Childhood Trauma:
What you need to know in the primary care setting

Presented by:
Kelley Victor, MD
Objectives

1. To be able to identify symptoms of PTSD

2. To understand the importance of trauma on development

3. To be able to explain the implications of the ACES study on behavioral health outcomes.

4. To be able to name the evidence-based interventions for PTSD
Colin

Colin is a 6 year old male currently living with foster parents who hope to adopt him. This is his 6th foster family in the past 9 months after being removed from parental home and then removed from grandparents’ home. He has 3 siblings who are in different foster homes. Foster parents have limited history. Colin refuses to talk about his previous experiences, siblings or previous foster homes.

Colin will not eat dinner with the family. Insists on preparing his own food. Starts crying if food is steaming hot.

Tearing apart things in the house, writing on the walls, repeatedly states he is a bad boy.

Meltdowns when foster parents set limits, stating that they don’t love him. Gets VERY upset when foster parents shut the door of his room for a timeout.

Disrespectful towards foster mother, does better with foster dad.

Doesn’t have good boundaries, doesn’t understand privacy.

Gets upset when foster mother has a beer.
A. **Exposure** to actual or threatened death, serious injury, or sexual violence in one or more of the following ways:

1. direct experience
2. witnessing, in person, the event as it occurs to others
3. Learning that the event occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the events must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event (first responders, police)
PTSD in DSM 5 - INTRUSION

B. Presence of 1+ of the following intrusion symptoms:

1. recurrent, involuntary, and intrusive distressing memories of the event
2. recurrent distressing dreams in which the content and/or affect of the dream are related to the event
3. dissociative reactions (flashbacks) in which the individual feels or acts as if the traumatic event is recurring
4. intense or prolonged psychological or physiological distress at exposure to internal or external cues that symbolize or resemble the event
PTSD in DSM 5 - AVOIDANCE

C. Persistent avoidance of stimuli associated with the event, as evidenced by one or both of the following:

1. avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the event
2. avoidance of or efforts to avoid external reminders that arouse distressing memories, thoughts, or feelings about or closely associated with the event
PTSD in DSM 5 - COGNITION/MOOD

D. Negative alterations in cognitions and mood associated with the event, as evidenced by 2+ of the following:

1. **inability to remember** an important aspect of the event (not due to head injury, alcohol, or drugs)
2. persistent and exaggerated **negative beliefs** or expectations about oneself, others, or the world
3. persistent, distorted cognitions about the cause or consequences of the event that lead the individual to **blame** himself/herself or others
4. persistent **negative emotional state** (fear, horror, anger, guilt, shame)
5. markedly **diminished interest** or participation in significant activities
6. feelings of **detachment** or estrangement from others
7. persistent **inability to experience positive emotions** (happiness, satisfaction, loving feelings)
PTSD in DSM 5 - HYPERAROUSAL

E. Marked alterations in arousal and reactivity associated with the event as evidenced by 2+ of the following:

1. **irritable** behavior and angry **outbursts** (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects
2. **reckless** or self-destructive behavior
3. **hypervigilance**
4. exaggerated **startle** response
5. problems with **concentration**
6. **sleep** disturbance (difficulty falling or staying asleep or restless sleep)
Preschool sub-type for PTSD
6 and younger

- The first developmental subtype of an existing disorder.
- Developmentally appropriate:
  - Young children have only emerging abstract cognitive and verbal expression capacities
  - The criteria for the age group should be more behaviorally anchored.
  - 8 of 19 criteria in DSM-IV require a verbal description of experiences and internal states.
- **Increasing sensitivity:** Research has shown that when using the preschool subtype, 3-8x more children qualify for PTSD in comparison to the DSM-IV criteria (Sheeringa, M.S., Myers, L., Putnam, F.W., & Zeanah, C.H. 2012)
PTSD in DSM 5: preschool subtype

A. **Exposure** to actual or threatened death, serious injury, or sexual violence in one or more of the following ways:
   
   1. direct experience
   
   2. witnessing, in person, the event as it occurs to others. **Especially caregivers.**
   
   3. Learning that the event occurred to a **parent or caregiving figure**. In cases of actual or threatened death of a family member or friend, the events must have been violent or accidental.
   
