Relational Care and Helping Children Heal from Trauma

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Disclosures

I do not have any relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provide commercial services discussed in this CME activity. I do receive annual royalties for two chapters in UptoDate and for my role as co-author of a textbook, Childhood Trauma & Resilience, published by the AAP.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in our presentation.
Learning Objectives

• Recognize the effects of trauma and how it hijacks typical brain development

• Understand the importance of relationships in healing and resilience after trauma

• Establish a partnering relationship with parents so their safe, stable, nurturing caregiving can promote child resilience

• Adopt a few strategies to promote resilience of children with trauma histories
Why is Trauma-informed Care Important?

• High prevalence: 48-90% of children in US

• Cumulative childhood adversities alter our biology, and can negatively affect our lifelong health

• Something we can (and should) do about it as pediatricians

• Evidence-informed: derived from research in other fields
  • Attachment
  • Parenting
  • Resilience
  • Brain development (neuroscience)
  • Epigenetics
  • Evidence-based, Trauma-informed Mental Health Care
• Children entering foster care
  – High prevalence of abuse and neglect, and of developmental, mental health, behavioral, academic and physical health problems

• Mental, behavioral health (80% of children > 5 y screen +)
  – Multiple diagnoses: ADHD, ODD, Bipolar Disorder, Conduct Disorder, Adjustment Disorder, etc.
  – Psychotropic medications, sometimes multiple

• High rates of developmental problems (60% of children < 5 y screen +)

• Improvements, sometimes dramatic, especially younger children and sometimes teens
The Adverse Childhood Experiences (ACE) Study

Robert Wood Johnson Foundation, 2013

From The Adverse Childhood Experiences Study.
http://www.acestudy.org/ace_score, 2015
Findings from Original ACE Study

• Nearly 2/3’s of a relatively low risk population from Kaiser Health recalled at least one childhood adversity
• 12.5% recalled 4 or more
Early Adversity Can Have Lasting Impacts

Outcomes are dose-dependent

www.CDC.gov
Other ACEs

Negative Effects on Children and Teens

- Racism or felt discrimination
- Being bullied (physically/emotionally)
- Family disruption (unexpected; immigration; foster care)
- Dire poverty
- Significant community violence
- Migration, especially forced
- Foster care

“What happens in childhood doesn’t stay in childhood.”
~Andy Garner, MD
Neurohormonal Stress Response

Taxonomy of Stress

**POSITIVE**
Brief increases in heart rate, mild elevations in stress hormone levels.

**TOLERABLE**
Serious, temporary stress responses, buffered by supportive relationships.

**TOXIC**
Prolonged activation of stress response systems in the absence of protective relationships.

https://developingchild.harvard.edu/science/key-concepts/toxic-stress/
Toxic stress can potentially change outcomes through 6 mechanisms:

**Epigenetics**
- Telomere shortening

**Neurobiology**
- Neurohormonal Stress Response Systems

**Immunology**
- Microbiome
Trauma Affects Gene Expression: Children adapt to the dangerous world they live in

• Epigenetics is the science of gene expression.

• Research: trauma activates the neurohormonal stress responses that determine which genes are turned on or off.

• Specific genes can be turned on or off for a short time or forever, depending on the gene. Some of these changes can also be passed down the generations.

• Changes in gene expression are how we adapt to the environment we live in—a child who lives in a dangerous environment is going to have a different pattern of gene expression than they would in a nurturing environment.
Toxic stress can potentially change outcomes through 6 mechanisms:

- Neurobiology
- Immunology
- Epigenetics
Architecture of the Brain

**Amygdala**
Lower Brain
Alarm system
Emotional memory

**Hippocampus**
Midbrain
Memory & learning
Search engine, file cabinet

**Prefrontal cortex**
Regulation of impulses, attention, emotions
Working memory
Cognitive flexibility
Developmental Trauma Disorder

Trauma in early childhood, without buffering, impacts development of competencies that are dependent on that buffering.

Social-Emotional

Cognitive

Language Development

Gross Motor
What trauma looks like in children...

Developmental Trauma Disorder
Oxytocin: Favors Affiliate Response

Garner, A and Saul B.. Thinking Developmentally, AAP Press, 2018
What Happens When No or Negative Social Response?

