Participants will give the definition of trauma and describe the frequency of trauma/developmental trauma in pediatrics.

Participants will understand and learn strategies to become trauma-informed and address symptoms of trauma in their clients.

Participants will utilize emotional regulation strategies for self-regulation and sensory modulation in their clients.

Participants will describe how to set goals and maintain an environment that addresses traumatic stress, staff resilience, and minimizes further stress.

**Foundational Terms**

**Triggers**
Signals that act as signs of possible danger, based on historical traumatic experiences and which lead to a set of emotional, physiological, and behavioral responses that arise in the service of survival and safety (e.g., sights, sounds, smells, touch).

Triggers are all about one’s perceptions experienced as reality. The mind/body connection sets in motion a fight, flight, or freeze response. A triggered individual experiences fear, panic, upset, and agitation.

**Trauma**
An event, series of events, trigger(s), experience, or prolonged experience that is threatening or perceived to be threatening to a person.
Foundational Terms

Trauma-Informed Care

A framework of thinking and interventions that are directed by a thorough understanding of the profound neurological, biological, psychological, and social effects trauma has on an individual—recognizing that person’s constant interdependent needs for safety, connections, and ways to manage emotions/impulses.

Trauma-Informed Lens

We see the world through our own lens.

*We do not see things as they are, we see things as we are.* —Anais Nin
Please watch the first 5 minutes of the Dr. Nadine Burke Harris video [https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime](https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime).

*If you have time, I highly recommend viewing the entire video. It's only about 15 minutes in length.

**ACES Study**

- The CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) Study is one of the largest investigations of childhood abuse and neglect and later life health and well-being.

- The original ACE Study was conducted at Kaiser Permanente from 1995 to 1997 with two waves of data collection. Over 17,000 Health Maintenance Organization members from Southern California receiving physical exams completed confidential surveys regarding their childhood experiences and current health status and behaviors.

- The CDC continues ongoing surveillance of ACEs by assessing the medical status of the study participants via periodic updates of morbidity and mortality data.
Take time to complete the ACEs Study. It's available for FREE here: https://www.cdc.gov/violenceprevention/acestudy/index.html

Includes responses to:
- Abuse
- Natural disasters
- Bullying
- Violence
- Sexual abuse
- Serious accidents
- Repeat hospitalizations
- Living with a terminally ill person
- Burns
- Boating and/or car accidents
- Abandonment
- Victim is often ‘changed’ forever

Write to ask for permission from the creator of most graphics. They will permit you to use them in your presentation upon request.

https://www.cdc.gov/violenceprevention/childabuseandneglect/datasources.html
Neuroscience of trauma

Traumatic Stress by van der Kolk, McFarlane, and Weisaeth in 1996

- New memories are formed or dissociation is established
- Memories are stored as sensory fragments without linguistic components
- Intrusive sensations occur
- Try to construct a narrative
- Emotional and perceptual memories more intense through traumatic incidences
- Steeke (2003) described that often memory can not be linked to linguistics (no words to describe it).
- May be easier to communicate through images, senses, activities

The Body Remembers by Rothschild (2000)

- Sensations stored in the body
- Not just cognitive memories but sensory ones
- Can be activated when a sensation is similar

Bruce Perry (2006)

NMT

- Neurosequential Model of Therapeutics
- Not a specific treatment, but a way of organizing intake, strengths, interventions, and caregiver participation

Peter Levine

- Somatic Experiencing (SE)
- Trauma is a fact of life but so is resilience
- Trauma can occur in everyday life
  - Divorce
  - Stress
  - Falls
  - Accidents
- Results in phobias, anxiety, hyperactivity, behavioral problems
- Trauma is physiological
- Stress wears us down
- We feel helpless
Developmental trauma disorder (DTD)

