

Trauma: Its Significance for the Human Services Continuum

A Two-Part Teleconference Series

Part One

Monday, November 7, 2005

Understanding and Awareness of Trauma and Its Impact

The definition of Trauma:

- The Oxford English Dictionary defines “trauma” as a profound emotional shock
- The National Child Traumatic Stress Network defines “trauma” as a potentially overwhelming psychological condition that occurs when a person has witnessed, or been directly exposed to life threatening events, serious harm, or relationships in which there is repeated physical or sexual abuse. In children, witnessing violence against loved ones and out of home placements are also potentially traumatic stressors.
- Dr. Bruce Perry, a child trauma expert, defines trauma as “a psychologically distressing event outside the range of usual experiences
- Trauma is an experience that results in an abnormally intense and extended stress response

When did the study of trauma and its implications gain significance?

- Historically, interest in trauma has been associated with the experiences of men in battle. Consider the terms “shellshock” from World War I and “battle fatigue” from World War II. It was not until the Vietnam War that the conceptual framework we now understand became more developed and informed. The diagnosis of “post-traumatic stress disorder” became widely accepted and acknowledged in 1980.
- Freud conducted some of the earliest work in the field of trauma. He was one of the first to theorize that a significant number of adult psychological disorders and behaviors were rooted in adverse childhood experiences.

How does the diagnosis that we are most familiar with, “post traumatic stress disorder,” relate to other levels of trauma responses?

- Post-traumatic stress disorder is the “classic stress response.”
- It is useful to think of trauma as a spectrum of disorders as there are many associations between a past history of traumatic experience and the variety of behavioral and physical responses.

Complex Post-Traumatic Stress Disorder (PTSD) Problems

- Irritability, aggression, tension
- Sleep problems, nightmares, flashbacks
- Hair-trigger tempers
- Mood instability – depression, anxiety
- Poor impulse control – destructive behavior
- Dichotomous, extremist thinking and behavior
- Attachment to dysfunctional groups, relationships

Complex PTSD; Complex Problems

- Multiple addictions & compulsive behavior
- Psychosomatic and other physical illness
- Lack of empathy, conscience, meaning, purpose
- Failure of imagination, repetition, compulsion

Traumatic events impact children and adults differently

- Adults have more fully developed internal and external resources to make sense of and to cope with a traumatic event.
- The central nervous systems (brains) of children are not yet fully developed. They are unable to put their experiences into context or to make sense of them.
- The two most fundamental responses to trauma are the “fight or flight response” where the instinct for survival takes control; or disassociation, which is a protective mechanism that creates a barrier to the actual experience. Repeated exposure to trauma prevents normal brain development in children.

What are the most common physical, emotional, behavioral and social reactions to trauma?

- Intrusive re-experiencing of fragments of the events, such as flashbacks and nightmares.
- Avoidance and numbing of people, places, things and feelings that are reminders of the events.
- Physiological hyper-arousal with increased startle response, changes in blood pressure, heart rate and other physical changes.
- Typical trauma responses are frequently mistaken for other problems. These include poor academic performance, drug and alcohol use, poor social interactions, inability to trust or to bond with others

Points to consider

- A person experiences something as traumatic when both their internal and external coping resources fail. Internal resources are everything from how the body experiences stress to the meaning that the person is able to make of the experience. External resources are everyone else; family, friends, the community and society at large. To a certain extent then, the individual determines the extent of the trauma experienced.
- What is traumatic for one person at one point in time may not be experienced as traumatic by another person, or even by the same person at some other point in time.
- The impact of single event trauma (like 9/11 or Hurricane Katrina) is different from that of recurring, ongoing repetitive trauma (like childhood sexual abuse, or domestic violence, or parental alcohol or drug abuse)

The Trauma-Violence Relationship

- American children are exposed to high rates of violence at home, at school and on the streets and children living in impoverished, crime-ridden neighborhoods are particularly susceptible to exposure to violence – in some studies over 80%

The Trauma-Violence Relationship

- Exposure to violence is linked to a multitude of childhood emotional, behavioral, social and academic problems.
- Witnessing violence has been linked to later aggressive behavior, poor conflict resolution skills, increased emotional problems, poorer academic functioning and diminished IQ's.

A Threat Occurs: Human Stress Response

- State of high alert, hyper-vigilance
- Action, not thought
- Decreased ability to think clearly or completely
- Inability to tolerate uncertainty, ambiguity = dichotomized extremist thinking
- Attention to threat – tagged for mental priority

A Threat Occurs: Human Stress Response

- Increased aggression – loss of impulse control
- Fight/flight/freeze
- Dissociation buffers central nervous system but fragments mental functioning
- Speechless terror – loss of words
- Disrupted attachment
- Action is either successful – or not

The Threat Recurs: Chronic Hyperarousal

- Resets the central nervous system – hypersensitivity to threat
- Extremist thinking becomes chronic
- Aggression becomes chronic
- Attention to threat becomes chronic
- Hyperarousal interferes with cognitive development
- Action continues to be either successful – or not

The Threat Recurs: Chronic Hyperarousal

- Loss of, or failure to develop, affect modulation – further interference with cognitive development
- Disrupted attachment becomes chronic, self-perpetuating
- Change in norms propels reenactment
- Inability to manage affect leads to symptoms, e.g. substance abuse, self-mutilation, etc.

The Threat Recurs: Chronic Hyperarousal

- Lack of self-soothing – lack of empathy
- Intrusive symptoms reinforce sense of helplessness, learned helplessness, failure of mastery
- Defenses against flashbacks – avoidance, numbing, drugs, etc.
- Effects sense of identity, view of self, social relationships
- Adaptation to adversity – change in norms
- Inability to self-protect or self-correct

ACE Study Design

- Joint study between Kaiser-Permanente and the Center for Disease Control (CDC)
- Undertaken 1998
- 30,000 subjects in two waves of survey
- Majority of subjects upper middle-class, college-educated, Caucasian
- Initially came from weight-loss program when patients who were losing weight began dropping out and researchers began surveying them to find out reasons for their sabotaging success and discovered common thread of childhood trauma

The Threat Recurs: Chronic Hyperarousal

- Traumatic Reenactment
- Damages meaning, conscience, view of self and others
- Disrupted attachment – failed trust, failed relationships
- Problems with authority figures
- Difficulties resolving conflicts
- Inability to grieve
- Addiction to stress
- Resistance to change
- Deterioration, alienation
- Poor parenting practices

What is the significance of exposure to traumatic experiences in childhood?

- There is evidence of a direct correlation between childhood exposure to trauma, and adult behavioral and medical issues
- The ACES Study: The Adverse Childhood Experiences Study was conducted at Kaiser Permanente, a large HMO in California, and funded by the Center for Disease Control. It was the largest public health study of its kind, including over 18,000 middle class adults, mostly white (77%), college educated (72%) and over 50 years of age (62%). The results of the study were that over 52% of the study participants had experienced at least one “adverse childhood experience.” The responses showed a clear, graded relationship between the number of categories of adverse childhood experiences (your ACES score) and health and social problems experienced as adults.
- There is evidence that supports the direct connection between trauma, a prolonged stress response, and resulting disrupted neurodevelopment. This leads to many social, emotional and cognitive problems, then to health risk behaviors (like smoking, drug or alcohol use, risky sexual behaviors) and then to resulting health problems.

Evidence from ACE Study Suggests:

Adverse childhood experiences are the most basic cause of health risk behaviors, morbidity, disability, mortality, and healthcare costs.

ACE Study Design

Survey Wave 1 -- complete
71% response (9,508/13,454)

n=15,000
71% response
*All medical evaluations
abstracted*

vs.

*Present
Health Status*

& →

Mortality

National Death Index

Morbidity

Hospital Discharge

Outpatient Visits

Emergency Room Visits

Pharmacy Utilization

Survey Wave II

n=15,000

*All medical evaluations
abstracted*

Categories of Adverse Childhood Experiences

Category
Prevalence (%)

Abuse, by Category

Psychological (by parents)	11%
Physical (by parents)	11%
Sexual (anyone)	22%

Household Dysfunction, by Category

Substance Abuse	26%
Mental Illness	19%
Mother Treated Violently	13%
Imprisoned Household Member	3%

