



Behavioral Health is Essential To Health



Prevention Works



Treatment is Effective



People Recover



Enhancing Recovery in a Trauma Informed System of Care: Changing Our Perspective

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Promoting Alternatives to Use of Seclusion and Restraints
through Trauma Informed Practices



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What is Trauma?

- Definition (*NASMHPD, 2006*)
 - The experience of violence and victimization including sexual abuse, physical abuse, severe neglect, loss, domestic violence and/or the witnessing of violence, terrorism or disasters
- DSM IV-TR (*APA, 2000*)
 - Person's response involves intense fear, horror and helplessness
 - Extreme stress that overwhelms the person's capacity to cope

Types of Trauma

- Pre and Perinatal Trauma



- Single Episode Trauma



- Developmental or Complex Trauma
- Historical Trauma
- Intergenerational Trauma

Traumatic Events:

- (1) render victims helpless by overwhelming force;*
- (2) involve threats to life or bodily integrity, or close personal encounter with violence and death;*
- (3) disrupt a sense of control, connection and meaning;*
- (4) confront human beings with the extremities of helplessness and terror; and*
- (5) evoke the responses of catastrophe.*

(Judy Herman, Trauma and Recovery, (1992)

What does trauma do?

- Trauma shapes a child's basic beliefs about identity, world view, and spirituality.
- Using a trauma framework, the effects of trauma can be addressed and a person can go on to lead a "normal" life.

Prevalence of Trauma

Mental Health Population

- 90% of public mental health clients have been exposed

(Muesar et al., in press; Muesar et al., 1998)

- Most have multiple experiences of trauma

• *(Ibid)*

- 34-53% report childhood sexual or physical abuse

• *(Kessler et al., 1995; MHA NY & NYOMH, 1995)*

- 43-81% report some type of victimization

DEFENDING CHILDHOOD

- PROTECT
- HEAL
- THRIVE

REPORT OF THE ATTORNEY GENERAL'S
NATIONAL TASK FORCE ON CHILDREN
EXPOSED TO VIOLENCE

NOV 2012

Prevalence

- 80% of child fatalities due to abuse and neglect occur within the first 3 years of life and almost always in the hands of adults responsible for their care.
- In the US, we lose an average of more than 9 children and youths ages 5 to 18 to homicide or suicide per day.
- According to the National Survey of Children Exposed to Violence, an estimated 46 million of the 76 million (61%) of children currently residing in the US are exposed to violence, crime and abuse each year.
- 1 in 10 children in this country are polyvictims.

Effects

- Their fear, anxiety, grief, guilt, shame, and hopelessness are further compounded by isolation and a sense of betrayal when no one takes notice or offers protection, justice, support, or help.
- Exposure to violence in the first years of childhood deprives children of as much as 10% of their potential IQ, leaving them vulnerable to serious emotional, learning and behavior problems by the time reach school age.

Prevalence of Trauma

Mental Health Population – Adults

- Study in South Carolina CMHC found 91% of clients had histories of trauma (*Cusack, Frueh & Brady, 2004*)
- 97% of homeless women with SMI have experienced severe physical & sexual abuse – 87% experience this abuse both in childhood and adulthood (*Goodman et al, 1997*)
- Majority of adults diagnosed BPD (81%) or DID (90%) were sexually or physically abused as children (*Herman et al, 1989; Ross et al, 1990*)

Prevalence of Trauma

Mental Health Population - Children & Adolescents

- Canadian study of 187 adolescents; reported 42% had PTSD *(Kotlek, Wilkes, & Atkinson, 1998)*
- American study of 100 adolescent inpatients; 93% had trauma histories and 32% had PTSD *(Lipschitz et al, 1999)*
- A point in time medical record review of 154 children/adolescents in MA psychiatric hospitals revealed that 98% of the youths had clear, documented histories of trauma *(Massachusetts DMH, 2007)*

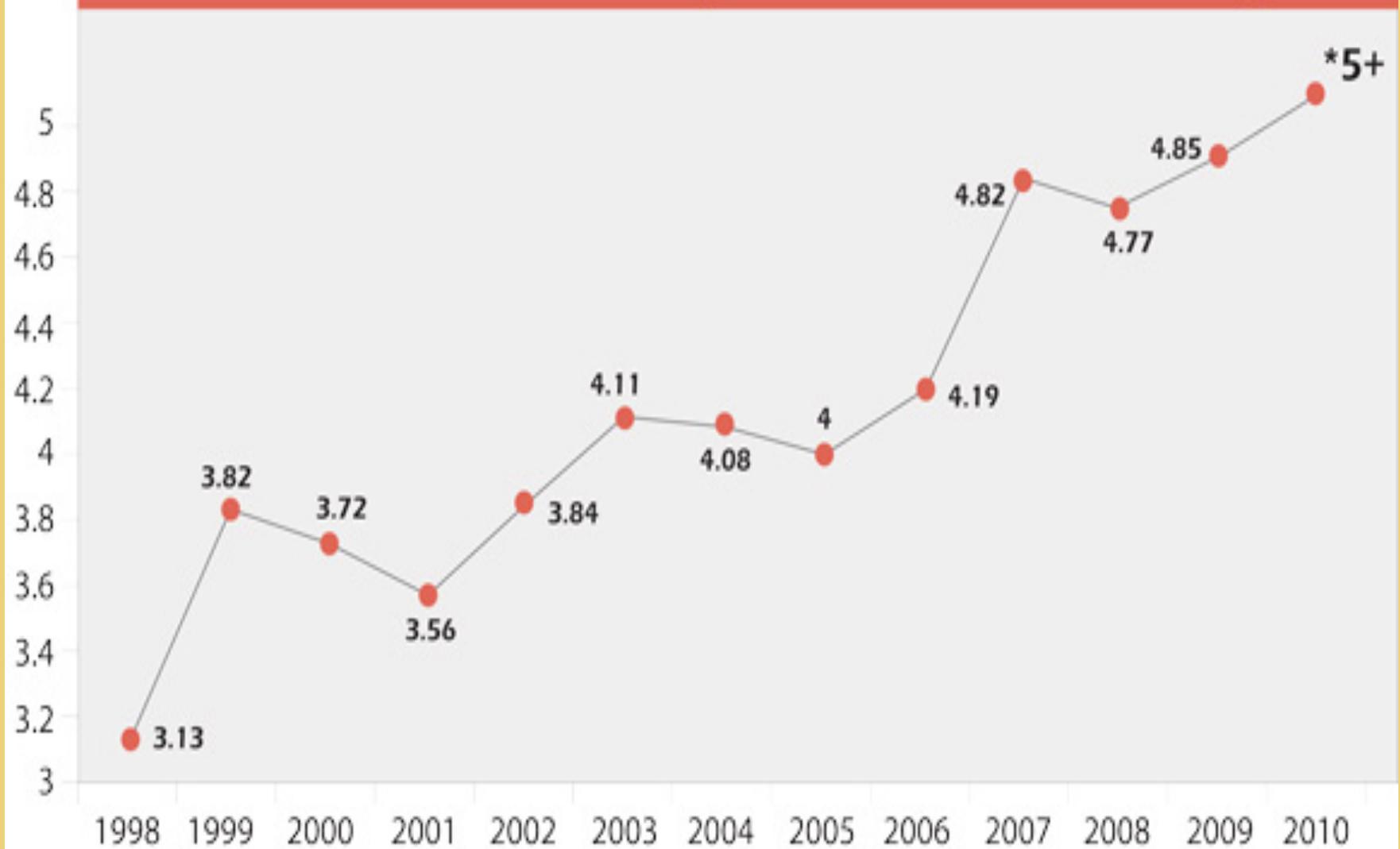
National Child Abuse Statistics 2010

- More than five children die every day as a result of child abuse
- Approximately 80% of children that die from abuse are under the age of 4
- More than 90% of juvenile sexual abuse victims know their perpetrator in some way.
- About 30% of abused and neglected children will later abuse their own children.

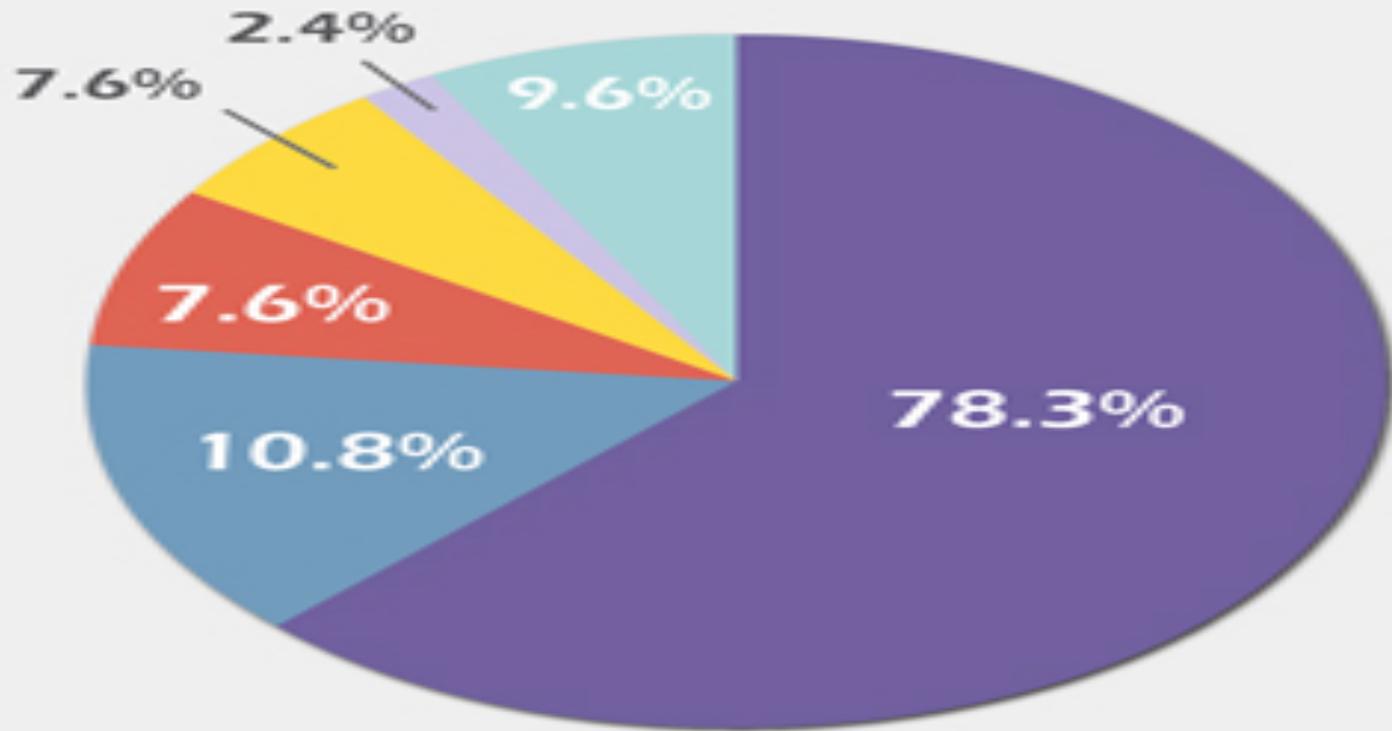
National Child Abuse stats cont.

- 14% of men and 30% of all women in prison were abused as children
- Children who experience child abuse and neglect are 59% more likely to be arrested as a juvenile, 28% more likely to be arrested as an adult, and 30% more likely to commit violent crime.
- Children whose parents abuse alcohol and other drugs are three times more likely to be abused and four times more likely to be neglected than children from non-abusing families.

Number of Child Deaths Per Day Due to Child Abuse and Neglect¹



Types of Child Abuse¹



- Neglect
- Physical Abuse
- Sexual Abuse
- Psychological Maltreatment
- Medical Neglect
- Other

These percentages sum to more than 100.0 percent because a child may have suffered more than one type of maltreatment.

Prevalence of Trauma Substance Abuse Population

- Up to two-thirds of men and women in SA treatment report childhood abuse & neglect

(SAMSHA CSAT, 2000)

- Study of male veterans in SA inpatient unit
 - 77% exposed to severe childhood trauma
 - 58% history of lifetime PTSD

(Triffleman et al, 1995)

- 55-99% of women with substance use disorders have a lifetime history of trauma; 50% of women in treatment have history of rape or incest

(Najavits et. al., 1997; Gov. Commission on Sexual and Domestic Violence, Commonwealth of MA, 2006)

Sexual Trauma and Addiction

- 208 African-American Women with histories of crack cocaine use
- Women with history of sexual trauma (n=134) reported being addicted to more substances than those who had not been sexually traumatized (n=74)
- Women with trauma histories reported more prior treatment failures than those without.

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Prevalence of Trauma: Children and Adolescents - Juvenile Justice Settings

- Being abused or neglected as a child increases the likelihood of arrest as a juvenile by 59% (*Widom, 1995*)
- Arrest rates of trauma-exposed youth are up to 8 times higher than community samples of same-age peers
(*Saigh et al, 1999; Saltzman et al, 2001*)
- 70% - 92% of incarcerated girls reported sexual, physical, or severe emotional abuse in childhood (*DOC, 1998; Chesney & Sheldon, 1997*)
- *A 2003 OJJDP survey of youth in residential placement found that 70% had some type of past traumatic experience, with 30% having experience frequent and/or injurious physical and/or sexual abuse. (Sedlak & McPherson, 2010)*

What does the prevalence data mean?

- The majority of adults and children in mental health treatment settings have trauma histories as do children and adults served in a variety of other behavioral and justice settings
- There appears to be a strong relationship between victimization and later offending

(Hodas, 2004; Frueh et al, 2005; Mueser et al, 1998; Lipschitz et al, 1999; NASMHPD, 1998)

Therefore ...

We need to presume the clients
we serve have a history of
traumatic stress and exercise
“universal precautions”

(Hodas, 2004)

Prevalence in the General Population

- ▶ 90% of public mental health clients have been exposed to trauma.
- ▶ In the general population, 61% of men and 51% of women reported exposure to at least one lifetime traumatic event, but majority reporting more than one traumatic event.

(Kessler, et al, 1995)

Avoidance of Shame and Humiliation

THE BASIC PSYCHOLOGICAL MOTIVE OR CAUSE OF VIOLENT BEHAVIOR IS THE WISH TO WARD OFF OR ELIMINATE THE FEELINGS OF SHAME AND HUMILIATION – A FEELING THAT IS PAINFUL AND CAN EVEN BE INTOLERABLE.

OUR TASK IS TO REPLACE IT WITH A FEELING OF PRIDE.

