Addressing Toxic Stress & Childhood Adversity using a Trauma-Informed Approach

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Objectives:

- Learn about the effects of toxic stress, trauma and childhood adversity on lifelong health and wellbeing.

- Understand how protective factors and resiliency can buffer the effects of adversity and toxic stress.

- Know how those working with children and families can take a more trauma informed approach to interact and work with those families they serve.

Trauma: The American Health Status Epidemic

- **Trauma:**

An emotional response to a terrible event like an accident, rape or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships and even physical symptoms like headaches, nausea and more. While these feelings are normal, some people have difficulty moving on with their lives. **~ American Psychological Association**

- **"Historical" Trauma**:

A type of trauma that is often overlooked is historical trauma. Historical trauma is most easily described as multigenerational trauma experienced by a specific cultural group. Historical trauma can be experienced by "anyone living in families at one time marked by severe levels of trauma, poverty, dislocation, war, etc., and who are still suffering as a result" (Cutler, n.d.).

Historical trauma is **cumulative and collective**. The impact of this type of trauma manifests itself, emotionally and psychologically, in members of different cultural groups (Brave Heart, 2011). As a collective phenomenon, those who never even experienced the traumatic stressor, such as children and descendants, can still exhibit signs and symptoms of trauma.

Trauma: The American Health Status Epidemic

- **Historical Unresolved Grief:** Grief as the result of historical trauma that has not been adequately expressed, acknowledged, or otherwise resolved. Examples include Holocaust survivors; lack of acknowledgement of the Armenian genocide and the mass murder of other ethnic groups in World War II.

- **Disenfranchised Grief:** Grief as the result of historical trauma when loss cannot be voiced publicly or that loss is not openly acknowledged by the public. For example, the lack of recognition of the generations of loss of American Indians from colonialism, disease and other factors, and the corresponding lack of recognition of their right to grieve these collective experiences.

- **Internalized Oppression:** As the result of historical trauma, traumatized people may begin to internalize the views of the oppressor and perpetuate a cycle of self-hatred that manifests itself in negative behaviors. Emotions such as anger, hatred, and aggression are self-inflicted, as well as inflicted on members of one's own group. For example, self-hatred among American Indians who act out their aggression on their own people.

Trauma: The American Health Status Epidemic

- **“Historical” Trauma Response (A*K*A* Intergenerational Trauma Response):** Refers to the impact that Historical / Intergenerational traumas continue to have on subsequent generations (**current population)** manifested in the following common ways: Silence & isolation, humiliation, shame, guilt, confusion, helplessness, hopelessness, avoidance, depression, sleep disturbance, control issues, defensiveness, hallucinations, anxiety, eating disorders, anger, **Violence**, personality disorders and many other Signs and Sxs that have become a significant part of the fabric of many of our underserved communities and impoverished populations across the world, . . .

- **Adverse Childhood Experiences** refers to 10 common traumatic experiences that have been highly correlated with DSM Diagnoses, Addictions, Poverty, Chronic Medical Conditions, The Top 10 Leading Causes of Death and the Lifestyles contributing to all of these public health challenges.

- **Trauma Informed Care** is an approach intended to engage people with histories of trauma that recognizes the presence of trauma symptoms and acknowledges the role that trauma has played in their lives. (caring and being a descent human)

Factors Contributing to Mental & Medical Problems in the U.S.

- **Trauma**
- **Trauma Response**
- **Intergenerational Transmission of Trauma Response (HT)**
- **Rise of ACE's: The Evolution of HT / ITR**
  - ✓ Slow & Insidious Intergenerational Phenomena

ACE Study: 4 or more ACE's can change our brain development & lead to Psycho-Social and Medical Problems in adulthood, . . .