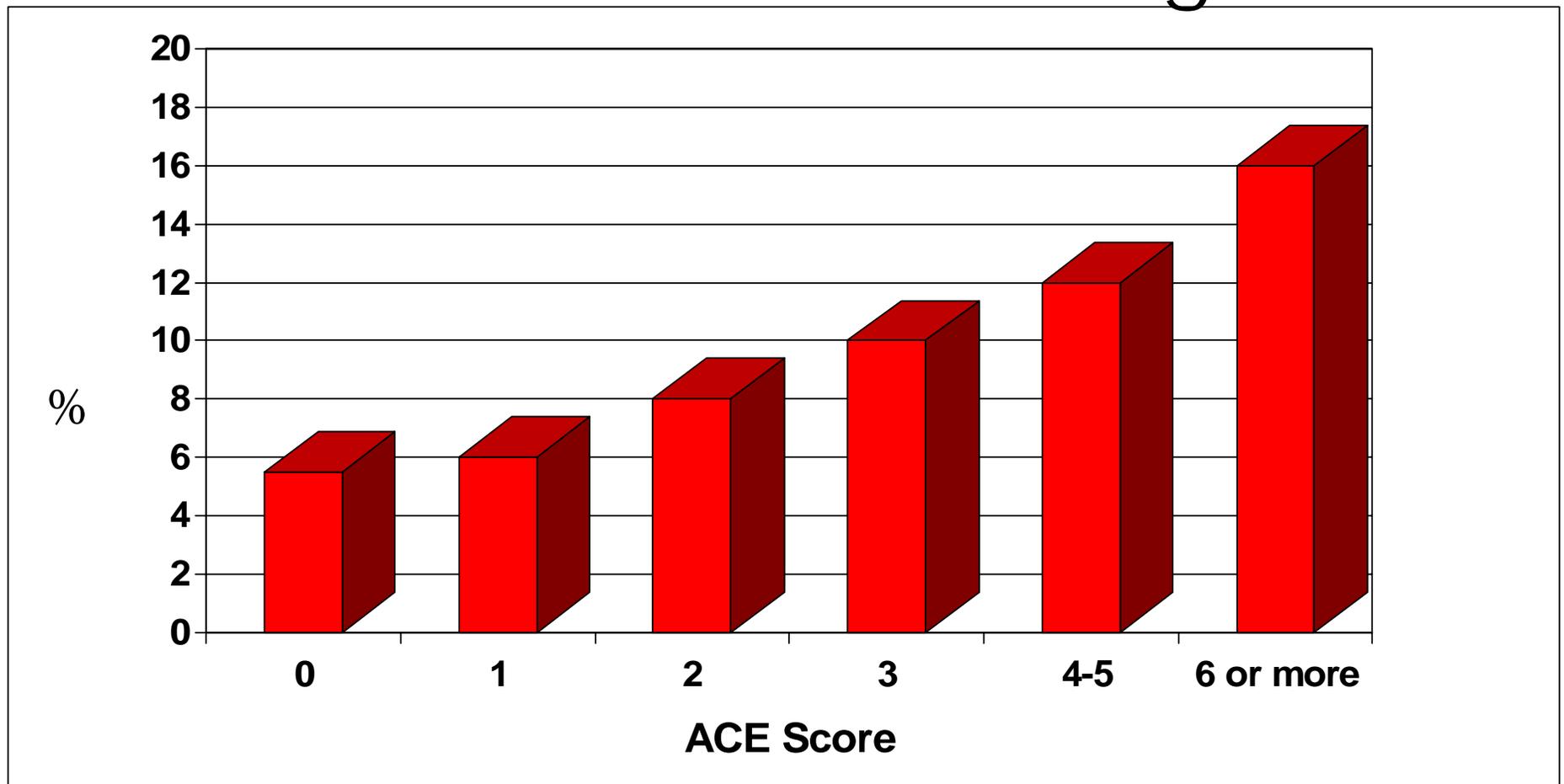
Adverse Childhood Experiences Score

Number of categories adverse childhood experiences are summed ...

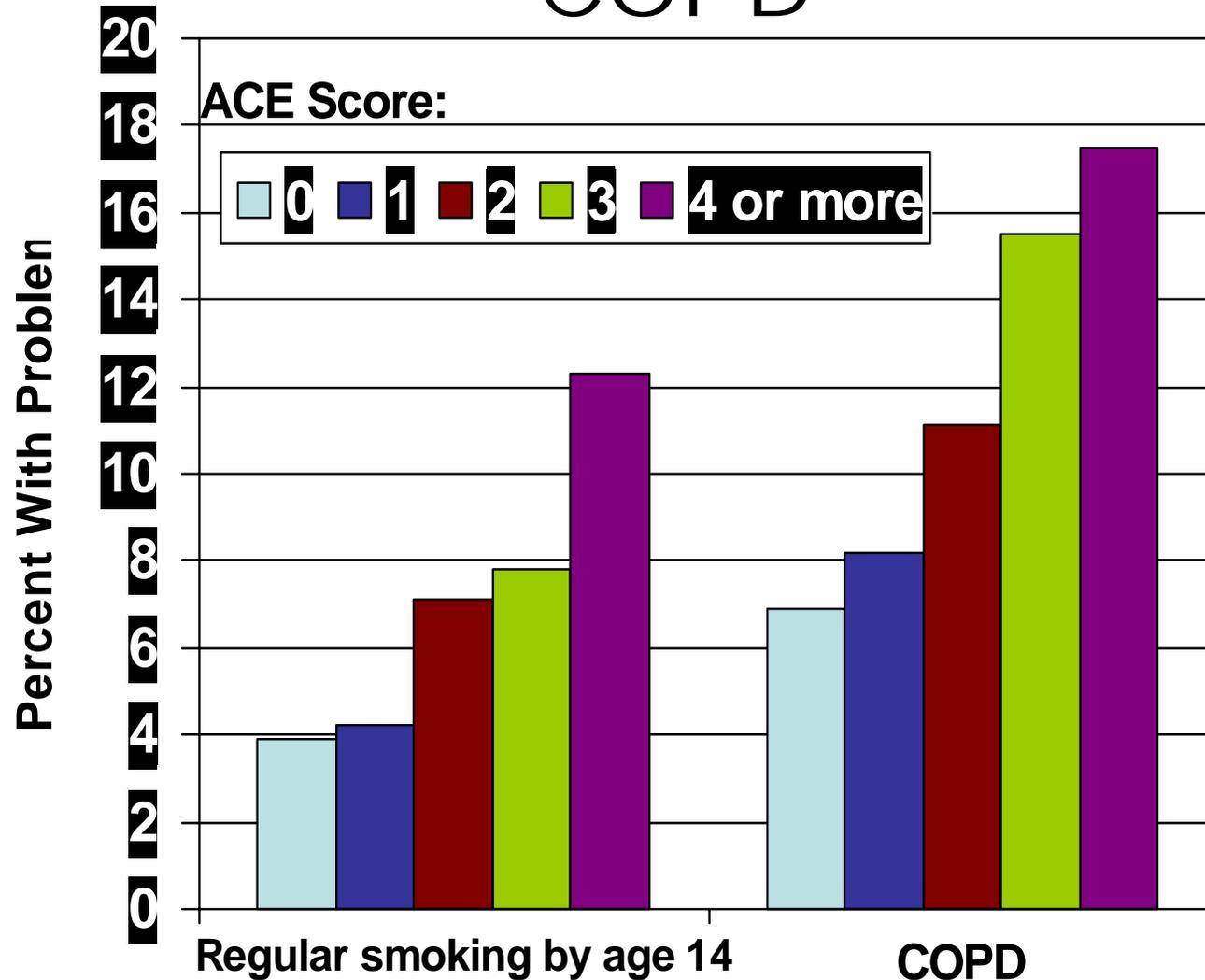
<i>ACE score</i>	<i>Prevalence</i>
0	48%
1	25%
2	13%
3	7%
4 or more	7%

- **More than *half* have at least one ACE**
- **If one ACE is present, the ACE Score is likely to range from 2.4 to 4**