   4. Experiencing repeated or extreme exposure to aversive details of the traumatic event (first responders, police)
PTSD in DSM 5: Preschool subtype

- B. Presence of 1+ of the following intrusion symptoms:
  1. recurrent, involuntary, and intrusive distressing memories of the event.
     - May NOT appear distressing
     - May be expressed as repetitive play
  2. recurrent distressing dreams in which the content and/or affect of the dream are related to the event
  3. dissociative reactions (flashbacks) in which the individual feels or acts as if the traumatic event is recurring. Traumatic re-enactment in play.
  4. intense or prolonged psychological or physiological distress at exposure to internal or external cues that symbolize or resemble the event
PTSD in DSM 5: Preschool subtype

- Just 1+ of the following.

  - C. Persistent avoidance of stimuli associated with the event, as evidenced by one or both of the following:
    - 1. avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the event
    - 2. avoidance of or efforts to avoid external reminders that arouse distressing memories, thoughts, or feelings about or closely associated with the event

  - D. Negative alterations in cognitions and mood associated with the event, as evidenced by 2+ of the following:
    - 1. inability to remember an important aspect of the event (not due to head injury, alcohol, or drugs)
    - 2. persistent and exaggerated negative beliefs or expectations about oneself, others, or the world
    - 3. persistent, distorted cognitions about the cause or consequences of the event that lead the individual to blame himself/herself or others
    - 4. persistent negative emotional state (fear, horror, anger, guilt, shame)
    - 5. markedly diminished interest = constricted play or participation in significant activities
    - 6. feelings of detachment or estrangement from others = social withdrawal
    - 7. persistent inability to experience positive emotions (happiness, satisfaction, loving feelings)
PTSD in DSM 5: Preschool subtype

- E. Marked alterations in arousal and reactivity associated with the event as evidenced by 2+ of the following:
  - 1. **irritable** behavior and angry **outbursts** (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.
    - Includes extreme temper tantrums
  - 2. **reckless** or self-destructive behavior = TEENAGERS
  - 3. **hypervigilance**
  - 4. exaggerated **startle** response
  - 5. problems with **concentration**
  - 6. **sleep** disturbance (difficulty falling or staying asleep or restless sleep)
Back to Colin. Are there symptoms of PTSD?

- Colin is a 6 year old male currently living with foster parents who hope to adopt him. This is his 6th foster family in the past 9 months after being removed from parental home and then removed from grandparents’ home. He has 3 siblings who are in different foster homes. Initially with limited history because Colin isn’t talking about his experiences. Refuses to talk about his siblings or previous foster homes.

- Colin will not eat dinner with the family. Insists on preparing his own food. Starts crying if food is steaming hot.

- Tearing apart things in the house, writing on the walls, repeatedly states he is a bad boy.

- Meltdowns when foster parents set limits, stating that they don’t love him. Gets VERY upset when foster parents shut the door of his room for a timeout.

- Disrespectful towards foster mother, does better with foster dad.

- Doesn’t have good boundaries, doesn’t understand privacy.

- Gets upset when foster mother has a beer.
Developmental Considerations

- **Impact of trauma on the developing brain:**
  - most rapid developmental period is between birth and age 5.
  - May see delay in milestones or in cognitive development because of significant neglect (malnutrition, lack of stimulation) or physical abuse (head injuries).

- **Impact of trauma on the attachment process:**
  - There is strong connection between secure attachment and effective emotional regulation.
  - With trauma, may see less trust that caregiver can protect them.

- **Lack of coping skills:**
  - Difficulty processing the traumatic experience and resulting reactions.
Developmental Considerations

- Impact on social/peer development:
  - Lack of exposure to healthy social situations.
  - Child may feel different or “less than” because of the trauma.

- Impact on cognitive development:
  - Delays in brain development or brain injury.
  - Educational neglect.
  - Attention/focus is poor (hyperarousal symptoms) and child stops trying.

