-term extinction of fearful memories, and the size of this brain area may affect its ability to do so.

Individual differences in these genes or brain areas may only set the stage for PTSD without actually causing symptoms. Environmental factors, such as childhood trauma, head injury, or a history of mental illness, may further increase a person's risk by affecting the early growth of the brain. Also, personality and cognitive factors, such as optimism and the tendency to view challenges in a positive or negative way, as well as social factors, such as the availability and use of social support, appear to influence how people adjust to trauma. More research may show what combinations of these or perhaps other factors could be used someday to predict who will develop PTSD following a traumatic event.

Risk Factors

Systematic reviews have identified 14 different risk factors associated with PTSD development.

Pre-traumatic factors

- Ongoing life stress or demographics
- Lack of social support
- Young age at time of trauma
- Pre-existing psychiatric disorder
- Female gender

- Low socioeconomic status, lower level of education, lower level of intelligence, race (African-American, American Indian, and Pacific Islander)
- Prior trauma exposure reported abuse in childhood, report of other previous traumatization, report of other adverse childhood factors)
- Family history of psychiatric disorders (genetics).

Peri-traumatic or trauma-related factors

- Severe trauma
- Type of trauma (interpersonal traumas, such as torture, rape, or assault, convey a high risk of PTSD)
- High perceived threat to life
- Community (mass) trauma
- Peri-traumatic dissociation.

Post-traumatic factors

- Ongoing life stress
- Lack of positive social support
- Negative social support (e.g., negative reactions from others)
- Bereavement
- Major loss of resources
- Other post-traumatic factors, including children at home and distressed spouse

Trauma, perceived support, and perceived life threat were strongly associated with PTSD. Prior trauma and prior (in early childhood or in adult life) adjustment factors were identified among the pre-trauma factors. Prior trauma was more strongly related to PTSD when the traumatic experience involved non-combat interpersonal violence than when the traumatic experience resulted from combat or an accident. Perceived life threat was more associated when assessment was further away from the traumatic event and in non-combat interpersonal violence than in accidents. Perceived social support was also more significant in studies that assessed individuals further away from the time of the traumatic event. Family history of psychiatric disorders was more significant among survivors of non-combat interpersonal violence than when the traumatic experience was combat exposure.

Biological Disturbances

Some of the main biological disturbances in PTSD can be conceptualized as dysregulation of the naturally occurring stress hormones in the body and increased sensitivity of the stress and anxiety circuits in the brain. There is dysregulation of adrenergic mechanisms that mediate the classical fight-flight or freeze response. Patients with PTSD have hypersensitivity of the hypothalamic-pituitary-adrenal axis (HPA) as compared to patients without PTSD. Patients have a much greater variation in their levels of adrenocorticoids than patients without PTSD. Researchers have found differences in both brain structures and brain circuits that process threatening input between patients with PTSD and those without.

It is not known for certain whether these changes are present prior the traumatic event and predisposed the person to developing PTSD or whether these changes are the result of the PTSD. One way to think of this is the fear circuitry no longer being integrated with the executive centers of the brain located in the prefrontal cortex. Even minor stresses may then set off the "fight or flight" response in patients with PTSD which leads to increased heart rate, sweating, rapid breathing, tremors, and other symptoms of hyperarousal listed above.

Acute Reactions to Trauma

In the immediate aftermath of a disaster, almost everyone will find themselves unable to stop thinking about what happened. These are called intrusion or re-experiencing symptoms. They will also exhibit high levels of arousal. For most, fear, anxiety, re-experiencing, efforts to avoid reminders, and arousal symptoms, if present, will gradually decrease over time. The expected psychological outcome is recovery, not psychopathology.

Practitioners should remember that most disaster survivors (including children and disaster rescue or relief workers) experience common stress reactions after a traumatic event. These reactions may last for several days or even a few weeks and may include:

- Emotional Reactions: shock, fear, grief, anger, guilt, shame, feeling helpless, feeling numb, sadness
- Cognitive reactions: confusion, indecisiveness, worry, shortened attention span, trouble concentration
- Physical reactions: tension, fatigue, edginess, insomnia, bodily aches pain, startling easily, racing heartbeat, nausea, change n appetite, change in sex drive
- Interpersonal reactions: distrust, conflict, withdrawal, work or school problems, irritability, loss of intimacy, feeling rejected or abandoned.

Because stress reactions are so pervasive after a major disaster, it can be difficult to know when a stress reaction is more severe and may require clinical intervention. The following are severe stress symptoms that indicate increased risk for acute stress disorder or posttraumatic stress disorder (PTSD). Even more important than the symptoms listed below is the individual's functional capacity. Symptomatic individuals who can continue to function affectively at work or at home are at much lower risk for developing psychiatric problems than those who are functionally incapacitated.

Severe Reactions After a Disaster

- Intrusive re-experiencing: terrifying memories, nightmares, or flashbacks
- Extreme emotional numbing: completely unable to feel emotion, as if empty
- Extreme attempts to avoid disturbing memories: such as through substance abuse
- Hyperarousal: panic attacks, rage, extreme irritability, intense agitation, violence

- Severe anxiety: debilitating worry, extreme helplessness, compulsions or obsessions
- Severe depression: loss of the ability to feel hope, pleasure, or interest; feeling worthless, suicidal ideation or intent.
- Dissociation: fragmented thoughts, spaced out, unaware of surroundings, amnesia

Screening for PTSD

There are a number of reasons why health care providers should screen patients for a history of trauma exposure. Some of the most important reasons are:

- Trauma and trauma-related problems are common. About 60% of men and 50% of women experience at least one trauma such as a disaster, war, or a life-threatening assault or accident at some point in their lives. It is estimated that 8% of the population has PTSD in their lifetimes, and PTSD is highly comorbid with other disorders such as panic, phobic, or generalized anxiety disorders; depression; or substance abuse.
- PTSD affects health. Reviews of the literature on trauma and health emphasize the role of PTSD as a mediator between trauma exposure and health effects. Such health effects include a variety of medical disorders as well as significant behavioral health risks.
- Trauma exposure affects utilization of services. There is a high medical utilization rates for survivors of different types of trauma.
- PTSD is under-recognized by practitioners. Research shows that many patients who seek physical healthcare have been exposed to trauma and have posttraumatic stress symptoms but have not received appropriate mental health care. As with anxiety disorders and depression, most patients with PTSD are not properly identified and are not offered education, counseling, or referrals for mental health evaluation. Keep in mind that avoidance of trauma reminders is a prominent symptom of PTSD. This makes it even more likely that patients will not spontaneously report their trauma experiences or related symptoms.

Health care providers can increase the chances of improved health outcomes for their patients by following these steps:

- Identify a PTSD consultant
- Screen for PTSD
- Discuss the results
- Provide a referral
- Provide educational materials
- Follow up with the patient

Identify a PTSD consultant

The first step is to identify a mental health care provider trained in PTSD. This provider should be able to provide you with consultation, and your patient with education, assessment, and counseling. PTSD therapists come from a range of disciplinary backgrounds including psychiatry, clinical psychology, social work, and psychiatric nursing.

Screen for PTSD

The Primary Care PTSD Screen (PC-PTSD) shown below is designed to be used by healthcare professionals (outside of the mental health fields) who suspect that their patient may be experiencing PTSD. A positive response to the screen does not necessarily indicate that a patient has PTSD. However, a positive response does indicate that a patient may have PTSD or trauma-related problems, and further investigation of trauma symptoms by a mental health professional may be warranted. The PC-PTSD is brief and problem-focused. The screen does not include a list of potentially traumatic events. There are two reasons for this:

- Studies on trauma and health in both male and female patients suggest that the active mechanism linking trauma and physical health is the diagnosis of PTSD. In other words, the relationship between trauma and health appears to be mediated through a current PTSD diagnosis.
- A symptom-driven screen, rather than a trauma-focused screen, is attractive to health care staff who may not be able to address a patient's entire trauma history during their visit.