Hodas, 2004

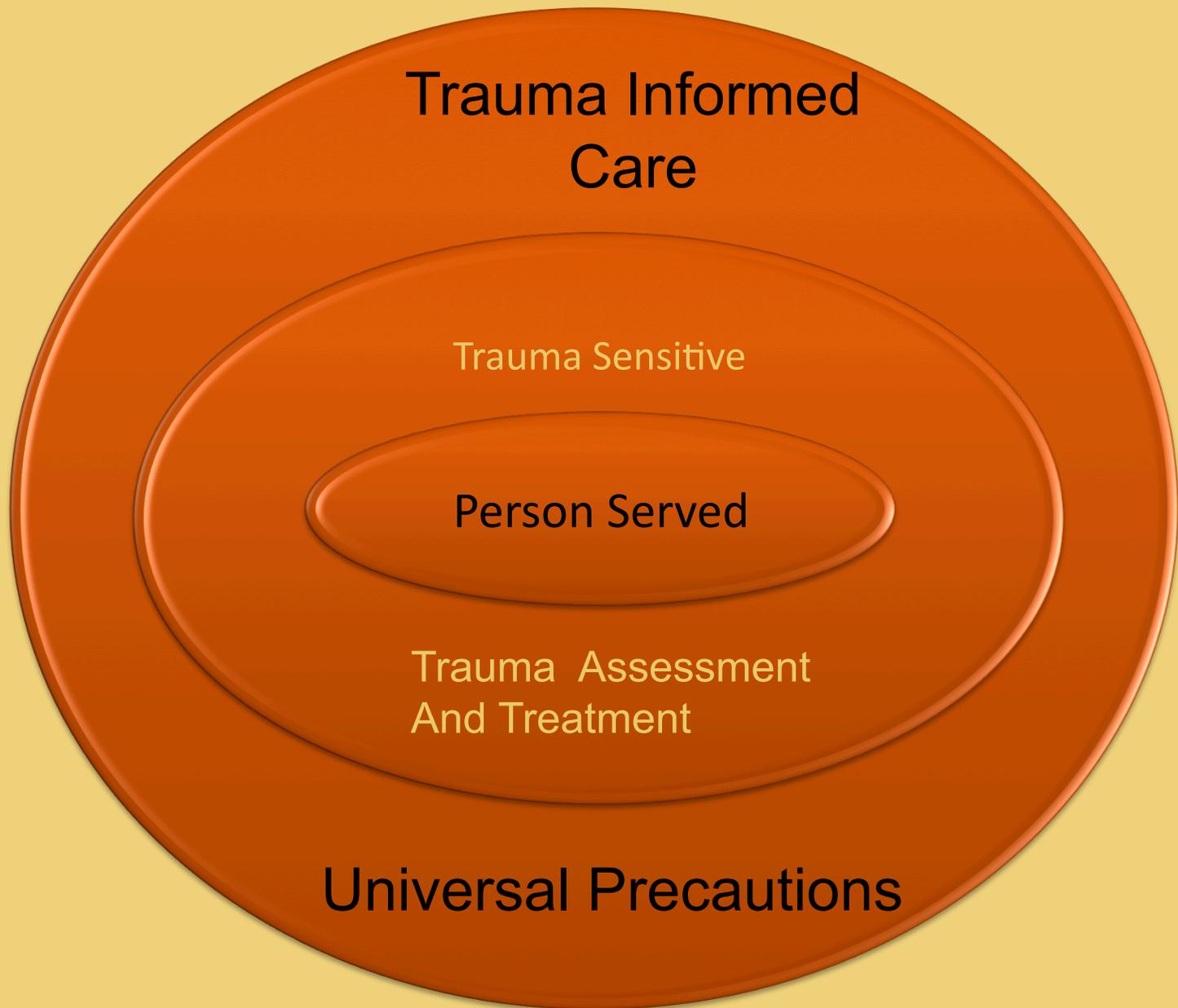
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Trauma Sensitive

Person
Served

Trauma
Assessment
And
Treatment

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Resiliency

Recovery

Trauma Informed System

Trauma Informed Care

Trauma Sensitive

Person Served

Trauma Assessment and TX

Universal Precautions

Non-Coercive

Non-Controlling

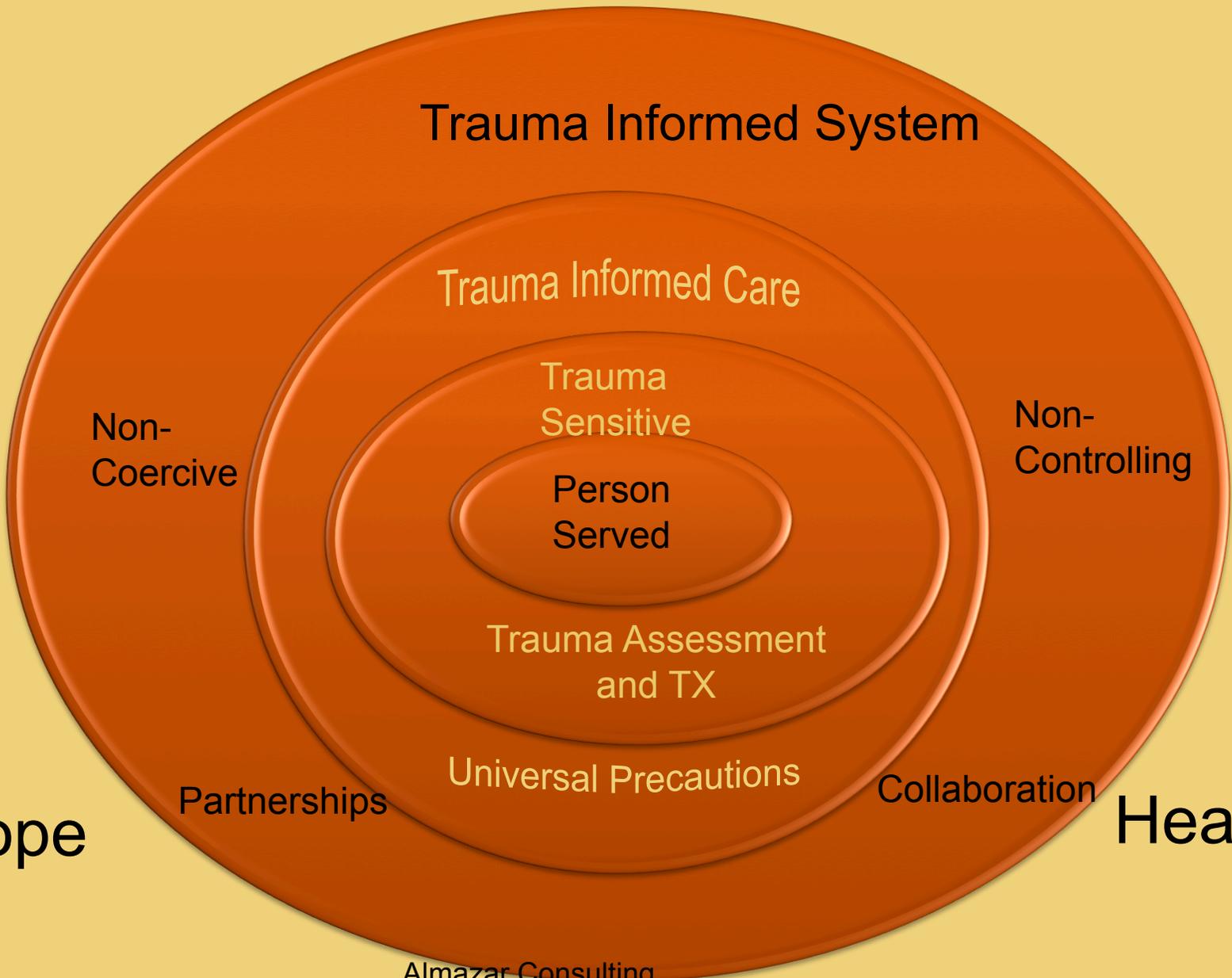
Partnerships

Collaboration

Hope

Healing

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ACE Study

Compares adverse childhood experiences against adult status, on average, a half century later

ACE Study slides are from:

- Robert F. Anda MD at the Center for Disease Control and Prevention (CDC)
- September 2003 Presentation by Vincent Felitti MD “Snowbird Conference” of the Child Trauma Treatment Network of the Intermountain West
- “The Relationship of Adverse Childhood Experiences to Adult Medical Disease, Psychiatric Disorders, and Sexual Behavior: Implications for Healthcare” Book Chapter for “The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease” Lanius & Vermetten, Ed)

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Other Critical Trauma Correlates: The Relationship of Childhood Trauma to Adult Health

- Adverse Childhood Events (ACEs) have serious health consequences
- Adoption of health risk behaviors as coping mechanisms
 - eating disorders, smoking, substance abuse, self harm, sexual promiscuity
- Severe medical conditions: heart disease, pulmonary disease, liver disease, STDs, GYN cancer
- Early Death *(Felitti et al., 1998)*

Adverse Childhood Experiences

- Recurrent and severe physical abuse
- Recurrent and severe emotional abuse
- Sexual abuse
- Growing up in household with:
 - Alcohol or drug user
 - Member being imprisoned
 - Mentally ill, chronically depressed, or institutionalized member
 - Separation/Divorce
 - Mother being treated violently
 - Both biological parents absent
 - Emotional or physical abuse

(Fellitti,1998)

ACE Questions:

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often or very often**... Swear at you, insult you, put you down, or humiliate you? **Or** Act in a way that made you afraid that you might be physically hurt?
2. Did a parent or other adult in the household **often or very often**... Push, grab, slap, or throw something at you? **Or Ever** hit you so hard that you had marks or were injured?
3. Did an adult or person at least 5 years older than you **ever**... Touch or fondle you or have you touch their body in a sexual way? **Or** Attempt or actually have oral, anal, or vaginal intercourse with you?
4. Did you **often or very often** feel that ... No one in your family loved you or thought you were important or special? **Or** Your family didn't look out for each other, feel close to each other, or support each other?

ACE Questions: Con't

5. Did you **often or very often** feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? **Or** Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
6. Were your parents **ever** separated or divorced?
7. Was your mother or stepmother: **Often or very often** pushed, grabbed, slapped, or had something thrown at her? **Or Sometimes, often, or very often** kicked, bitten, hit with a fist, or hit with something hard? **Or Ever** repeatedly hit at least a few minutes or threatened with a gun or knife?
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
10. Did a household member go to prison?

The higher the ACE Score, the greater the likelihood of :

- Severe and persistent emotional problems
- Health risk behaviors
- Serious social problems
- Adult disease and disability
- High health and mental health care costs
- Poor life expectancy

For example:

The following information and slides are from September 2003 Presentation at "Snowbird Conference" of the Child Trauma Treatment Network of the Intermountain West. Vincent J. Felitti, MD. And from Lanius/Vermetten Book Chapter 6/2007.

Adverse Childhood Experiences are Common

Of the 17,000 HMO Members:

- **1 in 4** exposed to **2** categories of ACEs
- **1 in 16** was exposed to **4** categories.
- **22%** were sexually abused as children.
- **66% of the women** experienced abuse, violence or family strife in childhood.

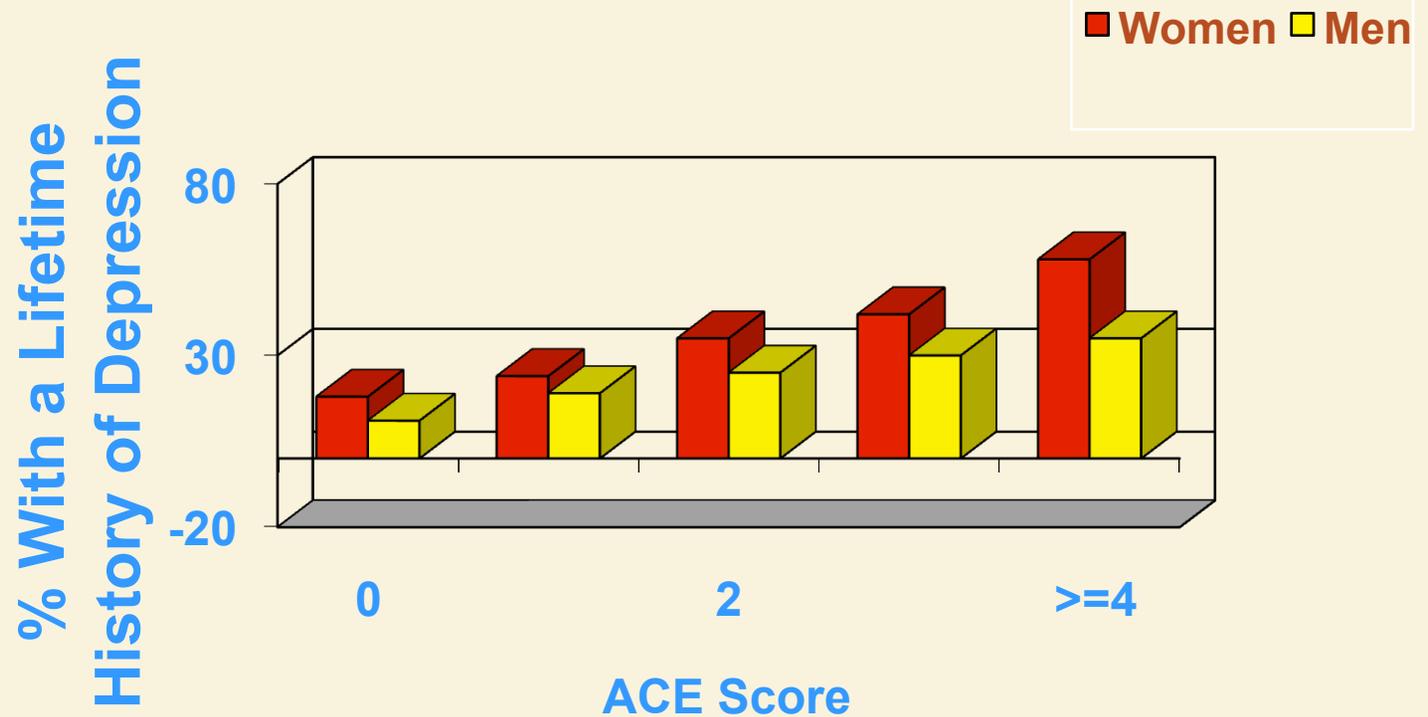


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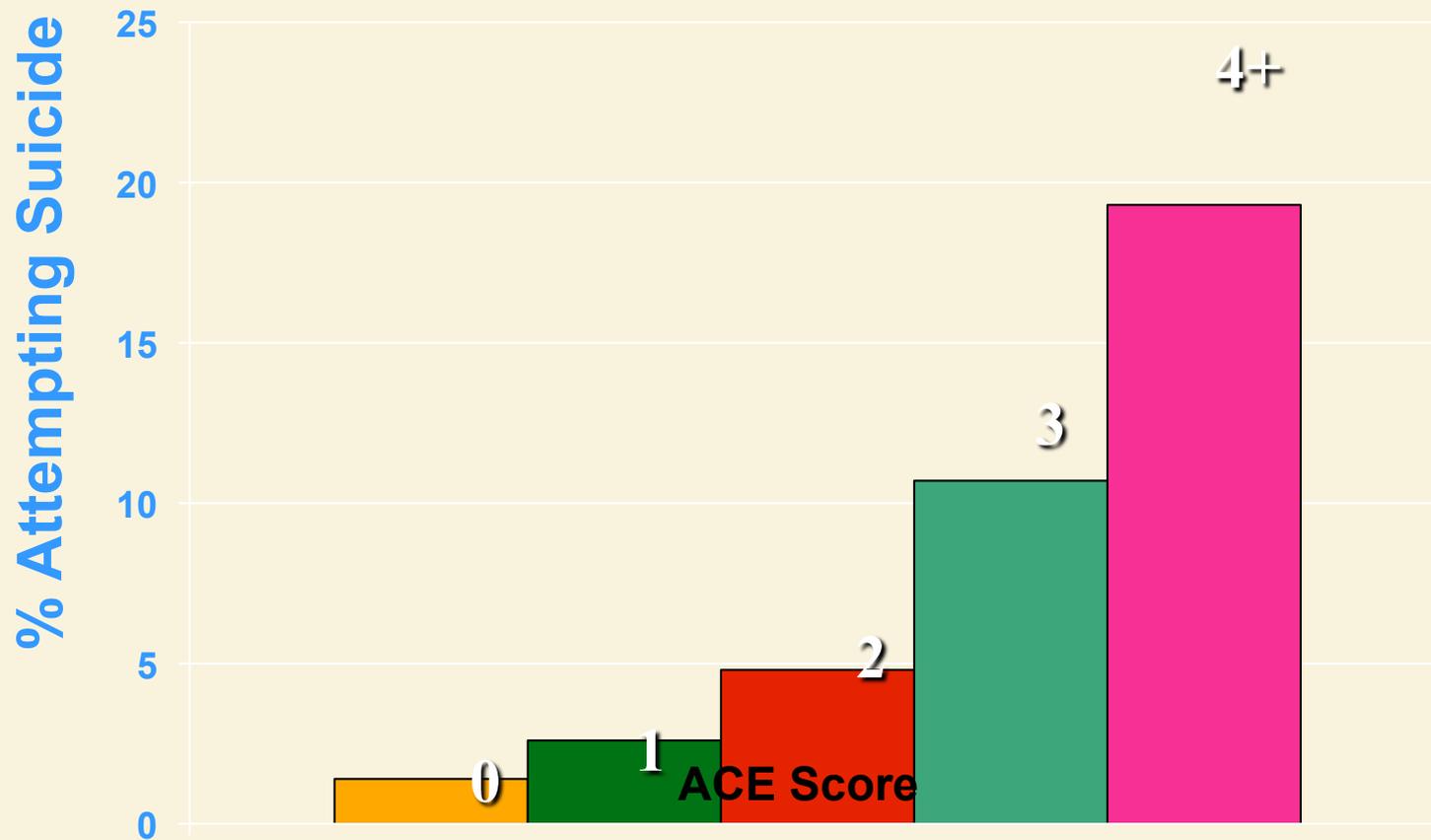
Emotional Problems

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Childhood Experiences Underlie Chronic Depression

