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Trauma-Informed Care in OT: Biological Foundations and Practical Interventions



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Introduction

The prevalence of trauma across the lifespan is significant, and occupational therapists across all practice settings are very likely to interact with clients who have some type of trauma history. Exposure to trauma can impact an individual's ability to participate in various activities in their lives. These include but are not limited to ADLs, IADLs, social participation, health management and maintenance, and leisure participation. This makes it essential for therapists to understand how to properly address trauma, not only for the sake of the patient's safety but also to help patients achieve their goals and reduce harm. While trauma-informed approaches are crucial to holistic occupational therapy treatment, OT providers should have a deeper understanding of how trauma works. This includes awareness of how trauma manifests in the body and the biological foundations that contribute to practical, effective trauma interventions.

Section 1: Trauma Background

References: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18

Trauma is defined as any external event that causes significant distress or fear, leading to difficulty coping. These are the main determining factors for trauma, as this somewhat general definition accommodates the different forms of trauma. In addition, what one person finds traumatic can differ from what another person finds traumatic. Therapists must keep this in mind when identifying and dealing with the effects of trauma. Specific effects may vary based on the type of trauma someone has witnessed or been part of.

Trauma Forms

Someone may experience trauma as a result of bullying in educational or professional settings. Community violence is another form of trauma people may experience at the hands of strangers in public places. Natural disasters can be incredibly traumatic, affecting individuals by displacing them from their homes and communities either temporarily or permanently. Early childhood trauma is characterized by any exposure to trauma during the ages of 0 and 6. Intimate partner violence can take place in many contexts as this form of trauma is deeply embedded within someone's life. Medical trauma involves one-time or multiple medical events that lead to psychological stress, which may result from an acute illness or a chronic condition. Racial discrimination and prejudice can also lead to trauma.

Trauma can also take the form of sexual, financial, emotional, physical, or verbal abuse. Refugees and immigrant populations are exposed to specific traumatic instances, which may be related to war, terrorism, and other forms of violence. Sex trafficking is a form of trauma that comes with its own distinct set of trauma and concerns. Traumatic grief results in strong emotional and physiological responses after the loss of a close loved one. While these are some of the more common forms trauma can take, they are by no means the only way humans experience trauma.

Trauma Classifications

In a clinical sense, there are four types of trauma: acute, chronic, complex, and "little t" traumas. Acute trauma is what someone experiences after a single traumatic incident, such as a bad car accident or a brief but urgent medical event. In the case of chronic trauma, individuals are exposed to prolonged, repeated, and often severe forms of trauma. Some examples of chronic trauma include domestic

violence and military combat. Complex trauma ensues when individuals sustain multiple and often varied traumatic incidents that are highly interpersonal in nature. An example of complex trauma may be abuse from a loved one extending through all of childhood or being held captive and tortured for years.

Lastly, “little t” trauma describes minorly traumatic events that do not meet any of the above criteria, but are still distressing to individuals. “Little t” traumas take the form of common, everyday events that a great deal of people will experience in their lifetime. These can include relocation, unemployment, loss of a loved one, and ending a relationship. On their own, “little t” traumas don’t typically cause clinically significant psychological reactions. However, a combination of these stressors over short or long periods of time can lead to more traditional trauma responses. Some individuals may even develop mental health concerns after a series of “little t” traumas, especially if the events happen close together, the individual is at risk of psychiatric conditions, or they do not properly process the impact these events have had on their lives.

Related Diagnoses and Diagnostic Criteria

There are a range of diagnoses someone may develop after experiencing trauma. The most common is post-traumatic stress disorder (PTSD). PTSD involves the following symptom clusters: **avoidance** (staying away from internal reminders of traumatic events such as memories, feelings, or thoughts as well as external reminders such as places, conversations, and people related to the event), **intrusion** (ongoing, distressing memories of a traumatic event that are not in a person’s control and may take the form of flashbacks or nightmares), **negative shifts in mood and cognition** (unrealistic, negative belief about people, the world, or themselves paired with feelings such as shame, guilt, sadness, and fear), and **changes to reactivity or arousal** (reckless behaviors, difficulty sleeping, impaired

concentration, hypervigilance, an exaggerated startle response, irritability, and anger). To be diagnosed with PTSD, these symptoms must significantly impair an individual's ability to function and last for at least one month.