Primary Care PTSD Screen (PC-PTSD)

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

1. Have had nightmares about it or thought about it when you did not want to?
YES NO
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
YES NO
3. Were constantly on guard, watchful, or easily startled?
YES NO
4. Felt numb or detached from others, activities, or your surroundings?
YES NO

Current research suggests that the results of the PC-PTSD should be considered "positive" if a patient answers "yes" to any three items. Patients who screen positive for PTSD should be explicitly screened for suicidal ideation as well.

Discuss the results

The following suggestions may facilitate your discussing with the patient his or her responses to the PTSD screen:

Provide an appropriate context for the discussion and respond empathically

- Ensure privacy by closing the door and keeping family members out of the room.
- Inform patients that traumatic events and the distress they create can have important effects on the body and on health as well as on the patient's mental health.
- Make no assumptions about the meaning or impact of traumatic events for an individual; your assumptions may be inconsistent with the patient's feelings and experience.
- Acknowledge any reported distress (e.g., "I'm sorry you have had such terrible nightmares").
- Show interest and concern, and tell the patient that you are glad that he or she has told you about the symptoms.
- Offer empathic support. Unless you have appropriate mental health training and will be the person to evaluate or treat the patient, it is not advisable to elicit a detailed account of the trauma or to challenge the patient's report in any way.

Clarify responses

If the PC-PTSD screening instrument is utilized, clarify responses to determine:

- Whether the patient has had a traumatic experience. "I notice from your answers to our questionnaire that you experience some symptoms of stress. At some point in their lives, many people have experienced extremely distressing events such as combat, physical or sexual assault, or a bad accident, and sometimes those events lead to the kinds of symptoms you have. Have you ever had any experiences like that?"
- Whether reported symptoms are really trauma-related. "I see that you have said you have nightmares about or have thought about an upsetting experience when you did not want to. Can you give me an example of a nightmare or thinking about an upsetting experience when you didn't want to?" If a patient gives an example of a symptom that does not appear to be in response to a traumatic event (e.g., a response to a divorce rather than to a traumatic event), it may be that he or she is ruminating about a negative life event rather than experiencing intrusive thoughts about a traumatic stressor.
- Whether reported symptoms are disruptive to the patient's life. "How have these thoughts, memories, or feelings affected your life? Have they interfered with your relationships? Your work? How about with recreation or your enjoyment of activities?"

Positive responses to these questions in addition to endorsement of trauma symptom items on the PC-PTSD Screen indicate an increased likelihood that the patient has PTSD and needs further evaluation.

Ascertain whether traumatic events are ongoing in a patient's life

If ongoing traumatic events are a part of the patient's life, it is critical that the health care practitioner determine whether the patient needs an immediate referral for social work or mental health services. The practitioner might ask: "Are any of these dangerous or life-threatening experiences still continuing in your life now?"

If ongoing family violence is suspected, it is imperative that the patient be told the limits of confidentiality for medical professionals, who are mandated to report suspected ongoing abuse of children and dependent adults. Discussion of possible abuse should take place in the absence of the suspected perpetrator; if the abuser is present, victims may deny abuse for fear of retaliation.

If ongoing threats to safety are present:

- Acknowledge the difficulty in seeking help when the trauma or threat is ongoing.
- Determine if reporting is legally mandated. If it is, develop a plan with the patient to file the report in a way that increases rather than decreases the safety of the patient and his or her loved ones.

If reporting is not appropriate, provide written information (or oral if written might stimulate violent behavior in the perpetrator) about local resources that might help the situation. Establish a plan that the patient will agree to in order to move toward increased safety. The National Domestic Violence Hotline is available to guide callers to local resources: 1-800-799-SAFE or TTY: 1-800-787-3224.

Provide a referral

After a review of the screen results and a discussion with the patient, the provider can decide whether the patient may benefit from further specialized mental health evaluations. Patients with positive screens may be referred to specialized PTSD treatment, behavioral medicine, or more general mental health services for further evaluation and possible treatment.

If it appears that a patient does have active PTSD symptoms

- Explain why the screen results lead you to recommend that he or she seek further evaluation and/or treatment. Let the patient know that the screen does not mean that he or she definitely has PTSD, but that you think further evaluation is needed.
- Encourage the patient to voice any reservations or concerns he or she might have about evaluation or treatment. You may be able to facilitate pursuit of treatment by listening to these concerns, acknowledging their validity, and

addressing some of the patient's questions about what to expect during mental health evaluation and treatment.

- Make sure the patient understands that he or she is not crazy.
- Normalize the idea of treatment. Explain that treatment involves common sense activities that include learning more about PTSD, finding and practicing ways of coping with trauma-related symptoms and problems, taking steps to improve relationships with family and friends, and making contact with other patients who experience similar problems.
- Provide the patient with a written referral to a mental health professional.

The mental health professional to whom you refer the patient should be given:

- A copy of the PC-PTSD results
- Any relevant information about health events or injuries that might have been traumatic
- Information about any suspected negative impact of the patient's posttraumatic symptoms on health or medical compliance

If Patient Refuses Referral

Many patients are reluctant to participate in mental health treatment. Common reasons include discomfort with the idea of seeing a psychologist or psychiatrist, a perceived stigma associated with treatment, previous negative experiences with mental health providers, negative attitudes towards health care agencies, lack of confidence in the helpfulness of counseling, or a reluctance to open up old emotional wounds. Faced with this situation, the practitioner can do several things to raise the likelihood that a mental health referral will be accepted:

- Suggest an evaluation rather than treatment. Sometimes, it is useful to suggest that the patient meet with a mental health professional so that he or she can learn more about posttraumatic stress, ask questions, and consider with the mental health provider whether more contacts will be useful.
- Explain the need for treatment. Explain to patients that although a wish to avoid reminders of the trauma is natural and common, this avoidance may actually interfere with recovery. This avoidance may prohibit helpful processes that can result from talking through the experience, receiving social support, or receiving specialized treatment.
- Give the patient educational materials that describe PTSD and its common co-morbid conditions (depression, substance abuse), treatment for PTSD, and coping with PTSD. Sometimes he or she will read the materials at a later time and begin to think more carefully about participation in treatment.
- Give information about different ways the patient can seek assistance. Avenues for assistance include local mental health services; online resources; and local community, spiritual, and mental health resources.

- Consider involving the patient's spouse or partner in the discussion if it seems appropriate and the patient gives his or her permission. This may help clarify for the patient the impact of PTSD on others in his or her life and increase his or her motivation to seek help.

Follow up

At the patient's next visit, it is important to ask whether he or she followed through with the referral for mental health evaluation or care. If the patient did follow through, the practitioner can ask if the referral was perceived as helpful. If the patient did not follow through with the referral and is still in need of care, the provider can try to learn what the obstacles were to obtaining care.

Advanced Assessment Tools

The following is a listing of specialized/advanced PTSD assessment tools commonly used by licensed mental health professionals. (Please note: These advanced tools should only be utilized by licensed mental health professionals. Other health care practitioners should only screen for PTSD using the Primary Care PTSD Screen.)

Combat Exposure Scale (CES)

The Combat Exposure Scale (CES) is a 7-item self-report measure that assesses wartime stressors experienced by combatants. Items are rated on a 5-point frequency (1 = "no" or "never" to 5 = "more than 50 times"), 5-point duration (1 = "never" to 5 = "more than 6 months"), 4-point frequency (1 = "no" to 4 = "more than 12 times") or 4-point degree of loss (1 = "no one" to 4 = "more than 50%") scale.

Respondents are asked to respond based on their exposure to various combat situations, such as firing rounds at the enemy and being on dangerous duty. The total CES score (ranging from 0 to 41) is calculated by using a sum of weighted scores, which can be classified into 1 of 5 categories of combat exposure ranging from "light" to "heavy." The CES was developed to be easily administered and scored and is useful in both research and clinical settings.

Evaluation of Lifetime Stressors (ELS)

The Evaluation of Lifetime Stressors (ELS) is an assessment protocol for adolescents or adults comprised of a self-report questionnaire and semi-structured interview that examines a range of traumatic experiences across the lifespan. The 56-item questionnaire assesses experiences with disasters, illnesses, accidents, violence, combat, and other traumas by offering 4 response options ("yes, I can remember this," "I'm not sure if this happened," "No, but this happened to someone else in my family" and "No, this did not happen"). The 56-item interview is organized into 9 modules (some of which are optional) that examine the non-negative responses on the questionnaire by providing specific probe questions for each item.

