Focusing your Trauma Lens: Examining Trauma and Traumatic Stress in Children and Adolescents

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Elizabeth Wallis, MD, MS is an Associate Professor of Pediatrics and Psychiatry & Behavioral Sciences at the Medical University of South Carolina (MUSC) in Charleston, SC. She heads the Division of Adolescent Medicine and has expertise in eating disorders, trauma and caring for youth in foster care. She is passionate about improving mental health care for children and particularly in facilitating access to mental health care in primary care settings, both through clinician training and integrating behavioral health support into primary care. Prior to shifting her focus to adolescent medicine, she worked as a primary care pediatrician in West Philadelphia, PA.

Dr. Wallis received her bachelor's degree in biology from the College of William and Mary and her medical doctorate from the Warren Alpert Medical School of Brown University, where she completed a combined MD program between Brown and Dartmouth Medical School. She completed pediatric residency as well as a fellowship in academic general pediatrics at the Children's Hospital of Philadelphia and has a master's degree in health policy research from the University of Pennsylvania.

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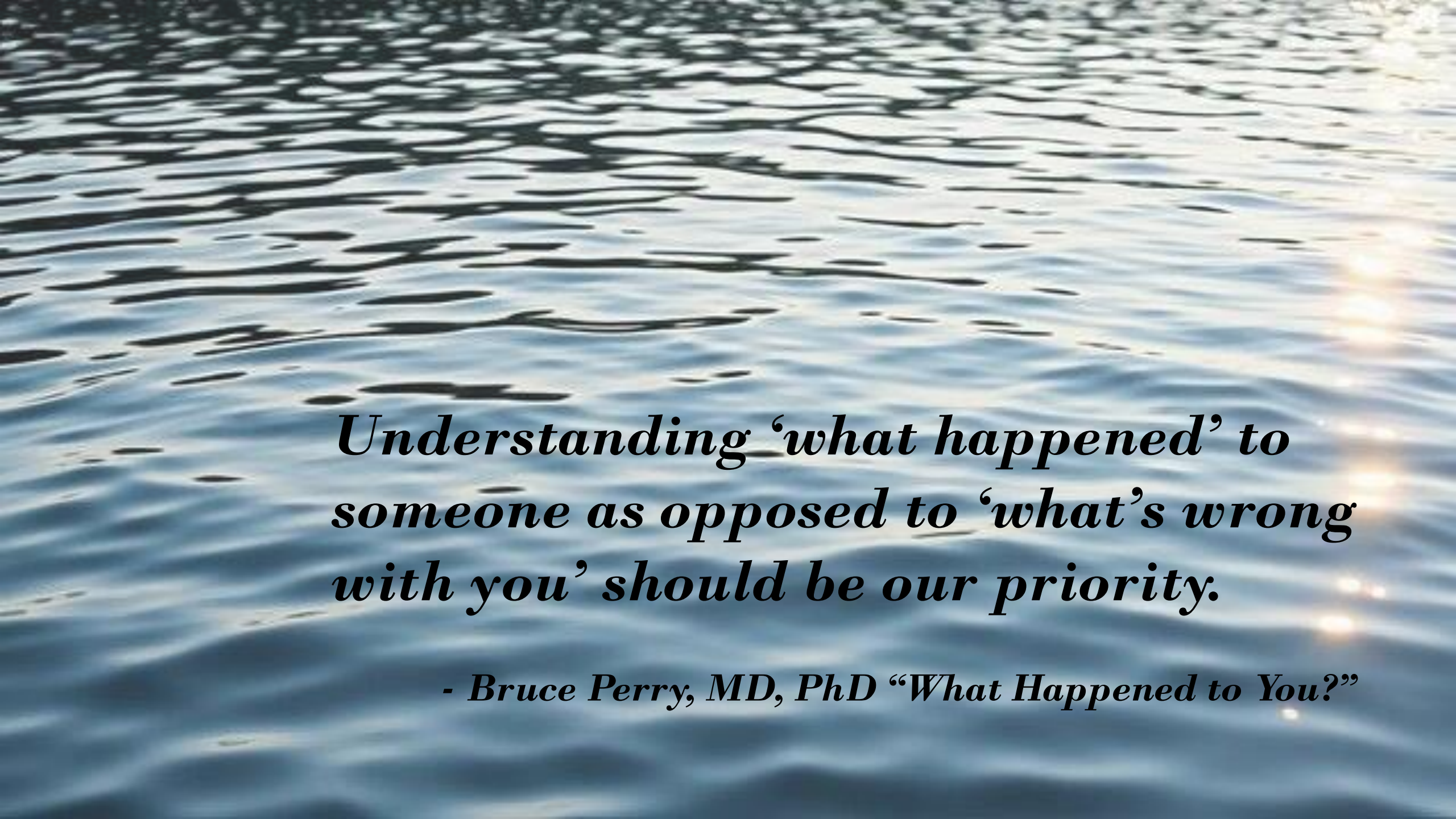
Learning Objectives

