

Adverse Childhood Experiences and their Relation to Depression and Suicidality:

Turning gold into lead



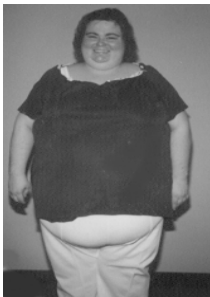
A collaborative effort between
Kaiser Permanente and the Centers for Disease Control



Depression in Adults Conference
Calgary October 15, 2008

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Is Morbid Obesity the *core* Diagnosis?



In 51 weeks
408 ⇔ 132 lbs



Origins of the ACE Study

ACE Study Design

Survey Wave I
71% response (9,508/13,454)
n=13,000

All medical evaluations
abstracted

vs.

Present
Health Status

N = 17,337

Survey Wave II
n=13,000

All medical evaluations
abstracted

Mortality

National Death Index

Morbidity

Hospitalization
Doctor Office Visits
Emergency Room Visits
Pharmacy Utilization

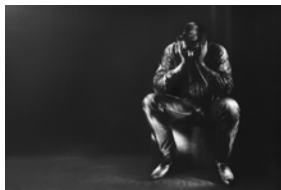
Prevalence of Adverse Childhood Experiences

Abuse, by Category	Prevalence (%)
Psychological (by parents)	11%
Physical (by parents)	28%
Sexual (anyone)	22%
Neglect, by Category	
Emotional	15%
Physical	10%
Household Dysfunction, by Category	
Alcoholism or drug use in home	27%
Loss of biological parent < age 18	23%
Depression or mental illness in home	17%
Mother treated violently	13%
Imprisoned household member	6%

Adverse Childhood Experiences Score

Number of categories (not events) is summed...

ACE Score	Prevalence
0	33%
1	25%
2	15%
3	10%
4	6%
5 or more	11%*



- Two out of three experienced at least one *category* of ACE.
- Women are 50% more likely than men to have ACE Score >5.
- If any one ACE is present, there is an 87% chance *at least* one other ACE category is present, and a 50% chance of 3 others.

The ACE Study Summary of Findings:



- Adverse Childhood Experiences (ACEs) are very common, but largely unrecognized.
- ACEs are in fact the basis for much of adult medicine and of many common public health problems like depression.
- ACEs are strong predictors of later well-being, social functioning health risks, disease, and death.
- Adverse childhood experiences are interrelated, not solitary.
- This combination makes ACEs *the leading* determinant of the health and well-being of the nation.

Molestation in Childhood



Familial obesity does not mean genetic

Depression:

Most say depression is a disease.
Many say depression is genetic.
Some say it is due to a chemical imbalance.

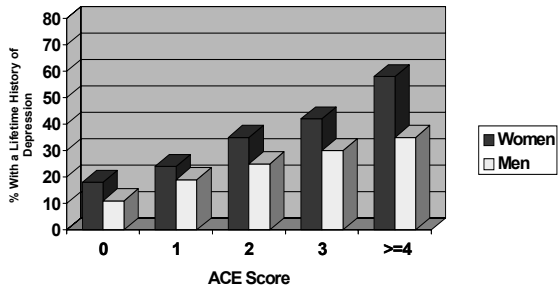


What if depression were *not* a disease,
but a *normal response* to
abnormal life experiences?



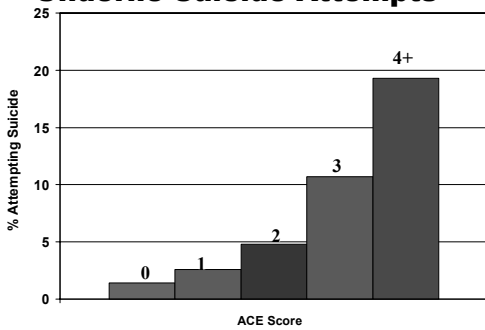
Well-being

Childhood Experiences Underlie Chronic Depression



Death

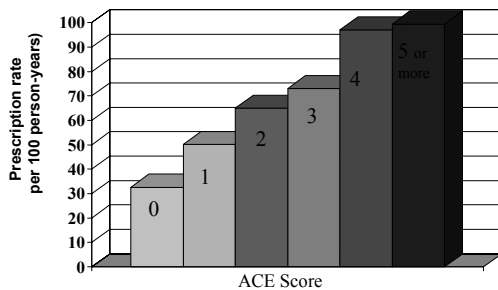
Childhood Experiences Underlie Suicide Attempts



