Complex Trauma and Toxic Stress in Children and Adolescents

Aimie Zale, UMMS Class of 2016
Summer Service Learning Assistantship
FaCES Clinic, UMass Pediatrics

Background on the Faces Clinic

The FaCES clinic was founded in 2003 to provide care for children in the immediate period following their placement. When the Department of Children and Families (DCF) takes custody of a child, their medical care can be fragmented and incomplete due to the circumstances of their withdrawal. At FaCES, children have an initial screening visit within seven days of placement and a comprehensive visit within 30 days, along with immunization updates, medication refills, laboratory evaluations as necessary, and subspecialty and mental health/developmental referrals [7]

My work this summer in the FaCES clinic involved clinical observation of these screening and comprehensive visits, as well as observation at multidisciplinary team meetings with DCF workers and interactions with foster children and foster parents.

Definitions

Categories of Stress: Stress can be positive, tolerable, or toxic. Positive stress enhances development, and tolerable stress does not harm development.[5]

Toxic Stress: Toxic stress is the extreme, frequent, or extended activation of the stress response, without the buffering presence of a supportive adult. [2]

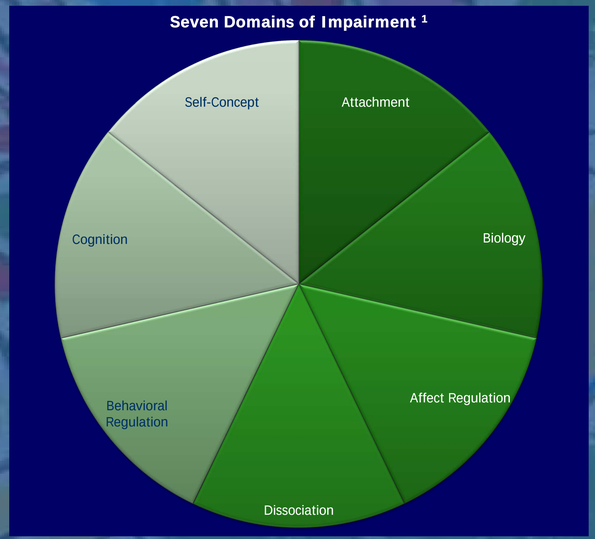
Complex Trauma: Complex trauma is an extreme result of toxic stress. Typically, complex trauma exposure refers to the simultaneous or sequential occurrences of child maltreatment—including emotional abuse and neglect, sexual abuse, physical abuse, and witnessing domestic violence—that are chronic and begin in early childhood. [1]

Children's reactions to Toxic Stress

Trauma and stress present differently in children than they do in adults. PTSD symptoms can be present, such as recurrent nightmares, flashbacks, and anxiety attacks. However, frequently children will have symptoms in other areas as well, and these "trauma-unrelated symptoms" can be more severe after child maltreatment than after a single-event trauma. The likelihood of these children meeting PTSD symptom criteria decreases as the trauma becomes more complex.[3] Issues with toileting, sleeping, behavior, eating, and learning are all commonly seen among the patients in the FaCES clinic. Other symptoms can include emotional problems, issues with peer relations, conduct difficulties, and hyperactivity.

The Biology Behind Stress Reactions

The brain, endocrine, and immune system share a language of cytokines and hormones. When one system is activated, it is possible for signals to get transmitted to other systems. During periods of toxic stress, the hypothalamic-pituitary-adrenal system is activated to help the body cope with the stressful situation. In children, this entire system is still being developed, so chronic activation can lead to long-term dis-regulation of the HPA system and its role in stress and immunity. Repeated negative exposures can disrupt additional homeostatic processes, including cortisol regulation and telomere maintenance of the DNA.[4]



These changes are adaptive in the toxic environment. It's only when moved to a healthy environment that they become maladaptive.

Attachment
- Maladaptive attachment to caregivers
- Increased risk for ongoing physical and social difficulties

Dissociation
- Key feature of complex trauma in children
- Emotional and physical disconnect
- Can exacerbate other symptoms/domains

Self-Concept
- Problems estimating own competence
- Feeling of being ineffective or helpless

Biology
- Interference with brain development and regulation

Affect Regulation
- Difficulties with self expression and self soothing
- Maladaptive coping behaviors

Behavioral Regulation
- Both under- and over- controlled behavior patterns
- Can be diagnosed as ADHD or ODD

Cognition
- Maltreated children more likely to have developmental delays, need special ed, have low grades, or drop out of school

Treatment for Children with Trauma

These therapies have been designed for children with more simple traumas. For kids with extreme complex traumas there are other therapies that are in continual development.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)

TF-CBT is a therapy technique that was developed for children and adolescents that have been exposed to trauma. Therapists work both individually with parent/caregiver and child, as well as with both together. It's a phase-oriented treatment that helps children 3-18 develop coping strategies and a trauma narrative that can help process the trauma and relieve trauma symptoms. It has the strongest evidence of any treatment model in addressing trauma related symptoms. At the FaCES clinic, TF-CBT is recommended for older children who have the cognitive skills necessary to respond to the therapy. [6]

Child-Parent Psychotherapy (CPP)

CPP was developed exclusively for children under six years of age. CPP focuses on direct intervention in the relationship between the child and the caregiver using play as a model for coping. CPP therapists help caregivers learn to provide secure attachment to the child, and this therapy allows the child to reenact the traumatic event through play, and create a trauma narrative appropriate to their age and understanding. This helps the child to process their feelings of anger and sadness in a safe space, while the therapist can help the caregiver understand the child's actions and needs and teach caregivers to respond appropriately. [6]

References

1. Cook A. Complex trauma in children and adolescents. Psychiatric annals. 2005;35(5):390-398.
2. Johnson SB, Riley AW, Granger DA, Riis J. The science of early life toxic stress for pediatric practice and advocacy. Pediatrics. 2013;131(2):319-327.
3. Jonkman CS, Verlinden E, Bolle EA, Boer F, Lindauer RJ. Traumatic stress symptomatology after child maltreatment and single traumatic events: different profiles. Journal of traumatic stress. 2013;26(2):225-232.
4. Odgers CL, Jaffee SR. Routine versus catastrophic influences on the developing child. Annual review of public health. 2013;34:29-48.
5. Forkey H, Garner A, Nalven L, Schilling S, Stirling J. Helping Foster and Adoptive Families Cope With Trauma. American Academy of Pediatrics; 2013.
6. Lawson DM, Quinn J. Complex trauma in children and adolescents: evidence-based practice in clinical settings. Journal of clinical psychology. 2013;69(5):497-509.
7. Foster Children Evaluation Services: Who We Are. http://www.facesclinic.com/who-we-are. Published 2012. Accessed 07/17/2013.