- Characterize the prevalence and far-reaching impact of trauma in youth
- Identify approaches for assessing trauma and traumatic symptoms
- Differentiate symptoms of trauma from those of other mental health diagnoses
- Describe evidence-based trauma treatments available for youth and families


Understanding 'what happened' to someone as opposed to 'what's wrong with you' should be our priority.

- Bruce Perry, MD, PhD "What Happened to You?"

Lifetime Prevalence

National Survey of Adolescents-Replication

38% - Witnessed serious community violence (Zinzow et al., 2009)

9% - Witnessed serious violence at home (Zinzow et al., 2009)

12% - Violent physical victimization by peer (Jackson et al., 2013)

17% - Sexual assault, 17 yo F (Saunders & Adams, 2014)

3% - Drug/Alcohol facilitated rape, 17 yo F (McCauley, 2009)

18% - Traumatic death loved one (Rheingold et al., 2012)

10% - Motor vehicle accident (Williams et al., 2015)

25% - Natural disaster (Saunders & Adams, 2014)

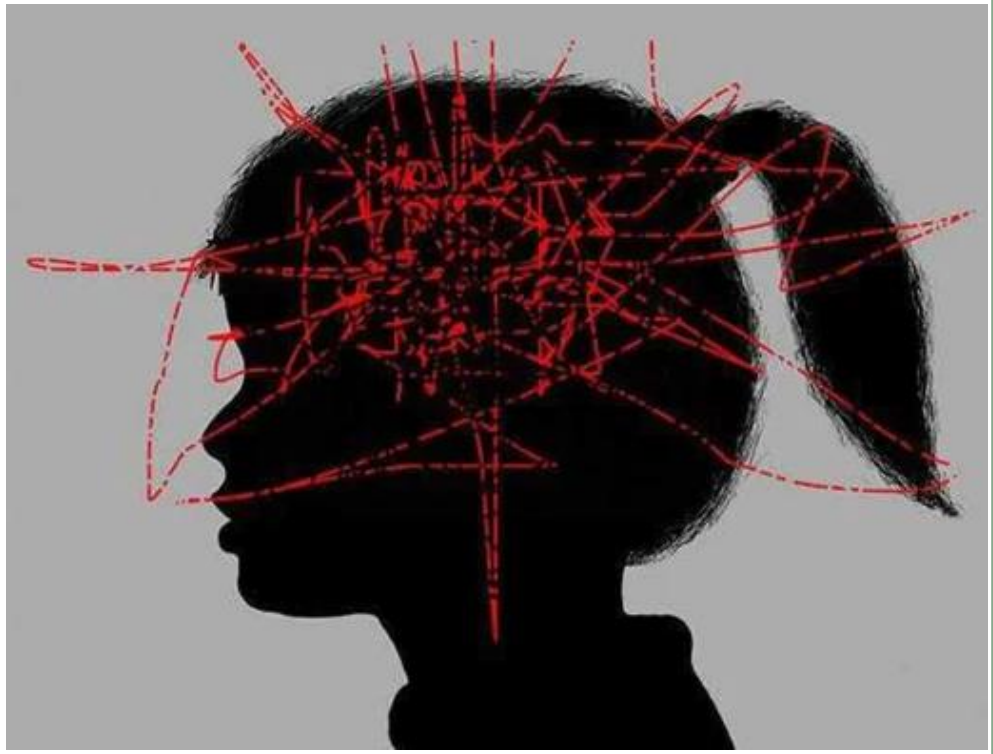
National Comorbidity Study Replication Adolescent Supplement
Childhood Adversity

- National survey of 6,483 adolescent-parent pairs.
- Assessed 12 childhood adversities (interpersonal loss, parental maladjustment, maltreatment, family economic)
- Assessed DSM-IV anxiety, mood, behavior and substance use disorders.
- 58% of adolescents reported exposure to at least 1 adversity – not Necessarily a trauma .
- 35% of all adolescents (60% of adversity exposed) reported multiple adversities.
- Different types of adversities associated with different types of disorders with different strengths of relationship. Inaccurate to just count them.

