Changing Your Perspective

From what’s wrong with you?

to

What’s happened to you?

Alison Leversha
Community Paediatrician
Starship Child Health and ADHB
ADVERSE CHILDHOOD EXPERIENCES (ACE)

- The largest scientific research project of its kind to date

- A decade long ongoing collaboration led by:
  - Vincent J. Felitti, MD
  - Robert F. Anda, MD, MS

- Analyzing the relationship between multiple categories of childhood trauma and health and behavioral outcomes later in life.
Adverse Childhood Experiences

A
• 17,000 adults
• 10 types of adverse experiences

C
• Only 1/3 had NO ACES
• 16% had 4 or more ACES

E
• More ACES were STRONGLY correlated with significantly poor health outcomes and health risk behaviors
The three types of ACEs include:

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Mother treated violently
- Substance Abuse
- Incarcerated Relative
- Divorce
How common are ACES?

Around half of all adults living in England have experienced at least one form of adversity in their childhood or adolescence.

Of all children and young people:

- 52% experienced 0 ACEs
- 23% experienced 1 ACE
- 16% experienced 2-3 ACEs
- 9% experienced 4+ ACEs
Safeguarding children NZ https://vimeo.com/280301894
How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.

- Reduces ability to respond, learn, or process effectively which can result in problems in school
- May have difficulty making friends and maintaining relationships
- Increases stress hormones which affects the body's ability to fight infection
- Lower tolerance for stress can result in behaviors such as aggression, checking out, and defiance
- Problems with learning and memory can be permanent
- May cause lasting health problems

A Survival Mode Response is one that increases heart rate, blood pressure, breathing and muscle tension. When a child is in survival mode, self-protection is their priority. In other words:

"I can't hear you, I can't respond to you, I am just trying to be safe."
ACES
THE REAL DANGER
IS HIDDEN

REPEATED
ACES
SHORTENS
LIFE
WHAT IMPACT DO ACEs HAVE?

As the number of ACEs increases, so does the risk for negative health outcomes.

Possible Risk Outcomes:

**BEHAVIOR**
- Lack of physical activity
- Smoking
- Alcoholism
- Drug use
- Missed work

**PHYSICAL & MENTAL HEALTH**
- Severe obesity
- Diabetes
- Depression
- Suicide attempts
- STDs
- Heart disease
- Cancer
- Stroke
- COPD
- Broken bones
<table>
<thead>
<tr>
<th>RISK FACTOR</th>
<th>% INCREASE</th>
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<tbody>
<tr>
<td>Smoking</td>
<td>242%</td>
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<tr>
<td>Obesity</td>
<td>22%</td>
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<tr>
<td>Depression</td>
<td>357%</td>
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<tr>
<td>Illicit drug use</td>
<td>443%</td>
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<tr>
<td>Injected drug use</td>
<td>1133%</td>
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<tr>
<td>STD</td>
<td>298%</td>
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<tr>
<td>Attempted suicide</td>
<td>1525%</td>
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<tr>
<td>Alcoholism</td>
<td>555%</td>
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</table>
Figure 2: Learning/Behavior Problems by ACEs Score

# Probability of Outcomes

Given 100 American Adults

<table>
<thead>
<tr>
<th></th>
<th>WITH 0 ACEs</th>
<th>WITH 3 ACEs</th>
<th>WITH 7+ ACEs</th>
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<tbody>
<tr>
<td>33 No ACEs</td>
<td>1 in 16 smokes</td>
<td>1 in 9 smokes</td>
<td>1 in 6 smokes</td>
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<tr>
<td>51 1-3 ACEs</td>
<td>1 in 69 are alcoholic</td>
<td>1 in 9 are alcoholic</td>
<td>1 in 6 are alcoholic</td>
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<tr>
<td>16 4-8 ACEs</td>
<td>1 in 480 uses IV drugs</td>
<td>1 in 43 uses IV drugs</td>
<td>1 in 30 use IV drugs</td>
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<tr>
<td></td>
<td>1 in 14 has heart disease</td>
<td>1 in 7 has heart disease</td>
<td>1 in 6 has heart disease</td>
</tr>
<tr>
<td></td>
<td>1 in 96 attempts suicide</td>
<td>1 in 10 attempts suicide</td>
<td>1 in 5 attempts suicide</td>
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</table>
ACE reduction reliably predicts simultaneous decrease in all of these conditions.
Mechanisms by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan
The Pair of ACEs

