Childhood Maltreatment, Emotional Dysregulation, and Psychiatric Comorbidities

Yael Dvir, MD & Brian Denieltolis, Psy. D
University of Massachusetts Medical School

Objectives
• Developmental effects of childhood maltreatment on emotional dysregulation and psychiatric sequelae
• Emotion regulation and its developmental neurobiology
• Research evidence for associations between childhood trauma, emotional dysregulation, and psychiatric comorbidity in children, adolescents, and adults

Emotion Dysregulation & Childhood Trauma
ED: “The impaired ability to regulate and/or tolerate negative emotional states.”
May present in many psychiatric conditions including anxiety and mood disorders
CT: associated with interpersonal trauma and post-traumatic stress associated with a wide range of psychosocial, developmental, and medical impairments in children, adolescents and adults
ED is a core feature that may help account for the heightened risk

Emotion Regulation
Interplay between emotional and cognitive controls

Selecting/mapping situations with emotional significance
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Some emotions are generated automatically/regulated automatically
Other emotions require “meaning analysis” and are regulated with effortful cognitive processing
Condition of physiological reactions, memory, cognitive appraisal, and behavior
Control over:

- How and when
- Intensity
- Positive-negative valence (felt, experienced, expressed)

Occurrence continuously over time
May include changes in all three domains (behavior, experience, and physiology)

Both emotional states and goal-directed behavior can be modulated by:

- Decreasing negative behavior
- Increasing positive expressive behavior
- Addressing physiological responses (cognitive-behavioral therapy or medications)

Emotional Awareness and Social Cognition are key elements in the ability to regulate-emotions, and are impaired in a number of psychiatric conditions

Neurobiology of Emotion Regulation
The generation of emotion occurs as an interaction/series of actions:
- bottom-up (brain stem and limbic system to higher cortical regions)
- higher cortical areas are not limited to emotional regulation
- Limbic regions are not restricted to emotion activation
- Emotional regulation involves a widely distributed functional network with bidirectional associations among many emotion-related brain regions

Responses to emotional tasks are widely distributed throughout the brain
- Higher cortical areas are not limited to emotional regulation
- Limbic regions are not restricted to emotion activation
- Emotional regulation involves a widely distributed functional network with bidirectional associations among many emotion-related brain regions

Childhood Trauma & Psychiatric Comorbidities
The consequences of trauma vary from individual to individual and over time for the same individual
Many traumatized children do not develop PTSD or any other disorder
Young survivors of interpersonal trauma in childhood are at increased risk for a number of psychiatric disorders including:
- Attachment insecurity
- PTSD
- Depression and anxiety disorders
- Conduct and social withdrawal disorders
- Eating disorders
- Substance use
- a dissociative variant of PTSD

Personality disorders
Traumatized children also are at risk for:
- Self-harm and sexualized behavior
- Anger
- Poor impulse control
- Attention difficulties

Emotional dysregulation associated with a wide range of psychosocial, developmental, and medical impairments in children, adolescents and adults

Maturational
The maturation of neural and neuroendocrine systems associated with emotion can explain in emotional liability and increase in self-control throughout childhood and adolescence
These processes include:
- Maturation of parasympathetic regulation in early childhood
- Developmental changes in hypothalamic-pituitary-adrenal axis

Maturation of these systems is shaped by early experiences and care-giver responsiveness
Developmental influences promoting enhanced emotion regulation as children grow older include:
- acquisition of language (understand/communicate emotions)
- maturation of other cognitive functions including attentional system
- having a secure attachment with caregivers

It is possible that early life adversity changes the threshold of limbic reactivity, or changes perceptual and cognitive associations related to emotion
Children growing up in early adversity are more likely to be emotionally reactive to stress and also less capable of emotion regulation

Adolescents and young adults: more likely to be emotionally reactive to stress and also less capable of emotion regulation

Multiple medical studies in those who experienced childhood maltreatment point to frontal-limbic circuits as the most affected brain regions

Psychiatric Comorbidities
Adults who experienced early life trauma continue to be at risk for:
- anxiety and affective disorders
- addictions
- psychiatric illness
- personality disorders
- dissociative identity disorder
- suicide
- revictimization

Multiple medical problems, including diabetes, heart disease, immune disorders, and chronic obstructive pulmonary disease

Childhood Trauma & Emotional Dysregulation
Early comorbid presentations are:
- secure attachments
- responsive caregiving
- optimal temperamental functioning
Caregivers provide not only for their children’s basic survival needs, but also for emotional interactions with caregivers are necessary for the development of bodily self-regulation
In humans, childhood maltreatment/repeated trauma, disrupts acquisition of appropriate emotional regulation and interpersonal skills

Increased risk for a number of psychiatric disorders including:
- internalizing and externalizing disorders
- a dissociative variant of PTSD

Personality disorders
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- self-harm and sexualized behavior
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Emotional Development
Maltraeted children (sexual trauma, neglect): deficits in delays in understanding and regulating emotions
Anticipate a negative reaction to display of negative emotions (sadness/anger to parents and peers)
These skills can be taught as part of clinical interventions (Shapira 2000 & 2005)

Caregiver representations in maltreated children:
- disorganized, vacant, and negatively-toned internal representations of caregivers
- problems with emotional dysregulation
- aggression
- decreased social competence (peer rejection) (Shields & Cloitre 2001)

Neglected preschool children had more difficulty discriminating emotional expressions and identifying discrete emotions
Physically abused children displayed a response bias for angry facial expressions

Physically abused children 8-11 year olds had difficulties disengaging attention from angry facial cues
In contrast, physically abused children were more accurately able to recognize early facial expression of anger, when few physiological cues were available (Hiltal 2000, 2005 & 2009)

Conclusions
Complex and bi-directional relationship between childhood trauma and emotional dysregulation
Childhood trauma is associated with:
- reduced ability to understand and regulate emotions
- reduced affectivity
- reduced self-control
- increased social withdrawal
- increased aggression
- increased irritability
- increased impulsivity
- increased conflict/struggle in interpersonal relationships with peers and adults
- increased self-harm behavior

Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities present a wide range of psychosocial, developmental, and medical impairments in children, adolescents and adults

References
Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities: Yael Dvir, Julianne D. Ford, Michael Hill, and Juan A. Frasier, Harvard review of psychiatry (2014)

Borderline Personality Disorder Precursor?
Conceptualized/emotional/behavioral dysregulation as potential precursors to BPD in childhood
- affective negativism
- anger
- instability
- liability
- impulsivity
- external conflict/staffage in interpersonal relationships with peers and adults
- suicidal/self-harm behavior

Found consistent evidence of a relationship between borderline personality disorder and all of the indices of dysregulation (Rogaski 2009)

Re-victimization
ED underlying mechanism for risky sexual behavior and sexual re-victimization among adult victims of childhood sexual and physical abuse
A history of childhood physical and sexual abuse was highly associated with increased risk for adolescent/adult rape
More than 5% of women sexually re-victimized

Emotional dysregulation appearing to be a mediating factor
Other sexually risky behaviors (higher lifetime number of sexual partners including strangers) predicted by measures of emotional dysregulation
The severity of physical and sexual re-victimization is predicted by childhood sexual abuse

Victims with a history of sexual abuse in their own childhoods: risk for impairment in their internal attachment representations and attachment behavior with their daughters
Daughters showed impairment in emotional regulation, risk for exposure to sexual abuse (Min 2010, 2011, Hall 2009)

Q U I C K  S T A R T  ( c o n t . )