There are several other trauma/stress-related disorders and other mental health conditions that may result after a traumatic event:

- Acute stress disorder
 - Someone may be diagnosed with acute stress disorder anywhere between 3 days and 1 month after a traumatic event if they meet 9 of 14 specific symptoms. Since this is an acute expression of trauma, it does not include non-fear based symptoms since those are more characteristic of chronic trauma expressions. Derealization and depersonalization are considered symptoms and not subtypes of this condition.
- Adjustment disorder
 - This condition is diagnosed when someone has disproportionate emotional and behavioral reactions within 3 months of a traumatic event. This is a temporary diagnosis, as individuals with true cases of adjustment disorder will no longer meet diagnostic criteria within 6 months of the stressor being terminated. This time frame is what sets adjustment disorder apart from other trauma-related conditions. Symptoms for adjustment disorder are less specific than those of other diagnoses on this list, but fall into three categories: anxiety, depressed mood, and disturbance of conduct.
- Complex post-traumatic stress disorder (C-PTSD)
 - This condition causes many of the same symptoms as standard PTSD with the exception of having more of an effect on interpersonal

function (significant hardship with emotional intimacy), self-concept (deep-seated feelings of defeat, low-worth, guilt, and shame), and affect (drastic emotional reactivity, dissociation, and self-destructiveness).

- Delayed expression post-traumatic stress disorder
 - This condition is diagnosed when someone meets all of the criteria for PTSD, but symptoms do not present themselves until 6 months after a traumatic event (compared to 3 months for traditional PTSD).
- Disinhibited social engagement disorder (DSED)
 - This condition is diagnosed in children who have experienced traumatic events. Symptoms of DSED include demonstrating overly familiar physical or verbal behaviors with individuals they do not know, a lack of connection or reference back to caregivers when in unfamiliar places, and a lack of shyness (leading to willingness to be led away) with unfamiliar adults.
- Dissociative disorders
 - This class includes dissociative identity disorder (DID), dissociative amnesia, and depersonalization/derealization disorder. General diagnostic criteria for these conditions includes disruptions in perception, emotion, bodily representation, identity, memory, consciousness, and/or motor control, which are not due to cultural or religious norms, medical conditions, or substance use.
- Personality disorders
 - These conditions include schizoid personality disorder, antisocial personality disorder, borderline personality disorder, histrionic

personality disorder, schizotypal personality disorder, paranoid personality disorder, narcissistic personality disorder, dependent personality disorder, avoidant personality disorder, and obsessive-compulsive personality disorder.

- While pathology varies quite a bit between these conditions, they all include inflexible, persistently maladaptive traits impacting interpersonal relationships, impulse control, affect, and cognition. Patterns may become established as early as adolescence and remain stable across the lifespan.
- Reactive attachment disorder (RAD)
 - As another trauma-related condition diagnosed in children under the age of 5, RAD develops after a child experiences chronic emotional or social disturbances, persistent emotional withdrawal and inhibition, and has a history of deprivation or other major shifts in care while very young.
- Unspecified trauma and stressor-related disorders
 - These conditions are diagnosed when someone experiences significant occupational impairment and emotional distress despite not meeting criteria for other trauma-related conditions.

Prevalence of Trauma

Over the course of any OTs time working in the field, they are very likely to encounter patients who have endured trauma. This may mean treating individuals who have trauma-related conditions such as PTSD or navigating OT treatment with a patient who has a trauma history in the absence of a diagnosis. Either way,

therapists should understand how often traumatic events occur in order to prepare themselves for properly addressing trauma histories when they arise.