Vincent Felitti, MD & Robert Anda, MD

<< www.acestudy.org >>

Adverse Childhood Experiences (ACE's) Birth to Age 18

Vincent Felitti, MD & Robert Anda, MD
<< www.acestudy.org >>

- Abuse
  - Emotional – recurrent threats, humiliation
  - Physical—beating, not spanking
  - Contact sexual abuse
- Household Dysfunction
  - Mother treated violently
  - Household member was alcoholic or drug user
  - Household member was imprisoned
  - Household member was chronically depressed, suicidal, mentally ill, or in psychiatric hospital
  - Not raised by both biological parents
- Neglect
  - Physical
  - Emotional

The Bridge to Comprehensive Healthcare

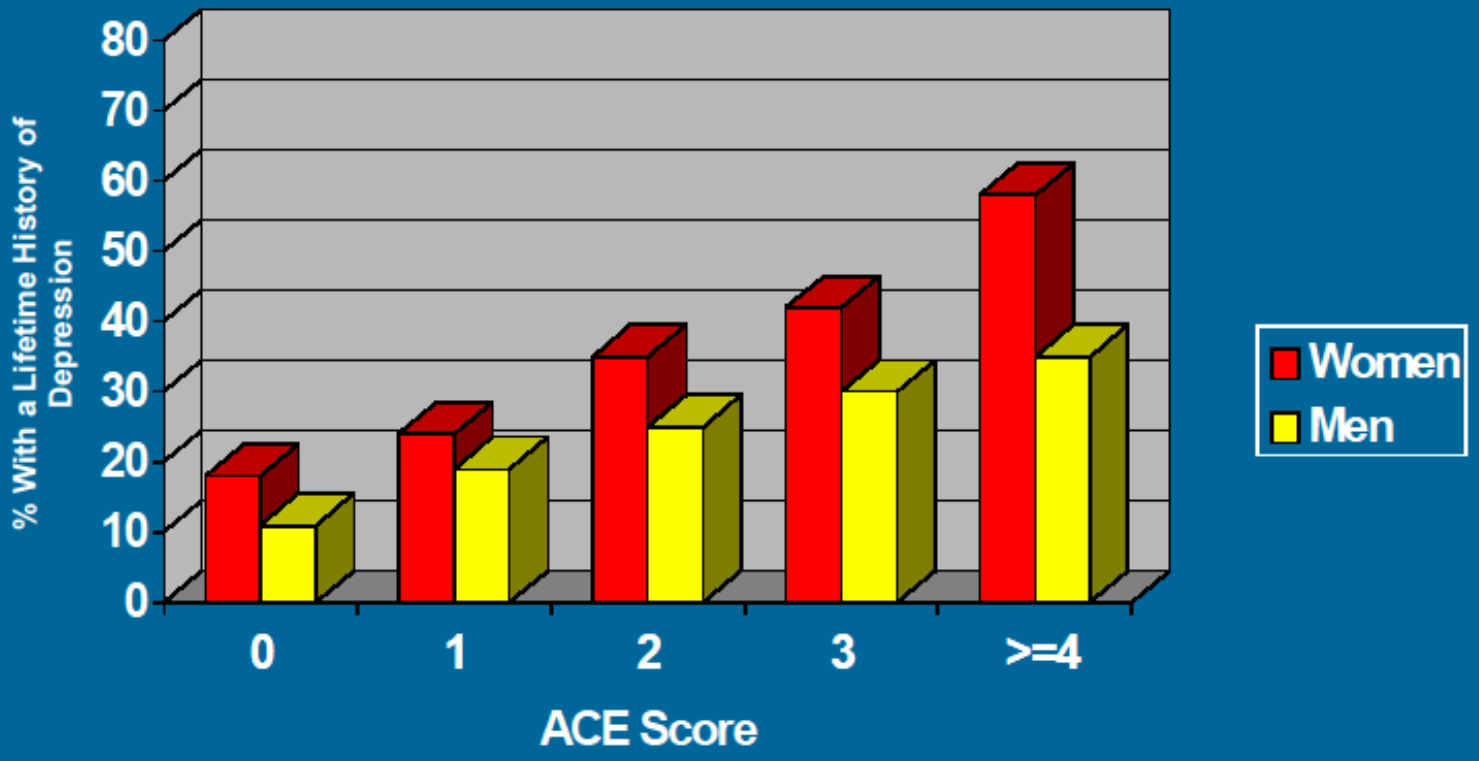
Traumatized People Spend Most of Their Life Seeking Relief From Their Memories