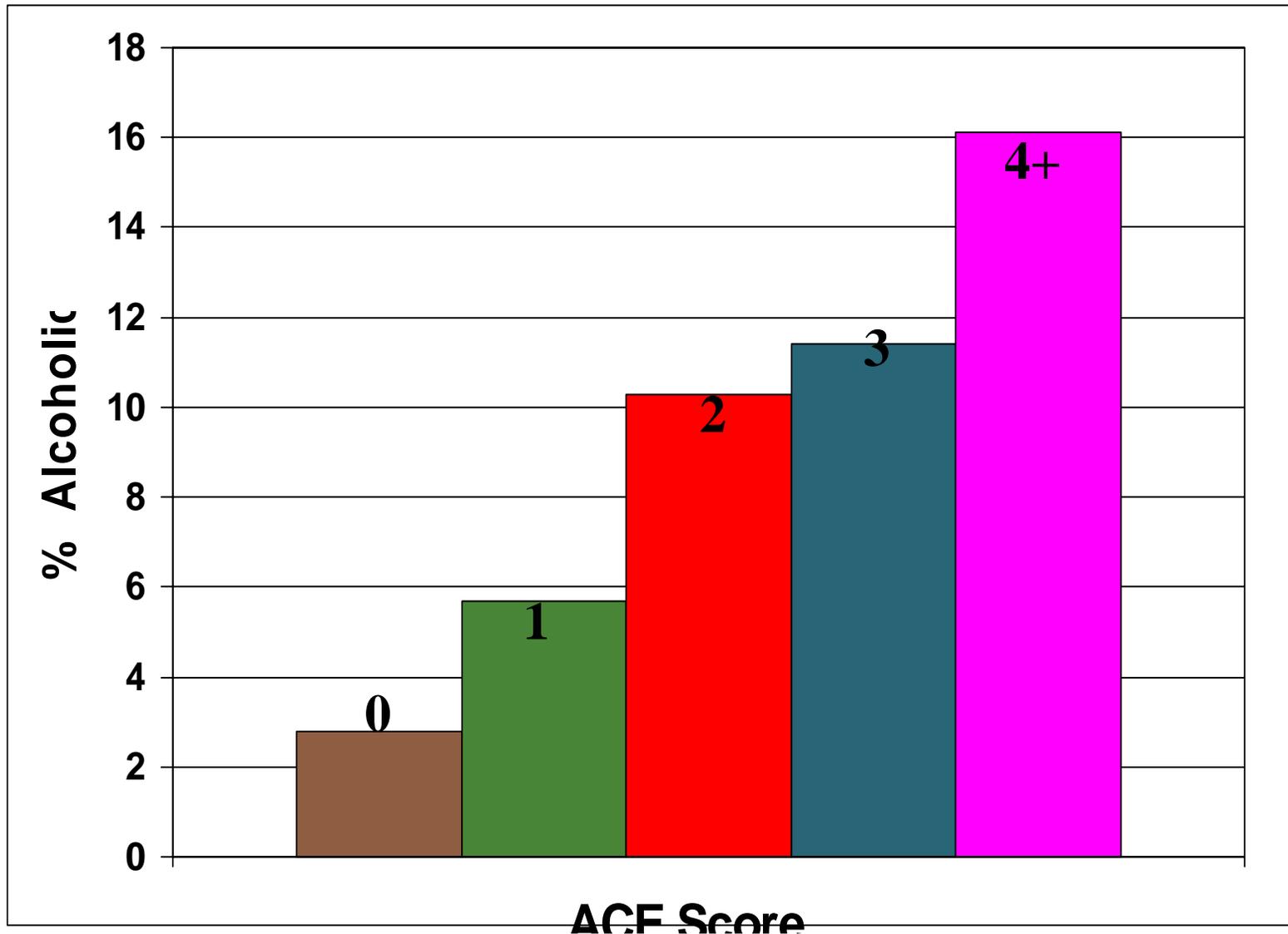
Adverse Childhood Experiences vs. Current Smoking



ACE Score vs. Smoking and COPD



Childhood Experiences vs. Adult Alcoholism



Some say depression is genetic.

Some say depression is due to a chemical imbalance.

Might depression be a *normal* response to *abnormal life experiences*?

The traditional concept:

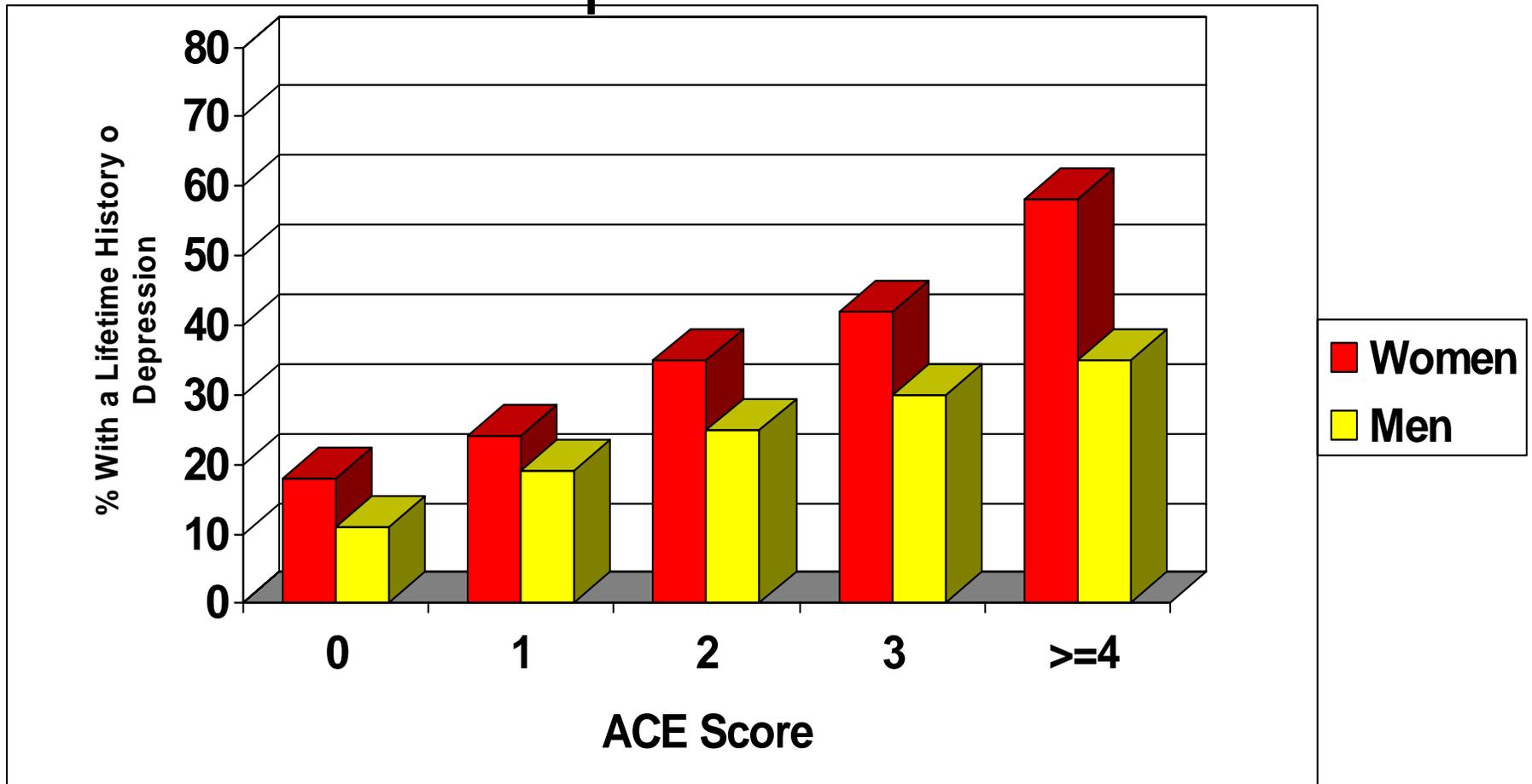
“Addiction is due to the characteristics intrinsic in the molecular structure of some substance.”

ACES suggests that:

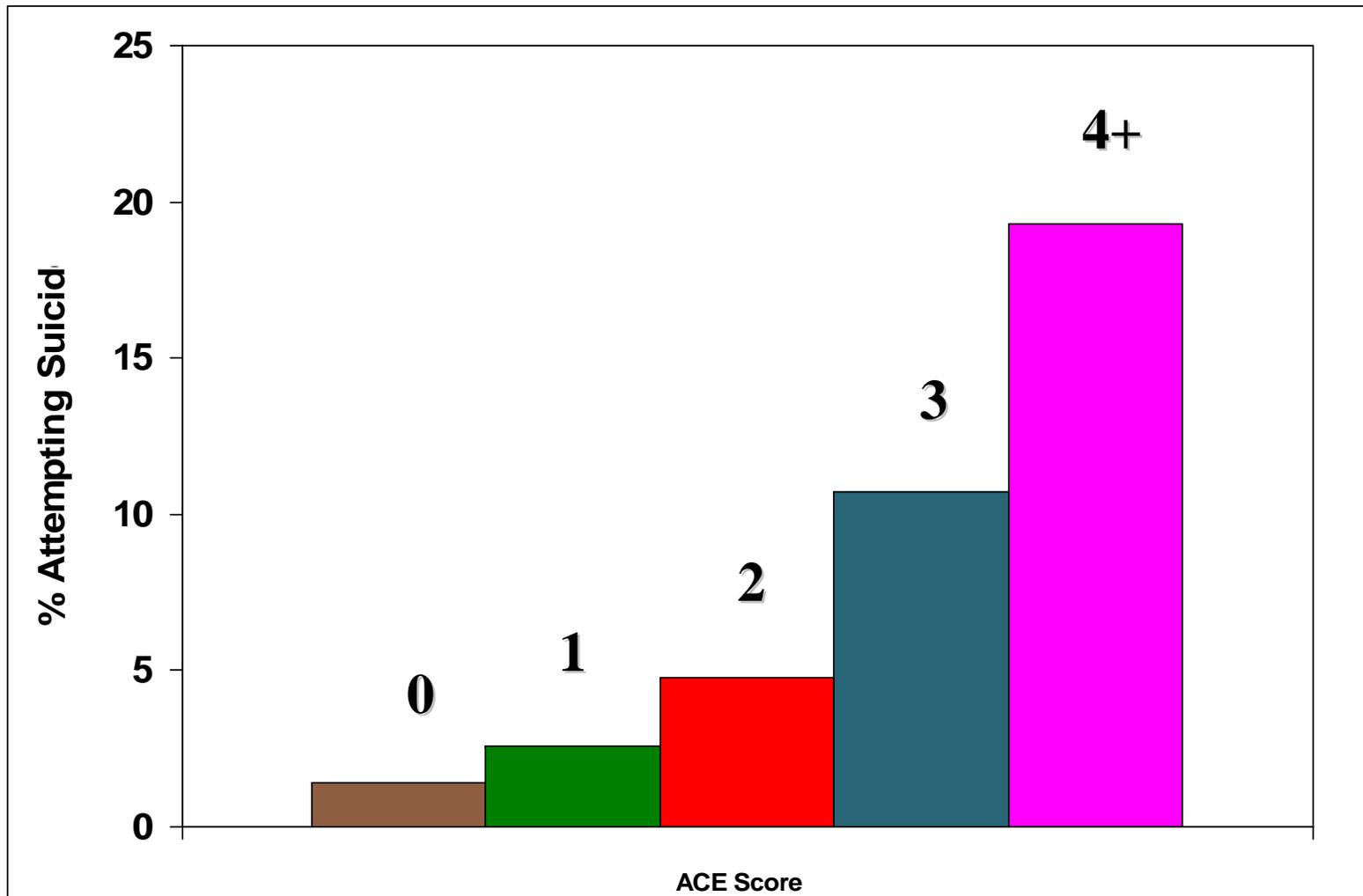
“Addiction highly correlates with characteristics intrinsic to that individual’s childhood experiences.”