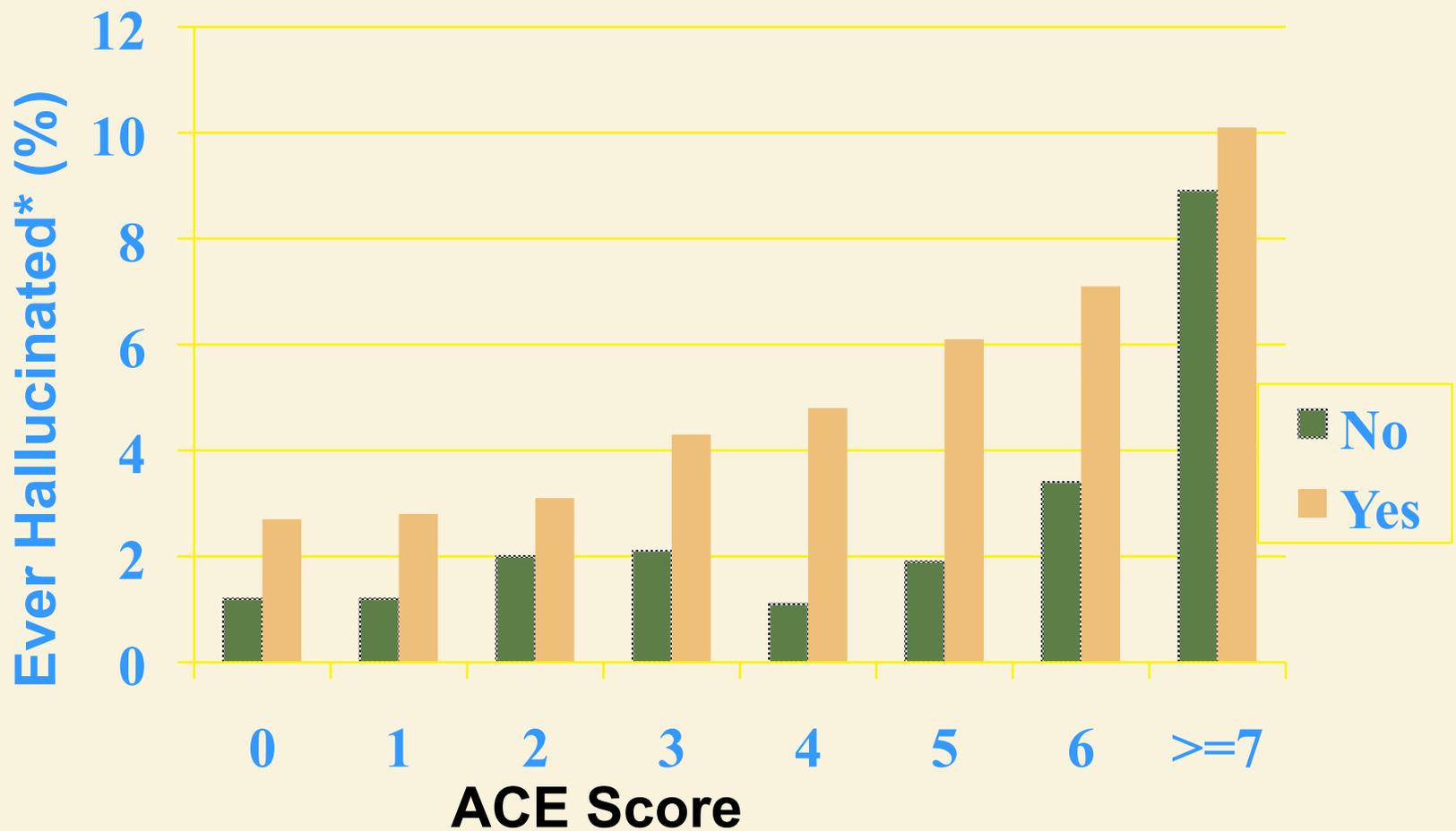


Childhood Experiences Underlie Suicide



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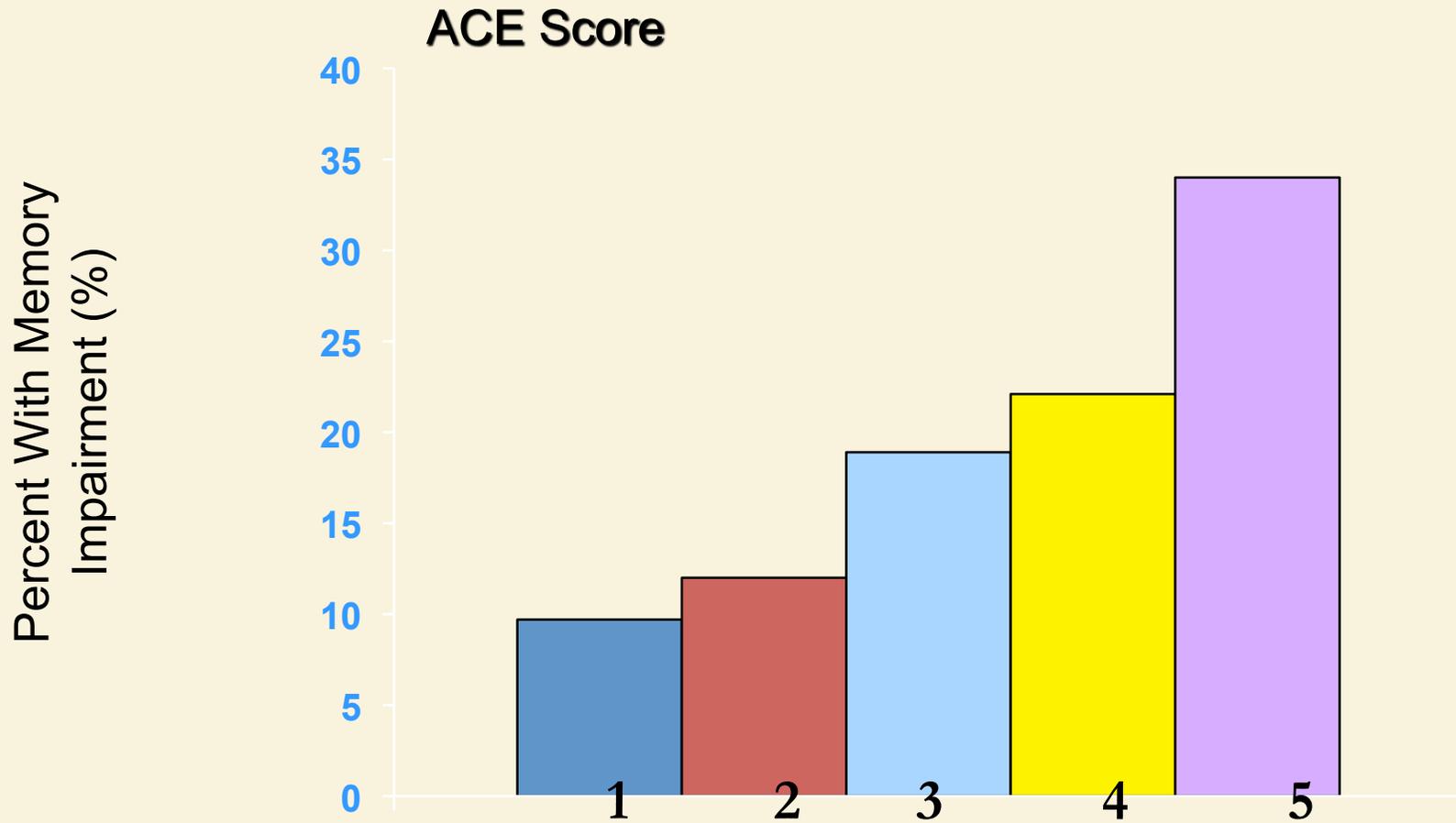
ACE Score and Hallucinations



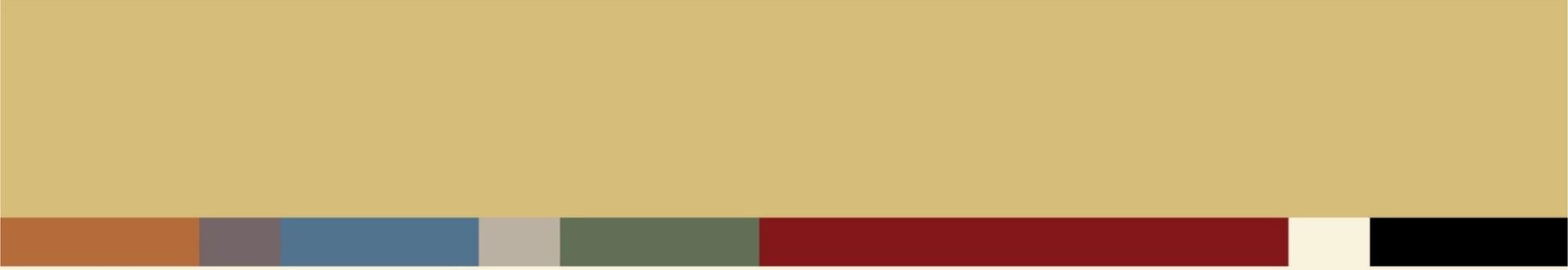
*Adjusted for age, sex, race, and education.

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ACE Score and Impaired Memory of Childhood



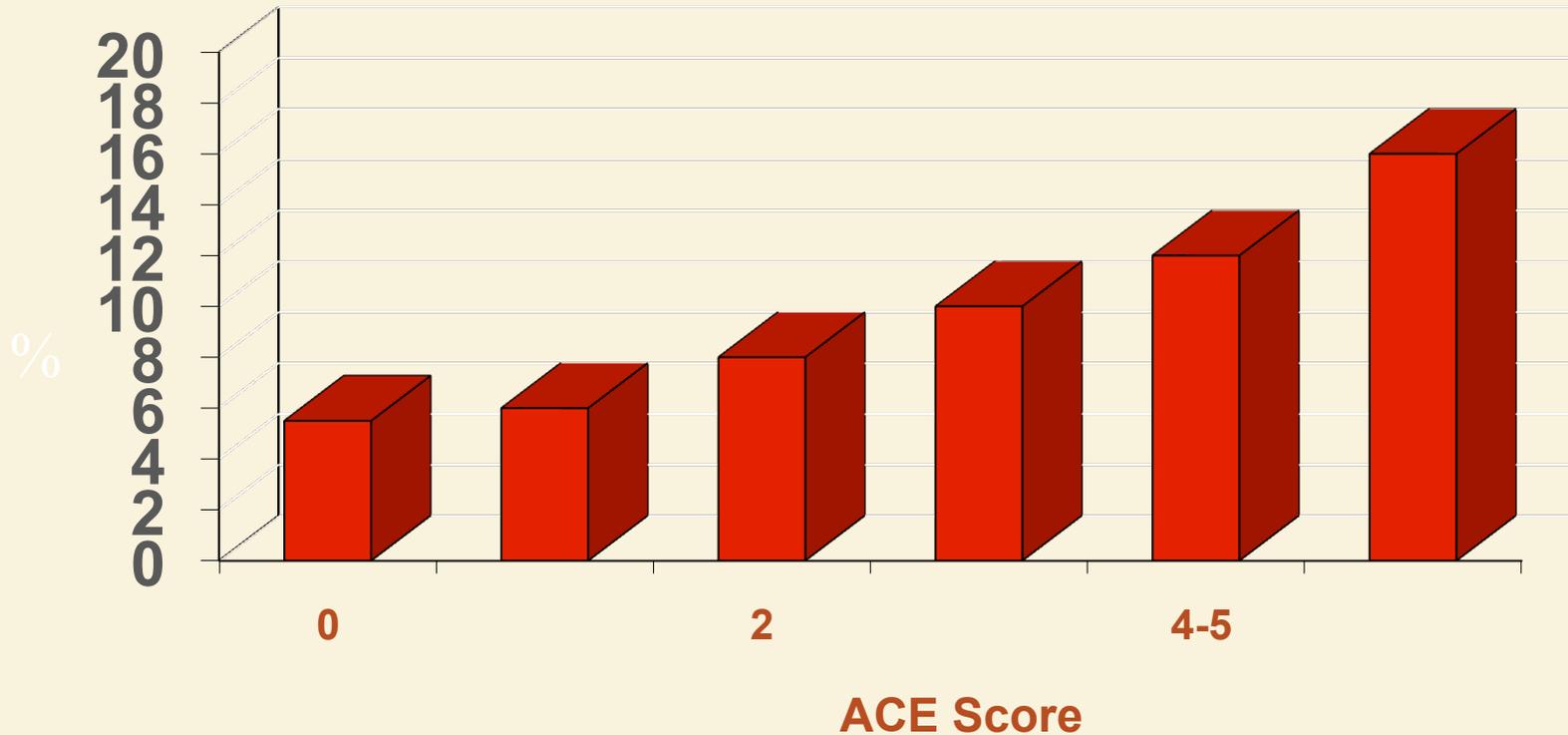
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Health Risk Behaviors

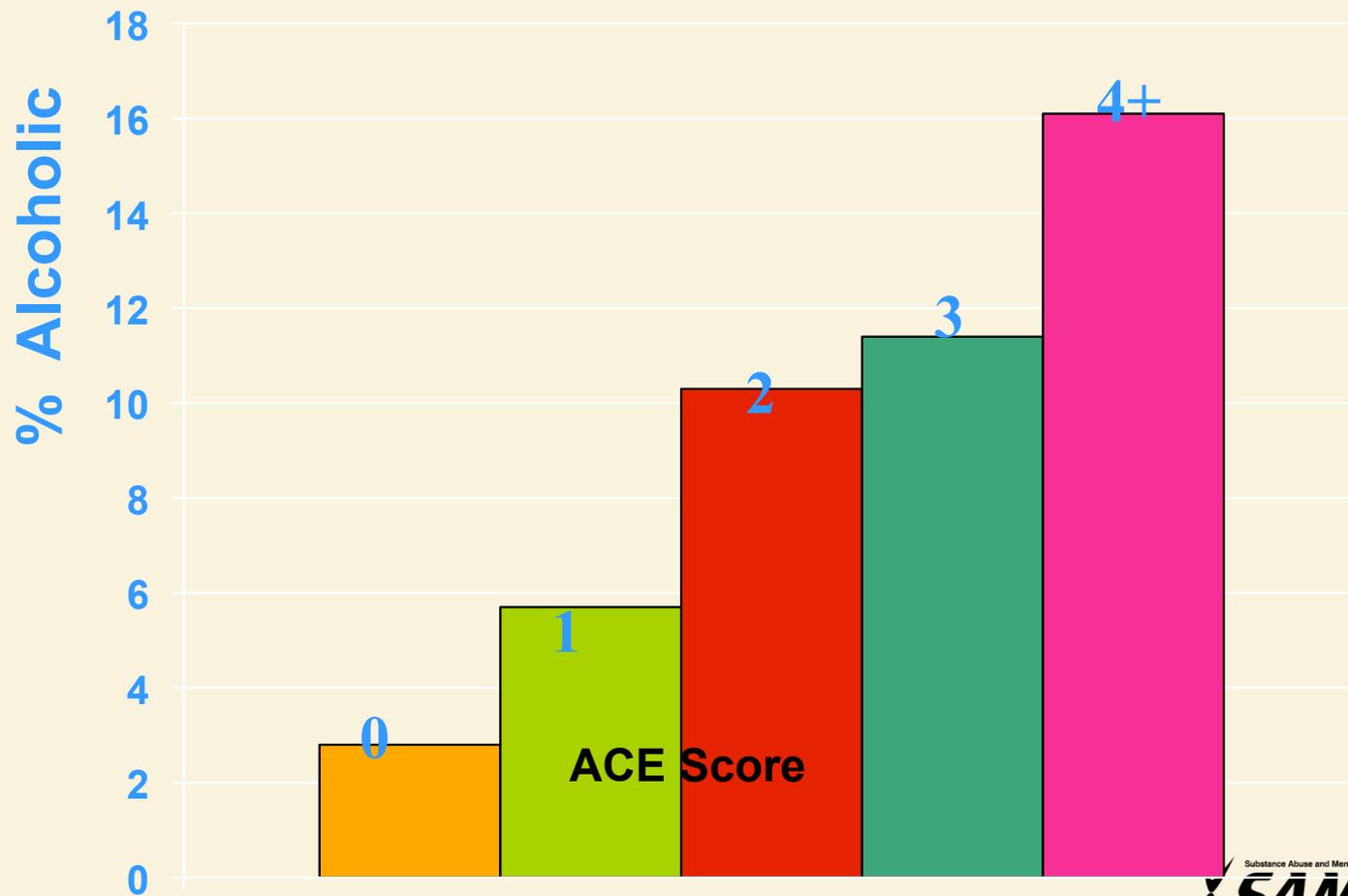
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Adverse Childhood Experiences and Current Smoking



