Trauma/ACEs 101

Tom Bradach
IL Chapter, American Academy of Pediatrics
• Providing pediatrician and interprofessional education, resources, and technical assistance

• Working on policy, advocacy, and systems improvement issues

• Connecting providers and families to community resources for education, treatment, and other services
THE INFLUENCE OF ADVERSE CHILDHOOD EXPERIENCES (ACEs) ON DEVELOPMENTAL OUTCOMES
ACE Study

The largest study of its kind that looks at the health and social effects of adverse childhood experiences over a lifespan.
ACEs Impact Multiple Outcomes

Risk Factors for Common Diseases
- Smoking
- Alcoholism
- Promiscuity
- High Perceived Risk of HIV
- Poor Perceived Health
- Illicit Drugs
- IV Drugs
- Multiple Somatic Symptoms
- Cancer
- Liver Disease
- skeletal Fractures
- Chronic Lung Disease
- Sexually Transmitted Diseases
- Ischemic Heart Disease

Prevalent Diseases
- Difficulty in job performance
- Married to an Alcoholic
- High perceived stress
- Depression
- Sleep Disturbances
- Memory Disturbances
- Panic Reactions
- Poor Anger Control
- Early Age of First Intercourse

General Health and Social Functioning
- Smoking
- Alcoholism
- Promiscuity
- Obesity
- High perceived stress
- Mental Health
- Depression
- Anxiety
- Poor Self-Rated Health

Mental Health
- Alcoholism
- Promiscuity
- Smoking
- Hallucinations
- Depression
- Sleep Disturbances
- Memory Disturbances
- Panic Reactions
- Poor Anger Control
- Early Age of First Intercourse

ACEs

Sexual Health
- Illicit Drugs
- IV Drugs
- Multiple Somatic Symptoms
- Cancer
- Liver Disease
- Skeletal Fractures
- Chronic Lung Disease
- Sexually Transmitted Diseases
- Ischemic Heart Disease

Teen Paternity
- Fetal Death
- Unintended Pregnancy
- Sexual Dissatisfaction

Depression
- Sleep Disturbances
- Memory Disturbances
- Panic Reactions
- Poor Anger Control
- Early Age of First Intercourse
ACEs Include

Abuse
  • Emotional
  • Physical
  • Sexual

Neglect
  • Emotional
  • Physical

Home environment
  • Mother treated violently
  • Household substance abuse
  • Household mental illness
  • Parental separation or divorce
  • Incarcerated household member
Risk Factors for Adult Depression are Embedded in ACE

Source: Chapman et al, 2004
ACE vs. Suicide Attempts

% Attempting Suicide

ACE Score

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<tr>
<th>ACE Score</th>
<th>% Attempting Suicide</th>
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ACE vs. Smoking and COPD

% with Problem

Regular Smoking by Age 14

COPD

ACE Score

0

1

2

3

4 or more
ACE vs. Adult Alcoholism

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>% Alcoholic</th>
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<tr>
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Risk Factors of Adult Heart Disease are Embedded in ACE

Source: Dong, et al. (2004) via Center on the Developing Child at Harvard University
Risk Factors of Developmental Delay are Embedded in ACE

Data Source: Barth, et al. (2008)
Graphic adapted from 2011, Center on the Developing Child at Harvard University
Understanding the Impact of ACE

- Adverse Childhood Experiences
- Social, Emotional, and Cognitive Impairment
- Adoption of Health-Risk Behaviors
- Disease & Disability
- Early Death

Death

Conception
ACEs Impact Multiple Outcomes

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- High Perceived Risk of HIV
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Prevalent Diseases
- Cancer
- Liver Disease
- Chronic Lung Disease
- Sexual Transmitted Diseases
- Skeletal Fractures
- Ischemic Heart Disease

General Health and Social Functioning
- Relationship Problems
- Married to an Alcoholic
- High perceived stress
- Difficulty in job performance

Mental Health
- Depression
- Anxiety
- Sleep Disturbances
- Memory Disturbances
- Panic Reactions
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Sexual Health
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- Teen Pregnancy
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- Sexual Dissatisfaction
ACE and the Brain

WHAT IS THE ROLE OF STRESS?
Three Levels of Stress Response

POSITIVE
Important to development in the context of stable and supportive relationships
Three Levels of Stress Response:

**TOLERABLE**
Serious and temporary, but impact buffered by supportive relationships and safe environments
Three Levels of Stress Response: Positive, Tolerable, Toxic

**TOXIC**

Prolonged activation of stress response systems in the absence of protective relationships
What happens?

**Amygdala:**
activates the stress response
*Toxic stress:* enlargement

**Prefrontal cortex:**
usually a check to the amygdala
*Toxic stress:* loss of neurons, less able to function

**Hippocampus:**
major role in memory and mood
*Toxic stress:* impairment in understanding and emotion

Freely-reproducible image from the National Institutes of Health
Toxic Stress and Brain Development

- effects on body systems
- can damage brain architecture
- can lead to lifelong problems
In the Classroom
Academic Performance

• Behavioral issues/concerns

• Ability to learn

• High absenteeism
Trauma can look like other things

- Developmental delay
- ADHD
- “Behavior issues”
What teachers might observe

• Separation anxiety
• Lack of developmental progress
• Re-creating traumatic event
• Physical complaints
From Child to Parent

How does stress affect parenting?
EFFECT OF TRAUMA ON PARENTING ABILITY

• Reduced parenting capacity/responses

• Unhealthy response to stress

• High ACE score and risky adult behaviors

• Intergenerational effect
How Brains are Built: A Review

The Good News
Although Early Adversity CAN Impair Development...
...it doesn’t have to

Significant Adversity

New Protective Interventions

Healthy Developmental Trajectory

Supportive Relationships
Stimulating Experiences
Health-Promoting Environments
WHAT COMES TO MIND WHEN YOU HEAR THE WORD “RESILIENCE”? 
RESILIENCE AND OTHER REASONS FOR OPTIMISM

Several factors for resiliency, including:

• Cognitive capacity
• Healthy attachment relationships
• Confidence in personal strengths and abilities
• The ability to regulate emotions and behavior
• Supportive environmental systems
What can YOU do to build resiliency in children and families?
What can you do to support a child with complex trauma?

• Respond through compassion, not discipline

• Be trauma-informed when assessing children’s behaviors or your expectations of the family

• Provide consistency and stability in your interactions with children, families, colleagues
“You do not have to be a therapist to be therapeutic”
What’s wrong with this person?
What has happened to this person?
Just as important...
Take Care of Yourself!

- Increased irritability or impatience with students, families, or colleagues
- Decreased concentration
- Denying that traumatic events impact those we serve or feeling numb or detached
- Intense feelings and intrusive thoughts, that don’t lessen over time, about someone else’s trauma
Self Care Assessment
STRESS!

work

home
Things we recommend to manage stress

• Don’t go it alone.

• Recognize compassion fatigue as an occupational hazard.

• Guard against your work becoming the only activity that defines who you are.

• Address your physical, psychic, and spiritual needs.
Your charge today

• Think about all the children you serve

• Think about their families

• Think about the community in which you work

• Think about your colleagues

• Think about the ways you can build resilience with and for all of them
Thank You

Tom Bradach
Coordinator, Child Development Initiatives
Illinois Chapter, American Academy of Pediatrics (ICAAP)
TBradach@illinoisaap.com