Dismissing possible coping behaviors adopted in response to trauma as “bad habits” or “self-destructive behavior” may miss their intended function.

Childhood Experiences Underlie Chronic Depression



Childhood Experiences Underlie Suicide

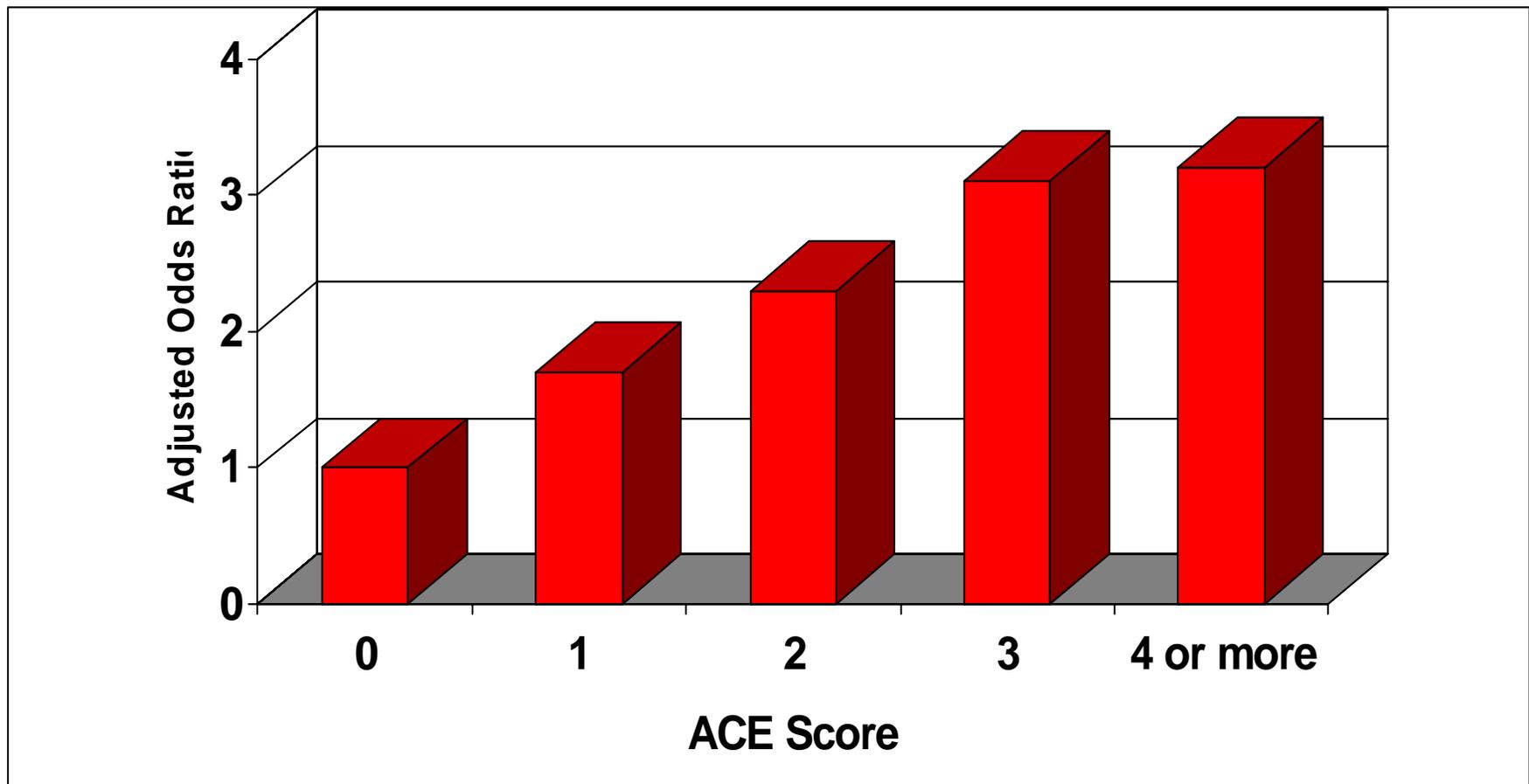


Estimates of the Population Attributable
Risk*
of ACEs for Selected Outcomes in
Women

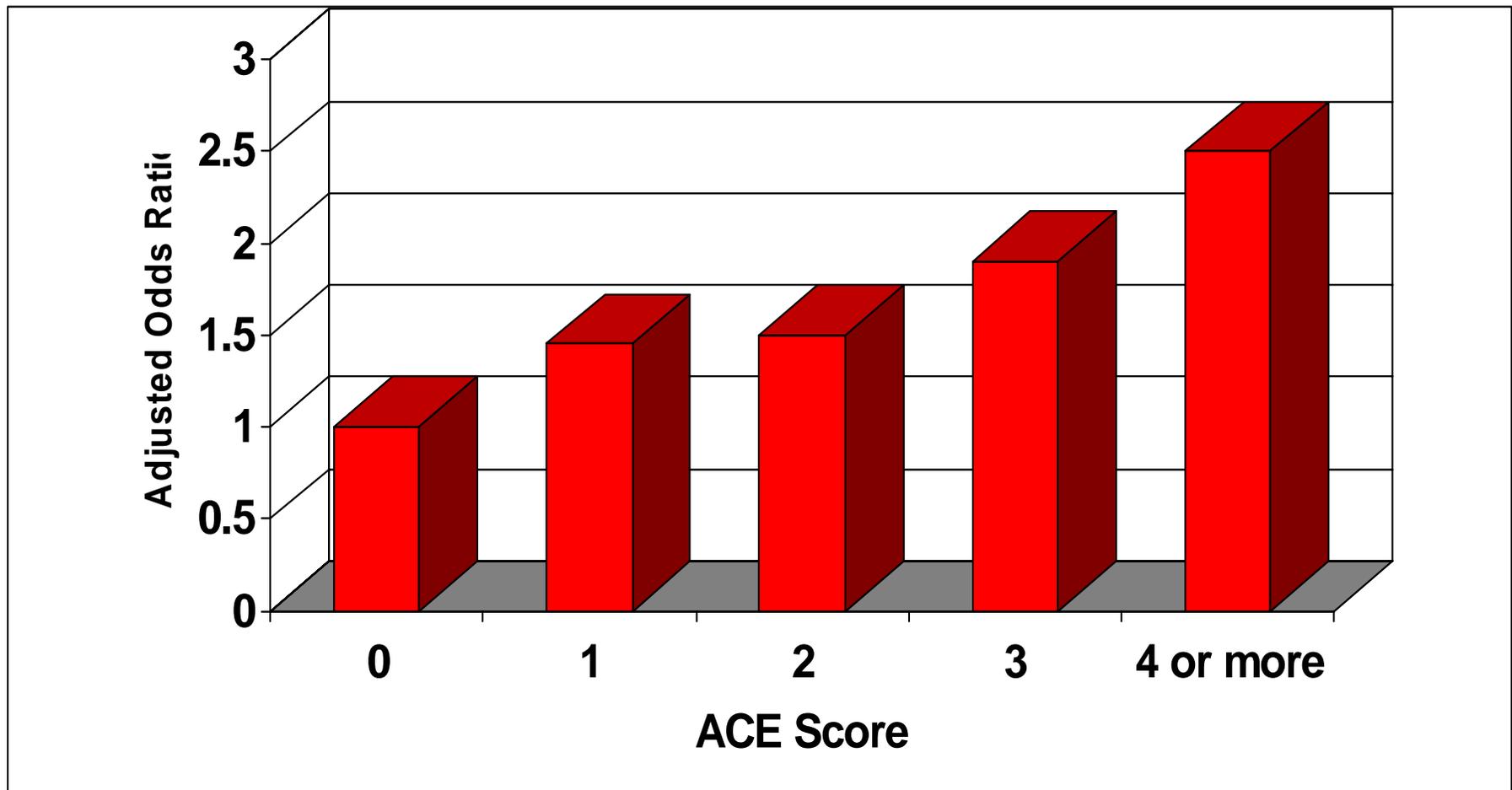
Mental Health	PAR
Current depression	54%
Chronic depression	41%
Suicide attempt	58%