- *Childhood adversities associated with 28% of onsets of all psychiatric disorders and 45% of childhood onset psychiatric disorders.*

McLaughlin, K.A., Green, J.G., Gruber, M.J., Sampson, N.A., Zaslavsky, A.M., & Kessler, R.C., (2012). Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents. *Archives of General Psychiatry*, *69*(11), 1151-1160.

- Traumatic Stress
  - Physical and emotional responses of a child to events that threaten the life or physical integrity of the child or someone close to the child
- Toxic Stress
  - Extreme, frequent, extended activation of the stress response without the buffering presence of supportive adults
- Complex Trauma
  - Describes children's exposure to multiple, traumatic events, often of an invasive and interpersonal nature and the wide-ranging, long-term impact of the exposure



Assessment of Trauma and PTSD

True or False ???

- Everyone who suffers a traumatic experience will develop PTSD (Post-Traumatic Stress Disorder)
- The severity of a single traumatic event correlates with the likelihood and severity of PTSD
- Talking about a trauma with a child/adolescent will make symptoms worse
- A child who experiences a traumatic event should immediately talk about it or engage in therapy

False

The **ABCDEs** of Post Traumatic Stress Disorder (PTSD)

A Specific Trauma

(a potentially traumatic event - PTE)

- Directly experiencing a traumatic event(s)
- Witnessing, in person, the event(s) as it occurred to others
- Learning that the traumatic event(s) occurred to a close family member or close friend
- Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g. first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

Bothered by Memories

Recurrent, involuntary and intrusive, distressing memories of the event(s).

Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

Dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring.

Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the event(s).

Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

Cannot Go to Many Places

Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

- Avoidance of or efforts to avoid distressing memories, thoughts or feelings about or closely associated with the traumatic event(s)

- Avoidance of or efforts to avoid external reminders (people, places, conversations, objects, situations) that arouse distressing memories, thoughts or feelings about or closely associated with the traumatic event(s)

Depressive Symptoms

Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Inability to remember an important aspect of the traumatic event(s)
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 traumatic event(s) that lead the individual to blame himself/herself or others.
4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or 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

Easily Frightened

Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) 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 (e.g. difficulty falling asleep, staying asleep, restless sleep)

What can trigger a physiologic response after a trauma?

Concrete Triggers

- Seeing someone with the same physical characteristics as an abuser
- Being in a location where abuse occurred

More Subtle Triggers

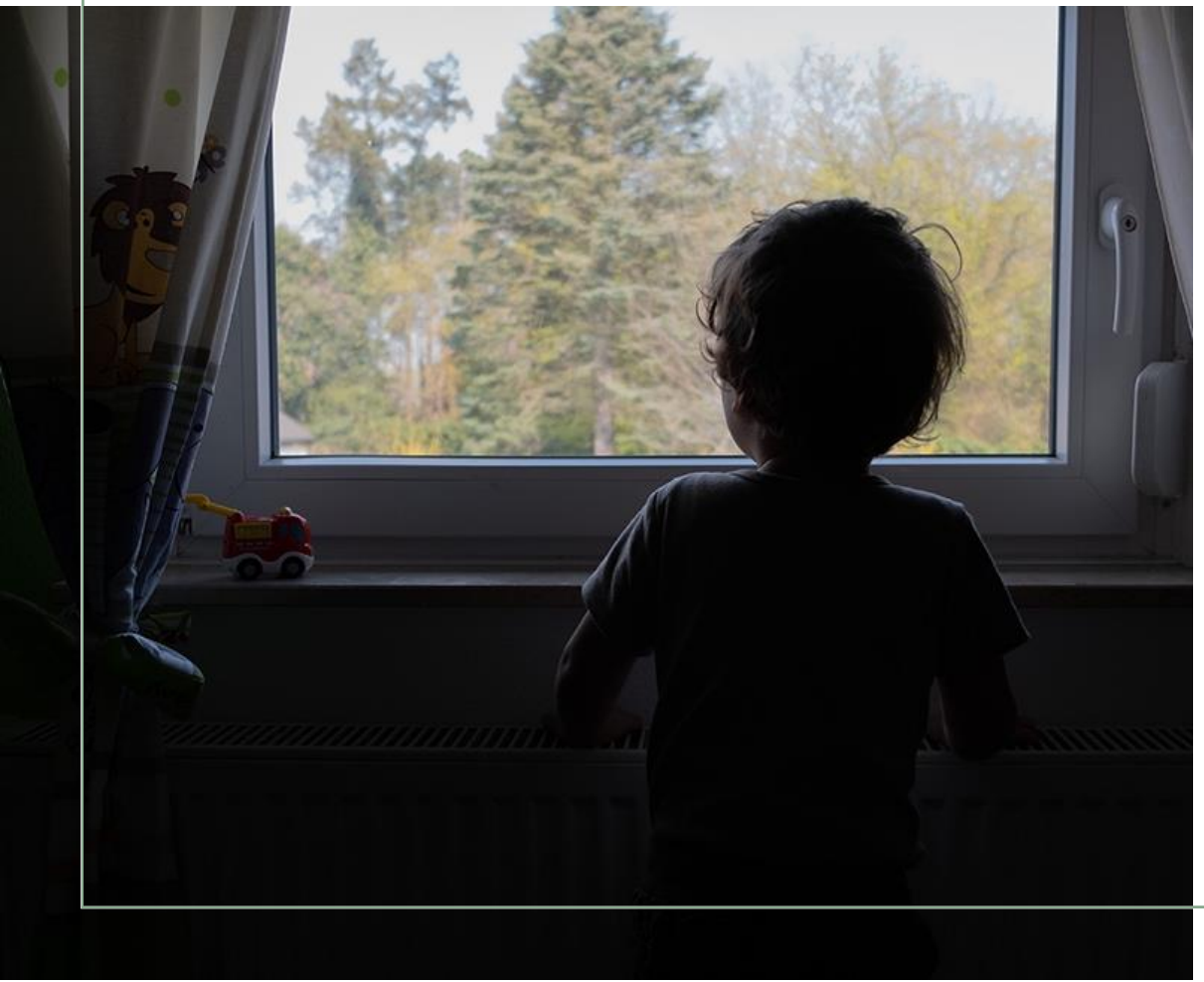
- A smell, place, conversation, tone of voice
- Yelling or fighting between strangers
- A holiday, date or similar marker