- Developmental Stages:
  - Trauma responses may emerge at different developmental stages as the child’s understanding of the world and emotions changes.
Developmental considerations: Children under 5

- Be honest and encourage questions.
- Discuss in **concrete** terms
- Use age appropriate vocabulary
  - Domestic violence aka adults fighting, sexual abuse aka touched in a private place, traumatic aka scary
- **Avoid using euphemisms**
  - “down there”, “went away”, “some sort of way”
- **Answer the question** they ask. Don’t assume meaning.
  - A child’s questions might sound deeper than they actually are.
Developmental considerations:
Children 6-10

- Concrete, omens, **magical thinking** → struggling to grasp abstract concepts beyond cognitive ability

- Trying to make **meaning** of what has happened.
  - Naturally egocentric at this age. May assume role/fault.
  - Should have done something to predict it/prevent it.

- Start to grasp the **finality** of death.

- Often **personify** death and think of it as the “boogeyman” or ghost or skeleton.
Developmental considerations: Teenagers

- Tend to search for meaning in their experiences.
- May experience guilt.
- The best thing adults can do is to encourage the expression and sharing of emotions.
- Teens seek internet support → need monitoring
Don’t be afraid to talk about trauma

- **Listen**, then **Validate**
- **Reassure**, Don’t Try to “Fix”
  - “Despite all the changes you/your family has been through, we’ll help you to be okay.”
- Children’s behavior often has meaning; they may not understand it themselves.
- **Observe**, be a detective to try to untangle it
  - Ex: child agitated at bedtime
  - Ex: child has angry outbursts when certain teacher comes to work with her
- **Psychoeducation**
  - Helping children and families to understand trauma responses.
Resilience Factors

- About **30%** of children that experience a trauma will develop PTSD.

- Protective factors include:
  - Temperament
  - Significant social support
  - Family adaptability
  - Absence of additional psychosocial stressors
Risk Factors for Developing PTSD

- Risk factors include:
  - Level of exposure to the traumatic event (physical presence, victim, physical injury)
  - Relationship to the direct victim of the trauma
  - Pre-existing conditions - anxiety, depression, previous trauma
  - Poor family adaptability - **best predictor of how a child will cope is how the parent(s) cope**
  - Other psychosocial stressors - low SES, housing, unmet medical needs
  - Perception - if the child perceives he/she is responsible for the trauma
What are the ACEs?
Adverse Childhood Experiences
Abuse and family/household challenges

1) Did you live with anyone who was depressed, mentally ill, or suicidal?
2) Did you live with anyone who was a problem drinker or alcoholic?
3) Did you live with anyone who used illegal street drugs or who abused prescription medications?
4) Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
5) Were your parents separated or divorced?
6) How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?
7) Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.
8) How often did a parent or adult in your home ever swear at you, insult you, or put you down?
9) How often did anyone at least 5 years older than you or an adult, ever touch you sexually?
10) How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?
11) How often did anyone at least 5 years older than you or an adult, force you to have sex?
ACEs: Adverse Childhood Experiences

- The ACE Study has uncovered how ACEs are strongly related to development of risk factors for disease, and well-being throughout the life course.

- Adverse Childhood Experiences (ACEs) are common.
  - ~66% of study participants reported at least one ACE
  - More than 20% reported 3+ ACEs.

- The ACE score, a total sum of the different categories of ACEs reported by participants, is used to assess cumulative childhood stress.

- Study findings repeatedly reveal a graded dose-response relationship between ACEs and negative health and well-being outcomes across the life course.
As the number of ACEs increases so does the risk for the following:

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease
- Depression
- Fetal death
- Health-related quality of life
- Illicit drug use
- Ischemic heart disease
- Liver disease
- Poor work performance
- Financial stress
- Risk for intimate partner violence
- Multiple sexual partners
- Sexually transmitted diseases
- Smoking
- Suicide attempts
- Unintended pregnancies
- Early initiation of smoking
- Early initiation of sexual activity
- Adolescent pregnancy
- Risk for sexual violence
- Poor academic achievement
The prevalence estimates reported below are from Washington, DC and ten states (HI, ME, NE, NV, OH, PA, UT, VT, WA, and WI) who included the ACE module on the 2010 BRFSS (n=53,784).