Leading organizations estimate that 70% of people across the globe will experience a traumatic event during the course of their life. Dated research shows that over 30% of these individuals have been exposed to four or more traumatic events during their life. Five common types were named the cause of over half of all traumatic exposures: a life-threatening injury or illness, a life-threatening vehicle accident, witnessing serious injury or death to someone else, unexpectedly losing a loved one, and being mugged.

It is predicted that around 5.6% of those who experience traumatic events subsequently develop PTSD, but many more in this group are likely to struggle with mental health concerns, differing stress responses, maladaptive coping strategies, and more despite not meeting the criteria for this condition. There are no single studies that survey all U.S. individuals about PTSD symptoms, so it is difficult to determine exactly how many people are living with this condition. That being said, researchers estimate 6% of the U.S. population will develop PTSD at some point during their lives. Women are more likely to experience PTSD than men are, due to their increased likelihood of more violent incidents such as sexual assault.

Thankfully, the majority of people who receive PTSD treatment eventually no longer meet diagnostic criteria. This reinforces the importance of recognizing warning signs, screening those at risk of PTSD and other trauma-related conditions, and providing comprehensive treatment for these concerns.

Adverse Childhood Experiences

When preventable events that have the potential to be traumatic affect individuals under the age of 18, they are called adverse childhood experiences (ACEs). There are eight types of ACEs:

- Emotional abuse
- Having a family member or someone else living in your household be incarcerated
- Having parents who are divorced or separated
- Living in a household with members who abuse substances
- Living in a household with members who have mental health concerns
- Physical abuse
- Sexual abuse
- Witnessing intimate partner violence

ACEs must be prevented and dealt with properly in order to properly address trauma and its after-effects. ACEs have been linked to a range of negative health outcomes during childhood and throughout the lifespan. In fact, studies have shown that preventing the occurrence of ACEs can reduce the prevalence of adulthood depression by much as 44%. Other negative outcomes associated with ACEs include:

- Poor academic performance
- Decreased professional achievements

- Increased risk of chronic conditions that can shorten lives by up to 20 years; most notably, diabetes, cancer, asthma, chronic obstructive pulmonary disease, kidney disease, stroke, heart disease, obesity, and depression
- Increased risk of substance misuse
- Greater risk of mental health concerns; those most commonly associated with ACEs include depression, anxiety disorders, suicide, and post-traumatic stress disorder
- Increased likelihood of engaging in risky behaviors, such as early sexual activity and cigarette smoking
- Increased risk of ACEs in offspring

Section 1 Personal Reflection

What is an occupational therapist's role in preventing ACEs while working in pediatric settings? What about adult-focused settings?

Section 1 Key Words

Adverse childhood experiences - Preventable events that affect individuals under the age of 18 and have the potential to be traumatic

Section 2: Neurological Impact of Trauma

References: 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Trauma has a widespread effect on the mind and body, regardless of someone's age. However, there are distinct differences in the way trauma influences developing and mature brains. The human brain continues to develop through the

mid-20s, which means this organ is particularly vulnerable to trauma and other stressors. Traumatic experiences impact several areas and chemicals of the brain:

- Amygdala
 - When individuals experience trauma, this leads to an overactive amygdala. This response occurs in both developing and mature brains.
 - Clinical presentations associated with an overactive amygdala include a heightened fear response and hyperreactivity to both perceived and real threats, increased levels of aggression, difficulty with emotion regulation, and poorer social interactions. This places someone at risk of substance use disorders, depression, anxiety disorders, and PTSD.
- Anterior cingulate cortex
 - Trauma leads to decreased volume of the anterior cingulate cortex in individuals with developing and mature brains.
 - When this part of the brain is smaller, individuals may present with difficulty understanding and responding to social cues (leading to impaired socialization), lack of empathy, emotional instability, decreased motivation for social activities, lower levels of cognitive flexibility, decreased attention, and impaired decision making skills.
- Basal ganglia
 - When children experience trauma, they are likely to develop basal ganglia dysfunction. Adults with PTSD typically experience differential activation of the basal ganglia compared to those who have not experienced trauma.