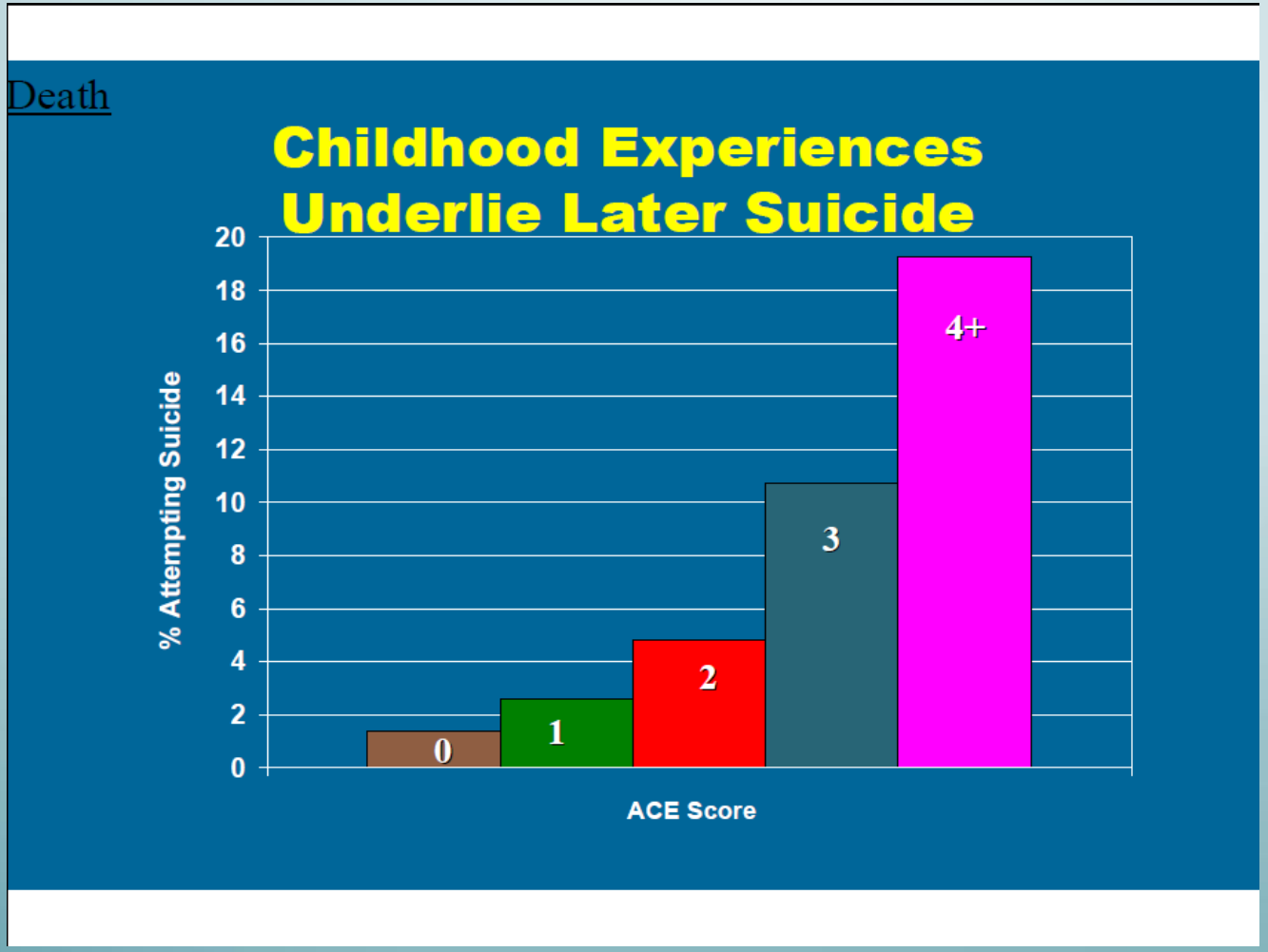



Well-being