It is very common for children to have strong emotional reaction to a trigger and not associate it with that trigger (or even identify the trigger)

"A child whose needs are not met, develops a different internal template of the world, that says people are unpredictable and unreliable."

How do children respond to trauma based on age and/or development?

Early Childhood



- Become more fearful in new situations, separation anxiety
- Strong startle reactions, aggressive outbursts, regression in milestones due to trauma reminders (which they cannot identify typically)
- Underdeveloped emotion regulation skills
- Trauma interferes with multiple aspects of brain development, including area that governs emotions, IQ, thinking to regulate emotions

School-Age Children

- Intrusive thoughts, fears that link to original danger/trauma
- Rapid shifts in behavior, withdrawn, aggressive behavior
- Poor concentration, distractibility
- Poor emotion regulation
- Poor social adjustment, difficulty with peers/friends
- Poor ability to manage fears, anxiety
- Problems with impulse control

Adolescents

- Mask symptoms, embarrassed by emotional responses and PTSD symptoms
- Isolation, feel often as though their experience and response is unique
- High risk behaviors – sex, drugs and alcohol, delinquent behaviors
- Anger and shame
- Difficulty interpreting danger and safety
- Poor understanding of consequences of behaviors
- Difficulty with abstract thinking, learning, problem solving

Risk Factors for Developing PTSD

Trauma Characteristics

- High risk-to-life threat
- Interpersonal violence perpetrated by a romantic partner or caregiver
- War/armed conflict related violence