<table>
<thead>
<tr>
<th>CE Category</th>
<th>Women Percent (N =32,539)</th>
<th>Men Percent (N =21,245)</th>
<th>Total Percent (N =53,784)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABUSE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>34.1%</td>
<td>35.9%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>15.8%</td>
<td>15.9%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>15.2%</td>
<td>6.4%</td>
<td>10.9%</td>
</tr>
<tr>
<td><strong>HOUSEHOLD CHALLENGES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimate Partner Violence</td>
<td>15.6%</td>
<td>14.2%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Household Substance Abuse</td>
<td>27.2%</td>
<td>22.9%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Household Mental Illness</td>
<td>19.3%</td>
<td>13.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Parental Separation or Divorce</td>
<td>23.1%</td>
<td>22.5%</td>
<td>22.8%</td>
</tr>
<tr>
<td>Incarcerated Household Member</td>
<td>5.2%</td>
<td>6.2%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>
The prevalence estimates reported below are from Washington, DC and ten states (HI, ME, NE, NV, OH, PA, UT, VT, WA, and WI) who included the ACE module on the 2010 BRFSS (n=53,784)

<table>
<thead>
<tr>
<th>Number of Adverse Childhood Experiences (ACE Score)</th>
<th>Women Percent (N =32,539 )</th>
<th>Men Percent (N =21,245)</th>
<th>Total Percent (N =53,784)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>40.0%</td>
<td>41.4%</td>
<td>40.7%</td>
</tr>
<tr>
<td>1</td>
<td>22.4%</td>
<td>24.9%</td>
<td>23.6%</td>
</tr>
<tr>
<td>2</td>
<td>13.4%</td>
<td>13.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>3</td>
<td>8.0%</td>
<td>8.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>4 or more</td>
<td>16.2%</td>
<td>12.4%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>
Psychotherapy is the mainstay of treatment of pediatric PTSD, with the greatest evidence supporting the use of trauma-focused psychotherapies.

Limited data from psychopharmacologic trials suggest that several classes of medications may have efficacy in youth with PTSD.

Pharmacotherapy should be used in conjunction with ongoing psychotherapy when prolonged and severe symptoms (including comorbid conditions such as depression and anxiety disorders) warrant additional intervention.

The extant treatment studies in pediatric patients with PTSD and consensus recommendations suggest that treatment should be based on the individual child's most distressing and functionally impairing symptoms.
Therapy for PTSD

- there are several core unifying concepts that characterize most evidence-based psychotherapies for traumatized youth.
  - ensuring safety from continued trauma
  - providing psychoeducation regarding the potential effects from, and responses to, trauma
  - providing effective coping/behavior management strategies
  - assisting children in mastering trauma avoidance, typically through trauma narration and/or exposure activities
  - engaging parents or other caregivers in treatment and enhancing the parent-child relationship.
Trauma-focused CBT (TF-CBT)

- The **most studied** treatment of symptomatic children exposed to trauma
- TF-CBT evaluated in **13 RCTs** superior to comparisons
  - active treatments/usual community care
  - Wait-list control conditions
  - Evaluated across the developmental spectrum **3-17 years**.
- **Multiple trauma types**
  - Sexual abuse, physical abuse, commercial sexual exploitation, domestic violence, disaster, war, traumatic grief, multiple/complex trauma
- **Different settings**
  - Clinic, foster care, domestic violence center, refugee organization, HIV treatment centers
  - Include **family** = greater improvement
  - Child’s behavior problems, PTSD, depressive symptoms, anxiety, functioning
  - Positive parenting practices
  - Parent’s emotional distress, depressive symptoms
Non-CBT therapies

- Child-Parent Psychotherapy (CPP)
  - dyadic, attachment-based therapy intended for traumatized children aged 3 to 5 years
- Parent Child Interactional Therapy (PCIT)
- Play therapy
- Eye movement desensitization and reprocessing therapy (EMDR)
- School-based group therapies
  - For instances of wide-scale community violence or disasters
  - Increases access to treatment