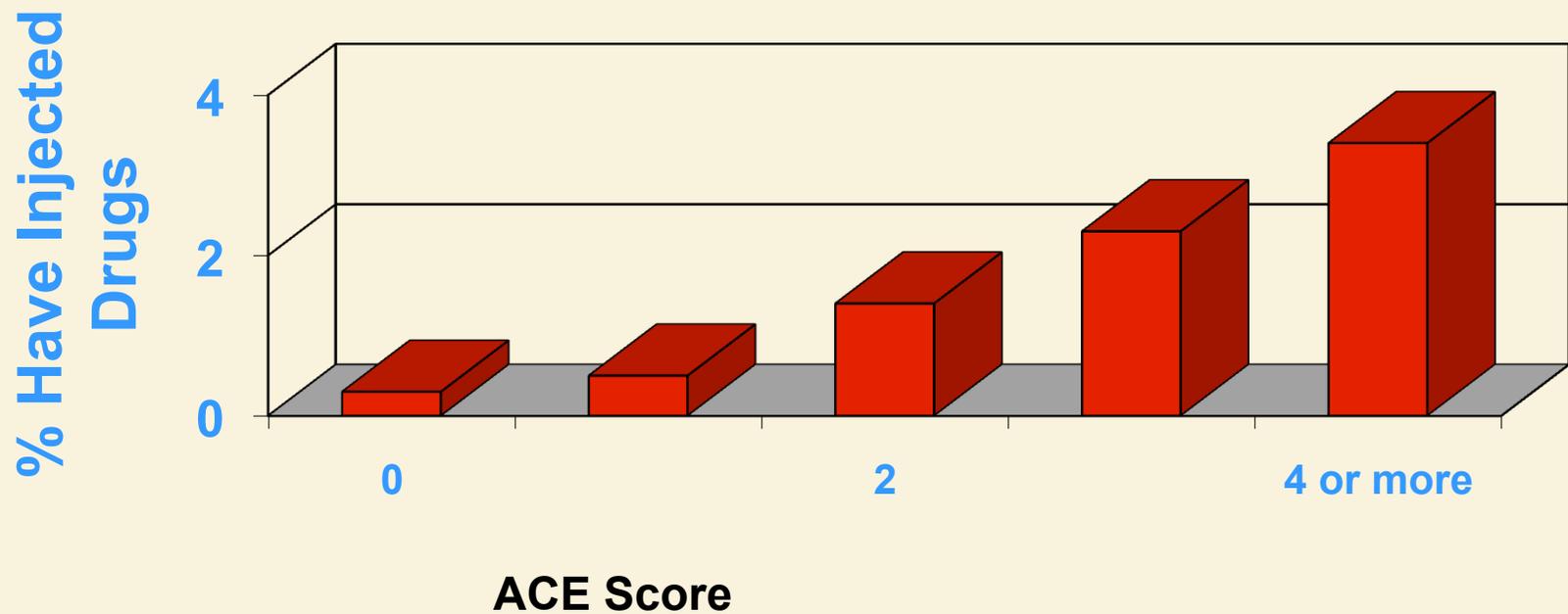
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Childhood Experiences and Adult Alcoholism



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ACE Score and Intravenous Drug Use



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N = 8,022 **SAMHSA** $p < 0.001$
Substance Abuse and Mental Health Services Administration
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)

“Male child with an ACE score of 6 has a 4600% increase in likelihood of later becoming an IV drug user when compared to a male child with an ACE score of 0. Might drugs be used for the relief of profound anguish dating back to childhood experiences? Might it be the best coping device that an individual can find?”

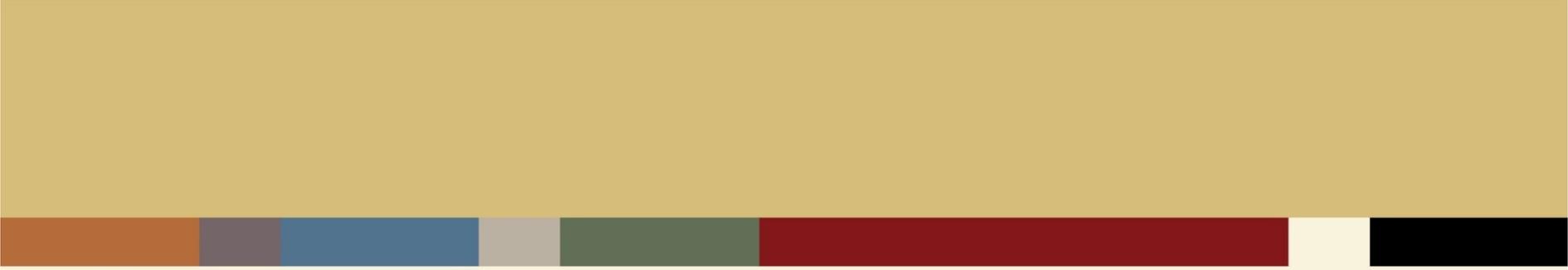
(Felitti, 1998)

Is drug abuse self-destructive or is it a desperate attempt at self-healing, albeit while accepting a significant future risk?”

(Felitti, 1998)

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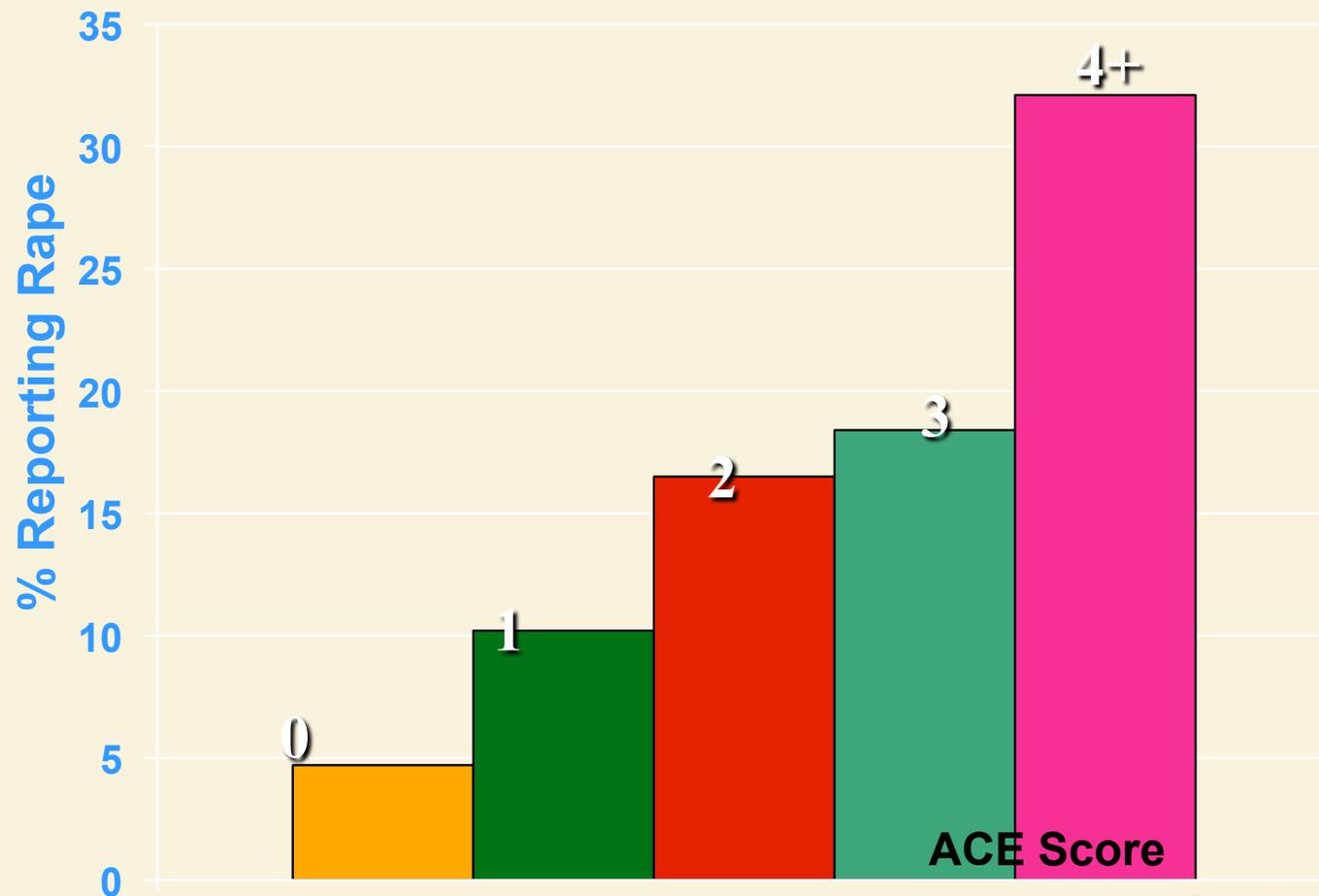
- **Basic cause of addiction is experience-dependent, not substance-dependent**
- **Significant implications for medical practice and treatment programs**



Serious Social Problems

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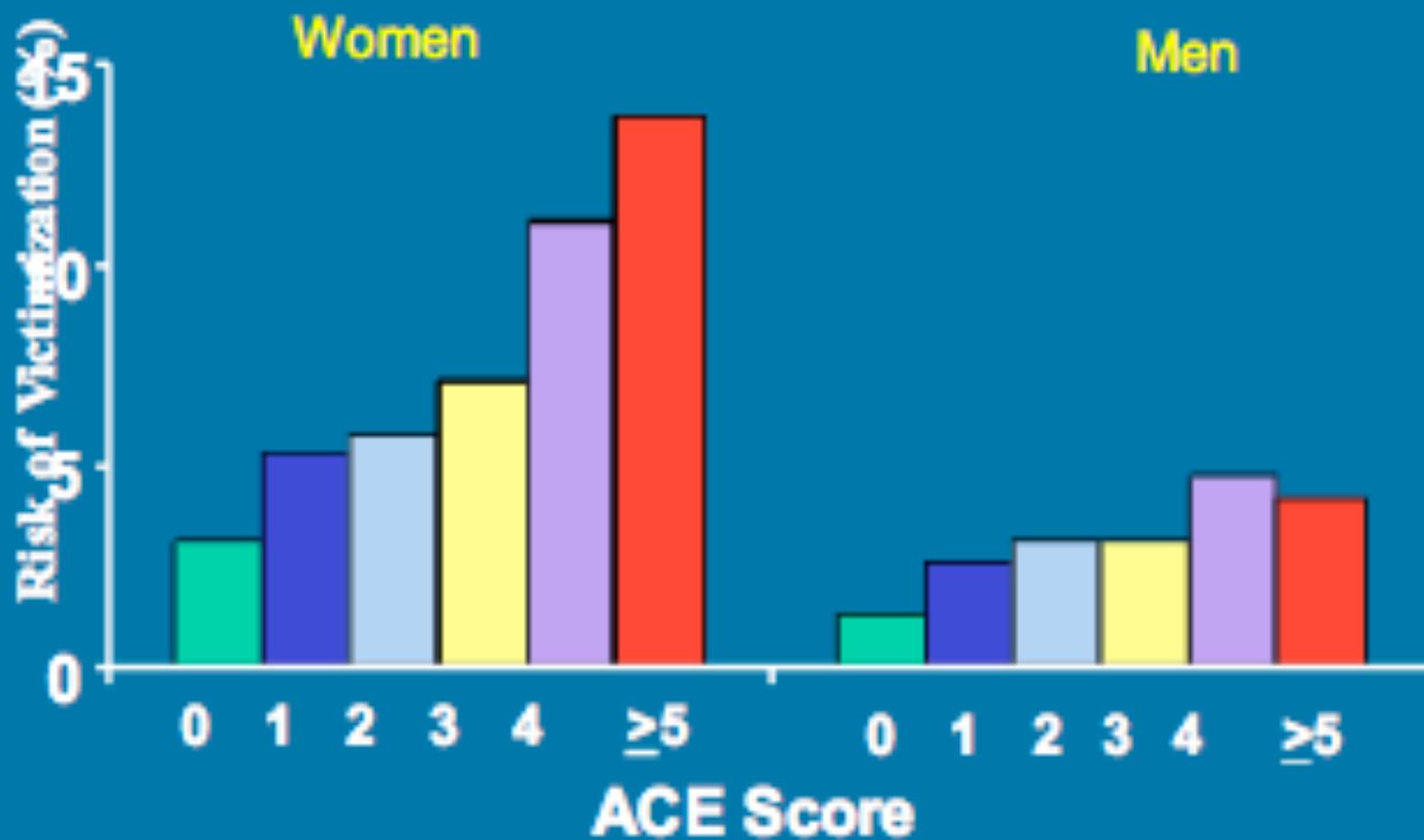
Childhood Experiences Underlie Rape



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well-being

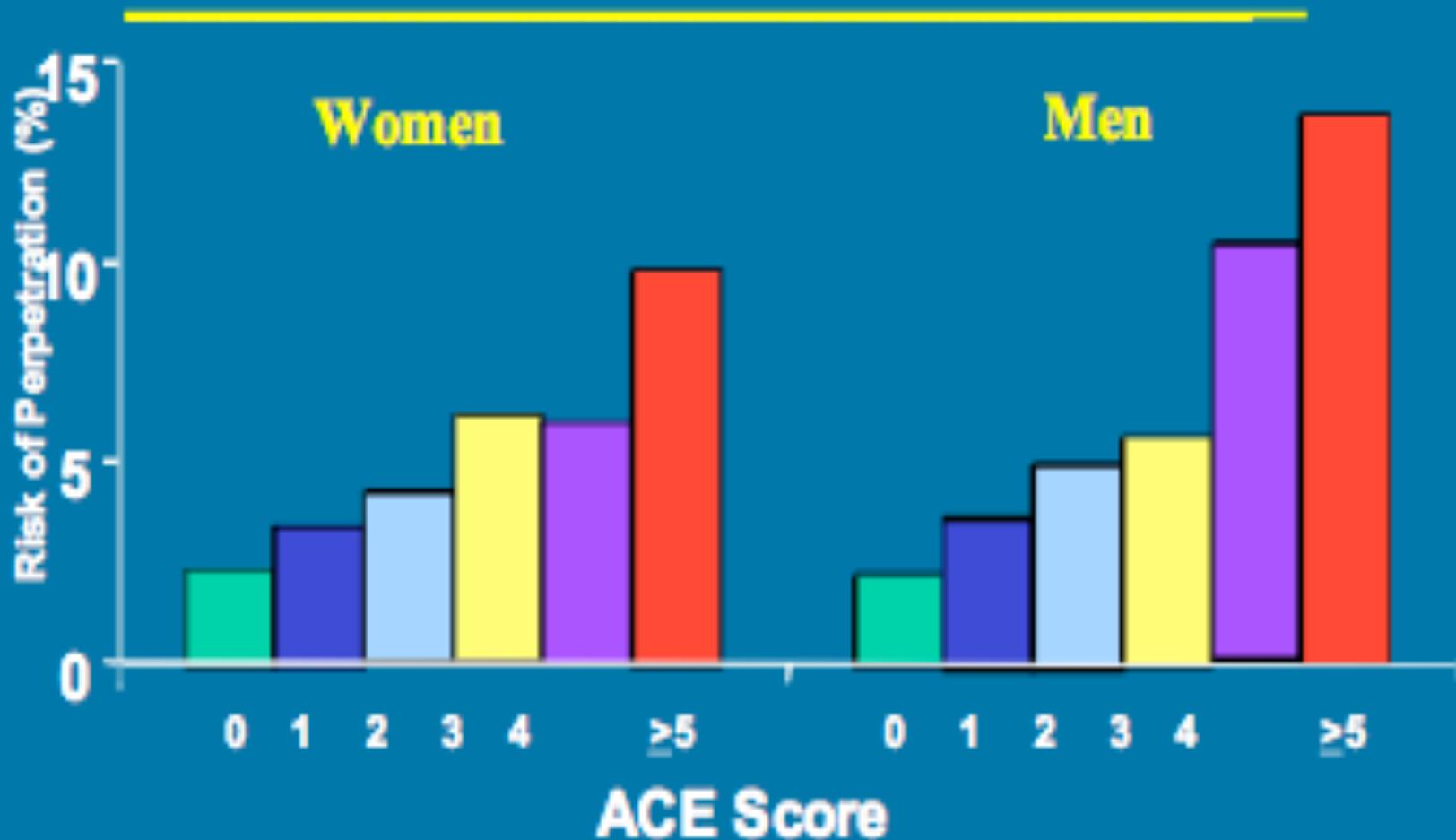
ACE Score and the Risk of Being a Victim of Domestic Violence