The interview provides a way to explore dimensions of each trauma including trauma type, perpetrators/victims, duration, frequency, perceptions of threats and emotional response, and others. A summary of the information can be captured in the Traumatic Events Summary prepared by the interviewer. Finally, an in-depth querying interview is provided to assess the worst two or three events to examine dimensions such as dissociation, disclosure, and treatment. This measure was designed to be sensitive clinically by allowing for vague responses and by introducing less emotionally evocative questions first and is suitable for both research and clinical purposes.

Life Events Checklist (LEC)

The Life Events Checklist (LEC) is a brief, 17-item, self-report measure designed to screen for potentially traumatic events in a respondent's lifetime. The LEC assesses exposure to 16 events known to potentially result in PTSD or distress and includes one item assessing any other extraordinarily stressful event not captured in the first 16 items.

For each item, the respondent checks whether the event (a) happened to them personally, (b) they witnessed the event, (c) they learned about the event, (d) they are not sure if the item applies to them, and the item does not apply to them. The LEC was developed concurrently with the Clinician-Administered PTSD Scale (CAPS) and is administered before the CAPS. The LEC has demonstrated adequate psychometric properties as a stand-alone assessment of traumatic exposure, particularly when evaluating consistency of events that actually happened to a respondent.

The LEC has also demonstrated convergent validity with measures assessing varying levels of exposure to potentially traumatic events and psychopathology known to relate to traumatic exposure. However, the LEC does not establish that the respondent has experienced an event with sufficient severity to meet DSM-5 criteria for a traumatic exposure (Criterion A1), and it does not assess peri-traumatic emotional experiences (Criterion A2).

Life Stressor Checklist – Revised (LSC-R)

The Life Stressor Checklist-Revised is a self-report measure that assesses traumatic or stressful life events. The measure has a focus on events relevant to women such as abortion. The questionnaire includes 30 life events, including experiences with natural disasters, physical or sexual assault, death of a relative and other events and follows a yes/no format.

For endorsed events, respondents are asked to provide: age when event began, age when event ended, belief that they were in harm ("yes" or "no"), feelings of helplessness ("yes" or "no"). In addition, effect on life and how upsetting event was at the time are rated on a 5-point intensity scale (1= not at all; to 5= extremely). Respondents are asked to identify the 3 events that currently have the greatest impact on them. The LSC-R can be used for clinical or research purposes.

Potential Stressful Events Interview (PSEI)

The 62-item Potential Stressful Events Interview (PSEI) was designed for use in the DSM-IV PTSD Field Trial to provide descriptive data on prevalence of traumatic events. It provides information on exposure to traumatic events as well as PTSD.

It is a comprehensive interview with five parts: (1) demographics; (2) low magnitude stressors in the last year such as job loss and serious illness; (3) high magnitude stressors such as combat or military experience or witness to someone being seriously injured; (4) objective characteristics of the prominent high and low magnitude events; and, (5) subjective characteristics of these prominent events. The final part (5) is a self-report that examines 15 emotional responses such as surprised or ashamed and 10 physical reactions such as shortness of breath and rapid heart rate. It can be used for both research and clinical purposes.

A subsection of the PSEI, called the National Women's Study Event History (NWSEH), interview can be administered independently of the other sections of the PSEI. The NWSEH takes 15-30 minutes to administer and covers the full range of high magnitude stressor events with very detailed assessments of sexual and physical assault events.

Stressful Life Events Screening Questionnaire (SLESQ)

The Stressful Life Events Screening Questionnaire (SLESQ) is a 13-item self-report measure for non-treatment seeking samples that assesses lifetime exposure to traumatic events. Eleven specific and 2 general categories of events, such as a life-threatening accident, physical and sexual abuse, witness to another person being killed or assaulted, are examined. For each event, respondents are asked to indicate whether the event occurred ("yes" or "no"), their age at time of the event, as well as other specific items related to the event, such as the frequency, duration, whether anyone died, or was hospitalization, etc. The SLESQ is recommended for research and general screening purposes, and is available in English and Spanish.

Trauma Assessment for Adults – Self-report (TAA)

The 17-item self-report Trauma Assessment for Adults (TAA) examines different types of stressful life events. It assesses 14 life events such as combat exposure during military service, physical or sexual assault, surviving a serious car accident, and others stressful events using a yes/no format. Each life event endorsed asks about presence of injury ("yes" or "no"), perception of danger ("yes" or "no"), and ages when it happened (first and last time). The TAA is appropriate for clinical or research purposes.

Trauma History Questionnaire (THQ)

The Trauma History Questionnaire (THQ) is a 24-item self-report measure that examines experiences with potentially traumatic events such as crime, general disaster, and sexual and physical assault using a yes/no format. For each event endorsed, respondents are asked to provide the frequency of the event as well as their age at the time of the event. The THQ can be used in both clinical and research settings, and is available in English and Spanish.

Trauma History Screen (THS)

The Trauma History Screen (THS) is a brief, 13-item self-report measure that examines 11 events and one general event, including military trauma, sexual assault and natural disasters. For each event, respondents are asked to indicate whether the event occurred (“yes” or “no”) and the number of times something like this happened. For each event endorsed, additional dimensions are assessed, including age when it happened, a description of what happened, whether there was actual or a threat of death or injury, feelings of helplessness and feelings of dissociation, a 4-point scale for duration of distress (“not at all” to “a month or more”) and a 5-point scale for distress level (“not at all” to “very much”). The THS is suitable both for clinical and research purposes, and can be administered to a wide population with its low reading level, use of common language and simple responses.

Traumatic Events Questionnaire (TEQ)

The 11-item Traumatic Events Questionnaire (TEQ) assesses 9 events such as experiencing a serious accident (industrial, farm or car), receiving news of serious injury or death of someone, and being a victim of physical or sexual abuse. It also allows for an unspecified traumatic event to be examined. For each event endorsed, respondents are asked to provide the frequency, age at the time(s) of the event, degree of injury, degree of life threat, degree of how traumatizing the event was at the time, and degree of how traumatizing the event is currently. A 7-point scale (1=“not at all” to 7=“extremely”) is used for each of the degree questions. The TEQ is suitable for research and clinical purposes.

Traumatic Life Events Questionnaire (TLEQ)

The TLEQ is a 23-item self-report measure of 22 types of potentially traumatic events including natural disasters, exposure to warfare, robbery involving a weapon, physical abuse and being stalked. For each event, respondents are asked to provide the number of times it occurred (ranging from “never” to “more than 5 times”) and whether fear, helplessness or horror was present (“yes/no”).

Some events include a question about presence of injury (“yes/no”), and for victimization questions, characteristics of the perpetrator (e.g., “stranger? Yes/no”). The last question asks respondents to identify the one event that “causes you the most distress” among those endorsed. Respondents are also asked about their age upon first occurrence, date of last occurrence, and amount of distress the event causes (“no distress” to “extreme distress”). The measure can be used for both clinical and research purposes.

Traumatic Stress Schedule (TSS)

The TSS interview measures essential information about potentially traumatic events. The TSS allows for assessment of 10 events such as combat, robbery or motor vehicle accident as well as one unspecified event. For each of the events, 12 detailed closed- and open-ended questions that examine dimensions of loss, scope, threat to life and physical injury, blame and familiarity are asked. It also prompts for an assessment of an

event that changed an important aspect of life such as residence, job or personal relations. This measurement can be used for clinical and research purposes.

PTSD and Physical Health

There is an established positive correlation between PTSD and negative effects on physical health. Those who report that they have PTSD symptoms are more likely to have a greater number of physical health problems than those who do not have PTSD. Similar results are found when physical health is measured by physician report or by laboratory tests. PTSD also has been found to be associated with greater medical service utilization for physical health problems.

Caution is warranted in making a causal interpretation of what is presented here. It may be the case that something associated with PTSD is actually the cause of greater health problems. For example, it could be that a factor associated with PTSD, such as smoking, is the actual cause of the increased health problems. This is not likely, however, given that we know that PTSD is associated with poor physical health even when behavioral factors such as smoking are controlled.