Child Characteristics

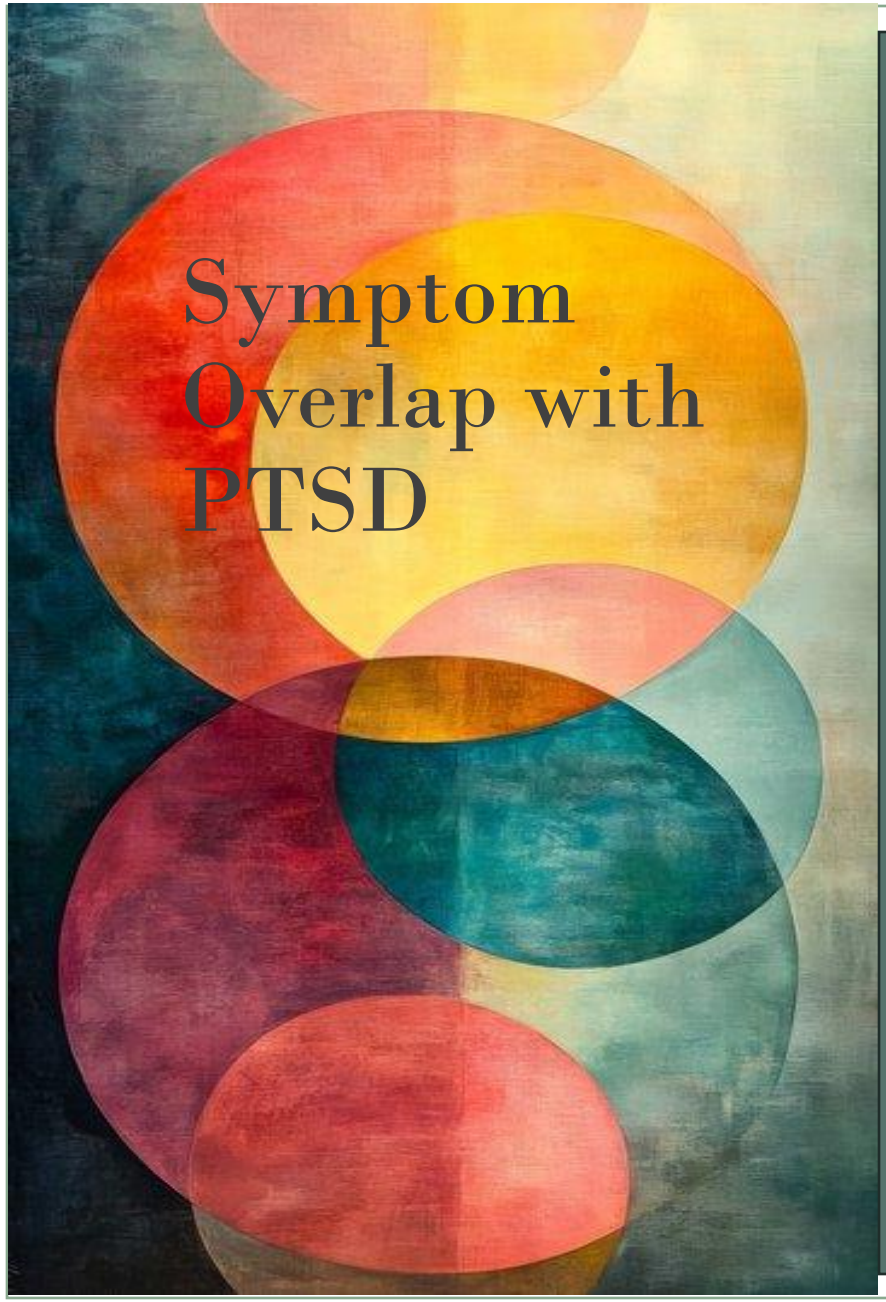
- Female
- Previous trauma
- Co-morbid psychiatric conditions
- Poor parental functioning, parental-PTSD
- Limited social support

Characteristics of Trauma Response

- High level of anger/negative appraisal of situation
- High levels of rumination/avoidance
- Prescence of dissociative symptoms

Trauma is so much more than PTSD…

- Higher risk of anxiety disorders
- Higher risk of depressive disorders
- Higher risk of sexual disorders (dyspareunia, vaginismus, inhibited/decreased sexual desire)
- Substance use/abuse/dependence)
- Delinquency, truancy, criminal behavior
- Aggression (peer aggression, dating and intimate partner violence)
- Other psychological impacts (victimization of others, low self-esteem, feelings of pervasive guilt, shame, self-blame, relationship difficulties, low academic performance, difficulties with employment/occupation, developmental problems)



Symptom Overlap with PTSD

Difficulties with focus/concentration, easy frustration, impulsivity, difficulty with emotion regulation, difficulty problem solving

- Attention Deficit Hyperactivity Disorder (ADHD)

Irritability, aggression, easily frustrated, argumentative

- Oppositional Defiant Disorder (ODD)

Poor concentration, irritability, poor emotion regulation, depressive symptoms, anxiety, easily fearful, isolation

- Anxiety disorders
- Major Depressive Disorder
- Complex Grief

Emotion dysregulation, rapid shifts in behavior, impulsivity, high risk behaviors

- Bipolar disorder

How can we help?

How do we talk about trauma and related symptoms?

What are the barriers and how do we overcome them?