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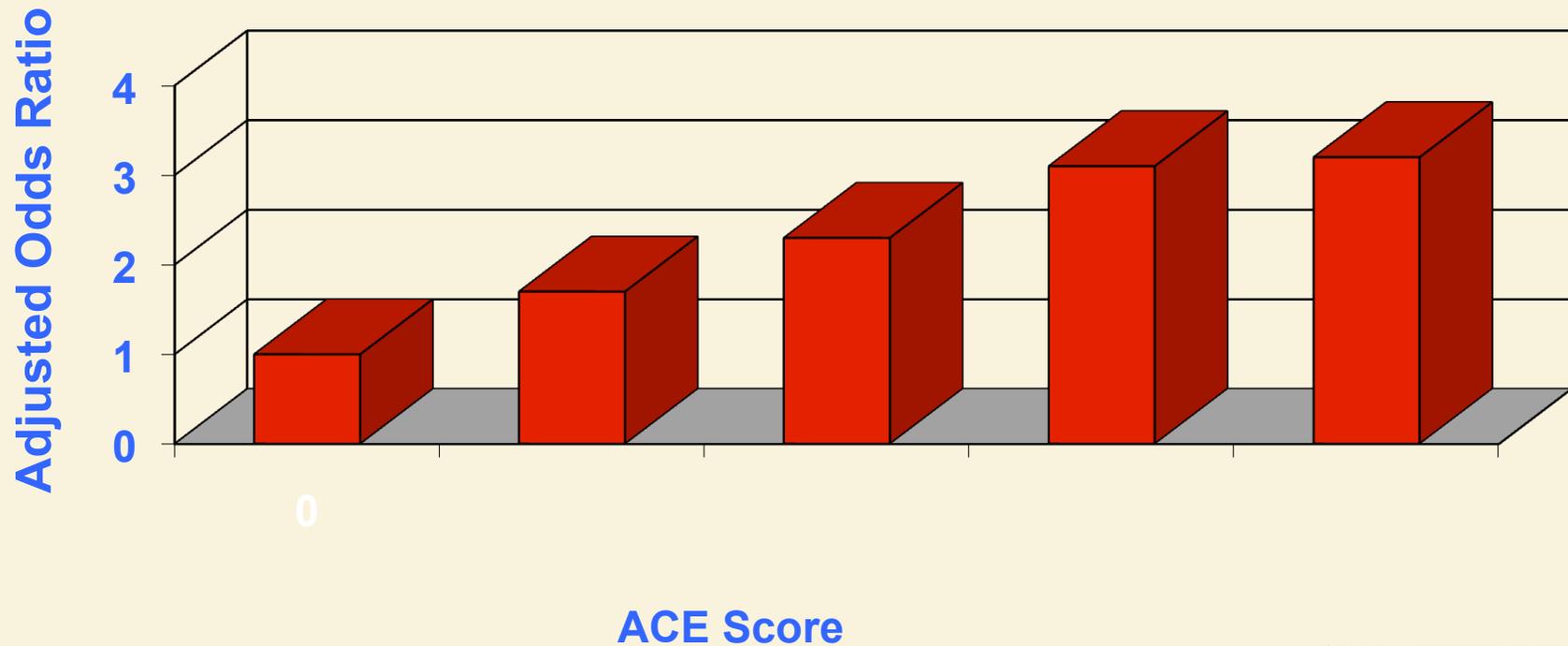
Well-being

ACE Score and the Risk of Perpetrating Domestic Violence



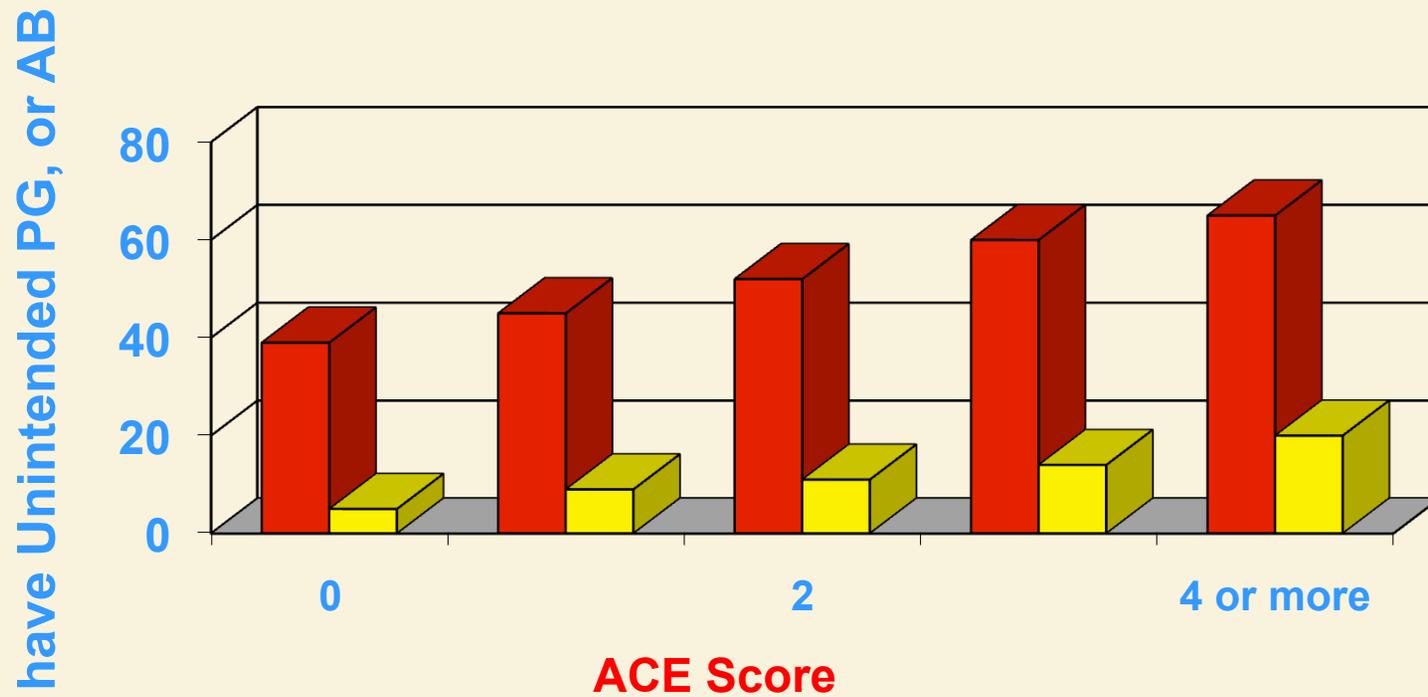
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Adverse Childhood Experiences and Likelihood of > 50 Sexual Partners



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ACE Score and Unintended Pregnancy or Elective Abortion

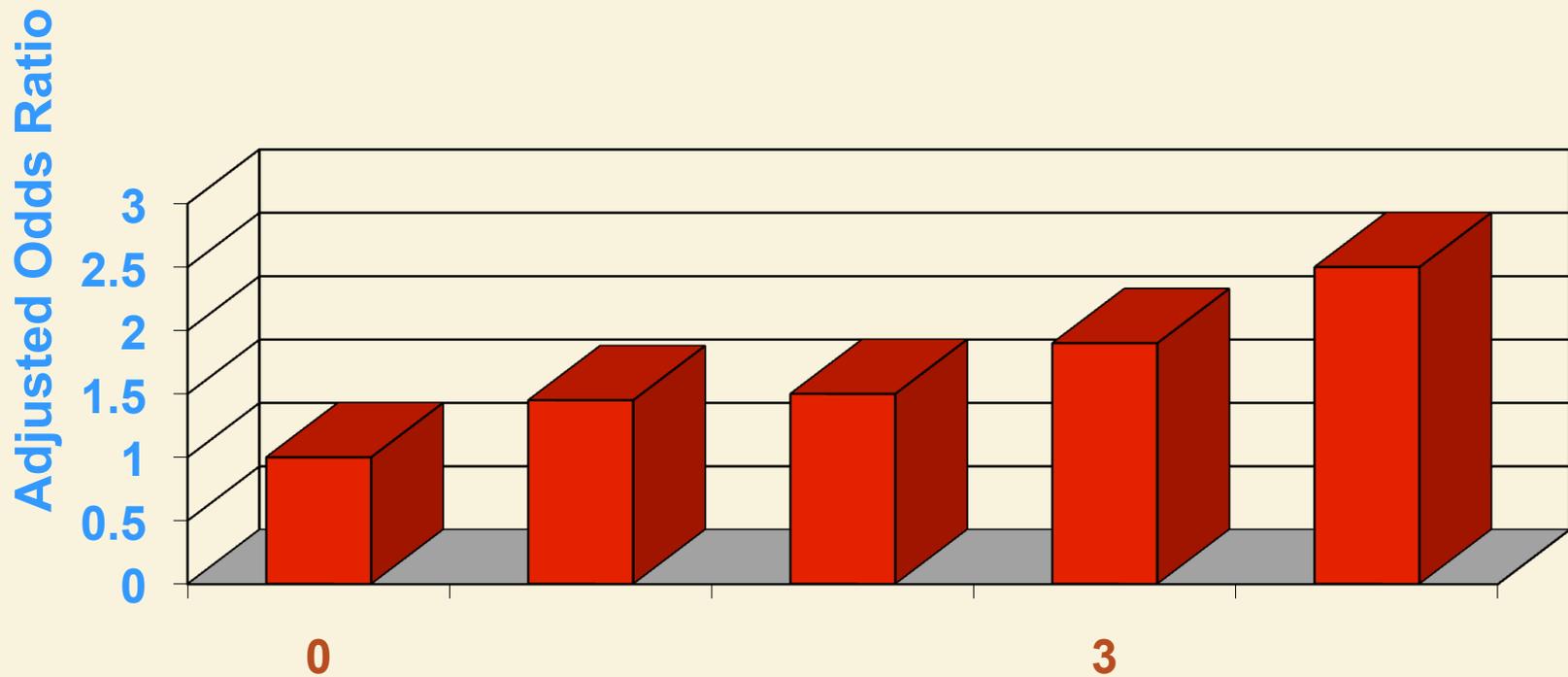


■ Unintended Pregnancy

■ Elective Abortion

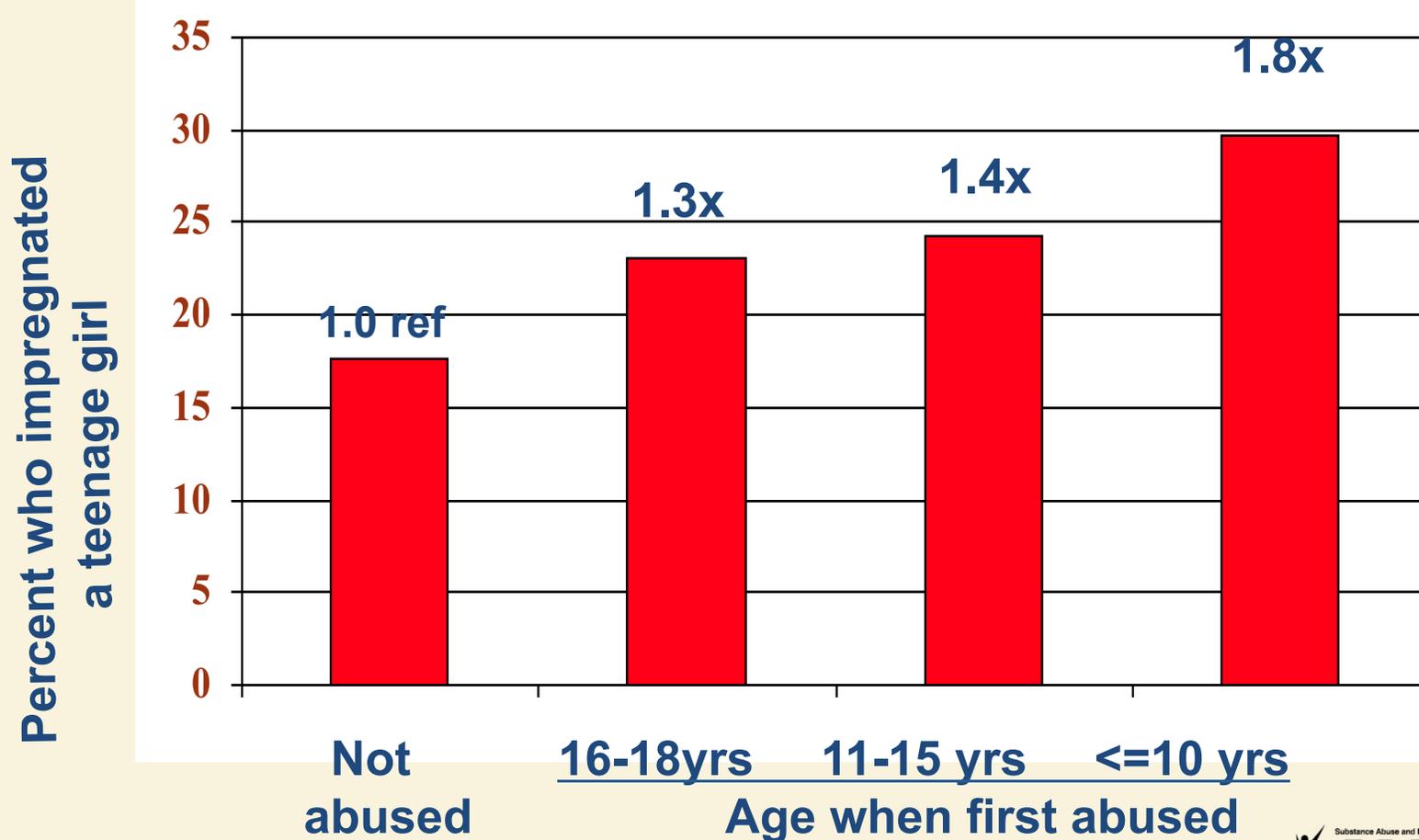
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Adverse Childhood Experiences and History of STD



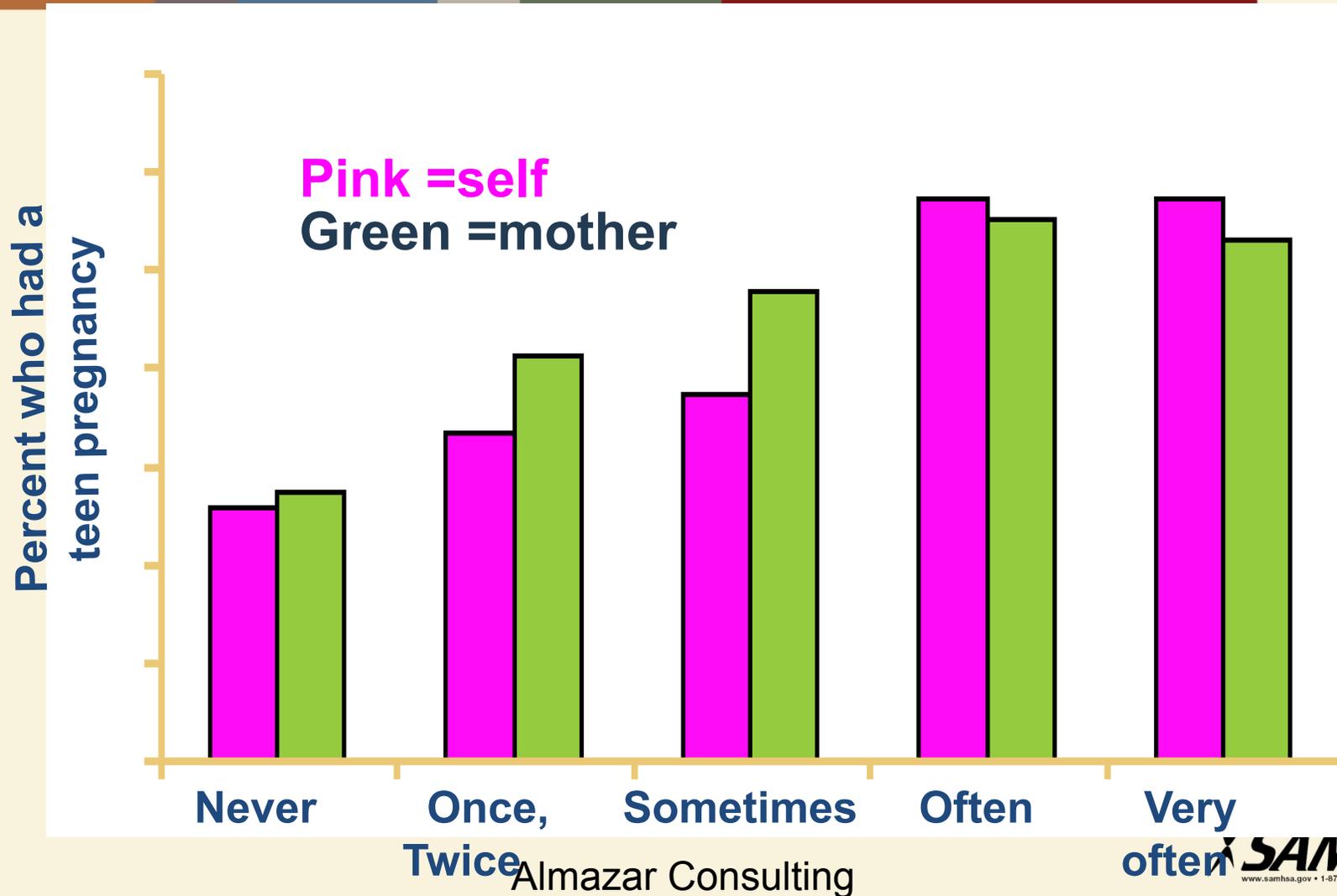
ACE Score
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Sexual Abuse of Male Children and Their Likelihood of Impregnating a Teenage Girl



