Trauma

Talks



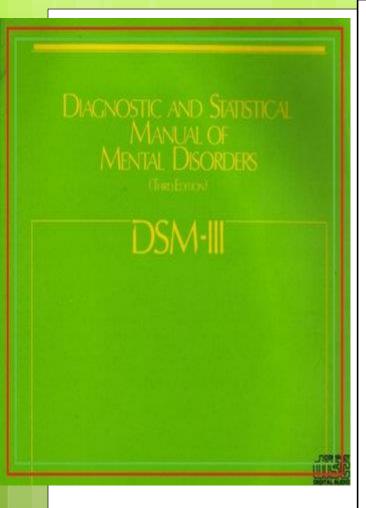
Mary Ann Jones, Ph.D. CEO

TRAUMA

Experiences or situations that are emotionally painful and distressing, and that overwhelm an individual's capacity to cope

Trauma Theory

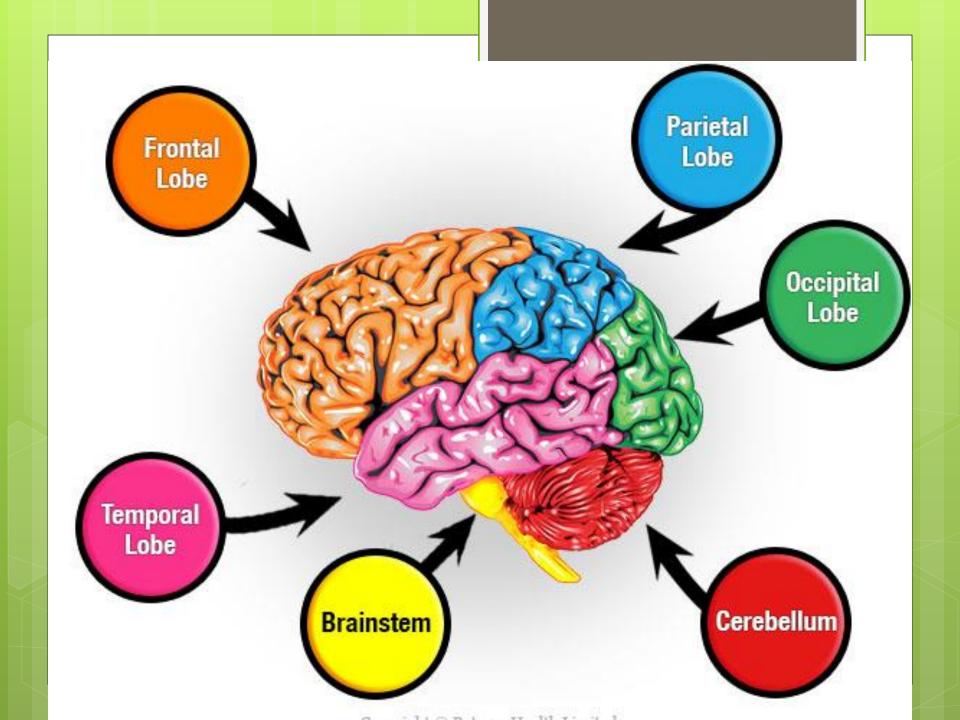
- •1970s Vietnam War Veterans
- o1980 DSM III
- o1990s ACE Study
- o2016 Paradigm Shift



From an historical perspective, the significant change ushered in by the PTSD concept was the stipulation that the etiological agent was outside the individual (i.e., a traumatic event) rather than an inherent individual weakness

Trauma and the Child's Brain





FRONTAL CORTEX	PROBLEM SOLVING	MORE PLASTICITY
LIMBIC SYSTEM	MEMORY, EMOTIONS	
MIDBRAIN	SLEEP, APPETITE, AROUSAL	
BRAINSTEM	HR, BODY TEMP, BP	LESS PLASTICITY

BRAIN STRUCTURES

- The child's stress response is exaggerated and prolonged resulting in changes in the child's brain organs.
- Larger, more active Amygdala
- Smaller Hippocampus
- Smaller less active Frontal Lobes
- Smaller Corpus Callosum

FRONTAL LOBE FUNCTION

- Impulse Control
- Organization
- Time Orientation

CORPUS CALLOSUM

- Not well Integrated
- Learning Problems

AMYGDALA

- Emotional Dysregulation
- Difficulty with Empathy
- Hyperarousal, Anxiety

OF SUPPORT AFTER.,,

The Fresh Quotes

You can spend a lifetime trying to forget a few minutes of your childhood.