How to Ask…

- Has anything ever happened to you where you felt really scared or that your life was in danger?
- Have you ever been seriously hurt or seen someone get hurt or killed?
- Has a parent (caregiver) ever acted in a way that you were scared that you might be physically hurt or you were hurt?
- Has anyone ever hit you, kicked you, punched you, hurt you or forced you to have sex when you didn't want to?
- Has anything really scary or dangerous ever happened to you:?
- Ask about related symptoms:
    - *Did anything stressful happen before you started having trouble sleeping?*
    - *Are you worried about something that happened to you in the past?*

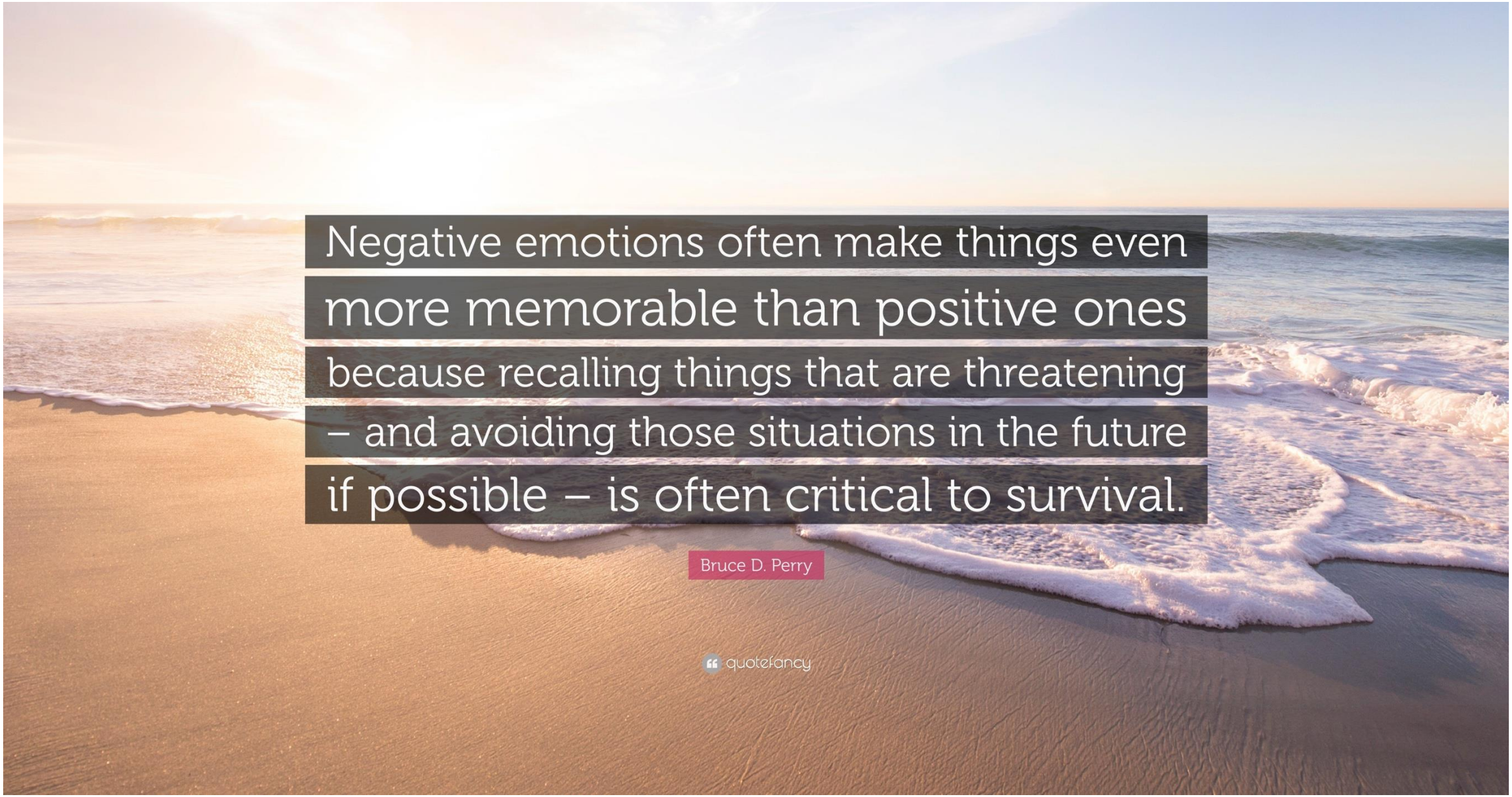
Tips for Talking About Trauma

- You don’t need every detail of a traumatic event, just outline of events
- Focus on the impact of the trauma on functioning and impairment
- Avoid unintentionally judgmental or placating statements
  - *“at least you survived” or “everything will be ok,” or “how did you end up in that situation”*
- Offer support, know available resource s
- Correct cognitive distortions when able
  - *“I’m in foster care b/c my behavior was so bad my mom couldn’t take care of me”*
  - *“I was raped because I walked home late at night by myself”*

Barriers to Talking about Trauma

How can adults best support kids who experience a traumatic event?