Social context
- Safe/positive: Can better identify safe and unsafe social context
- Unsafe/negative: Anti-social or defensive thoughts and actions to protect self

Prosocial thoughts and action facilitate support from others
Adaptive stress responses

Distress responses

Affiliate Response Meets Negative Cues

Garner, A and Saul B.. Thinking Developmentally, AAP Press, 2018
But, the presence of a nurturing caregiver = SAFETY
Oxytocin Promotes Focusing Your Attention

Social context
- safe/positive
- Can better identify safe and unsafe social context
- Prosocial thoughts and action facilitate support from others
- Adaptive stress responses

Resilience

Definition (courtesy of Anne Masten, PhD)

*Dynamic* process of *positive adaptation* to or in spite of significant adversities;

- Dynamic: dependent upon interaction of our genes with our environment
- Developmental: occurs over time

Resilience Promotion: Ordinary Magic

For children, the pathways to resilience develop in the give and take of safe, stable and nurturing relationships that are continuous over time (attachment).


Genes x environment x time = Outcomes
Resilience Promotion: Ordinary Magic

And it develops in the growth that occurs through play, exploration and exposure to a variety of normal activities and resource
Newer Conceptualization of Resilience: The Biology of Resilience Development

- Oxytocin: the affiliate hormone

- Affiliate structures and pathways of the brain—extend from the amygdala to the prefrontal cortex

- Biobehavioral synchrony between caregiver and child
THREADS: The 7 Personal Resiliency Factors

- Thinking and learning brain
- Hope, optimism, faith
- Regulation or self-control
- Efficacy (self-efficacy)
- Attachment: secure
- Developmental skill mastery
- Social connectedness
The remarkable power of the ordinary in human development
# Safe, Stable, Nurturing Caregiver

<table>
<thead>
<tr>
<th>Provides Vital Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protection and Safety</strong></td>
</tr>
<tr>
<td>secure base to safely explore the world and relationships</td>
</tr>
<tr>
<td><strong>Sense of Self</strong></td>
</tr>
<tr>
<td>see self interpreted and reflected by attachment figure</td>
</tr>
<tr>
<td><strong>Self in Relation to Others</strong></td>
</tr>
<tr>
<td>foundation of social learning, understanding ourselves as a person in relation with others</td>
</tr>
<tr>
<td><strong>Developmental Mastery</strong></td>
</tr>
<tr>
<td>of age-salient developmental tasks</td>
</tr>
<tr>
<td><strong>Self-efficacy</strong></td>
</tr>
<tr>
<td>sense of control over our environments and future</td>
</tr>
</tbody>
</table>
# Safe, Stable, Nurturing Caregiver

<table>
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<th>Provides Context</th>
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<tr>
<td><strong>Emotional Regulation</strong></td>
</tr>
<tr>
<td><strong>Executive Function</strong></td>
</tr>
</tbody>
</table>

Cumulative Adversity: Different Outcomes

Ref. 1,2,3
Childhood adversity is not destiny...
This Changes Everything!!
Trauma-informed care is defined by the National Child Traumatic Stress Network as health care in which all parties involved assess, recognize, and respond to the effects of traumatic experiences on children, caregivers, and healthcare providers.
What is Trauma-informed Care?

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What is wrong with you?
What is Trauma-informed Care?

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What is wrong with you?

What happened to you?
What is Trauma-informed Care?

Trauma-informed care is defined by the National Child Traumatic Stress Network as medical care in which all parties involved recognize, assess and respond to the effects of traumatic experiences on children, caregivers, and healthcare providers.

What is wrong with you?
What happened to you?
What is strong with you?
Trauma-Informed Care: American Academy of Pediatrics

- Universal approach to care
- Relational care (affiliate network)
  - Resilience promoting
  - Trauma aware and responsive
  - Culturally humble
  - Anti-racist

By its nature: Asks us to reflect on our own biases, implicit and explicit, and to be aware of how they affect our interactions with families and children. TIC requires us to seek and understand the perspectives of others.

Garner & Yoghman. Toxic Stress PS. 2021; NCTSN TIC is Anti-Racist
3 Core Principles of Development

- Support Responsive Relationships
- Reduce Stressors
- Strengthen Core Skills

Ref: Harvard Center for the Developing Child
Engagement & trust require safety

Empathy provides safety
Engagement

• Greeting
• Asking caregiver (or older child/teen) to share concerns
• Be present
• Open-ended questions (MI)
• Attuned, attentive listening
• Reflect back what hear
• Partnering
  • Ask for their ideas
  • Suggest ideas but adjust
3 Core Principles of Development

- Support Responsive Relationships
- Strengthen Core Skills
- Reduce Stressors

Ref: Harvard Center for the Developing Child
“Getting to know you...getting to know all about you”

- Tell me about your family.
- Are you raising your child(ren) the same way you were raised?
- Help me understand what is important to you about parenting or raising children?
- What do you find rewarding or stressful about parenting?
- Are you & your partner/supports on the same page?
- Has anything bad or scary happened to you or your child ever/since I last saw you?

