

TOXIC STRESS ON YOUNG

TODAY'S OBJECTIVES

- Review key concepts about early brain development
- Understand the effect of trauma & toxic stress on young children
- Discuss strategies for fostering resilience & mitigating the impact of trauma

WHY IS THIS IMPORTANT?



Trauma can change the course of a child's life and their future

Objective #1 Early Brain Development: Key Concepts



EARLY BRAIN DEVELOPMENT: KEY CONCEPTS

Knowledge from the fields of <u>neuroscience</u>, <u>immunology</u>, <u>genetics</u> and <u>epidemiology</u> have increased our understanding of the ways experience impact our biology, behavior & long term physical & mental health



EARLY BRAIN DEVELOPMENT: KEY CONCEPTS

- 1. Experience shapes brain architecture & function
- 2. Brains are built from the bottom up
- 3. The importance of serve and return
- 4. Experience alters how are genes are expressed

EXPERIENCE SHAPES BRAIN ARCHITECTURE



Center on the Developing Child, Harvard University

BRAINS ARE BUILT FROM THE BOTTOM UP











EXPERIENCE BUILD BRAIN ARCHITECTURE

o http://developingchild.harvard.edu/science/keyconcepts/

OBJECTIVE #2 STRESS, TRAUMA & TOXIC STRESS

HOW DOES STRESS WORK?

- ${\rm o}$ Stress is a normal & necessary part of life
- Stress disrupts our sense of well being
- Stress causes physiological reactions
- Stress causes behavioral reactions

THREE TYPES OF STRESS



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WHAT ARE TRAUMA & TOXIC STRESS?

- ${\color{black} \bullet}$ ${\color{black} Trauma}$ an intense event that threatens safety or security of an individual
- **Toxic Stress** re-occurring negative experiences that threaten safety or security
- ${\color{black} \bullet}$ ${\color{black} \mathbf{Traumatic Stress}}$ -event, the experience, and the effect

TRAUMA EXPOSURE OR EXPERIENCE

- Survivor (abuse, neglect, accident, disaster)
- Witness (personal witness-family, friend, neighbor, professional role)
- **Related to** (family member or close personal friend)
- Listening to details (professional role, media)

SECONDARY WOUNDING

- **Secondary Wounding** Experiencing a sense of blame, minimization and expectation about the traumatic experience from trusted individuals.
- **Self-Secondary Wounding** Applying disparate meaning to role in the traumatic experience through self-blame.

HOW DOES TRAUMA AFFECT YOUNG CHILDREN?

- Young children experience trauma differently than older children or adults
- Primarily a sensory experience
- o Not as able to anticipate danger and protect self
- Limited ability to express thoughts & feelings
- Different understanding of causation the power of thoughts, wishes, fears

Source: National Child Traumatic Stress Network

IMPACT OF TOXIC STRESS ON THE BRAIN



ACE STUDY

Adverse Childhood Experiences Study

- 1997 study conducted by CDC & Kaiser Permanente
- Surveyed 17,000 adults (middle aged, white, middle income)
- Count of adverse childhood experiences (up to 10)
- 25~% had at least 1 ACE; 12% had 4 or more

R. Anda, MD, MS and V. Felitti, MD

PREVALENCE OF ACES - MICHIGAN



48.7% of Michigan children with CSHCS have 2 or more ACES

WHAT ARE THE LONG TERM CONSEQUENCES?

When ACE score increases so does:

- High risk behaviors smoking, substance abuse
- Behavioral health problems depression, suicide attempts, intimate partner violence
- Physical health problems STDs, COPD, liver disease, ischemic heart disease
- Early death

HOW DOES THIS HAPPEN: ACE PYRAMID



OBJECTIVE #3 WHAT'S THE GOOD NEWS?

RESILIENCE



- Ability to successfully confront challenges & bounce back from setbacks.
- We are all born with resilience
- Resilience can be nurtured & recaptured

RESILIENCE

o <u>http://developingchild.harvard.edu/resources/inbr</u> <u>ief-resilience-series/</u>

SUPPORTIVE RELATIONSHIPS

- •Decrease stress hormones
- •Increase positive neural
- connections
- •Enhance a sense of safety
- •Teach positive coping skills
- •Nurture resilience



TRAUMA INFORMED CARE: KEY ASSUMPTIONS

- Realize: understand trauma & its impact
- **Recognize:** signs of trauma & its prevalence
- **Respond:** use/connect to trauma informed interventions
- **Resist:** avoid re-traumatization

SAMHSA, "Concept of Trauma and Guidance for a Trauma-Informed Approach"

Recognize

- Ask what happened rather than what's wrong
- Unresolved trauma in parents may lead to toxic stress for children
- An opportunity to support & educate parents/caregivers

RESPOND & RESIST

- •Emphasize What Young Children Need
- oTeach Coping Skills
- •Enhance Protective Factors
- •Mindful of Our Interactions with families

RESPOND & RESIST

What Young Children Need

Safety

Security

Nurturing

Respond & Resist

- •Encourage development of social emotional skills
 - Form relationships
 - Communicate needs
 - Regulate emotions
 - Explore their world

•Enable child's own abilities

Respond & Resist

Support Caregivers & Teach Coping Skills

- Self care •Nutrition, sleep, exercise
- Stress management
 Support, stress relievers
- Problem solving

 Address stressors (safety, income, health access)

RESPOND & RESIST

•Enhance Protective Factors

- Family Functioning/ Resiliency
- Social Support
- Concrete Support
- Child Development/Knowledge of Parenting
- Nurturing and Attachment

RESPOND & RESIST

•Refer for Services

- School completion & job training
- Mental health treatment (adult or child)
- Substance abuse treatment
- Intimate partner violence services

RESPOND & RESIST

oMindful of our interactions

- Safety
- Trustworthiness & Transparency
- Peer Support
- Collaboration & Mutuality
- Empowerment, voice & choice
- Cultural, historical & gender issues addressed

SECONDARY TRAUMATIC STRESS

The self is most important tool



STS is our occupational hazard

Attention to STS is = to using Personal Protective Equipment

Protect self in order to care for others effectively

IN SUMMARY

- Trauma & toxic stress change a child's experience of the world
- Which leads to changes in biology & brain architecture
- As a result, children act differently (defensively)
- Which impacts how they learn, get along with others, and take care of themselves
- Supportive relationships protect children from the impact of trauma & toxic stress

THANK YOU FOR YOUR TIME

• For More Information:

- Website: www.michigan.gov/traumatoxicstress
- Trauma Informed System Coordinator Mary Mueller, LMSW (517) 373-4190 MuellerM1@michigan.gov