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Prevent Child Abuse
Georgia™

Better Brains for Babies: Stress and Brain Development

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Better Brains for Babies: Stress and Brain Development

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...You can make a difference!
Objectives

At the end of today’s session, participants will be able to:

- Explain how the brain responds to stress
- Compare the three levels of stress
- Describe negative effects of toxic stress
- List ways to buffer the developing brain from toxic stress
Any external stimulus that threatens the balance of the normal equilibrium in the body.
Parts of the Brain

- Limbic system *(inside the brain)*
  - Amygdala
  - Hippocampus

Brain stem

Cerebellum

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CHAPTER 1: BRAIN ANATOMY
Parts of the Brain

- Cerebral cortex
- Limbic system *(inside the brain)*
  - Amygdala
  - Hippocampus
- Brain stem
- Cerebellum

CHAPTER 1: BRAIN ANATOMY

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The Stress Response

- Stressors cause physical and psychological changes
  - Release of cortisol
  - "Fight or flight" response
  - Increased heart rate
  - Increased adrenaline
  - Highly focused attention

- Primitive parts of the brain take over
Levels of Stress

3 Levels of Stress:
- Positive Stress
- Tolerable Stress
- Toxic Stress
Toxic Stress Derails Development
Dangers from Prolonged Stress

- Fewer synaptic connections
- Dominance of survival instincts
- Persistent hyper-arousal
- Impulsivity
- Reduced ability to learn
- Memory loss
Brainstorming: Handling Stress

Make a list of all the ways you can think of to handle stress

- In adults’ lives
- In young children’s lives
Ways to Handle Stress: The 4 As

Changing the Situation
- AVOID the stressor
- ALTER the stressor

Changing Reactions to the Stressor
- ADAPT to the stressor
- ACCEPT the stressor
Brainstorming, Part 2: The Four As

Go back to your brainstormed lists, and classify your ideas.

- Mark “S” for “situation” if they involve
  - AVOIDING the stressor
  - ALTERING the stressor

- Mark “R” for “reaction” if they involve
  - ADAPTING to the stressor
  - ACCEPTING the stressor
Key Factors that Mitigate Stress

- Loving, responsive, consistent relationships
- Safe environments
- Experience regulating stress in supportive environments
- Development of trust
- Resiliency
Attachments are about relationships

- Begin developing at or before birth
- Based on adult-child interactions
- Can form with more than one person
- Each relationship is unique
- Templates for later relationships

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When Adults Are Not Responsive
Securely attached children tend to...

- View the world as trustworthy
- Better regulate stress responses
- Be more independent at 18 months
- Be better problem solvers at age 2
- Be more successful with friendships
- Perform better academically
Responsive adults are...

- Emotionally and physically available
- Sensitive to the child
- Provide opportunities to explore
- Offer positive guidance
- Respect the child’s feelings
- Consistent
Importance of Consistency

- Predictability minimizes stress
- Repetition reinforces brain connections
- Knowing what to expect builds confidence and competence
- Limits encourage self-regulation
Specific Stress-Reduction Strategies

- Deep Breathing Exercises
- Sensory Activities
- Art Activities
- Children’s Literature
- Physical Activity
- Sleep
- Music
- Humor
Deep Breathing Exercises
- Fire-breathing dragon
- Flower and candle

Hands-on Activities
- Cornstarch and water
- Coloring to music
- Journaling
Children’s brains are wired by experiences, even if they do not remember them.

“Difficult” behaviors may be the result of stress (e.g., hair trigger temper, withdrawal, regression).

Absence of response can also cause stress.

Adults can help mitigate stress.

Building relationships takes time and patience.
Stress and Trauma

When you look at children who come out of terrible environments and do well, you find someone in their lives somehow instilled in them the attitude that they aren’t helpless, that they aren’t powerless, that they can do something.

—Dr. Bruce Perry

...You can make a difference!
Change the First Five Years

http://bit.ly/ChangeFirstFiveYears
Learn more about Better Brains for Babies at www.bbbgeorgia.org
Find us on Facebook
Contact Better Brains for Babies at info@bbbgeorgia.org or 706-542-7566
...you can make a difference!

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