- These brain changes result in impulsivity and difficulty predicting reward cues, especially related to motivation and learning.
- Cerebellum
 - Young individuals with developing brains see a decrease in functional activity of the cerebellum as a result of trauma. This is particularly true for a section called the vermis. These effects can lead to difficulty with motor control and coordination. Adults who are exposed to trauma may see reduced cerebellar volume.
 - Regardless of whether someone develops PTSD, trauma can lead to cerebellar changes correlated with symptoms of anxiety, depression, and dissociation.
- Cerebral cortex
 - Trauma has also been known to affect various parts of the cortex. In particular, research shows that trauma leads the temporal lobe to shrink. A dated study found that impaired temporal lobe development may lead to psychotic-like symptoms in individuals who have sustained trauma. In some cases, these symptoms resemble those resulting from temporal lobe epilepsy. With any degree of damage to the temporal lobe, individuals may experience difficulty processing speech, regulating their emotions, and forming and retrieving memories.
 - The parietal lobe is another brain area that is known to decrease in size when exposed to trauma. In particular, damage to this area can lead to poor spatial reasoning, language impairments, selective attention delays, and difficulty processing sensory input. This can

potentially be a contributing factor to the hypersensitivity that many individuals with a history of trauma experience.

- Corpus callosum
 - Dated research has shown that, while trauma does not affect the total area of the corpus callosum, individuals with PTSD had significantly smaller posterior midbodies than individuals without this condition. These results were similar across adults and children exposed to trauma.
 - In many cases, this leads to decreased communication between the two sides of the brain. For young children, this can lead to delayed motor skills, impaired problem-solving skills, language impairments, and more.
- Hippocampus
 - In developing brains, trauma leads to a smaller hippocampus. The same decrease in hippocampal volume can be seen in mature individuals who have experienced trauma.
 - It is common for someone with a smaller hippocampus to have difficulty forming new memories, learning new skills, and differentiating between past and present.
- Neurotransmitters and hormones
 - Developing individuals who experience trauma display high levels of a neurotransmitter called glutamate, which is an excitatory chemical. This imbalance can lead to a spike in intrusive memories and flashbacks, which are especially common in PTSD.

- Young individuals with a trauma history also see decreased levels of GABA, which is an inhibitory neurotransmitter. Low levels of this chemical lead to difficulty with fear extinction, increased anxiety, and difficulty regulating states of arousal.
- Trauma leads to fluctuations in dopamine and serotonin levels for all individuals, which can contribute to the development of anxiety and depression. In addition, anyone who has experienced trauma is more likely to possess serotonergic genetic vulnerability, which leads someone to be more susceptible to disruptions in the bodily systems that process serotonin.
- Elevated levels of norepinephrine are common in individuals with PTSD, leading to overactive stress responses.
- During traumatic events, the body releases more catecholamine, leading to an increase in these levels. This neurotransmitter is known to impair more complex cognitive functions such as those in the prefrontal cortex. Catecholamine also strengthens habitual emotion-based responses generated by the basal ganglia and amygdala.
- Cortisol is one hormone affected by trauma. Traumatic events activate the hypothalamic-pituitary-adrenal axis, which triggers the release of cortisol to assist the body in responding to threats. Typically, these levels should subside afterwards to help the body recover. But chronic stress and prolonged trauma lead the hypothalamic-pituitary-adrenal axis to become imbalanced, which may lead someone to have elevated cortisol levels when they should be lower and vice versa. Overly high cortisol levels can lead developing children to experience metabolic syndrome, bone mineral loss, muscle atrophy, suppressed immune function, and learning

difficulties. In fact, consistently high cortisol levels can cause damage to the hippocampus as it develops, leading children to have difficulty forming new memories.