- Traumatic events have most pervasive and huge effect within first 10 years of life.
- Exposure: multiple chronic ones (abandonment, shaming, rage, abuse, threats)
- Repeated Dysregulation: affective functioning, somatic (motor, medical, physiological)
  - Behavioral (reenactment)
  - Cognition (confusion, dissociation, repetitive thoughts)
- Persistently altered attributions and expectancies
  - Loss of safety, social injustice, negative self-view
- Functional impairment
  - Family, social, vocational, school, self-care

What Trauma Is:

<table>
<thead>
<tr>
<th>It should have been me</th>
<th>I could have done something to stop this</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am stupid, worthless, etc</td>
<td>May want to hurt self or others</td>
</tr>
<tr>
<td>Pain related to terror</td>
<td>Terror responses</td>
</tr>
<tr>
<td>Overwhelming sense of being powerless</td>
<td>May be kept secret</td>
</tr>
<tr>
<td>Anger can turn into assaulitive nature</td>
<td>It was my fault</td>
</tr>
</tbody>
</table>
**Ultimate Goals of Trauma-Informed Care**

1. Understand trauma and the impact it has on individuals
2. Maintain integrative/holistic care for healing
3. Promoting a safe setting (predictability, consistent, respectful)
4. Cultural competence (culture influences perception and responses)
5. Sharing (equal power among all)
6. Relationship building
7. Recovery is entirely possible for everyone

**How of Trauma-Informed Care**

- Restore sense of safety
- Trauma-informed assessment with neurosequential development and sensory-based trauma
- Address RIGHT hemisphere of the brain
- Positive attachment development
- Work on interpersonal skills
- Create safe environment (controlled, safe, all are empowered)
- Maintain cultural sensitivity
- Therapy in some form
- Team approach to build community
- Empower children and their families to actively participate

**De-escalation form**

from Crisis Prevention Institute (CPI)

www.crisisprevention.com
TAP (Trauma Assessment Pathway)

Chadwick Center for Children and Families (Rady Children’s Hospital in San Diego)
Taylor, Gilbert, Ryan, Mann (2005).

• Children ages 2-18 years old
• Individualized **client is a unique individual
• Strategies to organize information: trauma history, symptom presentation, relevant contextual history, developmental history
• Has a treatment component
• Overall helps to be comprehensive and guides treatment

CTAC (Child Trauma Assessment Center)

Comprehensive Transdisciplinary Trauma Assessment Model
Southwest Michigan Children’s Trauma Assessment Center (CTAC) (2000)

• Brain-based framework
• 5 disciplines: Medicine, social work, speech-language pathology, OT, psychology
• 5 domains: physical/medical, developmental, social/family, emotional/behavioral, trauma
• Referral (mostly comes from child welfare caseworker)
• **Diagnosis is secondary to child-centered care

CTAC Assessment Protocols

• Physical exam
• Sensory profile
• ADHD rating scale
• Psychosocial interview
• Draw-A-Person
• Vineland Adaptive Behavior Scales
• Preschool Development Profile (PDP)
• Child behavior sexual inventory
• Child behavior checklist
• Story retelling/regeneration
• Trauma Symptom Checklist for Children (TSCC)
Consider:

-A child enters your therapy area with ‘baggage’ brought from their experiences
  • Cumulative experiences from birth
  • Experiences of the day
  • We cannot change their mindset, only work with them to support their CURRENT state.
  • We have control over how WE RESPOND to them

Self-care is primary to caring for others.

Treatments

Art therapy
Body scanning
Family genogram
Play therapy
Body schema
Draw a story
Stress Management

- Be proactive.
- Be attuned.
- Be responsive.

- They are in survival mode.
- It is our job to help tame the child’s fear receptor.
- When a child begins to “act out,” we must first focus on regulation.

Change the way you see the child....

Regulation Strategies

There are several critical components in determining an effective regulation strategy:

- The strategy must be familiar (pre-taught).
- The strategy must address the child’s underlying need(s).
- The strategy must match the intensity of the child’s feelings.
- The strategy must be appropriate to the situation/environment.
- The strategy must be agreed upon by the child.
How do calming strategies work?