*That portion of a condition attributable to specific risk factors

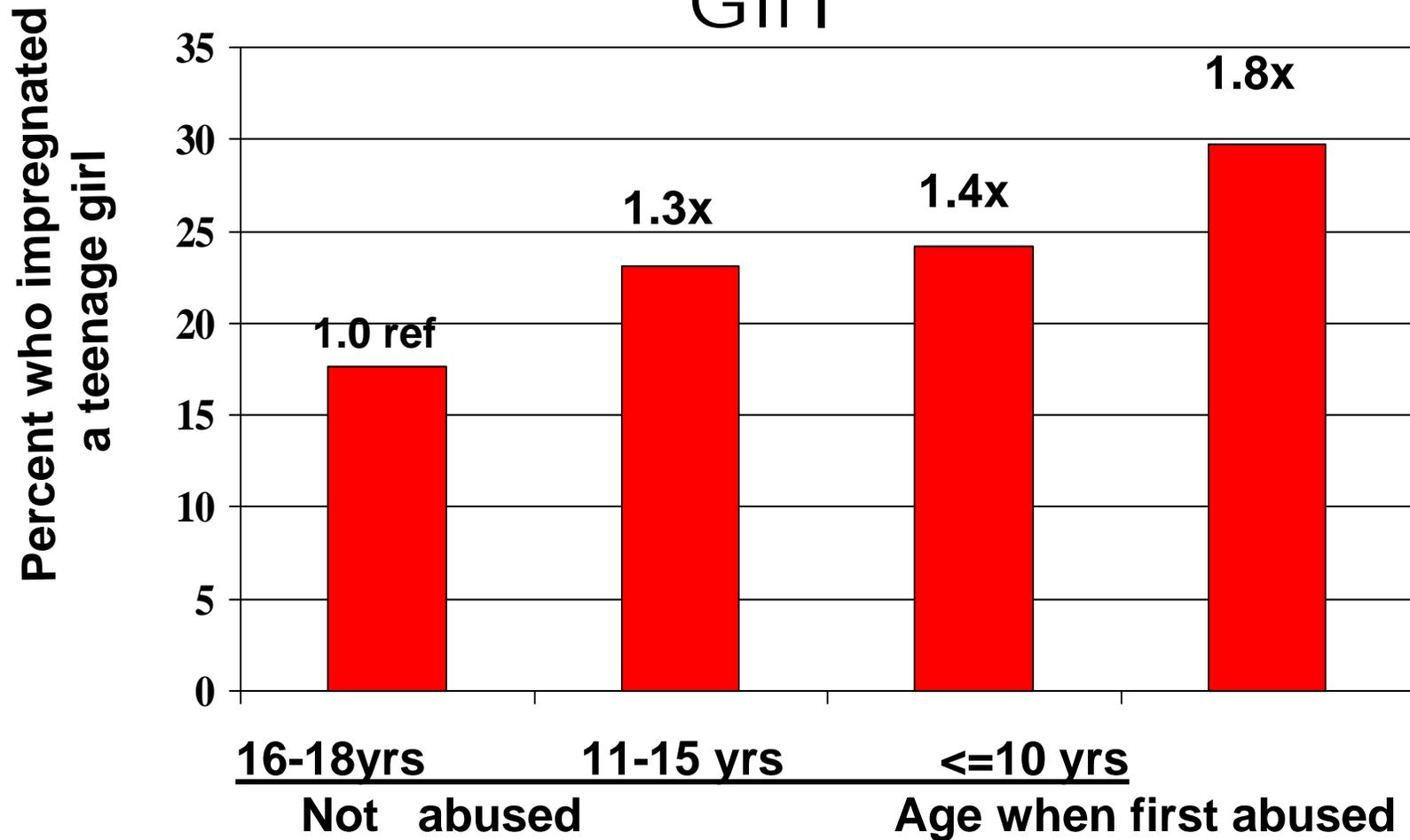
Adverse Childhood Experiences vs. Likelihood of > 50 Sexual Partners



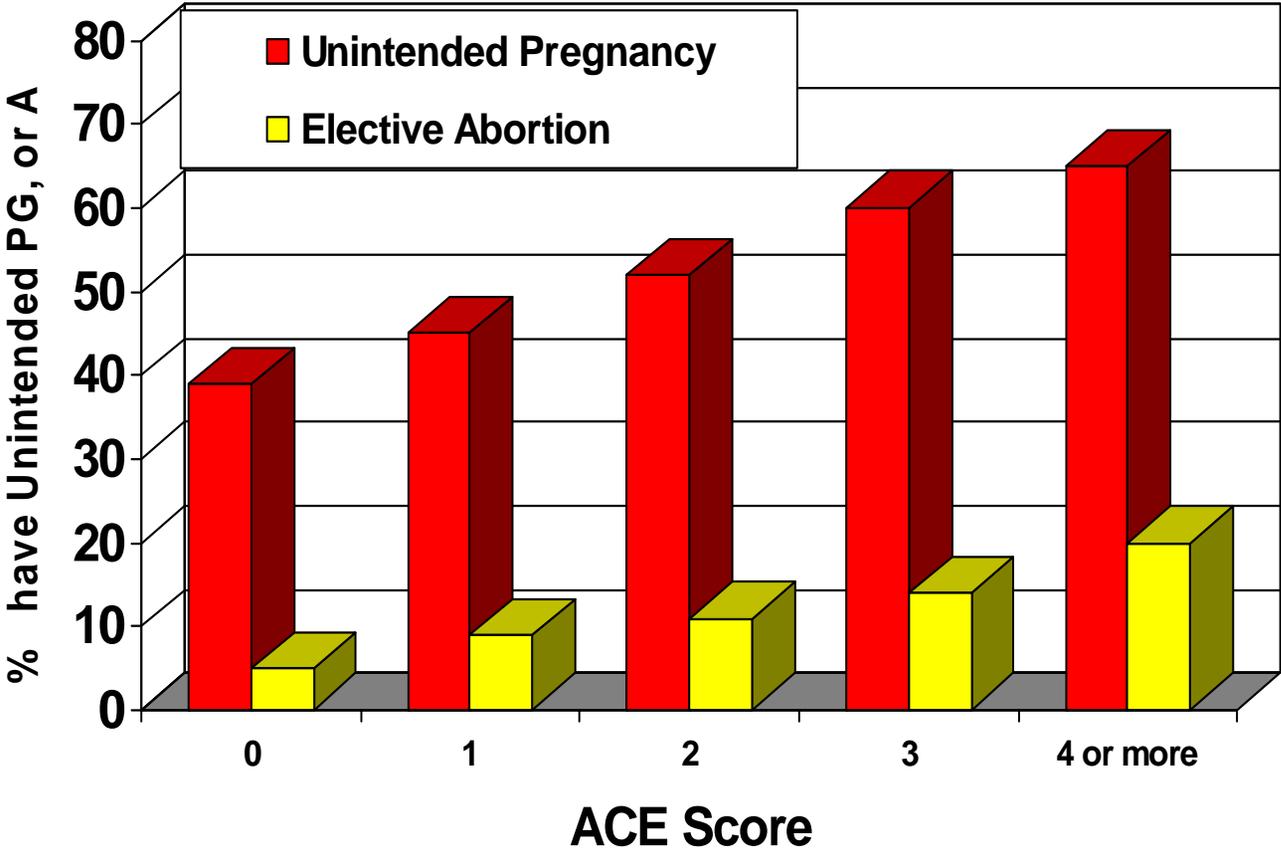
Adverse Childhood Experiences vs. History of STD



Sexual Abuse of Male Children and Their Likelihood of Impregnating a Teenage Girl