- Prefrontal cortex
 - When children experience trauma, this leads to an underdeveloped prefrontal cortex. Adults who have a history of trauma are likely to experience less activity in this region of the brain due to atrophy. Trauma leads to a spike in neurotransmitters called catecholamines, which reduces how often and how intensely prefrontal cortex neurons fire.
 - Research suggests that alpha-1 receptor blockages and alpha-2A receptor stimulation can possibly serve as protective factors for the prefrontal cortex during times of high stress and for those with PTSD.
 - Individuals with deficits in the prefrontal cortex are more likely to experience poor impulse control, difficulty with decision-making, and emotion dysregulation.

Section 2 Personal Reflection

What modalities might an occupational therapist provide to minimize the effects of trauma on the developing brain of a 5-year-old child?

Section 2 Key Words

Differential activation - When different sections of the same brain area have varying activity levels based on the task someone is engaged in

Fear extinction - The ability for fear to be greatly lessened or eliminated entirely based on repeated exposure to a fear-inducing stimulus

Section 3: Trauma Evaluation and Frames of Reference

References: 32, 33, 34, 35, 36, 37, 38

In order to properly evaluate someone who has experienced trauma, an OT must understand the direct and indirect effects of trauma on occupational performance. Someone with a history of trauma is likely to display the following adverse effects:

Emotional

- Mood swings, often including anger and sadness
- Feelings of hopelessness
- A loss of interest in activities that were once preferred and enjoyed
- Hypervigilance
- An inability self-soothe
- Increased reactivity
- Detachment or numbness from one's feelings
- Difficulty forming healthy attachment with others, which is especially common in developing children who experience trauma
- Poor communication skills, especially when they pertain to emotions and needs

Cognitive

- Difficulty forming new memories
- Inability to recall memories from the time of the traumatic event
- Delayed short-term memory
- Slowed learning abilities
- Shortened attention span
- Impaired concentration
- Limited executive functioning, including problem-solving, decision-making, planning, and organization

Physical

- Increased levels of muscle tension
- An overly activated startle response
- Feelings of unease
- Digestive problems with no known cause
- Sleep disturbances (night terrors, insomnia)
- Headaches
- Chronic pain

Indirectly, these effects can lead someone to develop distorted thought patterns, which impact their world views and self-esteem. Each of the emotional, cognitive, and physical changes someone is likely to experience due to trauma can impair their ability to function. Some of the occupational areas secondarily affected by

trauma include socialization (difficulty forming and maintaining relationships of any kind), work (often due to poor productivity and behavioral concerns), and household management/ADLs (forgetfulness of responsibilities and difficulty staying organized). Individuals with trauma histories may also display avoidance and self-harm behaviors that affect their occupational performance. Someone who chronically demonstrates signs of nervous system activation is at a greater risk of health concerns, including musculoskeletal concerns such as fibromyalgia and migraines, cardiovascular disorders (namely hypertension and arrhythmia), immune system dysfunction, and metabolic conditions such as obesity and diabetes. Therefore, individuals with trauma may need to spend more time on health maintenance to manage these risk factors, address concerns that come up if they are diagnosed with health conditions in these areas, and prevent complications from arising.

Frames of Reference for Trauma-Informed OT Care

Therapists typically utilize several frames of reference (FORs) to adequately address the complex set of needs associated with trauma. Therapists must use their clinical judgment to select the methods that are most appropriate for each patient. Some of the following frames of reference may be helpful for occupational therapists treating patients with a trauma history:

- Cognitive-Behavioral Frame of Reference
 - This approach covers the intersection of thoughts, emotions, behaviors, physiological processes, and the environment. The cognitive-behavioral frame of reference can be used with anyone who demonstrates negative thought patterns that lead them to engage in unhealthy behaviors. Some interventions with a cognitive-

behavioral basis include activity diaries, systematic desensitization, and deep breathing.