DOs	DON'Ts
Allow kids to feel upset, talk about feelings, cry, feel sad	Force kids to talk about feelings or trauma before they are ready
Keep as much of a normal routine as possible: meals, activities, expectations	Ask for personal details about trauma
Limit exposure to media, news and imagery of violence	Expect them to be brave or tough
Reassure kids are safe and you will do whatever you can to help them	Get upset over regression in behaviors: thumb sucking, bedwetting, sleep problems
If needed, explain what happened (disaster, etc) honestly but avoid unnecessary details	Admonish kids for expressing strong emotions


Negative emotions often make things even
more memorable than positive ones
because recalling things that are threatening
– and avoiding those situations in the future
if possible – is often critical to survival.
Bruce D. Perry
quotefancy

30 years of Clinical Research

Evidence Supported Interventions Developed, Tested, and Ready for Implementation

Trauma-Focused Cognitive-Behavioral Therapy

Parent Child Interaction Therapy

Alternatives for Families (AF-CBT)

Cognitive Processing Therapy

Prolonged Exposure Therapy

Child-Parent Psychotherapy

SafeCare

The Incredible Years

CBT for Children with Sexual Behavior Problems

Functional Family Therapy

Dialectic Behavior Therapy

Multi-Dimensional Treatment Foster Care

Multisystemic Family Therapy

Triple P

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)

- Validated for ages 3-18 for children who have experienced traumatic events
- Typical CBT components: psychoeducation, skill building (coping, distress tolerance), gradual exposure, cognitive processing
- Parent/caregiver involvement – help with skill building as well as conjoint sessions to process trauma
- Safety and stabilization very important before trauma work initiating
- Trauma narrative – allows gradual processing of trauma, decreasing avoidance, facilitating healing

Barriers to Treatment

- Lack of identification of trauma and related disorders
- Lack of service capacity
- Lack of evidence-supported referrals
- Poor collaboration between providers
- Lack of focus on treatment outcomes

Victimization Type Experienced	Saw a Counselor Past Year	Saw a Counselor Ever
Physical assault	9.4%	14.0%
Sexual victimization	13.9%	18.1%
Maltreatment by a caregiver	13.3%	16.0%
Witnessed violence	6.5%	10.3%

Psychotropic Medications: Adults with PTSD

Multiple review/meta-analyses of psychotropic medication in adults treated for PTSD

- 18 trials of SSRIs
- Several with tri-cyclic antidepressants, anti-epileptic medications, atypical antipsychotics, others

Combination of SSRI + prolonged exposure may be more effective than PE alone

Statements from multiple professional organizations (WHO, American Psychiatric Association, VA, etc)

- Strongly recommends use of evidence-based psychotherapies
- Insufficient evidence to recommend for/against combination treatment for all comers with PTSD (Medication + psychotherapy)
- If using meds consider fluoxetine, paroxetine, sertraline, venlafaxine
- Insufficient evidence for risperidone, topirimate

Children/Adolescents with Trauma/PTSD

	Agent	N=	Age (mean)	Results
Steiner et al	Divalproex sodium (Depakote)	71	16	High dose treatment, reduction in core PTSD symptoms
Cohen et al	CBT+sertraline v placebo	24	10-17	Non-significant difference in PTSD symptoms (trend favoring sertraline over placebo)
Stathis et al	Quetiapine (Seroquel)	6	15-17	Some PTSD symptoms improved (anxiety, dissociation, depression, anger)
Seedat et al	Citalopram (Celexa)	38	Adol/adults	Non-significant reduction in trauma symptoms in those treated

* There are other, even smaller studies
* Majority are not RCT but rather observational/chart review
* Majority of prescribers report extrapolating from adult data to treat PTSD/trauma in children

Other Medications for PTSD (Children)

