

CONSEQUENCES OF CHILD MALTREATMENT

Rachel Clingenpeel, MD FAAP

**The information contained in this document is intended to provide a general overview for educational purposes and cannot be interpreted as providing a medical opinion in any particular case of child maltreatment.

TOXIC STRESS

Definition: 'A child experiences strong, frequent, and/or prolonged adversity... without adequate adult support.'

Only some stress is toxic, and it depends on both the stressor and the support systems:

Positive stress: normal part of healthy development (first day of school, receiving vaccines)

Tolerable stress: Serious but temporary stress, buffered by healthy relationships (natural disaster, serious injury)

Toxic stress: Significant adversity without the relief of adult support

What does toxic stress do in the body?

Changes brain structure and function

->overdeveloped areas involved in fear, anxiety, impulsiveness

->underdeveloped areas involved in planning, reasoning, behavioral control

->damage to areas involved in learning and memory

Changes body's stress response system – hormones like cortisol

Changes to immune system

ADVERSE CHILDHOOD EXPERIENCES (ACEs)

What are ACEs?

Abuse, neglect, domestic violence, parent substance abuse, mental illness, incarceration

How do we know about ACEs?

Groundbreaking study looking at the effects of childhood stressors on adults

Over 17,000 subjects recruited at regular checkups

How common are ACEs?

63% of participants had at least one ACE, in a population not selected for trauma

28% physically abused, 21% sexually abused, 27% household substance abuse

ACEs beget ACEs

For example, the more often someone witnessed domestic violence as a child, the more likely they were also physically abused.

ACEs increase the risk of suicide, in both adolescents and adults.

ACEs increase the risk of COPD, heart disease, depression, alcoholism, smoking, unplanned pregnancy, STDs, poor pregnancy outcome, etc etc...

→in ADULTS!!

NEGLECT

Chronic neglect can produce more significant impairments than overt physical abuse!!

Severe deprivation and neglect:

- Changes brain development
- Chronically or permanently changes the stress response system
- Increases risk for emotional and interpersonal problems
- Increases risk of learning problems and poor school achievement

Consequences of Neglect: Infancy-Toddlerhood

- Delays in language
- Increased aggression, anger and conduct problems
- Negativity in play, poor peer relationships
- Negative maternal-child interactions

Consequences of Neglect: School aged - adolescence

- Increases in inattention, impulsivity, hyperactivity
- Difficulty initiating or developing friendships
- Reduced literacy
- Low self-esteem
- Increase in depression and suicidality

RESILIENCE

Definition: 'an adaptive response to serious hardship'

Not just an innate quality; a skill set that can be built through experiences

#1 Need: at least one stable, supportive relationship with an adult (Safe, Stable, Nurturing Relationships)

- Responsiveness
- Protection
- Teaching behavioral regulation
- Teaching and modeling healthy response to change
- Positive stress is necessary to develop these skills
- Some highly sensitive children are more vulnerable to stress
- ...but highly responsive to support
- Resilience can be improved at any age
- Executive function skills are important in resilience
- Prioritizing tasks, managing distractions, controlling impulses

RESOURCES

ACE Study:

- www.acestudy.org
- www.cdc.gov/ace

Toxic stress: www.developingchild.net

National Child Traumatic Stress Network: www.nctsn.org

Child Welfare Information Gateway, Supporting Brain Development in Traumatized Children:
<https://www.childwelfare.gov/pubpdfs/braindevtrauma.pdf>

REFERENCES

- National Scientific Council on the Developing Child. (2005/2014). *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3*. Updated Edition. Retrieved from www.developingchild.harvard.edu
- National Scientific Council on the Developing Child (2010). *Early Experiences Can Alter Gene Expression and Affect Long-Term Development: Working Paper No. 10*. Retrieved from www.developingchild.harvard.edu
- Stevens H, Leckman J, Coplan J, and SJ Suomi (2009). *Risk and Resilience: Early Manipulation of Macaque Social Experience and Persistent Behavioral and Neurophysiological Outcomes*. Journal of the American Academy of Child and Adolescent Psychiatry 48(2): 114-127
- Trickett PK, Noll JG, and FW Putnam (2011). *The Impact of Sexual Abuse on Female Development: Lessons From a Multigenerational, Longitudinal Research Study*. Development and Psychopathology 23: 453-476
- Li F and M Godinet (2014). *The Impact of Repeated Maltreatment on Behavioral Trajectories From Early Childhood to Early Adolescence*. Children and Youth Services Review 36: 22-29
- Jonson-Reid M, Kohl PL, and B Drake (2012). *Child and Adult Outcomes of Chronic Child Maltreatment*. Pediatrics 129(5): 839-845
- Afifi TO, Mota N, MacMillan HL, and J Sareen (2013). *Harsh Physical Punishment in Childhood and Adult Physical Health*. Pediatrics 132(2): e333-e340
- Yang BZ, Zhang H, Ge W, Weder N, Douglas-Palumberi H, Perepletchikova F, Gelertner J, and J Kaufman (2013). *Child Abuse and Epigenetic Mechanisms of Disease Risk*. American Journal of Preventive Medicine 44(2): 101-107
- Johnson SB, Riley AW, Granger DA, and J Riis (2013). *The Science of Early Life Toxic Stress for Pediatric Practice and Advocacy*. Pediatrics 131(2): 319-327