- Developmental Frame of Reference
 - Despite the name, trauma-affected individuals of any age can benefit from OT with a developmental basis. This frame of reference operates based on the idea that an individual's behavior is affected by their mastery of earlier developmental skills. According to the developmental FOR, there are six adaptive skill areas: self-identity skills, sexual identity skills, cognitive skills, sensory integration skills, dyadic interaction skills, and group interaction skills. OTs can address these areas by structuring treatment according to developmental milestones their patients may have missed.
- Frame of Reference for Motor Skill Acquisition
 - As we mentioned earlier, young children who experience trauma may display developmental delays in several skill areas. OTs can use the FOR for motor skill acquisition when treating children with motor delays stemming from trauma. This approach requires therapists to look at the child's abilities, the skills and characteristics associated with each motor task, conditions needed for the task, and the environment they are attempting the task in.
- Frame of Reference for Neuro-Developmental Treatment
 - While this may not be a provider's primary approach for trauma treatment, OTs are justified in using the FOR for Neuro-Developmental Treatment with some patients who also have neurological conditions. Individuals may display postural and movement changes among other nervous system issues as a result of

traumatic experiences. This frame of reference allows therapists to address concerns such as range of motion, postural control, weight shifting, mobility, and strength. This approach can be used across the lifespan.

- Psychodynamic Frame of Reference
 - This frame of reference is based on Freudian theories, meaning it uncovers deep-rooted concerns that may be impacting relationships. Supportive treatments are used to strengthen the ego defense mechanism and avoid conflicts. Explorative treatments bring conflicts to the conscious mind and resolve concerns stemming from unexpressed emotions.
- Psychoanalytic Frame of Reference
 - While related to the psychodynamic FOR, the psychoanalytic frame of reference focuses on three interrelated elements to dive into someone's unconscious mind: the therapist, the patient, and the act of doing. Treatment based on this FOR looks at task components such as sensory experiences, choice/play, materials/transformations, and temporal/space-related settings. In other words, psychoanalytic-based OT allows therapists and patients alike to uncover the unconscious aspects of doing things in an effort to address trauma.
- Psychospiritual Frame of Reference
 - This is another frame of reference that focuses on the unconscious mind, but as it intersects with spirituality. Dimensions at the core of this FOR include connectedness, centeredness, being, meaning, becoming, and transcendence. If a patient identifies spirituality as an occupational area they'd like to explore, therapists can provide

treatment with activities such as meditation, affirmations, yoga, chanting, prayer, scriptures, and more.

Trauma-Informed OT Evaluation

The fundamental aspects of a trauma-informed OT evaluation are not all that different from OT evaluations with other populations. Therapists should use a combination of standardized assessments, informal testing, and caregiver/patient interviews to create the plan of care. However, there are best practices therapists should follow to place their patient's needs first, build appropriate rapport, and avoid retraumatizing their patient. These include:

- Creating a sense of safety through clinic settings and interactions
- Using shared experiences to offer peer support
- Making all therapeutic decisions with respect and equity in mind while remembering equity is not one size fits all
- Screening all patients who have a history of traumatic event exposure for mental health concerns
 - If a patient screens positive for these concerns, therapists should follow up with questions about suicidal ideation
- Minimizing power dynamics to offer trustworthiness and transparency
- Empowering individuals by capitalizing on their strengths and lived experiences
- Ensuring your organization and its protocols do not reinforce stereotypes or biases
- Using only validated, evidence-based assessment and screening tools

- Refraining from having patients describe traumatic experiences in detail, especially if this information is already documented
- Focusing the evaluation on a patient's function as it pertains to their trauma history
- Offering supportive resources at the time of evaluation, such as making community referrals, beginning active treatment, or creating interpersonal support systems
- Ensuring the patient is grounded and safe at the time the evaluation ends
 - Therapists can do this by inquiring about the patient's personal safety plan, gauging their conscious awareness of the environment, and asking simple questions such as what the patient is doing after the evaluation ends.

Section 3 Personal Reflection

How might a therapist structure their clinic space to be more accommodating of individuals with trauma-related conditions?