POSITIVE

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

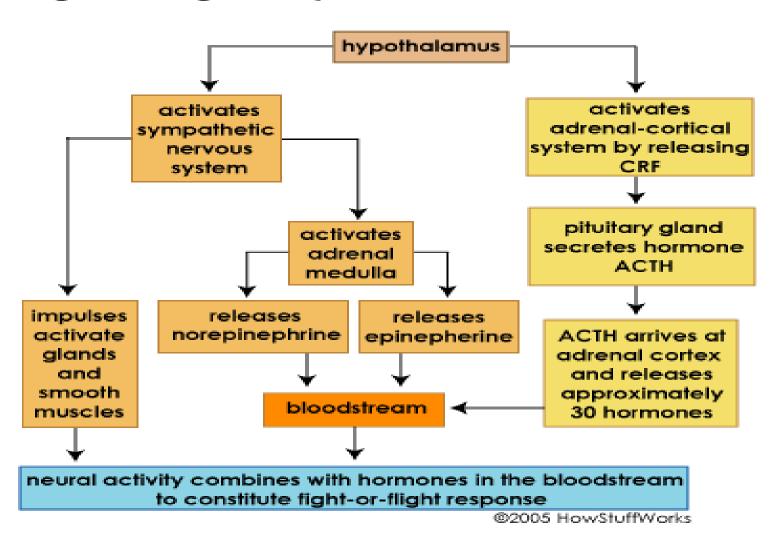
TOLERABLE

Serious, temporary stress responses, buffered by supportive relationships.

TOXIC

Prolonged activation of stress response systems in the absence of protective relationships.

Fight-or-flight Response



TOXIC STRESS

- According to the American Academy of Pediatrics, the term "toxic stress" describes the disruption in brain architecture and other developing organ systems that occur when a child is exposed to strong, frequent or prolonged adversity.
- Unlike ADHD, toxic stress involves many systems of the body and is characterized by a dramatic increase in stress-related disease and cognitive impairment.

Chronic stress leads to frequent triggering of the "fight or flight" chemical response, and that can be harmful to a child's development long-term.



CORTISOL RESPONSE

(Cortisol is released into the blood stream)

Decreased Immune Function

Increased Ulcer Response to Bacteria H. Pylori

Increased Viral Infections and Bronchitis

Increased Absenteeism

Changes in Glucose Metabolism

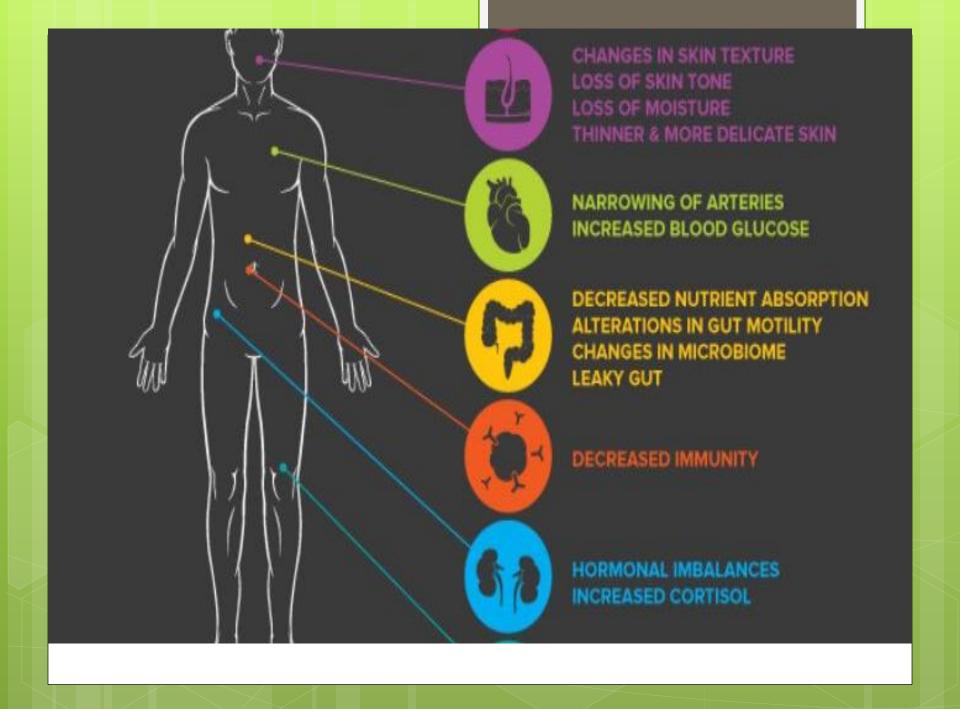
Insulin Resistance Pre-diabetes Diabetes and Nerve damage Truncal Obesity Fatigue