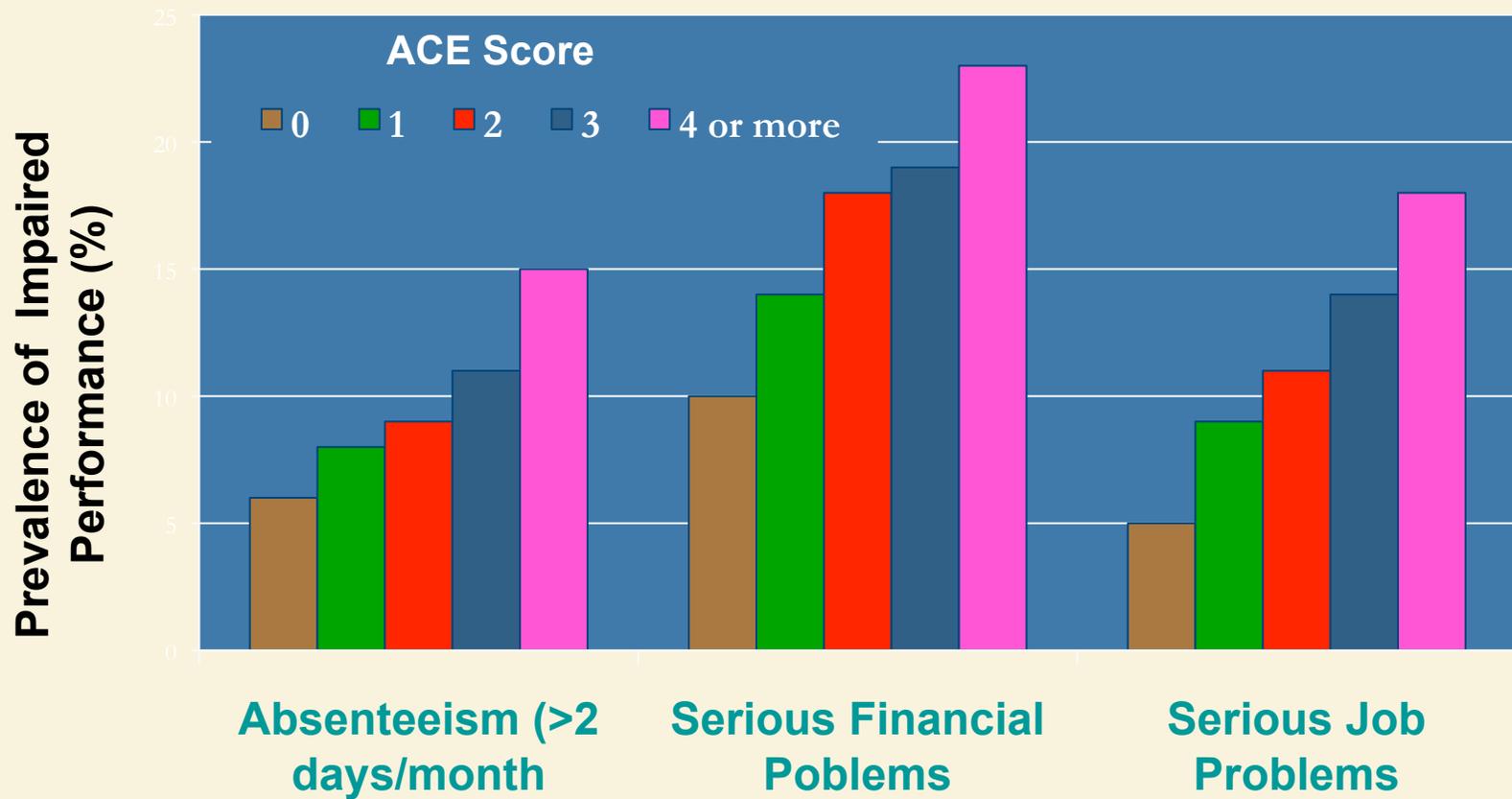
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Frequency of Being Pushed, Grabbed, Slapped, Shoved or Had Something Thrown at Oneself or One's Mother as a Girl and the Likelihood of Ever Having a Teen Pregnancy



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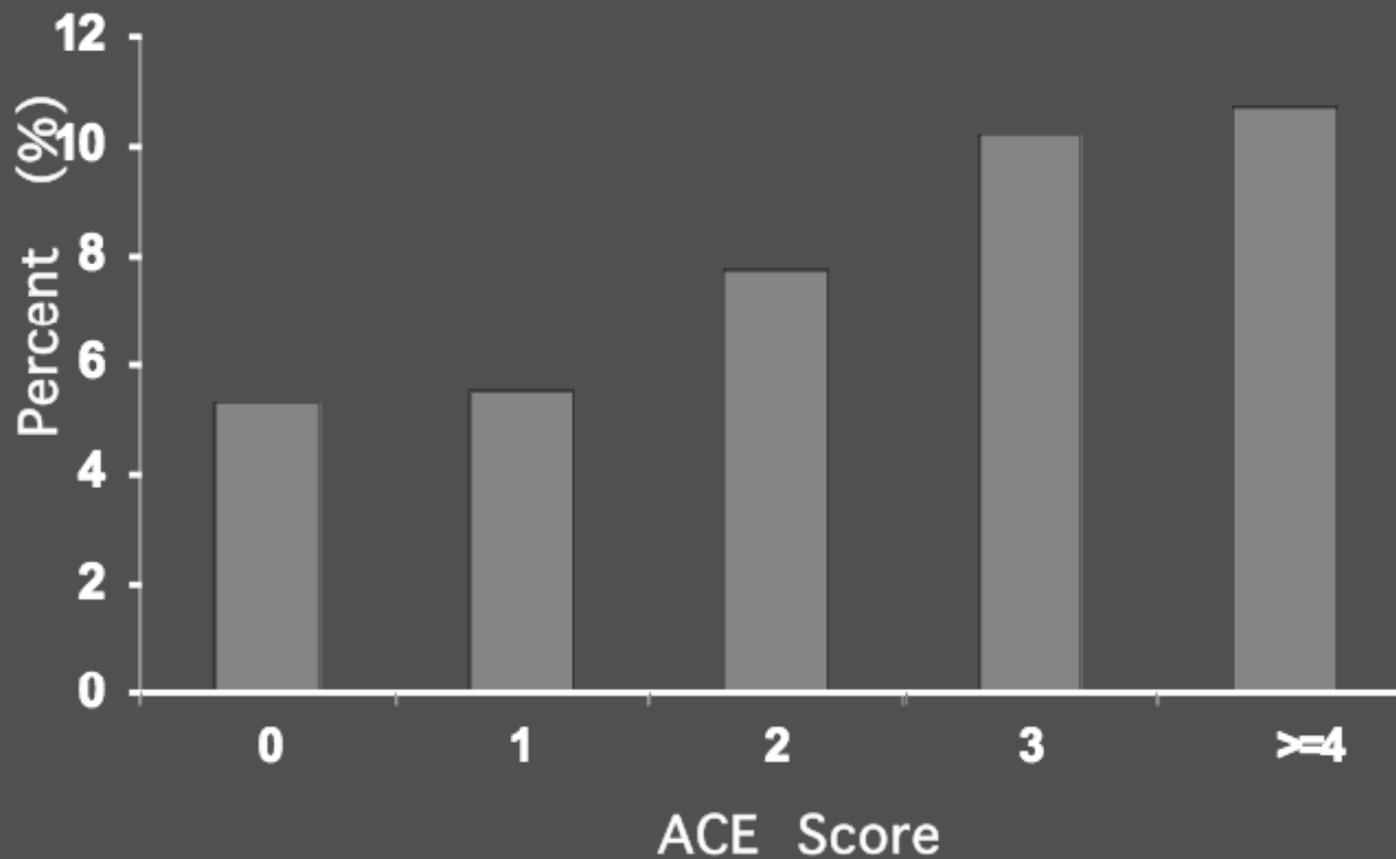
ACE Score and Indicators of Impaired Worker Performance



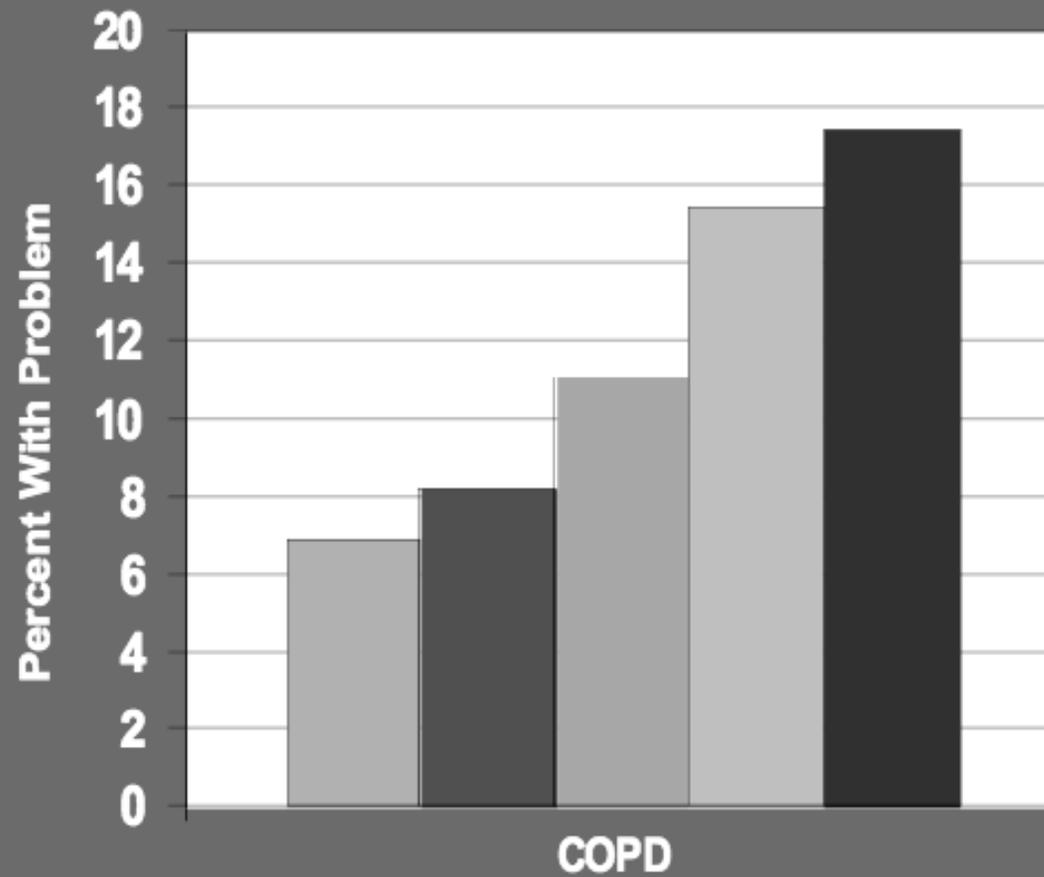
Adult Disease and Disability

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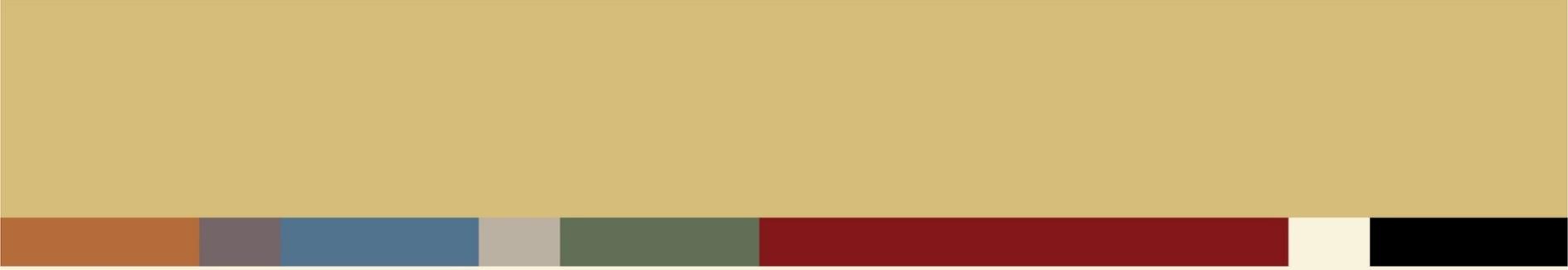
The ACE Score and the Prevalence of Liver Disease (Hepatitis/Jaundice)



ACE Score vs. COPD



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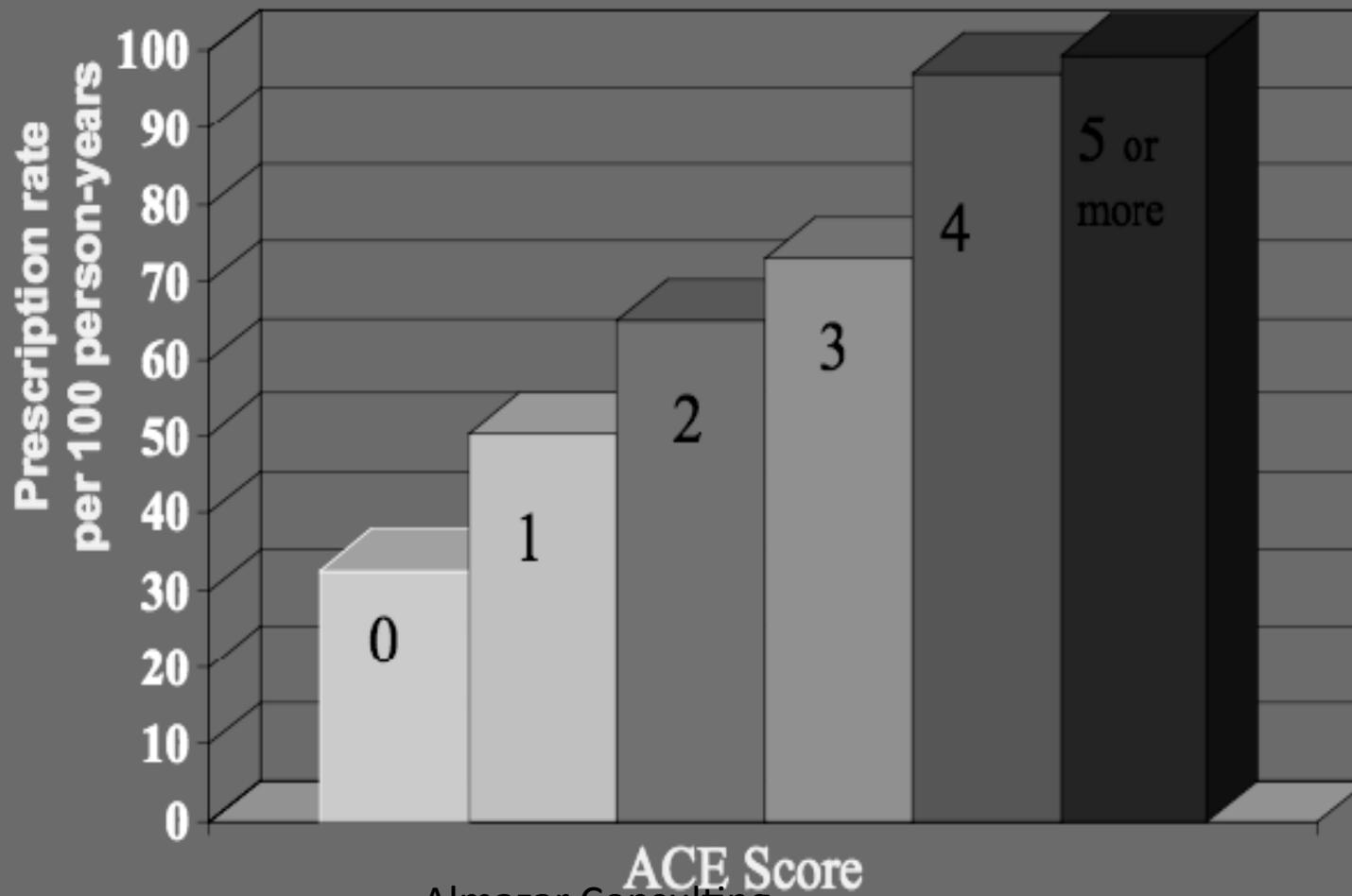