- Bilateral stimulation (crossing the midline of your body)
- Gentle touches (i.e., tapping) "Right here, right now - I am safe."
- Intentional thinking
- Controlled movements
- Intentional smiling is proven to change our brain chemistry and improve mood.
- Deep breathing can calm the brain and the body.

Right Brain Vs. Left Brain

Our job is to:

- Regulate our own self BEFORE we help our students
- Remember that the child's reaction is because of a response to fear not a response to you
- Look for and use teachable moments
- Consider the function of behavior
- Shift mindset from using words such as, "Victim" and "Damaged" to "Survivor"
We all crave predictability:

- Consistency is comfortable as humans are creatures of habit
- Allow choices
- Understand what 'de-escalation strategies' work best for your client

https://www.crisisprevention.com/CPIMedia/Media/download/PDF_TICRG.pdf

Selecting Triggers for Staff

Choose THREE Triggers

- Keep track of how many times "your buttons are pushed."
- Make a conscious effort when you encounter one of your triggers to follow the notice, name, validate, and respond strategy.
- Pay careful attention to how the student responds to this model.

PAUSE...what are you feeling?

"I Calm"
Breathing...notice nonverbal cues

"I Feel"
Name feeling...I statements

"I Choose"
Reframing...to a positive solution

"I Solve"
Problem solve...win/win solution
Self-Regulation is Complex

- Development
- Environment
- Practice

- Human relationships make the biggest changes

What is the Vagus Nerve?

- Longest of all cranial nerves
- CN X

- Long meandering bundle of motor and sensory fibers that links the brain stem to the heart, lungs, and gut.
- It also branches out to touch and interact with the liver, spleen, gallbladder, ureter, female fertility organs, neck, ears, tongue, and kidneys.

https://upliftconnect.com/12-ways-unlock-powers-vagus-nerve/
**The Vagus Nerve**

- Gut bacteria to have beneficial effect on mood and anxiety
- Vagal tone
- Maintenance of homeostasis
- Link between nutrition and psychiatric, neurological and inflammatory diseases.

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**How Does It All Connect?**

“A deeper understanding of ourselves, leads to a deeper understanding of our students.”

“Self-regulation is the foundational component to emotional wellbeing and lifelong success.”

- Becky A. Baily, Conscious Discipline

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**AOTA, 2015**

**WHAT IS TRAUMA-INFORMED CARE (TIC)?**

According to the National Child Traumatic Stress Network (n.d.), a trauma-informed care perspective is one in which program staff, agency staff, and service providers (1) routinely screen for trauma exposure and related symptoms; (2) use culturally appropriate evidence-based assessment and treatment; (3) make resources available to children, families, and providers on trauma exposure, its impact, and treatment; (4) engage in efforts to strengthen the resilience and protective factors of children and families impacted by and vulnerable to trauma; (5) address parent and caregiver trauma and its impact on the family system; (6) emphasize continuity of care and collaboration across systems; and (7) maintain an environment of care for staff that addresses, minimizes, and treats secondary traumatic stress, and that increases staff resilience.
SMART (Sensory, Motor, Arousal, Regulation, Treatment)

- Designed to explore and expand the repertoire of regulating experiences for children and their caregivers
- Nurture healing and growth
- Regulation of emotional, behavioral and interpersonal life is exceedingly difficult
- They find it difficult to live peacefully with their families, to make friends, and to learn in school

SMART

- Add play and expression
- Caregivers can learn these strategies
- Mental health team draws on expertise from the worlds of trauma-focused psychotherapy, sensorimotor psychotherapy, sensory integration, play therapy, attachment and family therapy, developmental psychology and human development.
- Utilizes sensory rooms

OT is perfect fit!

Occupation is the ‘job of living’.