Section 4: Trauma-Informed OT Intervention

References: 40, 41, 42, 43, 44, 45, 46

There is an array of trauma-informed OT interventions appropriate for each age group and practice setting:

Infants/Early Intervention

OTs should place a strong focus on the prevention of trauma-related conditions with children this young. This can be done through parent/caregiver training in some of the following modalities:

- Skin-to-skin contact (kangaroo care)
- Early bonding opportunities
- Collaboration between family members and family advocates
- Shared decision-making between parents

Lynch et al. (2021) looked at the deficits most commonly demonstrated by children between the ages of 0 and 5 who experienced adverse events. These children, who received OT and SLP or mental health services, displayed the greatest need in the area of sensory regulation and developmentally appropriate skills.

School-Aged/School-Based

- Educating all members of the interprofessional team about trauma responses and their impact on learning
- Using Cognitive Behavioral Intervention for Trauma in Schools (CBITS) as a targeted (Tier 2) intervention for students demonstrating trauma concerns
- Implementing Trauma-Focused Cognitive Behavioral Intervention (TF-CBT) as a Tier 3 intervention that brings students, families, and mental health providers in on the treatment process
- Sensory integration techniques

- Soothing and regulating forms of deep pressure (bear hugs, joint compressions, brushing, and body socks), vestibular input (linear swinging, rocking), tactile activities (sensory boxes containing play-doh, sand with small/preferred objects to sort), and active proprioceptive activities (climbing, heavy lifting)

Hockey et al. (2025) looked into trauma-informed and sensory-based practices implemented in school settings. This review found that most interventions were defined or embedded into existing school routines. Most interventions were applied across entire classes or schools, and were primarily sensory-based with less of a focus on trauma. While many of these interventions consisted of activities under OT's scope of practice, occupational therapists were found to have a minimal presence in the implementation process. This suggests this is an area of need for our discipline.

Adults/Community & Inpatient Settings

- Cognitive Processing Therapy (CPT), which is a form of CBT used with individuals who have PTSD
- Eye Movement Desensitization and Reprocessing (EMDR), a specialized modality that uses guided bilateral eye movements help individuals reprocess traumatic events and lessen the amount of distress they may cause
- Somatic therapies
 - Activities that improve body awareness
 - Deep breathing activities
 - Yoga

- Tai chi
- Meditation
- Progressive muscle relaxation
- Narrative exposure therapy (NET), involving written expression of a traumatic experience to make it more coherent and assist with the coping process
- Dialectical Behavior Therapy (DBT)
 - While known as the gold-standard treatment for individuals with Borderline Personality disorder, components of DBT can help any individuals who have experienced trauma.

Han et al. (2021) performed a systematic review that showed most evidence for occupation-based psychotherapy, Cognitive Behavioral Therapy, and Cognitive Processing Therapy for the management of trauma in adults. In addition, most OTs focus on promoting social participation, enhancing quality-of-life, and better managing the effects of trauma symptoms on the lives of adults who display them.

Section 4 Personal Reflection

What are some barriers that may exist for OTs implementing trauma interventions in inpatient settings?

Section 5: Case Study #1

A 51-year-old male is referred to outpatient OT for the treatment of a left wrist fracture and a right humerus fracture. The OT plans to use the Disabilities of the

Arm, Shoulder, and Hand (DASH) to establish the patient's baseline. Once she begins the evaluation, the therapist notices the patient has a heightened startle response and looks over his shoulder multiple times. Shortly after, the OT learns the patient's injuries were sustained during a home invasion. His wife was seriously injured during this same incident and remains in the hospital's intensive care unit. The patient answers all of the therapist's questions (though briefly), but the therapist senses he may be having difficulty adjusting to what happened to him as he alludes to some depressive symptoms. The therapist asks how long ago this incident occurred and the patient replies 4 weeks ago.

1. Does this patient's presentation warrant the diagnosis of a trauma-related condition?
2. Based on how the patient reacted during the evaluation, would he benefit from trauma screening?
 - a. If so, is the OT able to complete this screening as part of the evaluation that is currently underway?
 - b. If not, when can the OT expect this patient's startle response and related concerns to resolve?
3. What can the OT do to make the evaluation process more comfortable for this patient, regardless of what the focus of treatment is?