Costs

ACE Score and Rates of Antidepressant Prescriptions

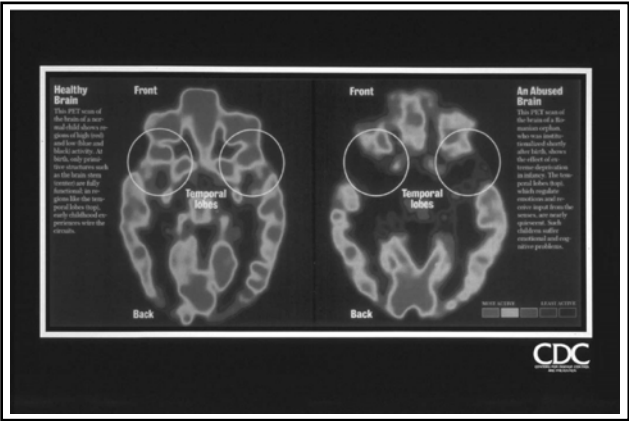
approximately 50 years later



Estimates of the Population Attributable Risk* of ACEs for Selected Outcomes in Women

Mental Health	PAR
Current depression	54%
Chronic depression	41%
Suicide attempt	67%

*That portion of a condition attributable to specific risk factors



Interventions

What Can We Do Today?

- Routinely seek a trauma-history of adverse childhood experiences from all patients, by questionnaire.
- Acknowledge their reality by asking, “How has this affected you later in your life?”
- Develop systems for early prevention.

An Individual, Population-based Health Appraisal System: A Biopsychosocial Concept

- Comprehensive history (*not* symptom-initiated) obtained at home by detailed questionnaire, better by Internet.



69. Depression or feel "down in the dumps"? ☐ Yes ☐ No

70. Much trouble with nervousness? ☐ Yes ☐ No

Do you:

71. Sometimes drink more than you think is good for you? ☐ Yes ☐ No

72. Use street drugs? ☐ Yes ☐ No

Have you ever:

73. Been raped, or sexually molested as a child? ☐ Yes ☐ No

73a. As a child, been physically abused? ☐ Yes ☐ No

73b. As a child, been verbally abused? ☐ Yes ☐ No

Includes ACE Questions

Interventions

Unconventional R.O.S. Questions of Demonstrated Value

- Have you ever lived in a war zone?
- Have you been a combat soldier?
- Who* in your family has committed suicide?
- Who* in your family has been murdered?
- Who* in your family had a nervous breakdown?
- Were you molested as a child?
- Have you ever been held prisoner?
- Have you been tortured?
- Have you been raped?

Results of Interventions

Benefits of a Biopsychosocial Preventive Approach

Biopsychosocial evaluation: 35% reduction in DOVs subsequent year.
(120,000 patient sample)

Biomedical evaluation: 11% reduction in DOVs, subsequent year.
(control)
(700 patient sample)

Final Insights from the ACE Study

- Adverse childhood experiences are common but typically unrecognized.
- Their link to depression and suicide is powerful, proportionate, and logical.
- They are the nation's *most basic* public health problem.
- It is comforting to mistake intermediary mechanism for basic cause.
- What presents as the 'Problem' may in fact be an attempted solution.
- Treating the solution may be threatening and cause flight from treatment.
- Primary prevention is presently the only feasible population approach.
- The resistance to introducing these changes is major.