High Health and Mental Health Care Costs

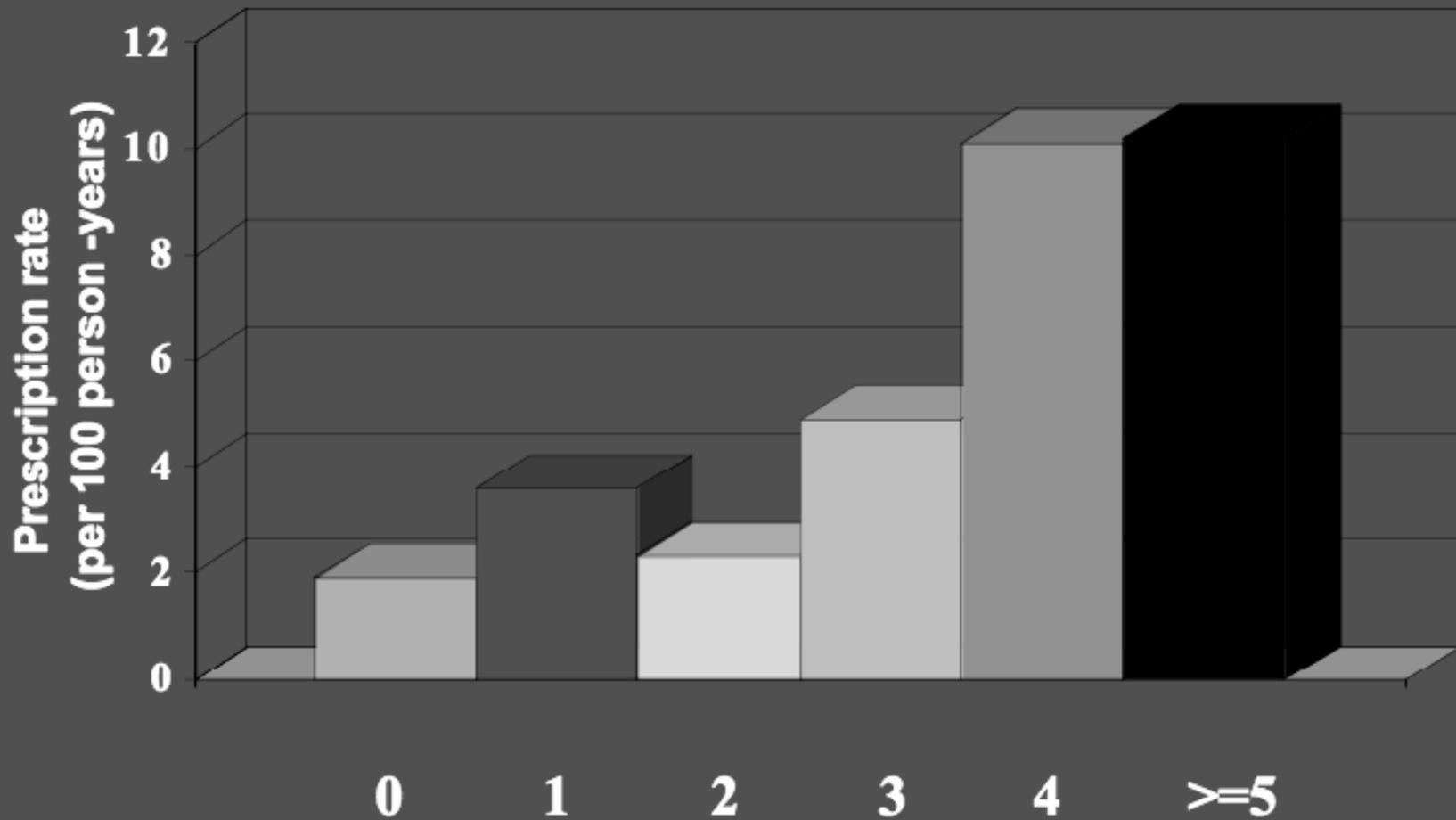
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ACE Score and Rates of Antidepressant Prescriptions

approximately 50 years later

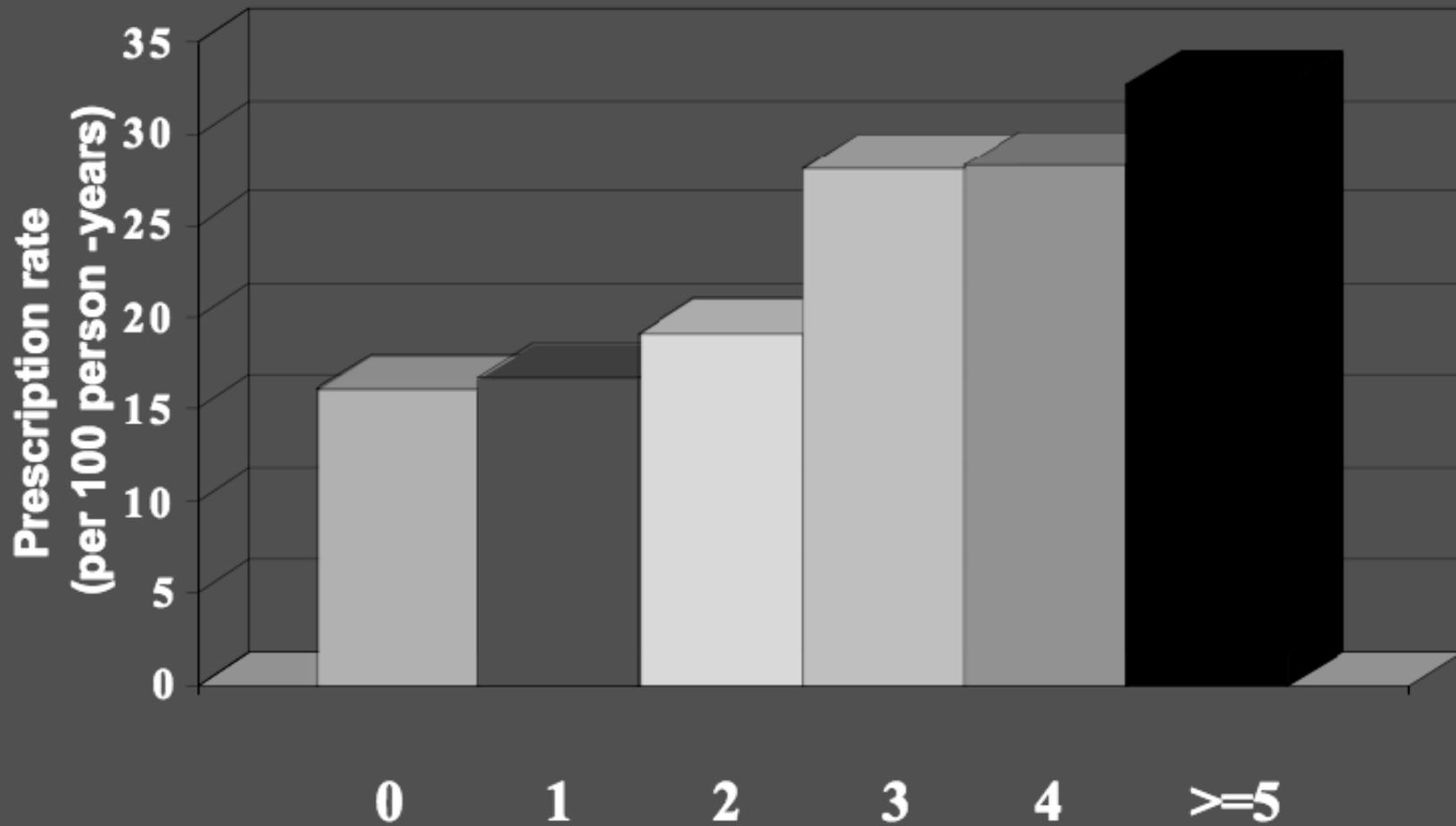


ACE Score and Rates of Antipsychotic Prescriptions

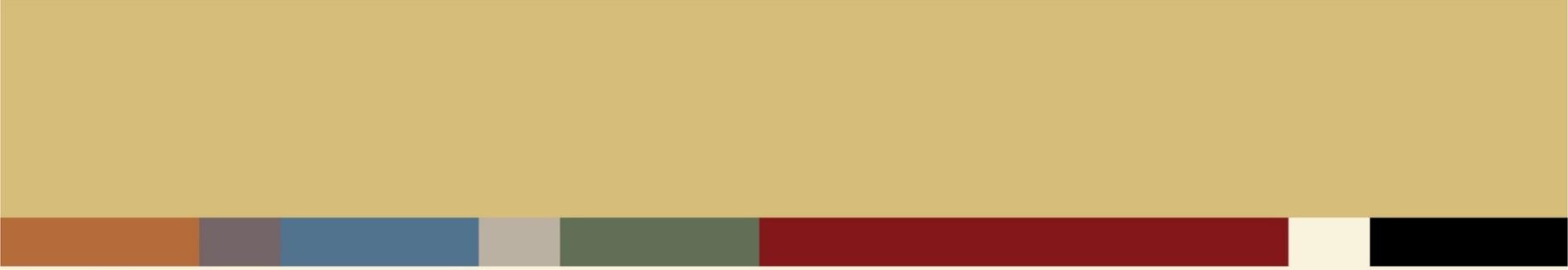


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ACE Score and Rates of Anxiolytic Prescriptions



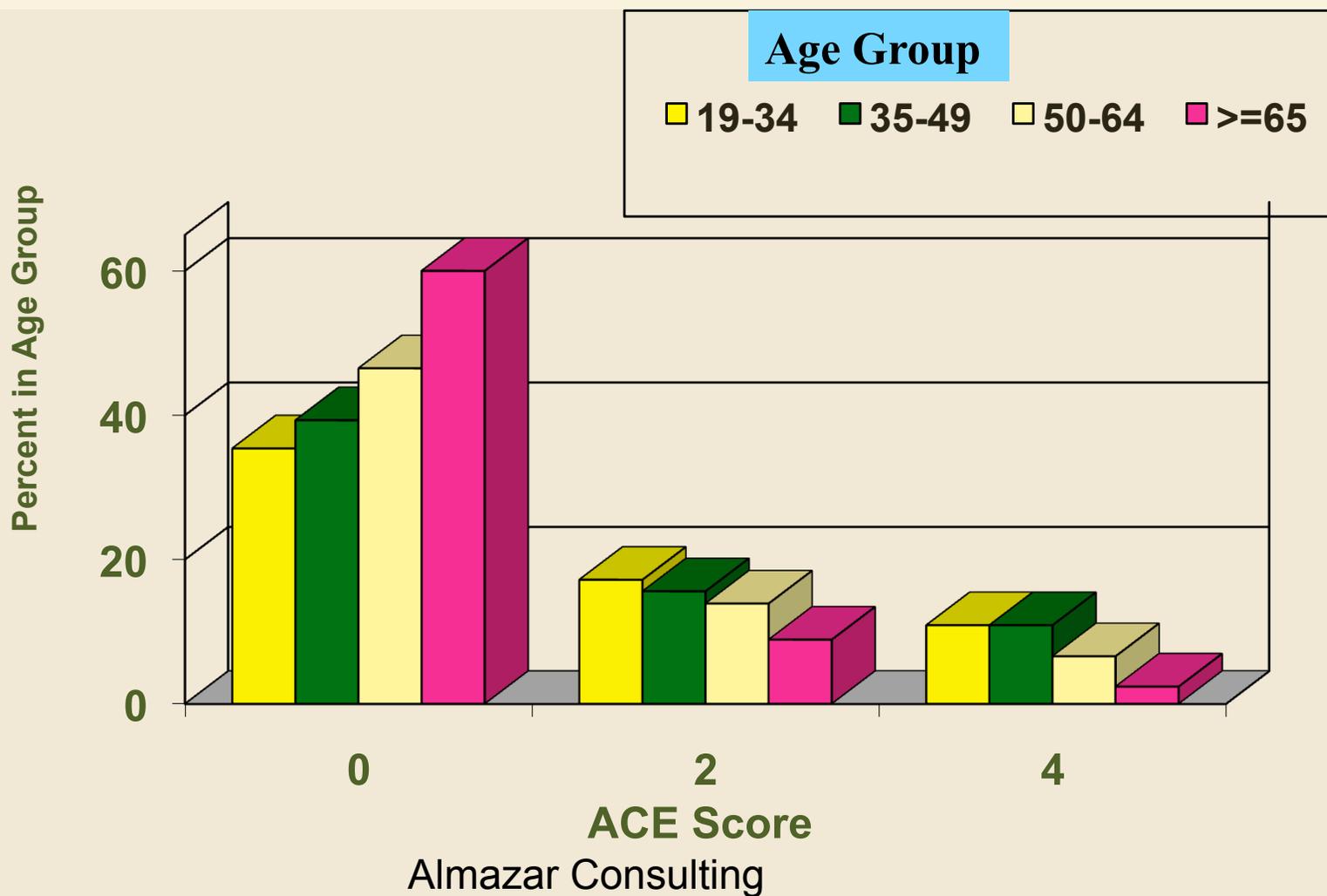
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Poor Life Expectancy

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Effect of ACEs on Mortality



Aoife O'Donovan, Thomas C. Neylan, Thomas Metzler, Beth E. Cohen. **Lifetime exposure to traumatic psychological stress is associated with elevated inflammation in the Heart and Soul Study.** *Brain, Behavior, and Immunity*, 2012

In the first study to examine the relationship between cumulative traumatic stress exposure and inflammation, the scientists found that the more traumatic stress a patient was exposed to over the course of a lifetime, *the greater the chances the patient would have elevated levels of inflammatory markers in his or her bloodstream.*

"This may be significant for people with cardiovascular disease, because we know that heart disease patients with higher levels of inflammation tend to have worse outcomes," said lead author Aoife O'Donovan, PhD, a Society in Science: Branco Weiss Fellow in psychiatry at SFVAMC and UCSF.

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“What happened to you?”
instead of
“What’s wrong with you?”

- All behavior has meaning
- Symptoms are ADAPTATIONS
- Comfort vs. Control
- We build on success not deficits

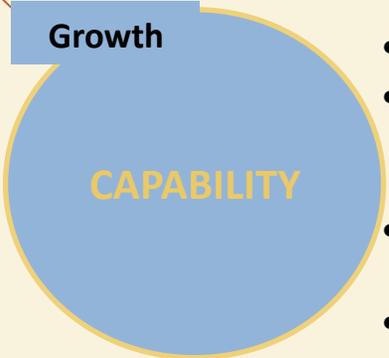
KEY SYSTEMS FOR RESILIENCE



- Faith, hope, sense of meaning
- Engagement with effective orgs – schools, work, pro-social groups
- Network of supports/services & opportunity to help others
- Cultures providing positive standards, expectations, rituals, relationships & supports



- Bonds with parents and/or caregivers
- Positive relationships with competent and nurturing adults
- Friends or romantic partners who provide a sense of security & belonging



- Intellectual & employable skills
- Self regulation – self control, executive function, flexible thinking
- Ability to direct & control attention, emotion, behavior
- Positive self view, efficacy



EXAMPLES OF PROGRAM & POLICY ACTIONS

- Parent Trust for Washington Children has incorporated the ACE questions into their work with addicted parents facing court action (DV, termination of parental rights) resulting in: 1) improved outcomes in parenting classes and 2) reduced relapse among parents with 4 or more ACEs.
- Safe Harbor Crisis Nursery in the Tri-Cities has incorporated ACEs and trauma into its day-to-day strategies and case management resulting in improved outcomes for families.
- Children of Incarcerated Parents; the Legislature has mandated the executive branch to engage in an initiative to address the needs of children of incarcerated parents. The initiative and its processes are framed to address the likelihood that these children have more than this one ACE.
- With the help of the Mental Health Transformation Grant and the Office of the Superintendent of Public Instruction (OSPI), Spokane is exploring the creation/implementation of trauma sensitive practices in public schools.
- OSPI introduced the Compassionate Schools initiative, which supports local school districts in reducing the non-academic barriers to schools success that are created by trauma (2008). (<http://www.k12.wa.us/CompassionateSchools/default.aspx>)

A Parable: Symptoms are Adaptations

Once upon a time a man named John decided to go for a kayak ride in a nearby river. Unfortunately, he greatly underestimated the strength of the current, and shortly after he set out he capsized. He was tumbling down the river, being injured as he banged into rocks when he spotted a large log near him. With considerable effort, John was able to grab the log and he held on to it for dear life. Clinging to the log, John continued to be swept down the river. He still crashed against things but with the log he was able to keep his head above water and survive. Finally, the current ejected John and the log into the middle of a large, tranquil pond. The log got caught on a rock in the middle of the pond. There were some people on the beach at the edge of the pond, and they saw John out in the middle. They called out to him: "Hello! You are safe now! It is not very far to shore! Just swim over here- the water is calm, it's not that deep, you will be fine!

But John could not let go of the log.