Children learn through playing:
- Cause and Effect
- Natural Consequences
- Fine and Gross Motor Skills
- Sensory Development

EVERY Person Wants to Succeed!
School and the Environment

- Set up for children who think logically
- Have a natural love of learning
- Have the ability to self-regulate and focus/attend
- Children with trauma may struggle!

What WE do........

- We label
- We reprimand
- We compare to peers
- We refer them to someone else
- We remove them (suspension)
- We suggest ADHD/ADD, sensory problems
- Distance and SHUN them!

What if children feel unloveable?

- There are many emotions commonly associated with trauma
  - Worthless
  - Helpless
  - Powerless
  - Forgotten
  - Hopeless
  - Unlovable
  - Do not feel safe
  - Does not have caring adults
  - Does not experience unconditional love
  - No environmental support
**Difference Illustration**

<table>
<thead>
<tr>
<th>Annalise</th>
<th>Jennifer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Using emotions and limbic system</td>
<td>• Uses rationalization and cortex</td>
</tr>
<tr>
<td>• Survival mode</td>
<td>• Regulated and in control</td>
</tr>
<tr>
<td>• Impulsive, upset, angry, irritable</td>
<td>• Rational thoughts</td>
</tr>
<tr>
<td>• Cognitive deficits</td>
<td>• Organized and self-aware</td>
</tr>
<tr>
<td>• Attention/focus problems</td>
<td>• Uses both halves of the brain</td>
</tr>
<tr>
<td>• Irrational thoughts</td>
<td>• Creative</td>
</tr>
<tr>
<td>• Thinks about Annalise and only Annalise</td>
<td>• Problem-solver</td>
</tr>
<tr>
<td></td>
<td>• Empathy and caring</td>
</tr>
</tbody>
</table>

**Mixed Messages**

<table>
<thead>
<tr>
<th>Message from Outside</th>
<th>Internalized Message</th>
<th>Change To</th>
</tr>
</thead>
<tbody>
<tr>
<td>You’re making me angry</td>
<td>I am bad.</td>
<td></td>
</tr>
<tr>
<td>How many times do I have to say that?</td>
<td>I can’t change, so why try?</td>
<td></td>
</tr>
<tr>
<td>You should have done better</td>
<td>I am not good enough</td>
<td></td>
</tr>
<tr>
<td>You are in trouble</td>
<td>Me against you, I’ll fight you!</td>
<td></td>
</tr>
<tr>
<td>If you would just listen</td>
<td>I’m stupid and a bad listener</td>
<td></td>
</tr>
<tr>
<td>From what I hear, this is normal for someone like you</td>
<td>No one believes in me so I’ll do what they expect. Why try?</td>
<td></td>
</tr>
</tbody>
</table>

**Higher Abstract**

Concrete Thought
Affiliation
Attachment
Sexual Behavior
Emotional
Reactivity Motor
Regulation
Arousal
Appetite/Satiety
Sleep
Blood Pressure
Heart Rate
Vicious Cycle

- Trauma causes gaps in cognition
- For example: student is 'street smart' but cannot function in classroom
- Falls apart and continues on downward spiral.
- Vulnerable
- Fearful
- Out of control
- Confused by non-verbal communication
- Decreased eye contact
- Poor problem-solving abilities
- Cannot make friends
- Cannot maintain healthy relationships

Alertness Zone (Regulation)

For optimal function and completing daily tasks and to form adaptive responses, children need to be at 'optimal' alertness. Throughout the day everybody fluctuates in and out of this 'optimal alertness zone'. However, a child with sensory integration dysfunction tends to spend the majority of their day either above or below this optimal zone.