“Assume the parent and child are doing the best they can.”
~Ross Greene, PhD
The THREADS of Resilience are FRAYED by Excessive Stress from Adversity or Trauma

You are at the end of your rope:

- Frets and Fear
- Regulation difficulties
- Attachment relationship concerns
- Yelling and yawning
- Educational and developmental delays
- Defeated/dissociation/depressed
Screening (validated)

- Maternal Depression Inventory
- Developmental Screens
  - SWYC (Free)
  - Ages & Stages (Proprietary)
- Mental and Behavioral Health Screens
  - Pediatric Symptom Checklist
  - Strengths and Difficulties Questionnaire
  - Depression
  - Anxiety (SCARED)
  - Suicidality
- Traumatic Stress Symptoms
  - PTSST

“If you hear symptoms, think trauma. If you hear trauma, think symptoms.”
~ Heather Forkey, MD
Pediatric Traumatic Stress Screening Tool

- Brief
- Validated in Primary Care
- Has predictive value
  - Cut-off scores
- Available online, free
- 6-18 yrs
  - Parent report 6-18 yrs
  - Self-report 11+ years
- English and Spanish
- Implementation strategy

https://intermountainhealthcare.org/ckr-ext/Dcmnt?ncid=529796906

_Pediatric Traumatic Stress Screening Tool_
_6–10 years of age_

Sometimes violent or very scary or upsetting things happen. This could be something that happened to your child or something your child saw. It can include being badly hurt, someone doing something harmful to your child or someone else, or a serious accident or serious illness.

Has something like this happened to your child recently? □ Yes □ No
If ‘Yes,’ what happened? _______________

Has something like this happened to your child in the past? □ Yes □ No
If ‘Yes,’ what happened? _______________

Select how often your child had the problem below in the past month. Use the calendars on the right to help you decide how often.

<table>
<thead>
<tr>
<th>How much of the time during the past month...</th>
<th>None</th>
<th>Little</th>
<th>Some</th>
<th>Much</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My child has bad dreams about what happened or other bad dreams.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. My child has trouble going to sleep, waking up often, or has trouble getting back to sleep.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. My child has upsetting thoughts, pictures, or sounds of what happened come to mind when he/she doesn't want them to.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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Pediatric Traumatic Stress Screening Tool

Visual patterns of responses help indicate symptom severity level.

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
</table>

**How much of the time during the past month...**

1. I have bad dreams about what happened or other bad dreams.
   - None
   - Little
   - Some
   - Much
   - Most

2. I have trouble going to sleep, waking up often, or getting back to sleep.
   - None
   - Little
   - Some
   - Much
   - Most

3. I have upsetting thoughts, pictures, or sounds of what happened come into my mind when I don’t want them to.
   - None
   - Little
   - Some
   - Much
   - Most

4. When something reminds me of what happened I have strong feelings in my body, my heart beats fast, and I have headaches or stomach ache.
   - None
   - Little
   - Some
   - Much
   - Most

5. When something reminds me of what happened I get very upset, afraid, or sad.
   - None
   - Little
   - Some
   - Much
   - Most

6. I have trouble concentrating or paying attention.
   - None
   - Little
   - Some
   - Much
   - Most

7. I get upset easily or get into arguments or physical fights.
   - None
   - Little
   - Some
   - Much
   - Most

8. I try to stay away from people, places, or things that remind me about what happened.
   - None
   - Little
   - Some
   - Much
   - Most

9. I have trouble feeling happiness or love.
   - None
   - Little
   - Some
   - Much
   - Most

10. I try not to think about or have feelings about what happened.
    - None
    - Little
    - Some
    - Much
    - Most

11. I have thoughts like “I will never be able to trust other people.”
    - None
    - Little
    - Some
    - Much
    - Most

12. I feel alone even when I’m around other people.
    - None
    - Little
    - Some
    - Much
    - Most

*Over the last 7 days, how often have you been bothered by thoughts that you would be better off dead or hurting yourself in some way?*

- None
- Little
- Some
- Much
- Most
Symptom screening: MH or behavioral

- Sleep problems
- Intrusive Symptoms & Hypervigilance
- Avoidance & negative mood
- Suicide

Ref. 14
ACE Questionnaires

- Designed as population surveys for risks—
  - Not validated as screeners for clinical use
  - No predictive value at individual level
- Deficit-focused—not strengths
- Doesn’t assess symptoms (which would inform clinical decision making)
- Potentially re-traumatizing
- Need to be carefully scripted (why, who, what will be done with info, can opt out)
Response to Disclosure

• **LISTEN with Empathy**: Listen, lean in, make eye contact

• **Validate and normalize**:  
  • “What you/JoJo are feeling (or How JoJo is behaving) is a normal response to what happened; what happened was abnormal and should never have happened.”  
  • “I am so sorry this happened to you…”

• Ask about what supports they have—who they can talk with  
• Ask about what services they have—MH, Evidence-based Trauma Treatment services, etc.

