ACE study
(Adverse Childhood Experience)

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What is the ACE study?

ACE Study:
• largest study of its kind ever done to examine the health and social effects of adverse childhood experiences
• 17,000 participants in the first study done by the CDC.
• Study repeated by 18 other states with similar results.
What do we mean by ACE?

- Growing up experiencing any of the following before age 18:
  - Recurrent physical abuse or neglect
  - Recurrent emotional abuse or neglect
  - Contact sexual abuse
  - Mother was/is treated violently
  - One or no parents
  - Alcohol and/or drug abuser in the household
  - An incarcerated household member
  - Family member who is suicidal, chronically depressed, mentally ill, or institutionalized
ACE study summary findings

• The more ACEs you have as a child (higher ACE score) → higher risk for health and behavioral problems as an adult.

• Problems such as:
  – Alcoholism + alcohol abuse
  – COPD
  – Depression
  – Fetal death
  – Health-related quality of life
  – Illicit drug use
  – Ischemic heart disease (IHD)
  – Liver disease
  – Multiple sexual partners
  – Risk for intimate partner violence
  – STDs
  – Smoking
  – Suicide attempts
  – Unintended pregnancies
  – Early initiation of smoking
  – Early initiation of sexual activity
  – Adolescent pregnancy
ACE study summary findings

- The more ACEs you have as a child (higher ACE score) → higher risk for health and behavioral problems as an adult.

<table>
<thead>
<tr>
<th>ACE score</th>
<th>Health / Behavior association</th>
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<tbody>
<tr>
<td>4</td>
<td>- 3-4x higher risk of depression</td>
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<td></td>
<td>- 5x more likely to become an alcoholic</td>
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<td>- 8x more likely to be a victim of rape</td>
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<td>- up to 10x more likely to attempt suicide</td>
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<td>6 or higher</td>
<td>- 2.6x more likely to have COPD</td>
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<td>- 3x more likely to have lung cancer</td>
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<td>- 4,600x more likely to abuse IV drugs</td>
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ACE study summary findings

• ACEs are implicated in the 10 leading causes of death in the U.S.

• $124 BILLION cost associated with just 1 year of confirmed ACE cases.

• Cost of ACE rivals cost of other high profile public health problems.
ACE study summary findings

• ACEs can damage your child’s brain structures and functions.
• How?

A child living much of their life in **stress** due to ACEs →
→ brain gets overloaded with **stress hormones**
→ brain **stops working** properly
→ child **falls behind** in school and/or fail to develop healthy **relationships**
→ child develops **feelings** of anger, helplessness, frustration and/or guilt
→ un/consciously develop **coping mechanisms** that involve drug, alcohol, food, risky behavior, etc.
→ health problems
What do we do now?
Bridging the Chasm

Acknowledgment that the problem exists.

TODAY:
Child health and well-being as it stands today.

FUTURE:
Child health and well-being as it could be.
What Can We Do Now?

• ACE study recommends routine screening of all patients for adverse childhood experiences must take place at the earliest possible point.

• Routinely seek history of adverse childhood experiences from all patients.

• Acknowledge their reality by asking, “How has this affected you later in life?”

• Arrange a return appointment to discuss possibilities for helping them.
Why ask?
Benefits of Inquiry

• A common belief among clinicians is that asking vulnerable consumers detailed questions about their trauma history may be too upsetting.  
  Goodman

• Studies conducted with public mental health consumers indicate otherwise.  
  Goodman

• There is no evidence in the literature that clients resent or object to being asked about a history of child sexual abuse.  
  Gallop et al

• On the contrary, there is increasing evidence that failing to ask represents colluding with society’s denial of either prevalence or impact.  
  Bryer; Doob
Benefits of Inquiry

- Biomedical evaluation **without ACE questions** reduced DOV’s during the subsequent year **by 11%** (700 patient sample).
- A neural net analysis of records of 135,000 patients **screened for ACEs** as part of their medical evaluation – showed an **overall reduction in doctor office visits during the subsequent year of 35%**.

Why?
- Better treatment planning? Decrease in somatization disorder?
- **Psychoanalyst** conducted a one-time interview of depressed patients; produced a 50% decrease visits in depressed patients because of somatization disorders.
Benefits of Inquiry

• Disclosure of trauma may have positive neurological effects on immune function

• A study of persons writing about their traumatic experiences (including interpersonal violence) suggested that confronting trauma experiences was physically beneficial. Positive effects included:
  – 2 measures of cellular immune-system function (mitogen responses and autonomic changes) were positive
  – Visits to the health center were reduced
  – Self-reports of subjective distress decreased

• Inhibiting or holding back one’s thoughts, feelings and behaviors is associated with long-term stress and disease.

  Pennebaker et al.
Benefits of Inquiry

9 partners in Children’s Clinic Pediatricians started a pilot to screen the parents of four-month-old babies for ACEs.

• “amount of intimacy ... with their patients increased. Their comfort level with this was much easier to come to than they expected.”

Stevens
Benefits of Inquiry

• A “thorough trauma assessment with children and adolescents is a prerequisite to preventing the potentially chronic and severe problems in biopsychosocial functioning that can occur when PTSD and associated or comorbid behavioral health disorders go undiagnosed and untreated”.

  Wolpaw & Ford
References