PTSD may promote poor health through a complex interaction between biological and psychological mechanisms. Current thinking is that the experience of trauma brings about neurochemical changes in the brain. These changes may have biological, as well as psychological and behavioral, effects on one's health. For example, these neurochemical changes may create a vulnerability to hypertension and atherosclerotic heart disease that could explain in part the association with cardiovascular disorders. These neurochemical changes may also relate to abnormalities in thyroid and other hormone functions, and to increased susceptibility to infections and immunologic disorders associated with PTSD.

The psychological and behavioral effects of PTSD on health may be accounted for in part by comorbid depressive and anxiety disorders. Many people with PTSD also experience depressive disorders or other disorders. Depressed individuals report a greater number of physical symptoms and use more medical treatment than do individuals who are not depressed. Depression also has been linked to cardiovascular disease in previously healthy populations and to additional illness and mortality among patients with serious medical illness. PTSD also may be related to poor health through symptoms of comorbid anxiety or panic.

The evidence linking anxiety to cardiovascular morbidity and mortality is quite strong, but the mechanisms are largely unknown.

Hostility, or anger, is another possible mediator of the relationship between PTSD and physical health. It is commonly associated with PTSD and decades of research on the health risks associated with the Type A behavior pattern have isolated hostility as a crucial factor in cardiovascular disease. PTSD and poor health also may be mediated in

part by behavioral risk factors for disease such as smoking, substance abuse, diet, and lack of exercise.

Associated Comorbidities

Medical Conditions

PTSD has also been linked to cardiovascular disease, anemia, arthritis, asthma, back pain, diabetes, eczema, kidney disease, lung disease, ulcers, chronic pain, work absenteeism, and other generalized health problems. One explanation for these problems may relate to the association of PTSD with dysregulation of the neuroendocrine, autonomic, nervous, and immune system functions. Patients who have PTSD and other chronic medical diseases may find that PTSD worsens their medical conditions. Some medical conditions, which can be acutely dangerous in the presence of PTSD, include bronchial asthma, peptic ulcer disease, GI bleed, and malignant hypertension.

Psychiatric Conditions

- **Delirium** - (also known as organic brain syndrome, organic psychosis, acute confusional state, acute brain syndrome, and various other names) is a disorder of cognition and consciousness with abrupt onset that is frequently overlooked. This is common in the elderly and medically ill.
- **Acute or marked psychosis** - "Psychosis" in and of itself is not a psychiatric disorder. Rather, psychosis is a symptom, which may present in a variety of conditions. Psychotic patients have an impaired sense of reality, which may manifest in several forms (hallucinations, delusions, mental confusion or disorganization). Acute psychosis represents a medical emergency.
- **Severe debilitating depression** (e.g., catatonia, malnourishment, severe disability) - While many mild to moderate illnesses may not necessarily present situations mandating immediate attention, the presence of severe depressive symptoms may represent a medical emergency, even in the absence of suicidal ideation.

PTSD and Chronic Pain

The prevalence of PTSD is substantially elevated in individuals with chronic pain. A current PTSD prevalence of 35% is seen in chronic pain patients, compared to 3.5% in the general population. One symptom of PTSD is that the person becomes emotionally or physically upset when reminded of the traumatic event. For people with chronic pain, the pain may actually serve as a reminder of the traumatic event, which will tend to exacerbate the PTSD.

It is important to recognize that certain types of chronic pain are more common in individuals who have experienced specific traumas. For example, adult survivors of physical, psychological, or sexual abuse tend to be more at risk for developing certain

types of chronic pain later in their lives. The most common forms of chronic pain for survivors of these kinds of trauma involve: pain in the pelvis, lower back, face, and bladder; fibromyalgia; interstitial cystitis; and non-remitting whiplash syndromes. Some of the theories as to why this relationship occurs relate to personality development, neurobiology or neurophysiology, memory, behavior, and personal coping styles.

When patients are coping with a chronic pain condition, it is difficult for them to hear from a therapy provider that they will need to "live with it" and "manage the pain" for the rest of their lives. Being faced with the news of impending health problems, ongoing severe pain, and disability is extremely difficult. These individuals may have lost their physical abilities, and they have lost the assurance that they can fully control whatever is going on in their lives. Much like losing a loved one, these individuals will need to grieve their losses. This may take some time and will vary from person to person.

Understand that prior to patients' being able to come to an acceptance about the permanence of their condition, they will be feeling very much out of control and helpless. Their lives essentially revolve around trying to regain their sense of control. This can sometimes be difficult, particularly when treatments don't seem to help or the patient's support system is weak. There may be times when they become outwardly angry or depressed. Restoring some sense of control and empowering the patient is a fundamental part of the treatment process.

Danger to Self or Others

Danger to Self

People with PTSD, including sub-threshold PTSD, are at high risk for suicidal ideation and, for women, suicide attempts. It is crucial to assess for safety and dangerousness in persons with PTSD, including current risk to self or others, as well as historical patterns of risk.

Assessment of dangerousness needs to take place in a safe and secure environment and should begin with the building of rapport. In patients with thoughts of self-harm, assessment should include existence of current intent and previous suicidal ideation, intent, or history of a suicide attempt.

Any history of suicidal attempts or a family history of a completed or attempted suicide should be taken seriously. Pay careful attention to patients with behaviors that may signal dangerousness (e.g., agitation, threatening, intimidation, paranoia). Access to weapons or other means of harm should also be taken seriously. Assess for domestic or family violence, because these are elevated in those with PTSD. Assessment of medical, psychiatric, and social/environmental risks is also warranted.

Suicidal behavior is best assessed with the following criteria: presence of active depression or psychosis, presence of substance abuse, past history of suicidal acts, formulation of plan, a stated intent to carry out the plan, feeling that the world would be better off if the patient were dead, availability of means for suicide (e.g., firearms and pills), disruption of an important personal relationship, and failure at an important personal endeavor. The presence of these factors often constitutes a psychiatric emergency and must always be taken seriously. Among young adults, aggressive symptoms may be predictive of suicidality in men and elevated symptoms of PTSD and/or depression may be more predictive in women.

Other predictors of completed suicide in general include history of suicide attempts, family history of suicide, access to weapons, male gender, and Caucasian race.

Individuals with severe childhood trauma (e.g., sexual abuse) may present with complex PTSD symptoms and parasuicidal behaviors, (e.g., self-mutilation, medication overdoses). Further, limited cognitive coping styles in PTSD have been linked to a heightened suicide risk. Fostering competence and social support may reduce this risk. Co-morbid substance use disorders may increase the risk of suicidality. Additionally, persons with PTSD may also be at personal risk of danger through ongoing or future victimization in relationships (e.g. domestic violence/battering, or rape).

Danger to Others

Some individuals with PTSD may be at risk for violence toward others. Explosivity, anger problems, and past history of violence are associated with an increased risk for violent behavior. Violence often emerges as a response to a perceived threat or marked frustration by the patient stemming from his or her inability to meet goals by nonviolent means.

The specific factors that contribute to violent behavior may include psychiatric, medical, environmental and situational/social engagements. Often, it is a combination of these factors that precipitates and aggravates the potential for violence, which may quickly escalate to agitation or the carrying out of violent impulses.

Whatever the cause, the following situations may serve as warning signs pointing toward a very real threat of violence:

- Ideation and/or intent to harm others
- Past history of violent behaviors
- Severely agitated, aggressive, threatening, or hostile behaviors
- Actively psychotic presentation.

Assessment of dangerousness can include questions, such as:

- You sound like you've had a very difficult time recently. Has life ever seemed like it's not worth living?
- Have you ever thought about acting on those feelings?

- Have you thought of how you would do this?
- Sometimes, when people get really upset or angry, they feel like doing harm to other people. Have you had any thoughts recently about harming others?
- How do you express your feelings?
- Are there times you are afraid to go home?

Psychotherapy

Psychotherapy interventions are aimed at reduction of symptoms severity, improvement of global functioning, and improvement in quality of life and functioning in social and occupational areas. Psychotherapy for PTSD may also have benefits in improving co-morbid physical health conditions, but this is not specifically the focus of treatment.