• Take care of survival needs first (reduce stressors): housing, food
3 Core Principles of Development

Support Responsive Relationships

Reduce Stressors

Strengthen Core Skills

Ref: Harvard Center for the Developing Child
Five Steps to Building Resilience

- Reassurance of safety
- Routines
- Regulation (co-regulation)
- Relationship Building
- Reading the child
Affiliate Approaches

Calming the stress response begins with a connection to a safe adult.

**Reassure**
Let child know they are safe. This should be said with words, hugs and safe spaces in the home.

**Return to Routine**
Routines for meals, bedtime, household schedules all help children to know what to expect.

**Regulate**
Skills to calm self: belly breathing, stretching, relaxation
Skills to name feelings: colors of emotions, words for feelings
Skills for managing emotions

Ref. 1,2,3
Reassurance: Caregivers Model Calm Behavior
Create Zone of Safety and Calm for Child

Children take their cues from their parents & adults around them.
Routines and Rituals

Routines communicate safety and shut down the stress response.

Childcare  Sleep  School

Important to prepare child for transitions or changes in routine.
Regulation

Caregiver modulate own emotions

So can help child to move to learning about emotions

So child can learn to modulate emotions
Promoting Self-Regulation Skills

**Figure 9.** Employing the evidence-based strategies for toxic stress regulation can help patients reduce stress and build resilience. Reproduced with permission from ACEs Aware.26
Regulation is the act of managing thoughts and feelings to engage in goal directed behavior.

Children have to learn to:

- Identify what they feel, name emotions
- Develop skills to manage emotions
- Calm their stress response
3 Core Principles of Development

Support Responsive Relationships

Reduce Stressors

Strengthen Core Skills

Ref: Harvard Center for the Developing Child
Relationship Building: Special Time In
Reading the Child: The Cognitive Triangle
What do Child Behaviors Tell Us?

“You have to study your child
To understand your child.”
Grandmother of
Adiah Spinks-Franklin, MD
Caregiver helps child develop the language (thus identification) of emotions...

Brackett, M. Permission to Feel. 2019
READING: Teaching the language of emotions

- Literacy
- Builds understanding of how child thinks
- Teach language of emotions
- FUN
- Teachable Moments
- Parent-child relationship
The Importance of Play

Learning, growth, and healing after trauma

- Vital to cognitive, physical, social and emotional development and wellbeing of children
- United Nations recognizes play as a human right for children
- Uses creativity as imagination develops
  - Helps them master their world and conquer their fears
  - Calming
  - Practice adult roles
  - Work in groups (affiliate network)
  - Resolve conflicts
  - Develop self-advocacy skills
- Parents can learn how their child perceives the world, thinks and learns

Referrals, Monitoring, Follow-up, Care Coordination

• Referrals (Develop resources and network of care)
  • Community based programs (reduce stressors)
  • Integrated MH/ Community-based MH (maternal depression, child MH problem)
  • Early Intervention (DD)
  • School: learning assessment if indicated
  • Evidence-based Trauma-Informed MH: know the resources in your community (CBT, PCIT, PCP)

• Monitoring and follow-up: check back in (phone, TH, in person)
• Care Coordination
Parents are the Magicians of Ordinary Magic

We are their assistants!

- Use our continuity of care to build caregiver knowledge and skills over time.
- Focus on attachment relationship as the context of building or rebuilding child and family resilience.
It is easier to build a strong child than to fix a broken man.
~Frederick Douglass

Thank You!
AAP Trauma-Informed Care Resources

- **Trauma-informed care page** [aap.org](http://aap.org)
- **Preventing Childhood Toxic Stress: Partnering With Families and Communities to Promote Relational Health** [policy statement](http://aap.org), **Trauma-Informed Care** [policy statement](http://aap.org), **Trauma-Informed Care in Child Health Systems** [clinical report](http://aap.org)
- **(PATTeR) Project** [video case vignette series](http://www.AAP.org/PATTeR) and provider [infographics](http://www.AAP.org/PATTeR).
- **Screening, Technical Assistance and Resource (STAR) Center**
- **ScreeningTime.org** for perinatal depression, social determinants of health, etc.
- **Promoting Relational Health: Implementing a Public Health Approach in Primary Care** [webinar](http://aap.org) with Andrew Garner, MD, PhD, FAAP
- **Trauma Toolbox** for Primary Care (Spanish and English)
- **Trauma coding fact sheet**

**Other:**
Thank You