Adverse Childhood Experiences

- Maternal Depression
- Physical & Emotional Neglect
- Emotional & Sexual Abuse
- Divorce
- Substance Abuse
- Mental Illness
- Domestic Violence
- Incarceration
- Homelessness

Adverse Community Environments

- Poverty
- Violence
- Discrimination
- Poor Housing Quality & Affordability
- Community Disruption
- Lack of Opportunity, Economic Mobility & Social Capital

Ellis W., Dietz W. BCR Framework Academic Peds (2017)
Three Core Concepts in Early Development

1

Experiences Build Brain Architecture

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD
Center on the Developing Child 🟢 HARVARD UNIVERSITY
90% of a child’s brain development happens before age 5

Source: Harvard Center for the Developing Child
The brain’s ability to change in response to experiences

The amount of effort such change requires

AGE

2 4 6 8 10 20 30 40 50 60 70

SOURCE: LEVITT (2009)

Center on the Developing Child

HARVARD UNIVERSITY

www.developingchild.harvard.edu
Normal

Chronic stress

Prefrontal Cortex and Hippocampus

Three Levels of Stress Response

Positive
Brief increases in heart rate, mild elevations in stress hormone levels.

Tolerable
Serious, temporary stress responses, buffered by supportive relationships.

Toxic
Prolonged activation of stress response systems in the absence of protective relationships.
Three Core Concepts in Early Development

Toxic Stress Derails Healthy Development

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD
Center on the Developing Child | HARVARD UNIVERSITY
Early Life Adversity

- Threat
- Deprivation

Neural Adaptations

- Emotional Processing
- Executive Function
- Reward Processing

Psychological Changes

- Heightened Emotional Reactivity
- Poorer Emotion Regulation
- Increased Delay Discounting
- Blunted Reward Responsivity

Addictive Behaviors

- Smoking Cigarettes
- Drinking Alcohol
- Overeating High-Sugar, High-Fat Foods
Executive State
Prefrontal Lobes
What can I learn from this?

Emotional State
Limbic System
Am I loved?

Survival State
Brain Stem
Am I safe?
Epigenetics
A woman who smokes while pregnant induces epigenetic changes in three generations at once: in herself, her unborn daughter, and her daughter’s reproductive cells.
Maternal Early Life Experiences and Parenting: The Mediating Role of Cortisol and Executive Function
Andrea Gonzalez, Ph.D., Jennifer M. Jenkins, Ph.D., Meir Steiner, M.D., Ph.D., Alison S. Fleming, Ph.D.

Intergenerational Transmission of Maternal Childhood Maltreatment Exposure: Implications for Fetal Brain Development
Claudia Buss, PhD, Sonja Entringer, PhD, Nora K. Moog, MSC, Philipp Toepfer, MSC, Damien A. Fair, PhD, Hyagriv N. Simhan, MD, MS, Christine M. Heim, PhD, Pathik D. Wadhwa, MD, PhD

Thinking Across Generations: Unique Contributions of Maternal Early Life and Prenatal Stress to Infant Physiology
Sarah A.O. Gray, PhD, Christopher W. Jones, BA, Katherine P. Theall, PhD, Erin Glackin, MA, Stacy S. Drury, MD, PhD

Child Abuse, Depression, and Methylation in Genes Involved With Stress, Neural Plasticity, and Brain Circuitry
Natalie Weder, MD, Huiping Zhang, PhD, Kevin Jensen, PhD, Bao Zhu Yang, PhD, Arthur Simen, MD, PhD, Andrea Jackowski, PhD, Deborah Lipschitz, MD, Heather Douglas-Palumberi, MA, Margrat Ge, MA, Francheska Perepetchikova, PhD, Kerry O’Loughlin, BA, James J. Hudziak, MD, Joel Gelernter, MD, Joan Kaufman, PhD
Child Neglect and Maltreatment and Childhood-to-Adulthood Cognition and Mental Health in a Prospective Birth Cohort

Marie-Claude Geoffroy, PhD, Snehal Pinto Pereira, PhD, Leah Li, PhD, Chris Power, PhD
when life seems hard...