Changes in Neurochemistry

Decreased Serotonin Sleep Mood Anxiety Depression Decreased
Dopamine
Pleasure
Motivation
Concentration
Increased risk
of addiction

Changes in Cardiovascular Status

Increased Blood Pressure
Increased Arterial Plaque
Increased Belly Fat
Heart Attack and Stroke



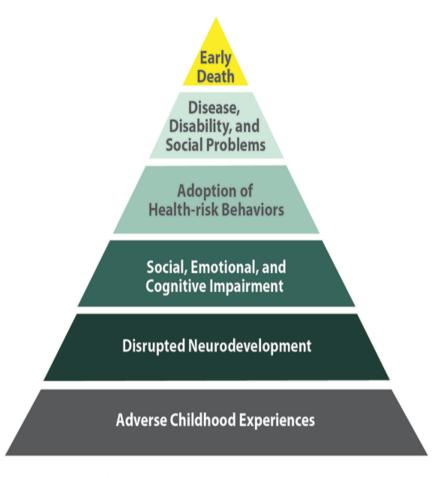
Adverse Childhood Experiences Study (ACE)

- The largest and most influential study of the relationship between childhood adversity and later life health and well being.
- The focus was to analyze the relationship between childhood trauma and the risk for physical and mental illness in adulthood.

ACEs: The 10 Areas of Trauma

- 1. Psychological Abuse
- 2. Physical Abuse
- 3. Sexual Abuse
- 4. Emotional Neglect
- 5. Physical Neglect
- 6. Loss of a Parent (for any reason)
- 7. Mother Treated Violently
- 8. Substance Abuse
- 9. Mental Illness
- 10. Criminal Behavior in the Household

The questions are described on the ACE website www.acestudy.com



Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

Death

Conception

WHAT IMPACT DO ACEs HAVE?

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



Possible Risk Outcomes:

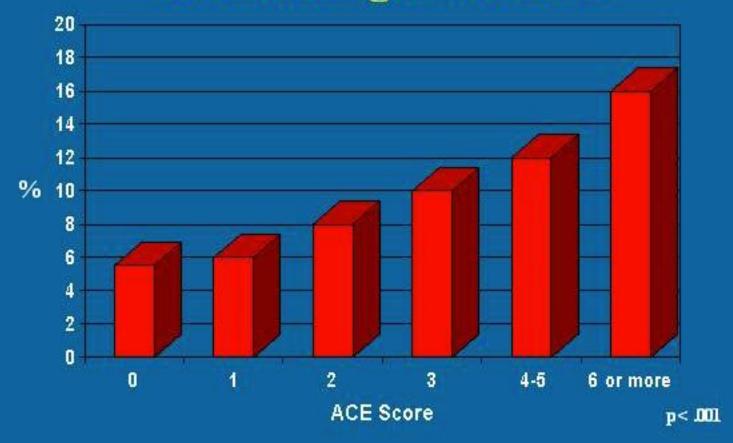


Health Risks

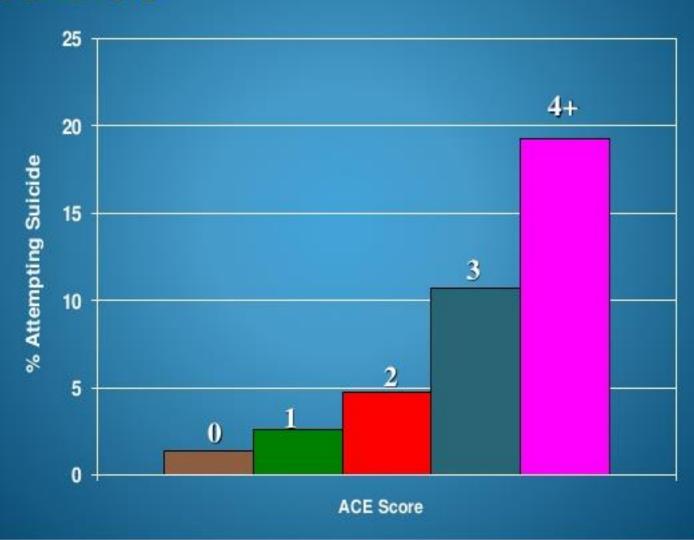
Childhood Experiences vs. Adult Alcoholism



Adverse Childhood Experiences vs. Smoking as an Adult



Suicide



PROBABILITY OF SAMPLE OUTCOMES GIVEN 100 AMERICAN ADULTS

33 Report No ACEs 51 Report 1-3 ACES 16 Report 4-8 ACEs

WITH 0 ACEs

WITH 3 ACEs

WITH 7+ ACEs

1 in 16 smokes

1 in 9 smokes

1 in 6 smokes

1 in 69 are alcoholic

1 in 9 are alcoholic

1 in 6 are alcoholic

1 in 480 uses IV drugs

1 in 43 uses IV drugs

1 in 30 use IV drugs

1 in 14 has heart disease

1 in 7 has heart disease

1 in 6 has heart disease

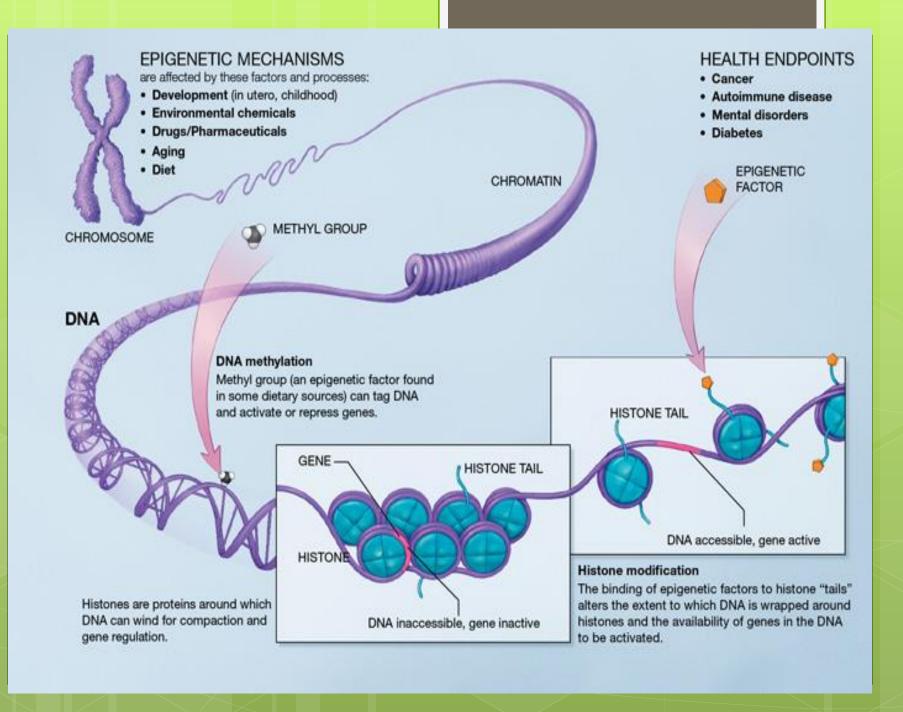
1 in 96 attempts suicide

1 in 10 attempts suicide

1 in 5 attempts suicide

EPIGENETICS

- Our genes, and ultimately our developing brain architecture, are influenced powerfully by positive early experiences—and negative ones, too.
- Genes provide the hardware, but early experience is the software that drives the system.



-- "Childhood adversity shapes a stress system that has trouble flipping the 'off'switch." --



Our survival depends on the healing power of love, intimacy and relationships. As individuals. As communities. As a country. As a culture. Perhaps even as a species.

Dean Ornish



Trauma happens in relationships, so it can only be healed in relationships. Art can't provide healing. It can be cathartic and therapeutic but a relationship is a three-part journey.

Alanis Morissette