Section 6: Case Study #1 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. Does this patient's presentation warrant the diagnosis of a trauma-related condition?

Potentially. Based on when the traumatic event occurred, this patient does not meet criteria for a PTSD diagnosis. If his symptoms persisted and/or worsened for the next 4-5 months, the patient may meet criteria. The patient also does not meet criteria for Acute Stress Disorder, as this condition must be diagnosed within the month following a traumatic incident. It is possible that the patient will be diagnosed with Adjustment Disorder, as the event occurred within the past 3 months. However, the patient would need to demonstrate certain emotional, behavioral, and functional symptoms stemming from the trauma in order to receive a diagnosis. The best way to determine this is by having a psychiatrist or psychologist perform a full psychiatric evaluation.

2. Based on how the patient reacted during the evaluation, would he benefit from trauma screening?

Yes, the patient's hypervigilance and heightened startle response indicate he may benefit from a trauma screening.

- a. If so, is the OT able to complete this screening as part of the evaluation that is currently underway?

Yes. Screenings of any kind can be completed on patients without a doctor's order, so the OT can complete the screening at any time they feel the patient may best participate.

3. What can the OT do to make the evaluation process more comfortable for this patient, regardless of what the focus of treatment is?

The OT should ensure all aspects of the evaluation process are clearly explained and avoid asking the patient direct questions about the traumatic

event. Since the patient's wife is still hospitalized, the OT may want to ask the patient if he would like any scheduling accommodations to allow him to visit her and be involved in her care. Whether or not this patient receives psychiatric care related to this traumatic experience, the OT should recommend support groups and other community resources to assist in supporting the patient during this time.

Section 7: Case Study #2

An OT working in early intervention begins treating a 3-month-old child in their new foster home. The child was placed in this home 1 week ago after his parents were arrested for child abuse and neglect. The child has some bruises, but no treatable physical injuries. At his most recent routine doctor's visit, his provider discovered motor and speech delays that led him to make referrals to OT and SLP. Another provider completed the child's OT evaluation, so this OT called the foster mom prior to the first visit to discuss the child's situation, including who is involved in his care.

1. What are ideal suggestions the OT can make in the realm of shared decision-making for this child?
2. What trauma-informed developmental activities might the OT use during treatment? And as part of this child's home exercise program?
3. How might the OT broach the topic of early bonding opportunities to assist with managing potential effects of trauma?

Section 8: Case Study #2 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What are ideal suggestions the OT can make in the realm of shared decision-making for this child?

This depends on whether or not the parents will remain involved in the child's care. If they will be released soon and the child will return to their home, they should be involved in the shared decision-making process. If not, both foster parents as well as the child's care coordinator, social worker, and any other relevant parties should be at the forefront of this process. The OT has a relevant place in these discussions and should offer their clinical insight into the effects of trauma and what care options are available. The OT should also ensure they bring other professionals into the decision-making process as needed to meet the child's unique and evolving needs.

2. What trauma-informed developmental activities might the OT use during treatment? And as part of this child's home exercise program?

The use of soothing music and age-appropriate multi-sensory activities are suitable for this child's treatment and home program. This can involve gentle massage, games such as peek-a-boo, and use of various textures to increase awareness and exploration. Tummy time is pivotal for achieving motor milestones at this age, so the therapist should make this a focus of treatment as well as offer parent education on this topic. The OT can also educate the foster parents about the importance of daily routines for ADLs, leisure, etc., as these help create predictability and safety for the child.

3. How might the OT broach the topic of early bonding opportunities to assist with managing potential effects of trauma?

Many of the above activities can be used as bonding opportunities. The OT can educate parents about the emotional, physical, and behavioral effects of healthy bonding, especially in children who have experienced trauma. This information should be passed on to caregivers, birth parents, and anyone else who will be involved in the child's care.



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