The evidence-based psychotherapeutic interventions for PTSD that are most strongly supported by randomized controlled trials (RCTs) can be considered broadly within in the trauma-focused psychotherapy category or stress inoculation training. Trauma-focused psychotherapies for PTSD refer to a broad range of psychological interventions based on learning theory, cognitive theory, emotional processing theory, fear-conditioning models, and other theories. They include a variety of techniques most commonly involving exposure and/or cognitive restructuring (e.g. Prolonged Exposure, Cognitive Processing Therapy and Eye Movement Desensitization and Reprocessing). They are often combined with anxiety management/stress reduction skills focused specifically on alleviating the symptoms of PTSD. Psychoeducation is another important component of all interventions. Other cognitive based therapeutic interventions that are not trauma-focused are less effective.

Exposure-Based Therapies (ET)

Exposure-based therapies emphasize in-vivo, imaginal, and narrative (oral and/or written) exposure, but also generally include elements of cognitive restructuring (e.g. evaluating the accuracy of beliefs about danger) as well as relaxation techniques and self-monitoring of anxiety. Examples of therapies that include a focus on exposure include Prolonged Exposure Therapy, Brief Eclectic Psychotherapy, Narrative Therapy, written exposure therapies, and many of the cognitive therapy packages that also incorporate in-vivo and imaginal/narrative exposure.

Imaginal exposure involves encouraging the patient to revisit the experience in imagination, and recalling the experience through verbally describing the physical and emotional details of the trauma. In vivo exposure involves asking the patient to physically confront realistically safe but still feared stimuli (e.g. driving a car after having been in a serious motor vehicle accident). In vivo exposure is typically arranged in a hierarchical order based on the perceived difficulty of confronting each stimulus. In addition, each item on the hierarchy may be gradated to make it more or less difficult depending on the patient's progress in treatment. In the preceding example the patient might first sit in a car in the passenger seat, and then in the driver's seat, and then start

the car, etc. The patient repeats each situation until a reduction in the intensity of emotional and physiological response is achieved, at which point they move on to the next item in their hierarchy.

The mechanism of ET is thought to be related to a reduction in negative emotions (fear, anxiety, sadness, guilt) associated with their experience through repetitive, therapist-guided confrontation of feared places, situations, memories, thoughts, and feelings. ET usually lasts from 8 to 15 sessions depending on the trauma and treatment protocol. In the most common form of ET, Prolonged Exposure therapy patients are repeatedly exposed to their own individualized trauma stimuli, until their arousal and emotional responses are consistently diminished.

Cognitive-Based Therapies (CBT)

Cognitive-based therapies emphasize cognitive restructuring (challenging automatic or acquired beliefs connected to the traumatic event, such as beliefs about safety or trust) but also include relaxation techniques and discussion/narration of the traumatic event either orally and/or through writing. Examples include Cognitive Processing Therapy and various cognitive therapy packages.

CBT is accomplished through a systematic and prescriptive process of (a) identifying dysfunctional beliefs, (b) challenging and disputing these beliefs by examining the evidence for or against them, and (c) restructuring or replacing these beliefs with those that are more functional, logical, and reality-based. According to theories on which CT is based, traumatic events may lead to distorted beliefs regarding personal safety, self-efficacy, relative danger, future consequences of actions, and availability of support. Over time, these maladaptive beliefs lead to or maintain symptoms of PTSD and impair global functioning. The goal of CBT for PTSD is to correct these beliefs, which causes a decrease in symptoms and improves functioning.

The CBT treatment protocol for PTSD typically begins with an introduction of how thoughts affect emotions and behavior. The cognitive model of change is introduced and the patient is given a detailed rationale and expectations for participation in therapy are established. Treatment interventions are focused on identifying and clarifying patterns of thinking. Several active techniques are used, such as capturing and recording thoughts about significant events, weighing the evidence in support of these thoughts, challenging distressing trauma-related thoughts, and replacing dysfunctional thoughts with more adaptive ones. Through systematic assignments both during and between therapy sessions, dysfunctional thoughts are examined, challenged, and replaced. As thoughts become more logical and reality-based, symptoms decrease and global functioning improves. CBT also emphasizes the identification and modification of distorted core beliefs about self, others, and the larger world. CT teaches that improved accuracy of thoughts and beliefs about self, others, and the world leads to improved mood and functioning.

Stress Inoculation Training (SIT)

Stress Inoculation Training places more emphasis on breathing retraining and muscle relaxation, but also includes cognitive elements (self-dialogue, thought stopping, role playing) and, often, exposure techniques (in-vivo exposure, narration of traumatic event).

Stress inoculation training does not necessarily focus as explicitly on the exploration of traumatic memories; it is included as a first-line alternative to trauma-focused psychotherapies for treating PTSD. SIT, which was developed originally for anxiety disorders and then modified for rape victims and later for PTSD, has been extensively studied in the treatment of PTSD. It has also been compared head-to-head with trauma-focused psychotherapies, and has been shown to be effective in assisting individuals with reducing trauma-related avoidance, anxiety, and cognitions, and there is good evidence that it is equivalent in efficacy to the trauma-focused psychotherapies.

SIT typically consists of education and training of coping skills, including deep muscle relaxation training, breathing control, assertiveness, role playing, covert modeling, thought stopping, positive thinking and self-talk, and in-vivo exposure. The rationale for this treatment is that trauma related anxiety can be generalized to many situations.

SIT is designed to “inoculate” people with PTSD from heightened stress responses through teaching anxiety management skills which can include:

- Relaxation training: teaching patients to control fear and anxiety through the systematic relaxation of the major muscle groups
- Breathing retraining: teaching slow, abdominal breathing to help the patient relax and/or avoid hyperventilation with its unpleasant and often frightening physical sensations
- Positive thinking and self-talk: teaching the person how to replace negative thoughts (e.g., ‘I’m going to lose control’) with positive thoughts (e.g., ‘I did it before and I can do it again’) when anticipating or confronting stressors. This is often combined with in-vivo exposure
- Assertiveness training: teaching the person how to express wishes, opinions, and emotions appropriately and without alienating others
- Thought stopping: distraction techniques to overcome distressing thoughts by inwardly shouting ‘stop’.

Eye Movement Desensitization and Reprocessing (EMDR)

Eye Movement Desensitization and Reprocessing closely resembles other CBT modalities in that there is an exposure component (e.g. talking about the traumatic event and/or holding distressing traumatic memories in mind without verbalizing them) combined with a cognitive component (e.g., identifying a negative cognition, an alternative positive cognition, and assessing the validity of the cognition), and relaxation/self-monitoring techniques (e.g., breathing, “body scan”).

Alternating eye-movements are part of the classic EMDR technique (and the name of this type of treatment); however, comparable effect sizes have been achieved with or without eye movements or other forms of distraction or kinesthetic stimulation. Although the mechanisms of effectiveness in EMDR have yet to be determined, it is likely that they are similar to other trauma-focused exposure and cognitive-based therapies.

The objective of EMDR is to assist patients to access and process traumatic memories while bringing them to an adaptive resolution. The therapist collaborates with patients to:

1. access a disturbing image associated with the traumatic event;
2. solicit the experience of body sensations associated with the disturbing image;
3. identify an aversive self-referring cognition (in concise words) that expresses what the patient “learned” from the trauma, and
4. identify an alternative positive self-referring cognition that the patient wishes could replace the negative cognition.

The patient is then asked to hold the disturbing image, sensations, and the negative cognition in mind while tracking the clinician’s moving finger back and forth in front of his or her visual field for about 20 seconds. In successive tracking episodes, the patient concentrates on whatever changes or new associations have occurred. Eye movement episodes are repeated until there are no new associations. Subsequent tracking episodes attempt to replace the negative cognitive self-statement with the alternate positive cognition.

Mindfulness

Mindfulness is defined as involving attention to and awareness of the present moment, and nonjudgmental acceptance. Awareness of the present involves observing thoughts, feelings, and sensations by focusing one's attention on the current moment. While attending to the present, mindfulness also entails a stance of acceptance, or willingness to experience an array of thoughts and emotions without judgment.