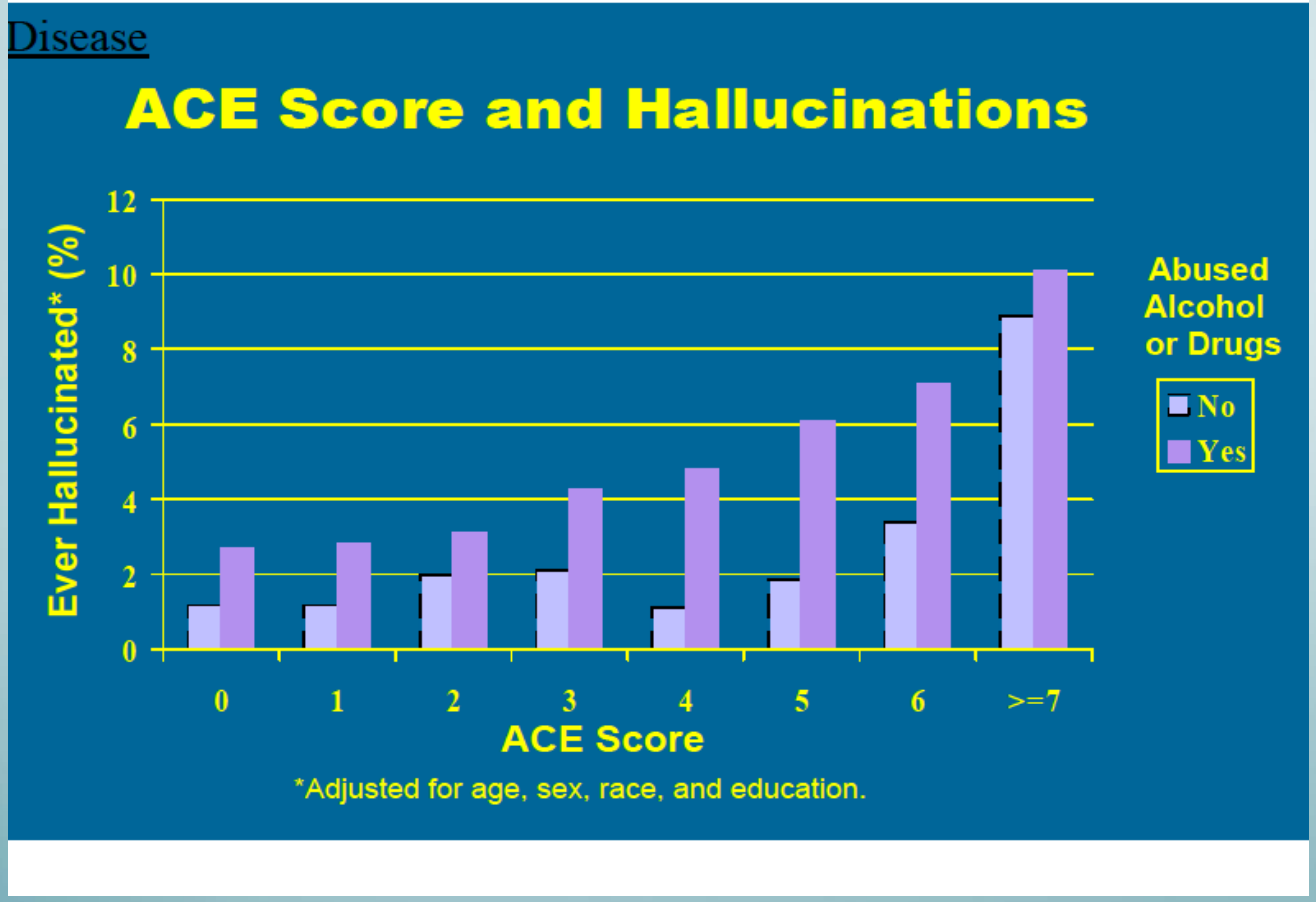
Childhood Experiences Underlie Chronic Depression