ACE Score vs. Unintended Pregnancy or Elective Abortion

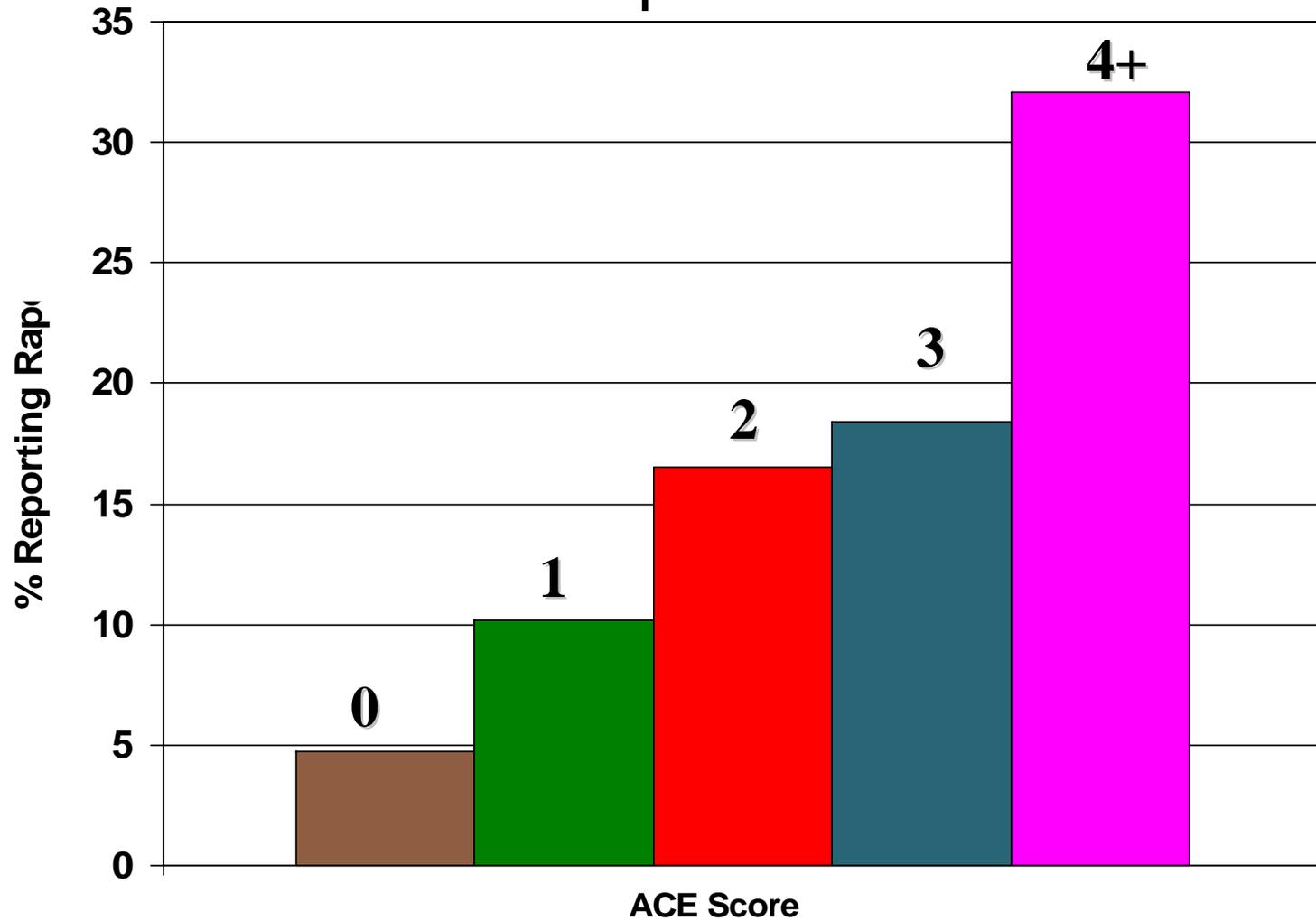


Adverse Childhood Experiences and the Risk of:

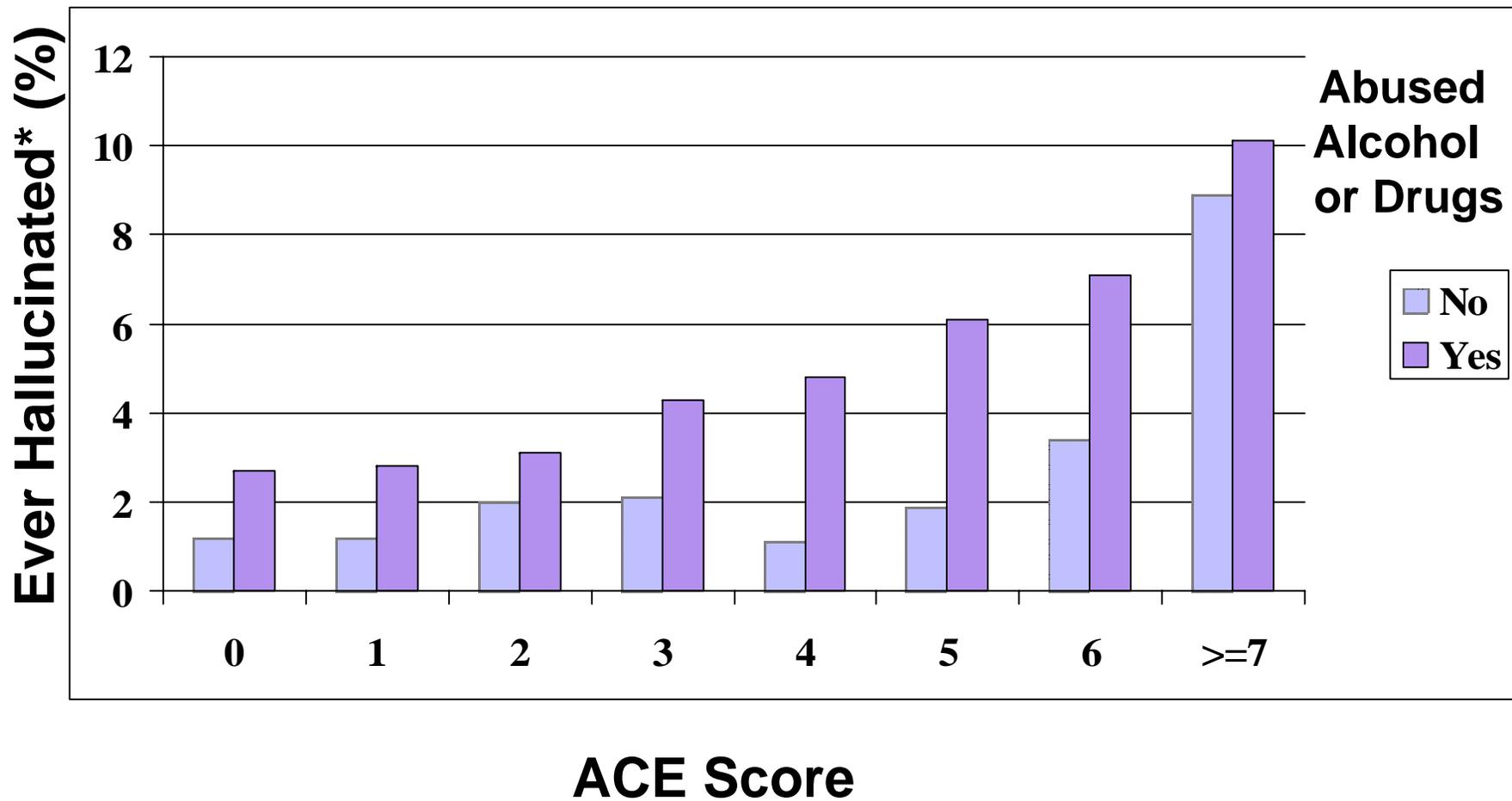
ACE Score	Multiple Sexual Partners*	3 or More Marriages*	Had Unwanted Pregnancy* (abortion)
0	1.0	1.0	1.0
1	1.6	1.5	1.5
2	1.9	1.6	1.7
3	3.4	2.3	2.3
4	4.4	2.9	2.1
≥5	5.8	3.8	2.9

***Adjusted Odds Ratio**

Childhood Experiences Underlie Rape



ACE Score and Hallucinations



*Adjusted for age, sex, race, and education.

Adverse Childhood Experiences and the Risk of:

ACE Score		Intimate Partner Violence*	Being Raped*
0	1.0	1.0	
1		1.9	2.0
2		2.1	2.8
3		2.7	4.2
4		4.5	5.3
≥5		5.1	8.9