The potential clinical utility of integrating mindfulness-based exercises in extant PTSD treatments has yet to be examined empirically. However, given the beneficial effects of mindfulness practice on enhancing emotion regulation as well as decreasing anxiety and depressive symptoms, mindfulness has been increasingly discussed in the context of PTSD and its treatment. The relevant theoretical and empirical literature suggests that mindfulness may serve clinically meaningful functions in alleviating PTSD symptoms.

Combining mindfulness or other skills to strengthen emotion regulation with existing empirically-supported PTSD treatments may improve outcomes in the following ways:

- **Engagement.** Mindfulness may appeal to clients who do not pursue evidence-based treatments or cannot tolerate them. Mindfulness practice may improve symptoms and it may also help such clients become engaged with a therapist or treatment process.

- **Preparation.** Mindfulness practice could be introduced prior to treatment. Learning to observe internal reactions without judgment and to accept feelings, sensations, and thoughts as they arise might usefully prepare patients to tolerate the unpleasant emotions that trauma processing elicits.
- **Less rumination.** If implemented as an adjunct to CPT or PE, mindfulness could be encouraged throughout the treatment course. Increased awareness of trauma-related re-experiencing symptoms may allow patients to break a ruminative cycle by gaining some distance from trauma-related intrusive thoughts and feelings. It may foster acceptance rather than avoidance.
- **Compliance.** Patients using mindfulness skills during treatment may be better able to persevere through trauma processing and benefit more fully from trauma-focused treatments.

Specific mindfulness-based interventions

Several psychotherapeutic interventions incorporating training in mindfulness are clinically relevant to traumatic stress. Although data are currently lacking on the efficacy of these interventions in PTSD populations specifically, research has supported the utility of these treatment approaches for various mental health concerns. Moreover, these interventions may be clinically useful for patients with PTSD as they target symptoms such as anxiety, depression, or emotion dysregulation that commonly co-occur with posttraumatic stress. At this time, the interventions listed below might best be considered meaningful tertiary care for patients with PTSD.

Acceptance and Commitment Therapy (ACT) - The goal of ACT is to increase psychological flexibility and facilitate behavior change, such that patients become more committed to moving toward identified goals and values. ACT targets avoidance of thoughts, memories, emotions, and other private experiences. Mindfulness exercises are one of a variety of techniques used to increase willingness to experience thoughts and feelings and thus facilitate psychological flexibility. In PTSD, these experiences may include intrusive recollections of the traumatic event and emotional states of guilt or anger. Patients are taught to be aware of private events without judging or attempting to control them.

Dialectical Behavior Therapy (DBT) - DBT is a multifaceted treatment for borderline personality disorder and related problems. In addition, DBT often has been used prior to the implementation of PTSD-specific treatments such as exposure-based interventions to address difficulties with emotion regulation and distress tolerance. DBT incorporates training in mindfulness as one of four areas of skill-building. In DBT, mindfulness involves three "what" skills (observing, describing, and participating) and three "how" skills (taking a nonjudgmental stance, focusing on one thing in the moment, and being effective).

Mindfulness-Based Stress Reduction - This treatment has primarily been employed to help patients manage stress associated with a variety of physical health conditions, such as chronic pain. It has also been shown to be a useful treatment approach for

anxiety disorders and depression, conditions that commonly co-occur with PTSD. Mindfulness meditation, a part of this therapy, is intended to cultivate a de-centered and nonjudgmental perspective in relation to physical sensations as well as cognitions and emotions.

Mindfulness-Based Cognitive Therapy - This consists of an eight-week group intervention that draws upon both mindfulness and cognitive therapy techniques, with the aim of reducing the risk of depressive relapse. Patients are taught to focus more carefully on everyday events and allow thoughts to occur without trying to avoid or suppress them. Mindfulness Based-Cognitive Therapy thus might be a useful tertiary care program for patient struggling with PTSD and depression.

Mindfulness-Based Relapse Prevention - Mindfulness skills are employed in this prevention therapy as a technique for coping with urges to use substances following treatment for drug abuse and addiction. These skills help patients engage in "urge surfing" by observing their urges as they appear, accepting them nonjudgmentally, and 'riding the waves' without giving in to the urges. The prevalence of substance abuse problems among individuals with PTSD has been explained in terms of the emotional avoidance function of drug and alcohol use. As such, mindfulness interventions can be used to address substance use and other behaviors used to avoid trauma-related experiences.

Pharmacological Treatment

Posttraumatic Stress Disorder (PTSD) has biological, psychological, and social components. Medications can be used in treatment to address the biological basis for PTSD symptoms and co-morbid Axis I diagnoses. Medications may benefit psychological and social symptoms as well. While studies suggest that cognitive behavioral therapies such as prolonged exposure (PE) and cognitive processing therapy (CPT) have greater effects in improving PTSD symptoms than medications, some people may prefer medications or may benefit from receiving a medication in addition to psychotherapy.

Currently, the evidence base is strongest for the selective serotonin reuptake inhibitors (SSRIs). The only two FDA approved medications for the treatment of PTSD are sertraline (Zoloft) and paroxetine (Paxil). All other medication uses are off label, though there are differing levels of evidence supporting their use. In addition to sertraline and paroxetine, there is strong evidence for the SSRI fluoxetine (Prozac) and for the serotonin norepinephrine reuptake inhibitor (SNRI) venlafaxine (Effexor) which are considered first-line treatments.

The medications prescribed for treating PTSD symptoms act upon neurotransmitters related to the fear and anxiety circuitry of the brain including serotonin, norepinephrine, GABA, and dopamine among many others. Most of the time, these medications do not entirely eliminate symptoms but provide a symptom reduction and are best used in

conjunction with an ongoing program of trauma specific psychotherapy for patients such as PE or CPT.

Selective Serotonin Reuptake Inhibitors (SSRIs)

These medications are the only FDA approved medications for PTSD. SSRIs primarily affect the neurotransmitter serotonin which is important in regulating mood, anxiety, appetite, and sleep and other bodily functions. This class of medication has the strongest empirical evidence with well-designed randomized controlled trials (RCTs) and is the preferred initial class of medications used in PTSD treatment.

The maximum benefit from SSRI treatment depends upon adequate dosages and duration of treatment. Treatment adherence is key to successful pharmacotherapy treatment for PTSD. Examples of the SSRIs and some typical dosage ranges are listed below:

- Sertraline (Zoloft) 50 mg to 200 mg daily
- Paroxetine (Paxil) 20 to 60 mg daily
- Fluoxetine (Prozac) 20 mg to 60 mg daily

The most common side effects of antidepressants like sertraline and paroxetine are:

- Headache, which usually goes away within a few days.
- Nausea (feeling sick to your stomach), which usually goes away within a few days.
- Sleeplessness or drowsiness, which may occur during the first few weeks but then goes away.
- Agitation (feeling jittery).
- Sexual problems, which can affect both men and women, including reduced sex drive, and problems having and enjoying sex.

Other Medications

Antidepressants

Antidepressants that work through other neurotransmitter combinations or through different mechanisms for altering serotonin neurotransmission are also helpful in PTSD. Venlafaxine acts primarily as a serotonin reuptake inhibitor at lower dosages and as a combined serotonin and norepinephrine reuptake inhibitor at higher dosages.

Mirtazapine may be particularly helpful for treatment of insomnia in PTSD. Trazodone is also commonly used for insomnia in PTSD even though there is little empirical evidence available for its use.

Examples of the newer antidepressants for PTSD and some typical dosage ranges are listed below:

- Mirtazapine (Remeron) 7.5 mg to 45 mg daily
- Venlafaxine (Effexor) 75 mg to 300 mg daily
- Nefazodone (Serzone) 200 mg to 600 mg daily

Mood Stabilizers

These medications, also known as anticonvulsants or anti-epileptic drugs, either block glutamate or potentiate GABA or do both. Patients who have Bipolar Disorder and PTSD often benefit from these medications since SSRIs and other antidepressants sometimes precipitate a manic episode.

Atypical Antipsychotics

While originally developed for patients with a psychotic disorder, this class of medications is being applied to patients with many other psychiatric disorders including PTSD. They act primarily on the dopaminergic and serotonergic systems. They can be used when a person with PTSD has a psychotic disorder.