Alpha-Agonists

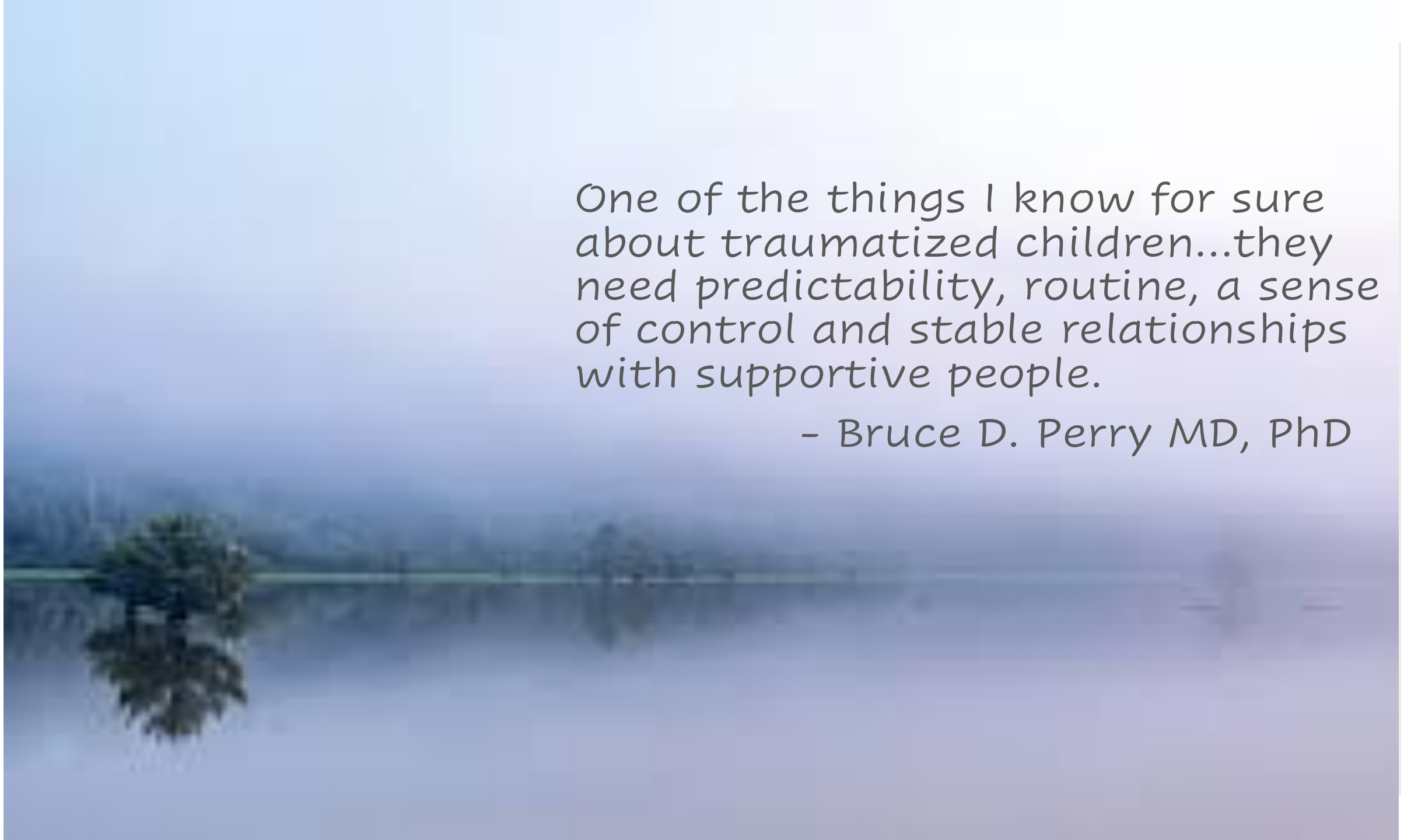
- Noradrenergic hyperactivity documented in pediatric and adult patients
  - Motor vehicle accident related PTSD
  - Sexual abuse related PTSD
- 8-week open label study of Guanfacine XR (Intuniv) in patients with ADHD *and* PTSD
  - n=19
  - Reduction in PTSD reaction indices (re-experiencing, avoidance, hyperarousal)

Benzodiazepines

- Lack of efficacy for use in PTSD (adults)
- May worsen severity and duration of PTSD
- May increase risk of developing substance-use disorder

PTSD Treatment Summary

- Strong evidence for trauma-focused psychotherapies for youth with PTSD
- Treatment with medication for co-morbid psychiatric conditions may be indicated (Depression, Anxiety, ADHD, others)
- Medication for PTSD without co-morbidities…
  - ✓ Alpha-2 agonists, alpha-1 antagonists, several others *may* provide benefit in PTSD but insufficient evidence to say conclusively
  - ✓ There isn't clear data that SSRIs work in children with PTSD (though in adults there is more compelling evidence)
  - ✓ Consider medication (particularly SSRIs) in children who are not helped sufficiently by therapy alone
  - ✓ BZD are not recommended in any professional guidelines in relation to PTSD treatment


One of the things I know for sure about traumatized children...they need predictability, routine, a sense of control and stable relationships with supportive people.
- Bruce D. Perry MD, PhD

Thank You

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