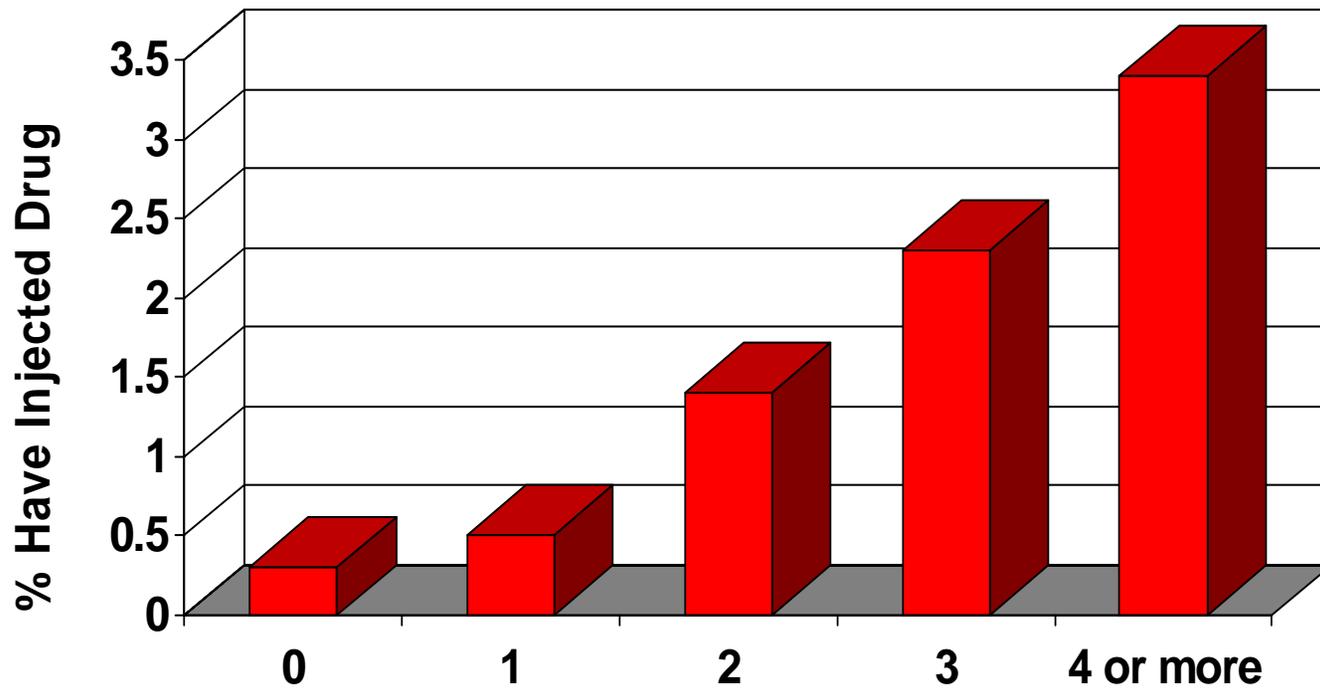
***Adjusted Odds Ratio**

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

	PAR
Depression and Suicide	48%
Crime Victim	
Sexual Assault	62%
Domestic Violence	52%

*That portion of a condition attributable to specific risk factors

ACE Score vs. Intravenous Drug Use



ACE Score

N = 8,022

p < 0.001

Adverse Childhood Experiences and the Risk of:

ACE Score	Alcoholism*	Parenteral Drug Abuse*	Attempted Suicide*
0	1.0	1.0	1.0
1	1.9	1.0	1.8
2	2.1	2.5	4.0
3	2.7	3.5	4.0
4	4.5	3.8	7.2
≥5	5.1	9.2	16.8

***Adjusted Odds Ratio**

Estimates of the Population Attributable Risk*

of ACEs for Selected Outcomes in Women

<u>Drug Abuse</u>	<u>PAR</u>
Alcoholism	65%
Drug abuse	50%
IV drug use	78%

*That portion of a condition attributable to specific risk factors

Many chronic diseases
in adults are determined
decades earlier, in
childhood.

Adverse Childhood
Experiences determine the
likelihood of the
ten most common causes of
death in the United States.

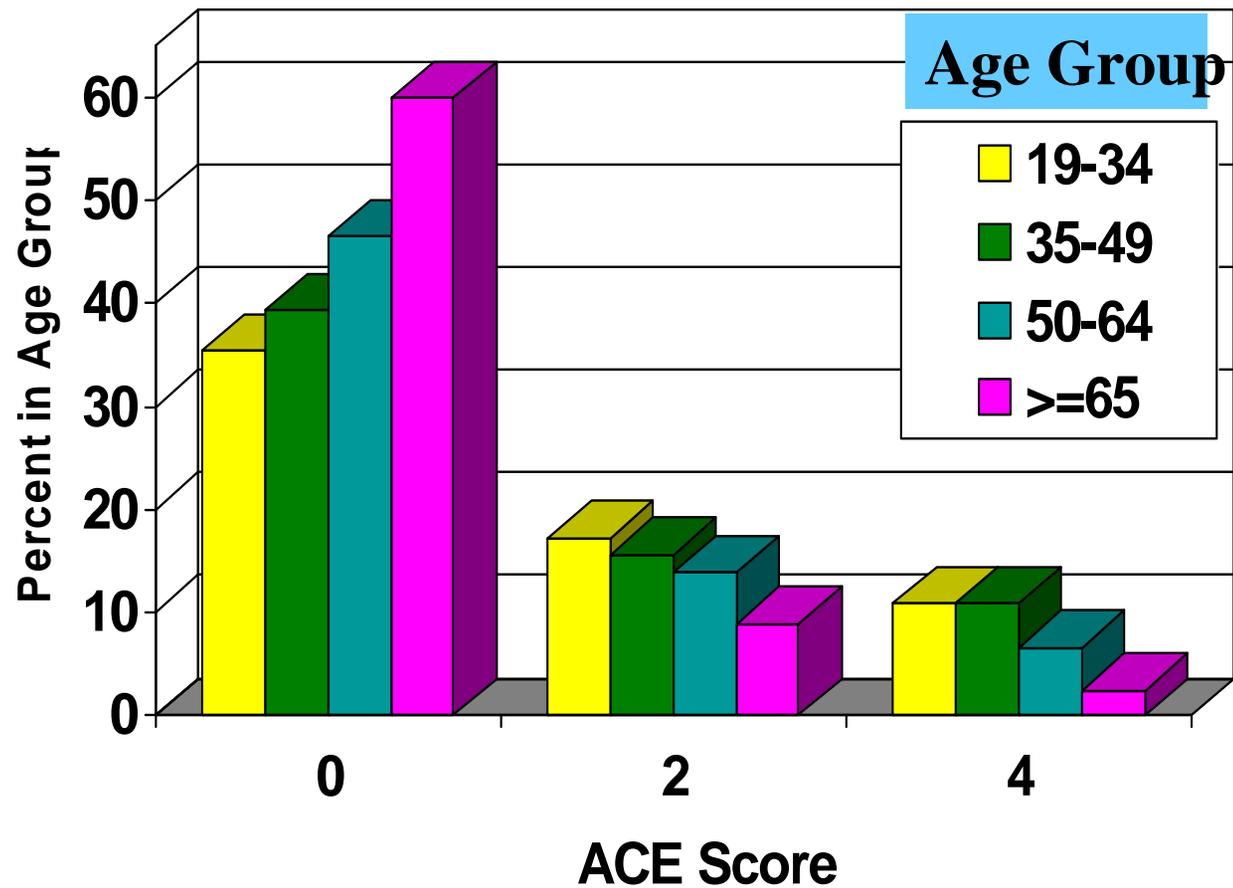
Top 10 Risk Factors: smoking, severe obesity, physical inactivity, depression, suicide attempt, alcoholism, illicit drug use, injected drug use, 50+ sexual partners, h/o STD.

With an ACE Score of 0, the majority of adults have few, if any, risk factors for these diseases.

However, with an ACE Score of 4 or more, the majority of adults have multiple risk factors for these diseases or the diseases themselves.

Premature mortality and excess morbidity are typically the result of a small number of common diseases.

Effect of ACEs on Mortality



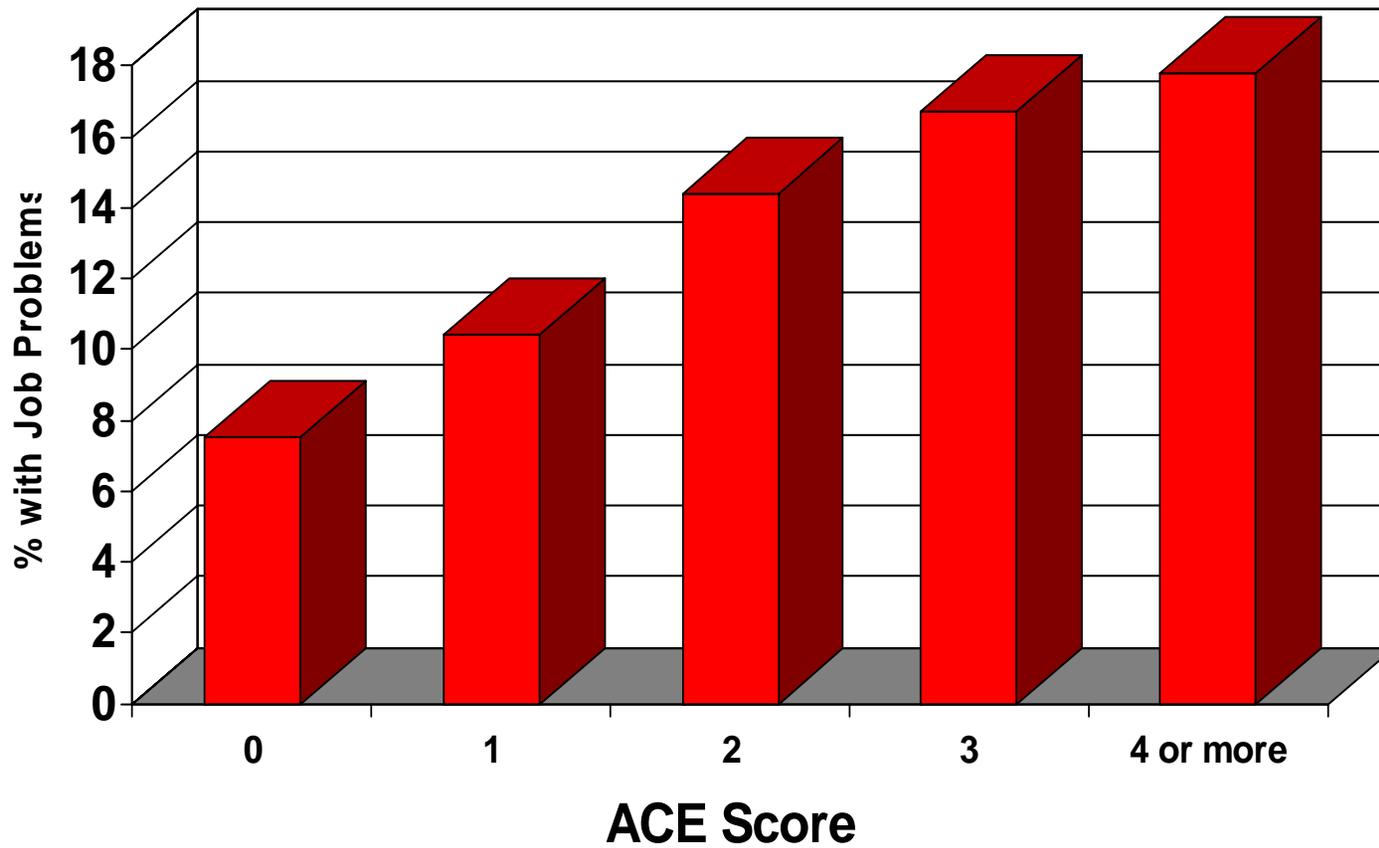
Their risk factors are also
reliable markers for
antecedent problems.