Medications for PTSD Symptom Management

There are a number of other medications that can be helpful for specific PTSD symptoms or that have been used as second line agents including the following:

- Prazosin (Minipress)
- Tricyclic Antidepressants (such as Imipramine)
- Monoamine Oxidase Inhibitors (MAOIs) (such as Phenelzine)

Prazosin has been found to be effective in decreasing nightmares in PTSD.

The tricyclic antidepressants and MAOIs act on a number of neurotransmitters. These medications are not used as first line agents due to their safety and side effect profiles. The tricyclics have quinidine like effects on the heart and can cause ventricular arrhythmias especially in overdose.

The MAOI phenazine has been shown to be effective in PTSD. Careful management of the MAOIs and strict dietary controls are important because they can cause potentially fatal hypertensive reactions when taken with other medications or certain foods rich in tyramine. MAOIs can also provoke the potentially fatal serotonin syndrome when used concurrently with SSRIs.

Buspirone and beta blockers are sometimes used adjunctively in treatment of hyperarousal symptoms, though there is little empirical evidence in support of this. Buspirone acts on serotonin and might reduce anxiety in PTSD without sedation or addiction.

Benzodiazepines

Benzodiazepines act directly on the GABA system which produces a calming effect on the nervous system. This is the only potentially addictive group of medications discussed. Studies have not shown them to be useful in PTSD treatment as they do not work on the core PTSD symptoms. There are several other concerns with the benzodiazepines including potential disinhibition, difficulty integrating the traumatic experience, interfering with the mental processes needed to benefit from

psychotherapy, and addiction. Because of their potential for addiction and disinhibition, they must be used with great caution in PTSD. Examples are listed below:

- Lorazepam (Ativan)
- Clonazepam (Klonopin)
- Alprazolam (Xanax)

Barriers to Effective Medication Treatment

There are several common barriers to effective medication treatment for PTSD which are listed below. These need to be addressed with patients in an ongoing dialogue with their prescribing clinician. Side effects need to be examined and discussed, weighing the risks and the benefits of continued medication treatment. Patient education about the side effects, necessary dosages, duration of treatment, and taking the medications consistently can improve adherence. A simple intervention of setting up a pill organizer weekly can go a long way to improve adherence.

- Fear of possible medication side effects including sexual side effects
- Feeling medication is a "crutch" and that taking it is a weakness
- Fear of becoming addicted to medications
- Taking the medication only occasionally when symptoms get severe
- Not being sure how to take the medication
- Keeping several pill bottles and not remembering when the last dosage was taken
- Using "self-medication" with alcohol or drugs with prescribed medications

PTSD in Children

The challenge for the Diagnostic and Statistical Manual (DSM) taxonomy has always been to consider developmental differences in the expressions of disorders in different age groups. Research has suggested that individuals of different ages may express features of the same criteria somewhat differently. Furthermore, there may be sufficient differences in the expressions of some disorders to justify an age-related subtype of the disorder. This is important to consider particularly in posttraumatic stress disorder (PTSD) because although PTSD has been widely reported in children and adolescents, the DSM-IV criteria were developed before substantial numbers of studies had been conducted on young children.

The Fifth Edition of the DSM (DSM-5) includes a new developmental subtype of PTSD called posttraumatic stress disorder in preschool children. As the first developmental subtype of an existing disorder, this represents a significant step for the DSM taxonomy. Since an alternative diagnostic set of criteria was initially proposed by Michael Scheeringa and Charles Zeanah, the criteria have been refined empirically, and endorsed by a task force of experts on early childhood mental health.

Because young children have immature abstract cognitive and verbal expression abilities, the criteria established for detecting PTSD in preschool children is more behaviorally anchored and developmentally sensitive than the one used for adults.

The major change was to require only 1 symptom in either the avoidance symptoms or negative alterations in cognitions and mood, instead of the DSM-IV threshold of 3 symptoms. The number of these symptoms that are possible to detect is simply fewer compared to adults. The symptoms of "loss of interests," "restricted range of affect," "detachment from loved ones," and "avoidance of thoughts or feelings related to the trauma" manifest in young children but are consistently ranked as some of the least frequent among the PTSD symptoms. The symptoms of "sense of a foreshortened future" and "inability to recall an important aspect of the event" were deleted because of the developmental challenges in manifesting and/or detecting them.

The wording of two symptoms was modified to enhance face validity and symptom detection. Diminished interest in significant activities may manifest as constricted play. Feelings of detachment or estrangement may be manifest more behaviorally as social withdrawal.

PTSD and the Family

Because PTSD and other trauma reactions change how a trauma survivor feels and acts, traumatic experiences that happen to one member of a family can affect everyone else in the family. When trauma reactions are severe and go on for some time without treatment, they can cause major problems in a family.

Trauma symptoms can make a family member hard to get along with or cause him or her to withdraw from the rest of the family. It can be very difficult for everyone when these changes occur. Just as people have different reactions to traumatic experiences, families also react differently when a loved one is traumatized. In the section below, many different types of reactions are described. A family may experience many of these reactions, or only a few. All of the reactions described, however, are common in families who have had to deal with trauma.

Sympathy

One of the first reactions many family members have is sympathy for their loved one. People feel very sorry that someone they care about has had to suffer through a terrifying experience. And they feel sorry when the person continues to suffer from symptoms of PTSD and other trauma responses. It can be helpful for the person who has experienced the trauma to know that his or her family members sympathize with him or her, especially just after the traumatic event occurs.

Sympathy from family members can also have a negative effect, though. When family members' sympathy leads them to "baby" a trauma survivor and have low expectations of him or her, it may send a message that the family doesn't believe the trauma survivor is strong enough to overcome the ordeal. For example, if a wife has so much sympathy for her husband that she doesn't expect him to work after a traumatic experience, the husband may think that she doesn't have any confidence in his ability to recover and go back to work.

Depression

One source of depression for family members can be the traumatic event itself. All traumas involve events where people suddenly find themselves in danger. When this happens in a situation or place where people are used to feeling safe, just knowing the event happened could cause a person to lose faith in the safety and predictability of life. For example, if a woman gets mugged in the parking lot of a neighborhood shopping center, her family may find they feel depressed by the idea that they are not really as safe as they thought they were, even in their own neighborhood.

It can also be very depressing when a traumatic event threatens a person's ideals about the world. For instance, if a man gets traumatized in combat by seeing someone tortured, it can be very depressing to know that people are capable of doing such cruel things to each other. Before the man was faced with that event, he may have been able to believe that people are basically good and kind.

Depression is also common among family members when the traumatized person acts in a way that causes feelings of pain or loss. There may be changes in family life when a member has PTSD or other symptoms after trauma. The traumatized person may feel too anxious to go out on family outings as he or she did in the past. The traumatized person may not be able to work because of PTSD symptoms. As a result, the family income may decrease and the family may be unable to buy things and do things the way they did before the traumatic event. A husband may feel unloved or abandoned when, because of her depression, his traumatized wife withdraws emotionally and avoids being intimate or sexual. Children whose father can't be in crowds because of combat trauma may feel hurt that their father won't come to see them play sports. When PTSD lasts for a long time, family members can begin to lose hope that their loved one or their family will ever get "back to normal."

Fear and Worry

Knowing that something terrible can happen "out of the blue" can make people very fearful. This is especially true when a family member feels unsafe and often reminds others about possible dangers. Very often, trauma survivors feel "on edge" and become preoccupied with trying to stay safe. They may want to get a guard dog, or put up security lights, or have weapons in the house in order to protect themselves and their family members. When one person in a family is very worried about safety, it can make

everyone else feel unsafe too. However, something that helps one person feel safe-like a loaded weapon under the bed-may make another person feel unsafe.

Family members can also experience fear when the trauma survivor is angry or aggressive. As described above, trauma survivors can become angry and aggressive automatically if they feel they are in danger. Trauma survivors may also become angry and aggressive because they are frustrated that they have trauma symptoms, or because they learned to be aggressive as a way to protect themselves in the trauma situation. No matter what the reason for the anger and aggression, it naturally makes family members fearful.