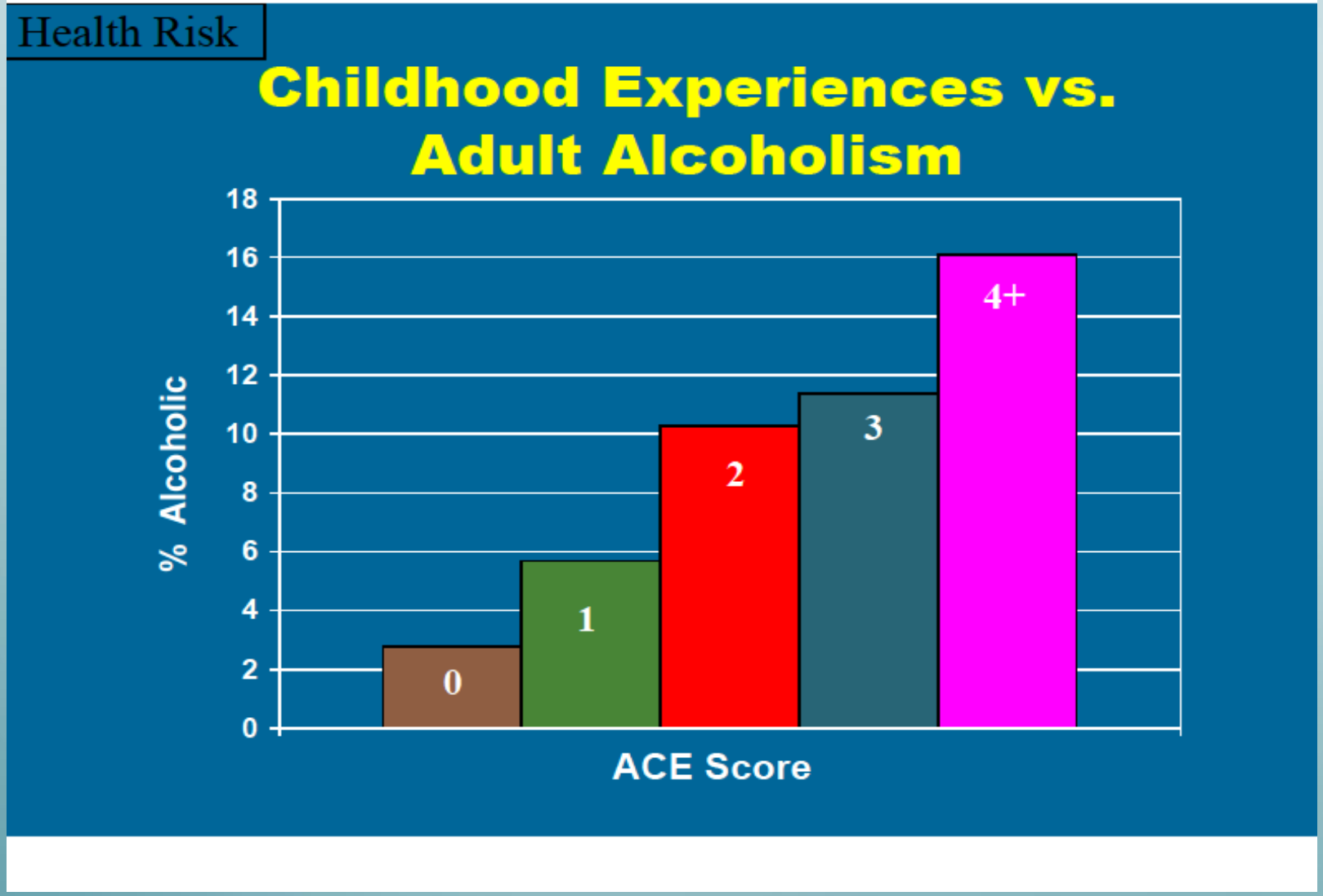
Death


Childhood Experiences
Underlie Later Suicide
% Attempting Suicide
20
18
16
14
12
10
8
6
4
2
0
0
1
2
3
4+
ACE Score

Disease

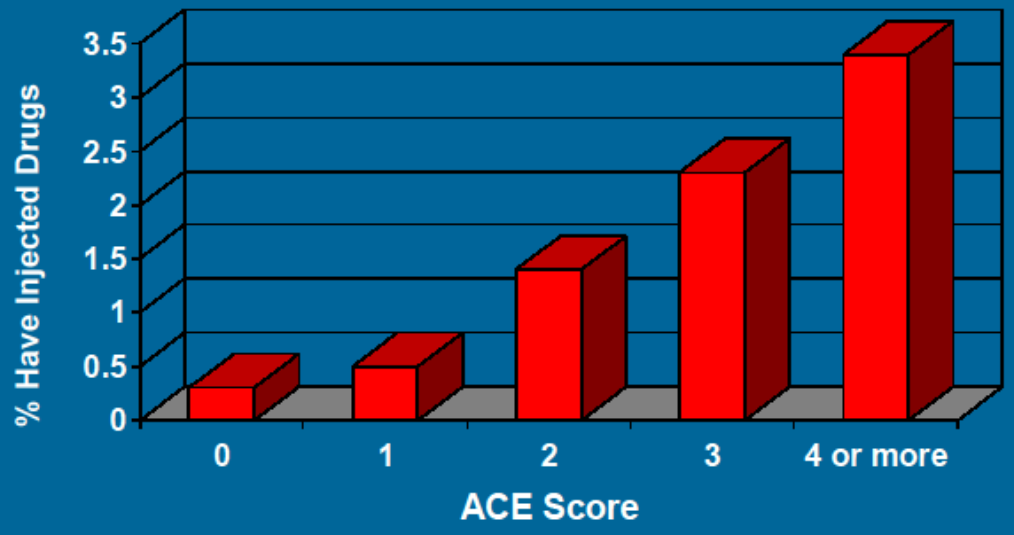

ACE Score and Hallucinations
Ever Hallucinated* (%)
12
10
8
6
4
2
0
0
1
2
3
4
5
6
>=7
ACE Score
Abused Alcohol or Drugs
No
Yes
*Adjusted for age, sex, race, and education.