Upstairs vs Downstairs Brain
Specific Considerations with Trauma

- ‘The hippocampus may be smaller (van der Kolk 2003).’
- Even when NOT in danger, the brain may react or think it’s in danger.
Receptors internally that detect INTERNAL responses
Organs, muscles, skin, bones, smooth muscle
Toileting, sexual drive, hunger, thirst, fatigue, heart rate, deep breathing
May significantly affect our external responses
Chemically controlled
Basic brainstem functions
Higher level functions and emotions
**Interoception**

- Intuition
- Perspective-Taking
- Self-Awareness
- Mindfulness

We feel nervous prior to reading aloud in class and our body responds:
- Teach children to ‘control’ their internal body such as breathing, relaxation, visualization.

---

**Allows us to ‘feel’ our skin & body**

*SUBJECTIVE*

---

**Body Mapping**

---
✓ Extreme effort required
to screen out background
noise and visual
distractions

✓ Needs frequent breaks
to prevent sensory
overload

✓ Focuses on one thing at
a time/perseveration

✓ Body awareness and
boundary difficulties

---

Traumatization occurs when internal and external resources are inadequate for coping.

<table>
<thead>
<tr>
<th>Type</th>
<th>Acute Trauma (Type I)</th>
<th>Complex Trauma (Type II)</th>
<th>Crossover Trauma (Type III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
<td>Single overwhelming event</td>
<td>Extended exposure to traumatizing situations</td>
<td>A single traumatic event that is devastating enough to have long-lasting effects</td>
</tr>
<tr>
<td>Characteristics</td>
<td>Detailed memories, dreams, hypervigilance, startle responses, dissociation, rage, social withdrawal, sense of foreshortened future</td>
<td>Psychological numbness, dissociation, panic, changes in concentration problems, hormonal imbalances</td>
<td>Perpetual insomnia, chronic pain, concentration problems, sleep disturbances, irritability</td>
</tr>
</tbody>
</table>

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WHETHER YOU THINK YOU CAN, OR THINK YOU CAN’T EITHER WAY YOU ARE RIGHT.

-Henry Ford

---

Acute Trauma (Type I)
Complex Trauma (Type II)
Crossover Trauma (Type III)
Also known as compassion fatigue, vicarious/secondary trauma is a process through which one’s own experience becomes transformed through engagement with an individual’s trauma. That is, trauma may not only impact the individual who experienced it. It can also impact those around them, including you as the staff member.

<table>
<thead>
<tr>
<th>Vicarious/Secondary Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs</td>
</tr>
<tr>
<td>Reduced sense of efficacy at work</td>
</tr>
<tr>
<td>Concentration &amp; focus problems</td>
</tr>
<tr>
<td>Isolation &amp; withdrawal</td>
</tr>
<tr>
<td>Exhaustion</td>
</tr>
<tr>
<td>Secretive addictions &amp; self-medicating</td>
</tr>
<tr>
<td>Jaded, bitter, pessimistic</td>
</tr>
<tr>
<td>Apathy and emotional numbness</td>
</tr>
<tr>
<td>Risk Factors</td>
</tr>
<tr>
<td>Being new to your field</td>
</tr>
<tr>
<td>Having a history of personal trauma or burnout</td>
</tr>
<tr>
<td>Working long hours</td>
</tr>
<tr>
<td>Having large caseloads</td>
</tr>
<tr>
<td>Having inadequate support systems</td>
</tr>
</tbody>
</table>

Physical Signs of STRESS in children:
- Stomach and headaches
- Sleeping issues
- Anger or aggression toward others
- Dilated pupils
- Sweating
- Flushing of cheeks
- Wide “deer in headlights” eyes

Possible Responses
- **Fight**
  - Tense, Jaw Clenched
  - Anger, Rage
- **Flight**
  - Conflict Avoidant
  - Fear, Anxiety
  - Run away from stimulus/situation
- **Freeze**
  - Over-compliance
  - Shut Down
  - ‘Checking out’ of situation
Severe Hypo-arousal

Jon Krakauer published a book called Missoula: Rape and the Justice System in a College Town in 2015. In it, he wrote about several women that were sexually assaulted while attending the University of Montana.