Many trauma symptoms can cause family members to worry. A wife might worry that her traumatized husband who becomes angry and violent at the least provocation will be injured in a fight or get in trouble with the police. A daughter may worry that her mother will make herself ill by drinking heavily as a result of a traumatic event. A man's inability to keep a job because of trauma-related problems may cause his family to worry constantly about money and the future.

Avoidance

Just as trauma survivors are often afraid to address what happened to them, family members are frequently fearful of examining the traumatic event as well. Family members may want to avoid talking about the trauma or trauma-related problems, even with friends. People who have experienced trauma hope that if they don't talk about the problem, it will go away. People also don't wish to talk about the trauma with others because they are afraid that others won't understand or will judge them. Sometimes, if the traumatic event is one associated with shame, such as rape, family members may avoid talking about the event and its effects because of social "rules" that tell us it is inappropriate to talk about such things. Family members may also not discuss the trauma with others because they fear it will bring their loved one more shame.

Family members may avoid the things that the trauma survivor avoids because they want to spare the survivor further pain, or because they are afraid of his or her reaction. For example, the wife of a combat Veteran who is anxious about going out in public may not make plans for family outings or vacations because she is afraid to upset her husband. Though she doesn't know what she can do to "fix" the problem, she does know that if the family goes to a public event, the husband will be anxious and irritable the whole time.

Guilt and Shame

Family members can feel guilt or shame after a traumatic event for a number of reasons. A family member may experience these feelings if he or she feels responsible for the trauma. For instance, a husband whose wife is assaulted may feel guilt or shame because he was unable to protect her from the attack. A wife may feel responsible for her husband's car accident if she thinks she could have prevented it if she had gotten

the car's brakes fixed. A family member may feel guilt and shame if he or she feels responsible for the trauma survivor's happiness or general well-being, but sees no improvement no matter how hard he or she tries to help. Sometimes, after years of trauma-related problems in a family, a family member may learn about PTSD and realize that this is the source of their family problems. The family member may then feel guilty that he or she was unsupportive during the years.

Anger

Anger is a very common problem in families that have survived a trauma. Family members may feel angry about the trauma and its effect on their lives. They may be angry at whoever they believe is responsible for the traumatic event (this includes being angry at God). They can also feel anger toward the trauma survivor. Family members may feel that the survivor should just "forget about it" and get on with life. They may be angry when their loved one continues to "dwell" on the trauma. A wife may be mad because her husband can't keep a job or because he drinks too much or won't go with her to social events or avoids being intimate with her or doesn't take care of the kids. Family members may also feel angry and irritable in response to the anger and irritability the trauma survivor directs at them.

Negative Feelings

Sometimes family members have surprisingly negative feelings about the traumatized family member. They may believe the trauma survivor no longer exhibits the qualities that they loved and admired. A person who was outgoing before a trauma may become withdrawn. A person who was fun-loving and easy-going before a trauma may become ill-tempered. It may be hard to feel good toward a person who seems to have changed in many ways. Family members may also respond negatively to behaviors that develop following a trauma. For instance, family members may be disgusted by a woman's excessive drinking in response to a trauma.

Family members may also have negative feelings about the survivor that are directly related to the traumatic event. For example, a wife may no longer respect her husband if she feels he didn't behave bravely during a traumatic event. A husband whose wife was raped may feel disgusted about what happened and wonder if she could have done something to prevent the assault. A son may feel ashamed that his father didn't fight back when he was beaten during a robbery. Sometimes people have these negative feelings even when they know that their assessment of the situation is unfair.

Drug and Alcohol Abuse

Drug and alcohol abuse can become a problem for the families of trauma survivors. Family members may try to escape from bad feelings by using drugs or drinking. A child or spouse may spend time drinking with friends to avoid having to go home and face an angry parent or spouse. On the other hand, spouses sometimes abuse drugs or alcohol

to keep their loved ones "company" when the survivor is drinking or using drugs to avoid trauma-related feelings.

Sleep Problems

Sleep can become a problem for family members, especially when it is a problem for the trauma survivor. When the trauma survivor stays up late to avoid going to sleep, can't get to sleep, tosses and turns in his or her sleep, or has nightmares, it is difficult for family members to sleep well. Often family members are also unable to sleep well because they are depressed or are worried about the survivor.

Health Problems

Family members of trauma survivors can develop health problems for a number of reasons. Bad habits, such as drinking, smoking, and not exercising may worsen as a result of coping with a loved one's trauma responses. In addition, many illnesses can be caused by trauma-related stress if it goes on for an extended period of time. When family members constantly feel anxious, worried, angry, or depressed, they are more likely to develop stomach problems, bowel problems, headaches, muscle pain, and other health problems.

Resources

Trauma survivors and their families often don't know what to do to care for themselves. Therapists and assistants can encourage survivors and families to learn more about trauma and its effects. Family members of a traumatized person should find out as much as they can about PTSD and get help for themselves, even if their loved one doesn't seek treatment. Family members can encourage the survivor to inquire about education and counseling, but they should not pressure or try to force their loved one to get help. Classes or treatment may also be useful for stress and anger management, addiction, couples communication, or parenting.

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The Anxiety Disorders Association of America (ADAA)

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Post-Traumatic Stress Disorder

Post-Test

1. Which of the following is NOT one of the four symptom clusters included in the diagnostic criteria (DSM-V) for PTSD? (p. 6)
 - A. Intrusion
 - B. Systemic physiologic response
 - C. Negative alteration in cognition and mood
 - D. Alterations in arousal and reactivity
2. Individuals with dissociative subtype of PTSD often experience _____. (p. 6)
 - A. depersonalization and derealization
 - B. psychosis
 - C. body dysmorphia
 - D. decreased suicidality
3. Acute stress disorder (ASD) is a mental disorder that can occur in the first month following a trauma. (p. 9) A. True B. False
4. Which of the following is a risk factor for PTSD? (p. 10-11)
 - A. Young age at the time of trauma
 - B. Family history of psychiatric disorders
 - C. Lack of positive social support
 - D. All of the above
5. It is estimated that _____ of the population experiences PTSD in their lifetime. (p. 13)
 - A. 2%
 - B. 8%
 - C. 13%
 - D. 17%
6. A clinician who suspects that their patient may have PTSD, should screen the patient using the _____. (p. 14)
 - A. Primary Care - PTSD Screen
 - B. Life Events Checklist
 - C. Potential Stressful Events Interview
 - D. Trauma History Screen
7. A screen indicates the patient may have active PTSD symptoms and they are reluctant to participate in mental health treatment. Which of the following is NOT one of the recommended clinician actions? (p. 17)
 - A. Suggest an evaluation rather than a treatment.
 - B. Explain the need for treatment.
 - C. Notify the local authorities about the patient's refusal to seek help.
 - D. Give information about different ways the patient can seek assistance.
8. A positive correlation exists between PTSD and negative effects on health. (p. 22) A. True B. False
9. The prevalence of PTSD is substantially elevated in individuals with chronic pain. (p. 23) A. True B. False
10. People with PTSD are at high risk for suicidal ideation. (p. 24) A. True B. False

11. Which of the following is NOT a recognized psychotherapy for PTSD? (p. 26-28)
- A. Prolonged Exposure Therapy
 - B. Regimented Behavioral Regression
 - C. Stress Inoculation Training
 - D. Eye Movement Desensitization and Reprocessing
12. _____ is defined as involving attention to, and awareness of, the present moment. (p. 29)
- A. Engagement
 - B. Mindfulness
 - C. Rumination
 - D. Musing
13. Which of the following is an FDA approved SSRI medication for the treatment of PTSD? (p. 32)
- A. Paxil
 - B. Effexor
 - C. Klonopin
 - D. Xanax
14. Why is the PTSD criteria for pre-school children different than the adult criteria? (p. 35)
- A. Young children are more sensitive to lower levels of trauma.
 - B. Adults exhibit a different physiological response to trauma than children.
 - C. Young children have immature abstract cognition and verbal expression abilities.
 - D. None of the above.
15. It is common for family members to respond to individuals with PTSD by expressing _____. (p. 35-39)
- A. Sympathy
 - B. Avoidance
 - C. Anger
 - D. All of the above

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