- Few direct comparisons to CBT therapies which is currently the gold standard.
Psychopharmacologic treatment of PTSD in children and adolescents: A review

- 3 double-blind, RCTs of SSRIs
- 1 double-blind, RCT of imipramine
- Several open-label and case series
  - Antiadrenergics
  - Other antidepressants
  - Second generation antipsychotics
SSRIs

- First line medication for PTSD in adults
- Studies in children
  - **Sertraline** vs placebo added to TF-CBT: both groups improved equally
  - 131 children with PTSD: **sertraline** vs. placebo x10 weeks—no difference
  - **Fluoxetine** vs. imipramine vs. placebo for acute stress disorder in pediatric burn victims. No difference though treatment x1 week. Low doses of medication.
  - 2 open label studies with **celexa** (n 24 and 8) showing subjective improvement in PTSD (38% reduction in symptoms)
- No studies of escitalopram, paroxetine or SNRIs.
Summary of medications in children with PTSD

- Two double-blind RCTs do **NOT** support the use of SSRIs for treatment of PTSD in children.
  - Therapy is the gold standard for PTSD treatment in children
  - Consider using to treat co-morbid depression/anxiety
- Extrapolation of adult studies and open label reports in children **preliminarily support the use of antiadrenergic agents**
  - Clonidine, tenex, prazosin
  - Hyperarousal and intrusive symptoms
- **Trials needed** for SGAs and mood stabilizers in children.
Co-morbidity

- Depression
- Anxiety
- Bipolar disorder
- Substance use disorders
- Disruptive behaviors
- ADHD
PTSD: the great masquerader

- Hyperarousal: ADHD vs. ODD
- School refusal: anxiety vs. defiance
- Intrusive symptoms, hyperarousal: psychosis vs. bipolar disorder
- Avoidance: depression vs. anxiety vs. anger
Case examples

- 10-year-old child in foster care with a history of sexual abuse 6 months ago meets criteria for both PTSD and generalized anxiety disorder. It is possible that the anxiety disorder preceded the abuse, but there is no history or collateral information to support or refute this.

- What do you treat first?

- Clinicians could proceed with a therapy such as TF-CBT and, at the end of therapy, reassess for any persistent symptoms of anxiety and treat appropriately.
Case Examples

- a child with PTSD also has severe, untreated ADHD that preceded the trauma

- What would you treat first?

- Addressing the ADHD with medication will help them function better at school and home and likely help make therapy more productive.
Case examples

- 14 year old hearing voices telling her “it’s your fault” and “you deserve this”. Father has history of schizophrenia. She has history of sexual abuse by her older brother.
  - Schizophrenia vs. trauma?

- 11 year old girl acting out at school and with foster mother. She is the oldest of 9 children. They were removed from the home because of parental neglect. At visits with foster siblings she bosses her siblings around, tells the CYF workers what to do.
  - ODD vs. trauma?
Coping Skills for Trauma Reminders

- Education: understanding the connection between trauma reminders and responses
- Relaxation skills
- Focused/deep breathing
- Visualization
- Music, videos
- Comforting objects
Trauma-Focused CBT

- Psychoeducation/Parent training
- Relaxation
- Affective modulation
- Cognitive processing
- Trauma narrative
- In vivo exposure
- Conjoint session
- Enhance safety
1. Why did this happen to me?
2. Who is responsible for the upsetting/confusing event(s)?
3. How will the upsetting/confusing event(s) affect me in the future?
4. How have the upsetting/confusing events affected my family?
5. Since the event(s), my view of the world has changed in these ways:
6. Since the event(s), my view of myself has changed in these ways:
7. Since coming to therapy, I have learned these things about myself:
8. Coming to therapy has changed me and my family in these ways:
9. If I had a friend that went through a similar upsetting/confusing event, I would give him or her this advice:
10. If my friend thought that talking about the upsetting/confusing event would be too hard, I would tell him or her:
Thank you.