- **Why is John clinging to the log when he is so close to safety? What will the people have to do if they truly want to help John?****They will have to swim out to him, and they will have to give him something like a life preserver to replace his log.**
- **In what ways are we swimming out to the people we serve?**
- **What life preservers are we giving them?**

Posted in trauma blog by Patricia Wilcox, LCSW, Klingberg Family Centers



Neurodevelopment of Childhood

Bruce D. Perry, M.D., Ph.D.
www.ChildTrauma.org



The Brain Matters

- The human brain is the organ responsible for everything we do. It allows us to love, laugh, walk, talk, create or hate.
- The brain - one hundred billion nerve cells in a complex net of continuous activity -allows us our humanity.
- For each of us, our brain's functioning is a reflection of our experiences.

The biological unit of survival for human beings is the clan.

Evolutionary pressure which resulted
in our species was applied to the
clan, not the individual.

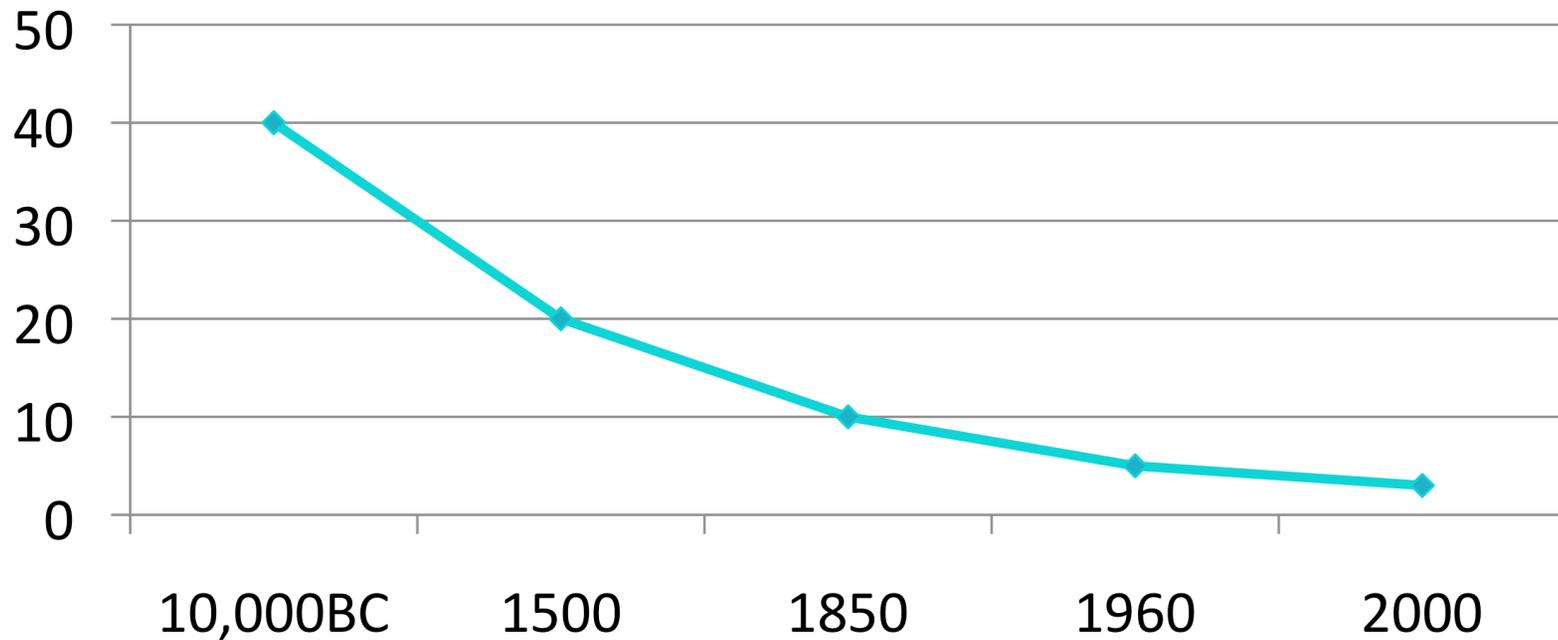
We are unavoidably inter-dependent
upon each other.

The compartmentalization of Western life

- Separate by age
- Separate by wealth
- Separate by work
- Separate in education, by profession
- Separate by transportation
- Separate by generation
- *Separate by ethnicity, religion, race*

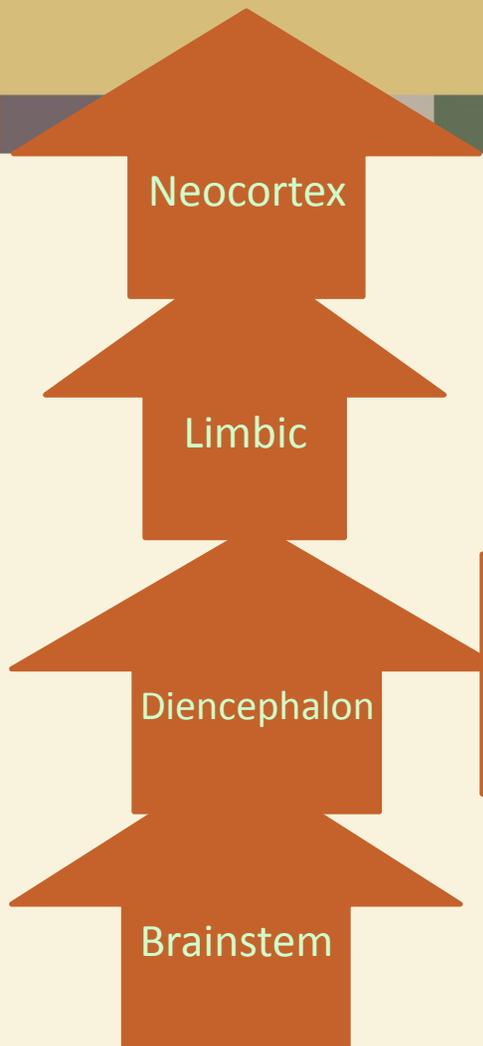
Decrease in Size of Households

Privacy and Isolation



Developmental Stages

- Emotional Regulation for infants
- Maternal dyad
- Repetitive, patterned interaction to hardwire self-regulation
- Exploration of individual self, tentative independence, tolerating manageable separations
- Independence



- Abstract Thought
- Concrete Thought

Peers, Teachers
Community

- Affiliation
- Attachment
- Sexual Behavior
- Emotional Reactivity

Family and Friends

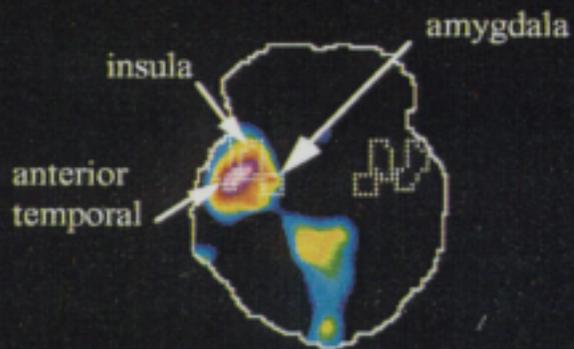
- Motor regulation
- Affect regulation
- Hunger/satiety
- Sleep

Caregiver

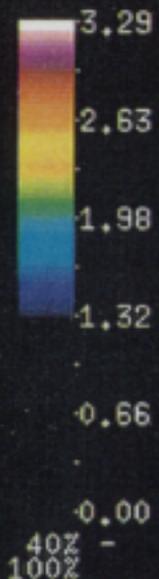
- Blood pressure
- Body temperature
- Heart rate
- Arousal states

Mother

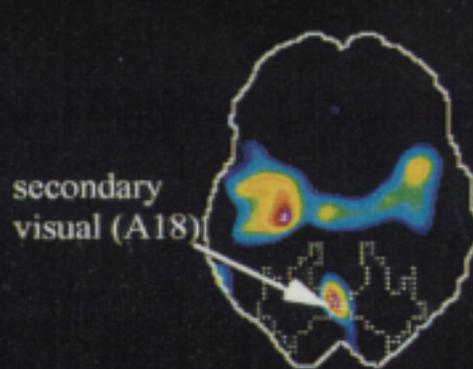
Traumatic minus Neutral



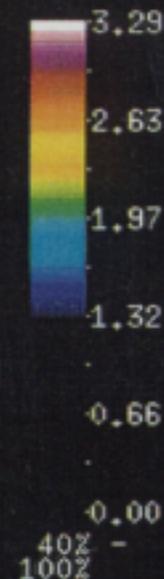
A -12 mm



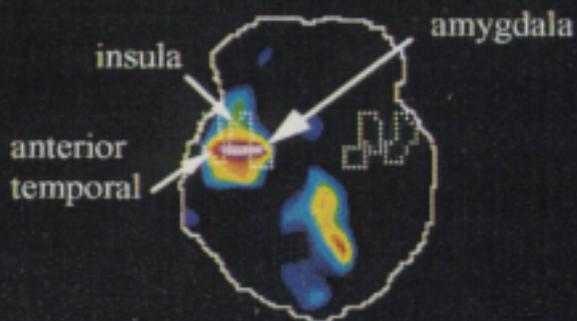
Traumatic minus Neutral



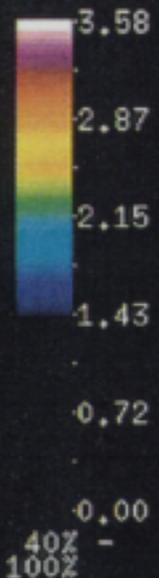
B 0 mm



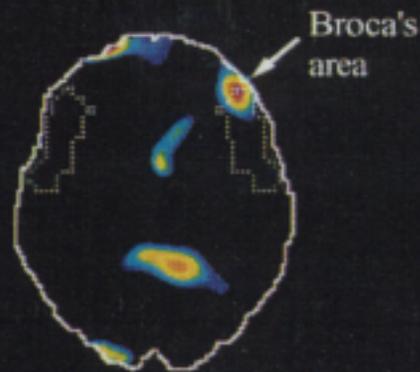
Traumatic minus Teeth-clenching



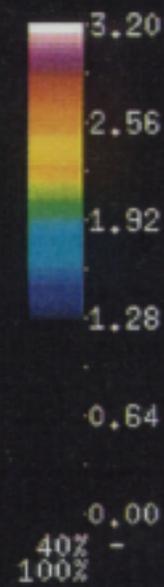
C -12 mm



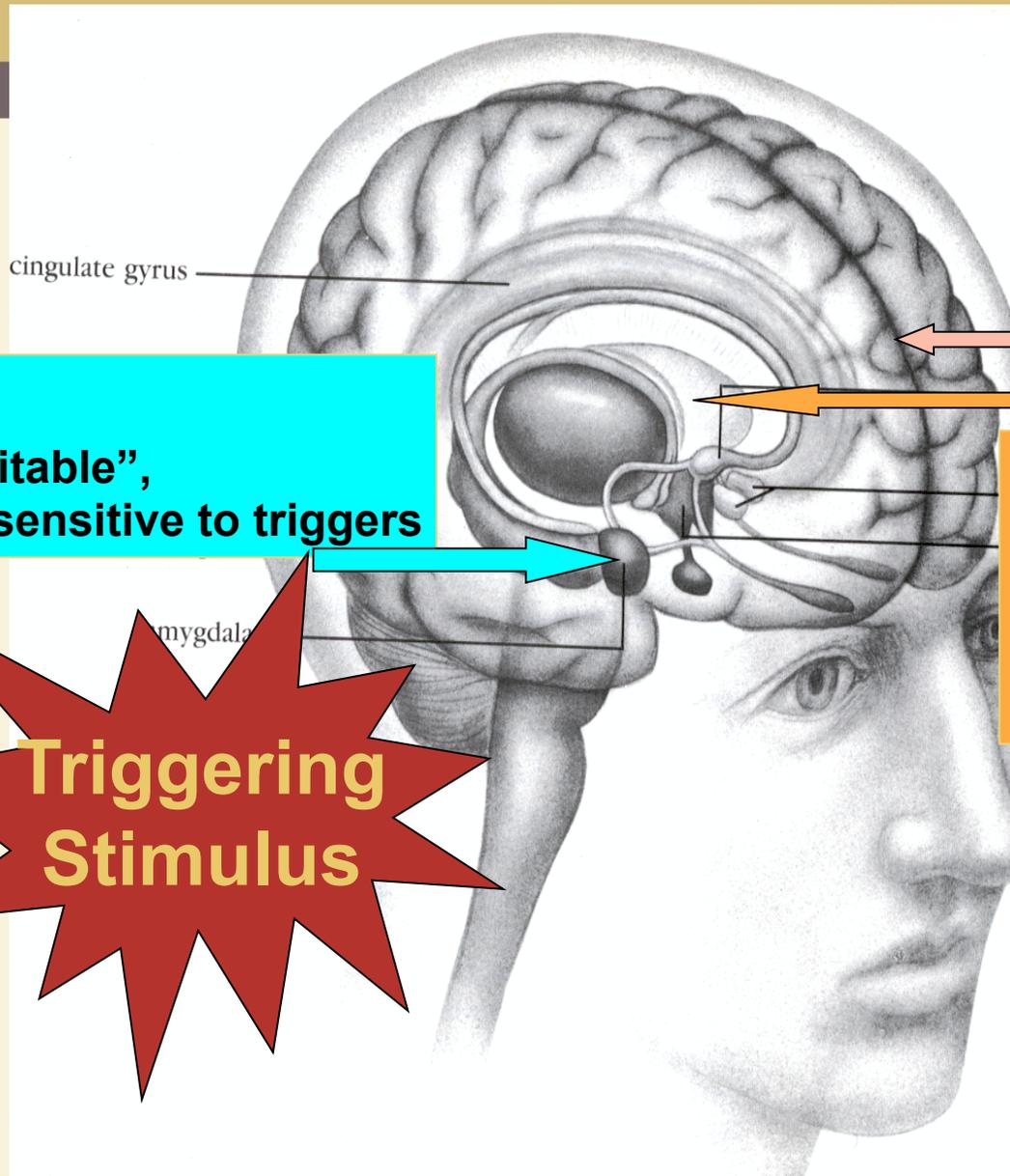
Neutral minus Traumatic



D 8 mm

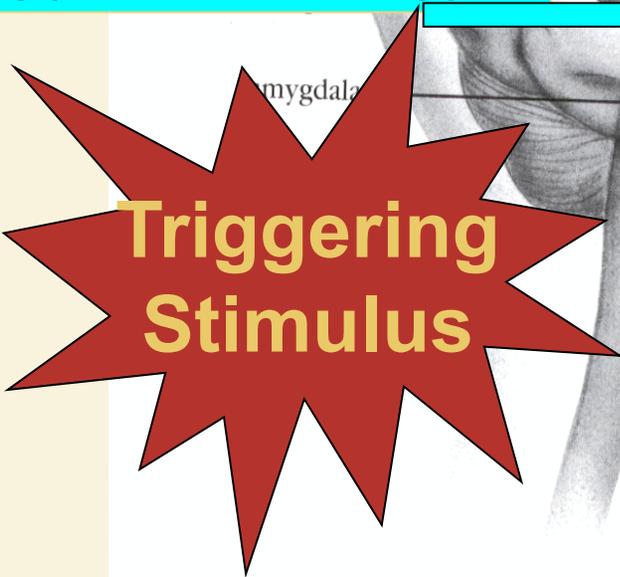


Bottom-Up Responses



Amygdala

Becomes “irritable”,
Increasingly sensitive to triggers



Prefrontal Cortex

Frontal lobes shut down or decrease activity to ensure instinctive responding

Thalamus

Ability to perceive new information decreases

Our Body's Chemical Response

- Cortisol
 - Regulation of the Adrenalines
 - Increase of energy
- Adrenalines
 - Fight or flight
 - Sharpens our focus and stimulates memory
 - Increases blood pressure and heart rate
 - Shunts blood away from systems that are not needed in danger response to the brain and muscles

Biochemical changes during and after the traumatic event 2

- Cortisol- Chronically low or high levels
 - results in reduced immune functioning, impaired regulation of the adrenalines, and damage to passages in the brain responsible for memory
 - While high, cortisol, thins stomach lining and bones, impairs the immune system, decreases blood flow to the intestines.

Serum Cortisol

- Cortisol Response to a Cognitive Stress Challenge in PTSD Related to Childhood Abuse

Finding: There were elevated levels of cortisol in both the time period in anticipation of challenge (from time 60 to 0) and during the cognitive challenge (time 0–20). PTSD patients and controls showed similar increases in cortisol relative to their own baseline in response to the cognitive challenge.

(Bremner, Vythilingam, et al 2002)

Implications for Children

- EXPERIENCE CAN CHANGE THE MATURE BRAIN - BUT EXPERIENCE DURING THE CRITICAL PERIODS OF EARLY CHILDHOOD ORGANIZES BRAIN SYSTEMS!
 - From Bruce Perry, Trauma and Brain Development