...try changing perspectives.
Trauma-Informed Care

• A strengths-based approach
• Grounded in an understanding of and responsiveness to the impact of trauma
• Emphasises physical, psychological, and emotional safety for both providers and survivors
• Creates opportunities to rebuild a sense of control and empowerment

(SAMHSA, 2014, p. 10)
Key Features

• Valuing the individual in all aspects of care
• Neutral, objective and supportive language
• Individually flexible plans and approaches
• Avoid shaming or humiliation at all times

(Fallot & Harris, 2002; Cook et al., 2002; Ford, 2003; Cusack et al. 2003; Jennings, 1998; Prescott, 2000)
We need to presume the clients we serve have a history of traumatic stress and exercise “universal precautions” by creating systems of care that are trauma-informed

(Hodas, 2005)
So Why Be Trauma-Informed?

- Trauma is pervasive and its impact is far reaching and long lasting
- Trauma affects how people approach services designed to help them
- Services designed to help people can be and often have been inadvertently re-traumatizing
- Recovery and healing are possible
- Protective factors facilitate healing and resilience

*Healing occurs within the context of RELATIONSHIPS*

(Fallot and Harris, 2002)
Trauma-Informed Language/Thinking

- What is wrong with you?  
  - Symptoms  
  - Disorder  
  - Attention-seeking

- What has happened to you?
  - Adaptations  
  - Response  
  - Trying to connect the best way they know how  
  - Doing the best they can given their early experience  
  - Trying to assert their power  
  - Individual has difficulty asking directly for what they want

- Borderline  
- Controlling  
- Manipulative
Table 1. *Definitions of Workforce Trauma*

<table>
<thead>
<tr>
<th>Workforce trauma</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Burnout</td>
<td>The cumulative psychological strain of working with many different stressors. It often manifests as a gradual wearing down over time, and of having physical and emotional exhaustion.</td>
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<tr>
<td>Vicarious trauma</td>
<td>The cumulative effect of working with people who have experienced trauma and includes cognitive changes resulting from empathic engagement and a change in worldview.</td>
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<td>Secondary traumatic stress</td>
<td>Workers' sub-clinical or clinical signs and symptoms of post-traumatic stress disorder (PTSD) that mirror those experienced by clients, friends, or whanau. While not formally recognised as a clinical disorder, many clinicians note that those who witness traumatic stress in others may develop symptoms similar to, or associated with, PTSD.</td>
</tr>
<tr>
<td>Compassion stress</td>
<td>Characterises the stress of helping or wanting to help people who have experienced trauma. Compassion stress is seen by some as a natural outcome of knowing about trauma experienced by a client, friend, or family, rather than a pathological process.</td>
</tr>
</tbody>
</table>

Source: Trauma Informed Oregon (n.d.).
Trauma in the Workplace

• Increased irritability or impatience with clients
• Difficulty planning and implementing work responsibilities
• Decreased concentration
• Denying that traumatic events impact clients or feeling NUMB or DETACHED (“I just don’t care”)
• Intense feelings or intrusive thoughts about clients
• Dreams about clients/sleep problems
• Changes in eating—more or less
• Increased use of stimulants, alcohol, cigarettes, spending or food to make it through the day/wk
Becoming Trauma Informed

- Trauma Aware
- Trauma Sensitive
- Trauma Responsive
- Trauma Informed
• Identify protective factors:
  • Encourage nurturing and positive relationships
  • Provide knowledge of parenting and child development
  • Assist in developing parental resilience
  • Social connections
  • Concrete support in times of need
• Build Strong Communities:
  • Inform and Educate
  • Enhance Skills
  • Provide Support
  • Enhance Access And Reduce Barriers
  • Community Activities
  • Modify/Change Policy
Resilience is important for emotional wellbeing. Correlates of resilience in young people include:

- Effective caregiving & parenting
- Intelligence & problem solving skills
- Self-regulation skills
- Perceived efficacy and control
- Achievement motivation
- Faith, hope, spirituality
- Beliefs that life has meaning
- Positive relationships with caring adults
- Positive friends or romantic partners
- Effective teachers and schools

Source: PHE (2016)
Social Justice

Parents have the right to know the most powerful determinant of their children’s future health, safety and productivity.
Harvard Center on the Developing Child
ACES and Trauma-Informed Care

- ACES are common and have long lasting effects
- Outcomes are not destiny
- Perspective is key: Trauma Informed
- We can affect change
I’ve learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

- Maya Angelou