Described as tonic immobility in the animal world

Playing possum

Nine-Step Method

1) Create safety
2) Accept sensations
3) Pendulation (feel worse because they’ve avoided sensations for a time)
4) Titration (moving through one small step at a time)
5) Fear-potentiated immobility (separate fear from immobility)
6) Move back into calm state
7) Self-regulation
8) Re-orient to the here and now

ATTAcH

Conceived over 50 years ago by John Bowlby and scientifically validated by developmental psychologist, Mary G. Ainsworth

Negative experiences hold more weight

Attunement: is the process of being aware of your own inner experience while being able to notice and connect with the inner experience of the person in front of you.
According to Lyons-Ruth, a developmental psychologist and Professor of Psychology at Harvard Medical School, “the attachment system is a psychological version of the immune system.” It combats and reduces stress much like the immune system is the biological structure for fighting physical disease. She and her colleagues have used standard coding measures to analyze the interactions between parent and infant in the first months of life. They identify a type of emotion communication between parent and child called “disorganized attachment.”

From PsychologyToday.com

Abandonment, post-partum depression, lack of familial resources

Ainsworth’s ‘Strange Situation’ Experiment

Mary Ainsworth

Watch video here: https://www.simplypsychology.org/mary-ainsworth.html

Determined four types of attachments:

1) Secure = infant easily soothed and able to have needs met by ‘attachment figure’ (we will use mother)
2) Insecure avoidant: mother does not respond to child in times of distress.
   Not enough confidence or response is inadequate for infant's needs
   May see child as 'acting out' 'uncontrollable' 'unmanageable'

   They are very independent of the attachment figure both physically and emotionally (Behrens, Hesse, & Main, 2007).

3) Resistant or Ambivalent: mother is inconsistent in responding to child's needs. Child may feel they cannot trust the caregiver.

4) Disorganized (Anxious) attachment: mother openly rejects child in times of distress. Mothers often experienced abuse or trauma. Role-confused behaviors between mother and child.

In 1986, researchers Main and Solomon added a fourth attachment style.
Empower!

- Give kids a chance to be heard
- Express feelings and emotions
- Affirm
- Acknowledge
- Replace with a positive

Looks like you're having a hard time.
You are safe.
I believe in you, no matter what.
You are not alone!
You have a voice when you're with me.

Strategies:

- Love = offering without requirements of receiving
- Hold space
- Validate when you can
- Make it safe
- Do not take it personally!
- Give time and patience
- Calm
- Leave notes on desk
- Empathize

LISTEN!
Mindfulness and Critical Importance of Breathing

Use techniques to support children’s self-regulation. Introducing breathing and other centering activities, such as mindfulness, helps children self-regulate (Perry & Szalavitz 2006).

Starting off each day with a special breathing ritual gives them the strategy they need to pay attention and to modify their breaths when they are stressed.

Organized Group Activity

Transitions from place to place
Music, rhythm, beat
Metronome
Lower lighting
Desk/chair organizers
Playground parachute
Walking slowly on taped line
SLOW & Controlled movement

Mastery of flexibility and frustration tolerance are crucial to a child’s overall development because interacting adaptively with the world requires the continual ability to solve problems, work out disagreements, and control the emotions one experiences when frustrated.
8 Senses to Calm

Return to Flexion, Linear Swinging, Vestibular

Music

Smells (vanilla, lavender)

Use crunchy snacks, dehydrated fruit, jerky

Lower lighting/floor lamps

Decrease Environmental Stimulus

Proprioceptive Input: PUSH, PULL, LIFT, CARRY
References


Web Resources & Clip Art Credit

YouTube TED Talk on Trauma: https://youtu.be/95ovIJ3dsNk
Bruce D. Perry, M.D., Ph.D. www.ChildTrauma.org Body Temperature
http://serendip.brynmawr.edu/jbb/kinesiStructures.html