“In my end is my beginning.”

T.S. Eliot - Quartets

Much of what causes time
to
be lost from work is
actually
predetermined decades
earlier
by the adverse
experiences
of childhood.

ACE Score vs. Serious Job Problems



Evidence from ACE Study Suggests:

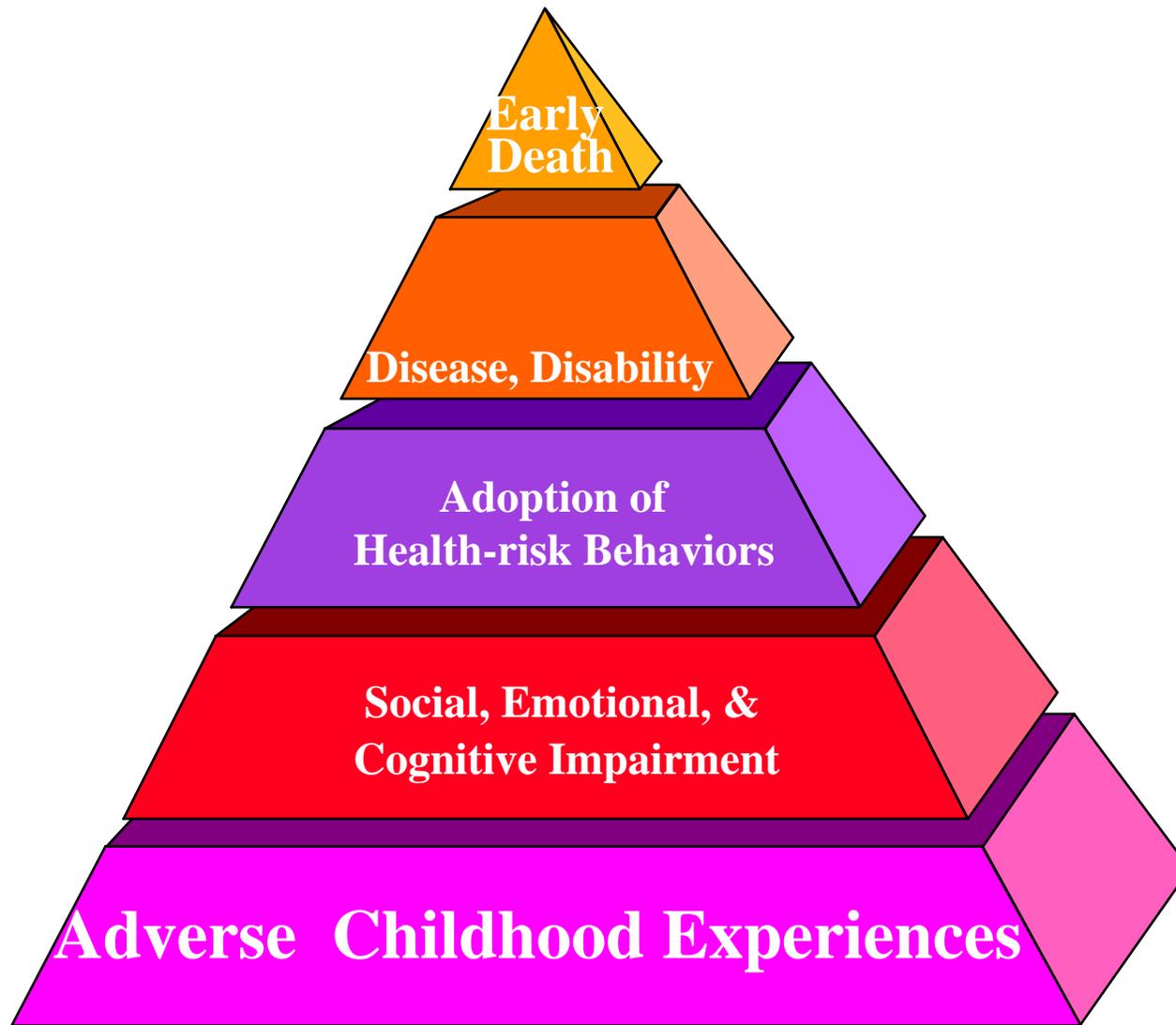
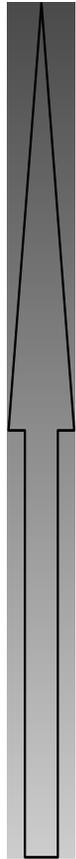
**Risk factors for these diseases are
initiated during childhood or
adolescence . . .**

**. . . and continue
into adult life.**

The risk factors
underlying
these adult diseases are
effective coping
devices.

What is conventionally viewed as a problem may actually have been adopted as a solution to an unrecognized prior adversity.

Death



Birth

The Influence of Adverse Childhood Experiences Throughout Life

“The truth about childhood is stored up in our bodies and lives in the depths of our souls. Our intellect can be deceived, our feelings can be numbed and manipulated, our perceptions shamed and confused, our bodies tricked with medication, but our soul never forgets. And because we are one, one whole soul in one body, someday our body will present its bill.”

Alice Miller

*Home is where one starts from. As we
grow older
The world becomes stranger,
The patterns more complicated of dead
and living ...*

... In my end is my beginning.

T.S. Eliot - Quartets

Challenges to Recovery from Trauma

- Victims are unlikely to make the connection between any of these symptoms and previous experiences
- They are unlikely to want to talk about their previous bad experiences
- They are likely not to remember the worst parts of the experiences
- They will want to stay emotionally numb rather than feel the pain of the previous experiences

Challenges to Recovery from Trauma

- Victims are likely to feel protective toward violence that occurred in the family
- The violence may still be going on – their families do not want to talk about it
- We don't want to talk about it either
- Mental health systems have not incorporated knowledge about trauma

What are the implications and significance of trauma theory to the human services spectrum?

- The National Child Traumatic Stress Network identifies the key sources of trauma as natural disaster, major illness or injury, criminal activity as perpetrator or victim, abuse or neglect or witnessing violence to a family member. This encompasses everything from CPS to Domestic Violence to Juvenile Justice.
- An understanding of Trauma theory and incorporation of Trauma-informed models of service delivery may improve outcomes for children, families, and communities.

What are the implications for the way in which human services are delivered? For agencies, and organizational culture?

- Current trauma informed theory implies that incorporation of trauma awareness, and trauma informed program models will achieve greater success and better long term outcomes.
- An understanding of the impact of trauma, and its multigenerational nature, will help in the delivery of more effective services.
- Trauma awareness helps make sense of seemingly incomprehensible behavior. Of greatest significance is an awareness of how trauma impacts a child in out of home care. Simply moving a traumatized child to a healthy home addresses the physical safety of the child, but fails to address their unmet developmental needs. Only in understanding traumatic reenactment and how to reshape that behavior, can lasting change occur for the traumatized child.

Trauma: Its Significance for the Human Services Continuum

- Please join us for Part Two on Monday, November 21, 2005 at 1:30 PM.

Resources

- The National Child Traumatic Stress Network:

<http://www.nctsnet.org>

- The Adverse Childhood Experiences Study:

<http://www.acestudy.org/>

- Centers for Disease Control:

[http://www.cdc.gov/od/oc/media/pressrel/r980514.
htm](http://www.cdc.gov/od/oc/media/pressrel/r980514.htm)