Health Risk


Childhood Experiences vs. Adult Alcoholism
% Alcoholic
18
16
14
12
10
8
6
4
2
0
0
1
2
3
4+
ACE Score

Health risk

ACE Score vs Injection Drug Use



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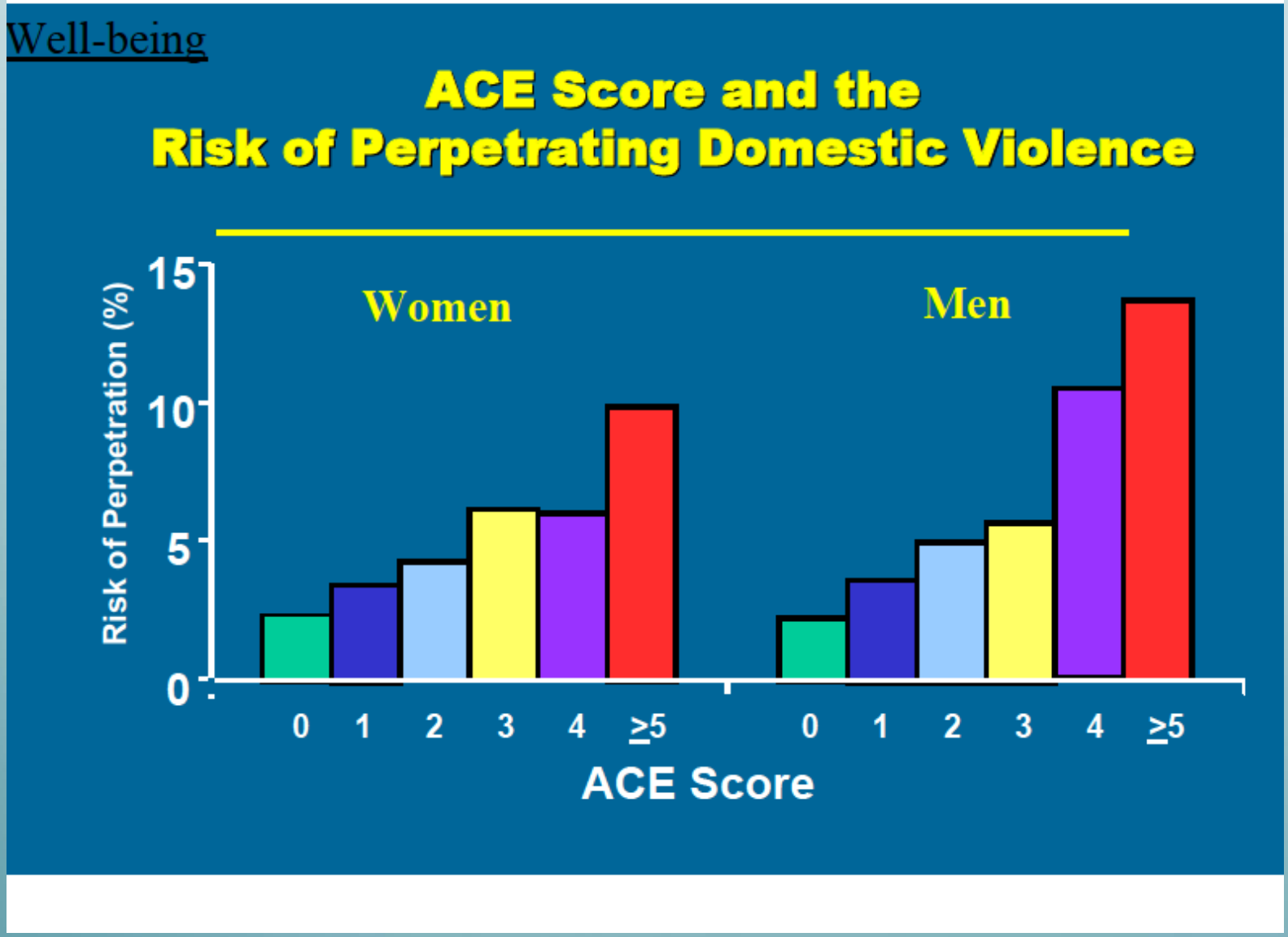
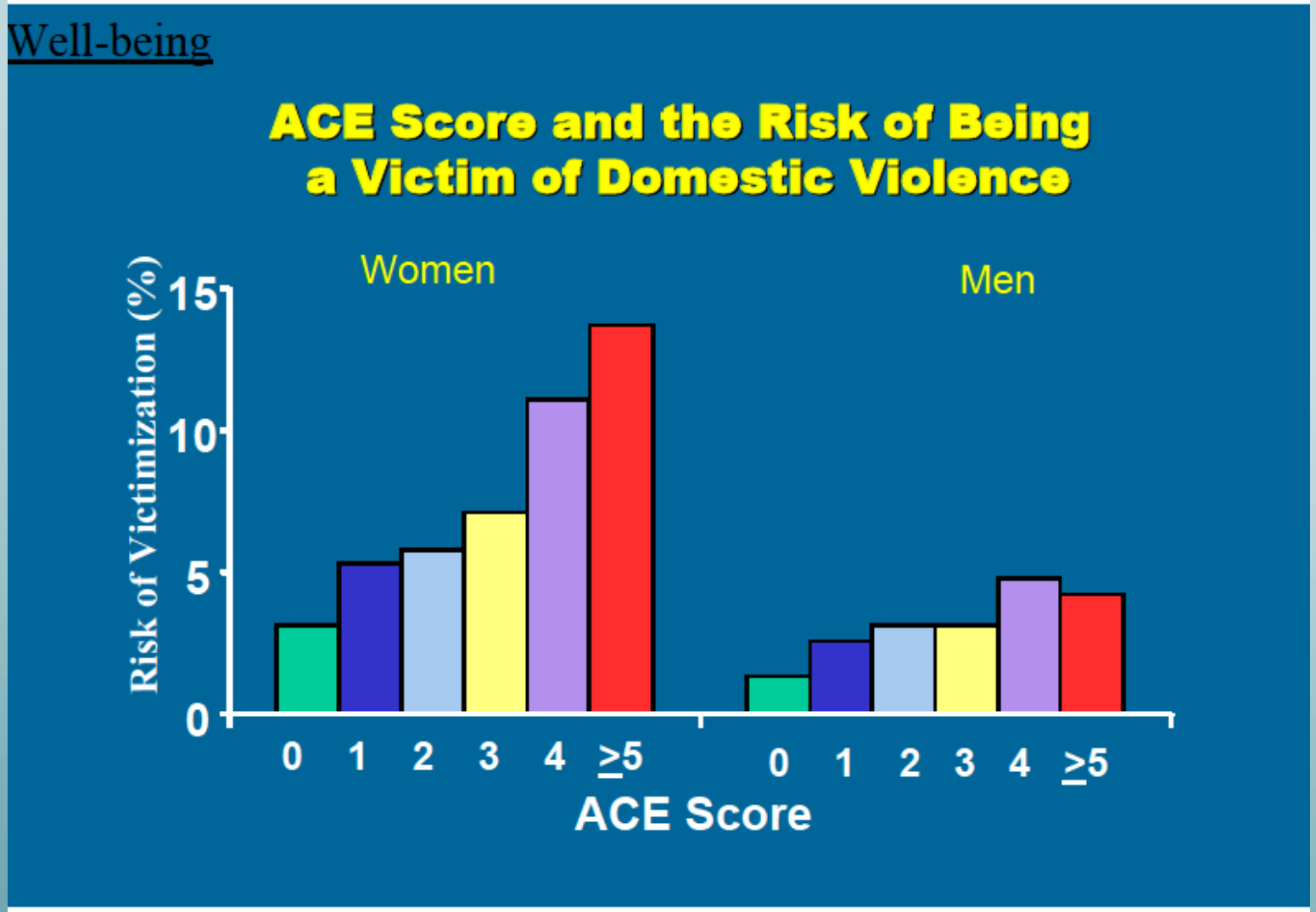
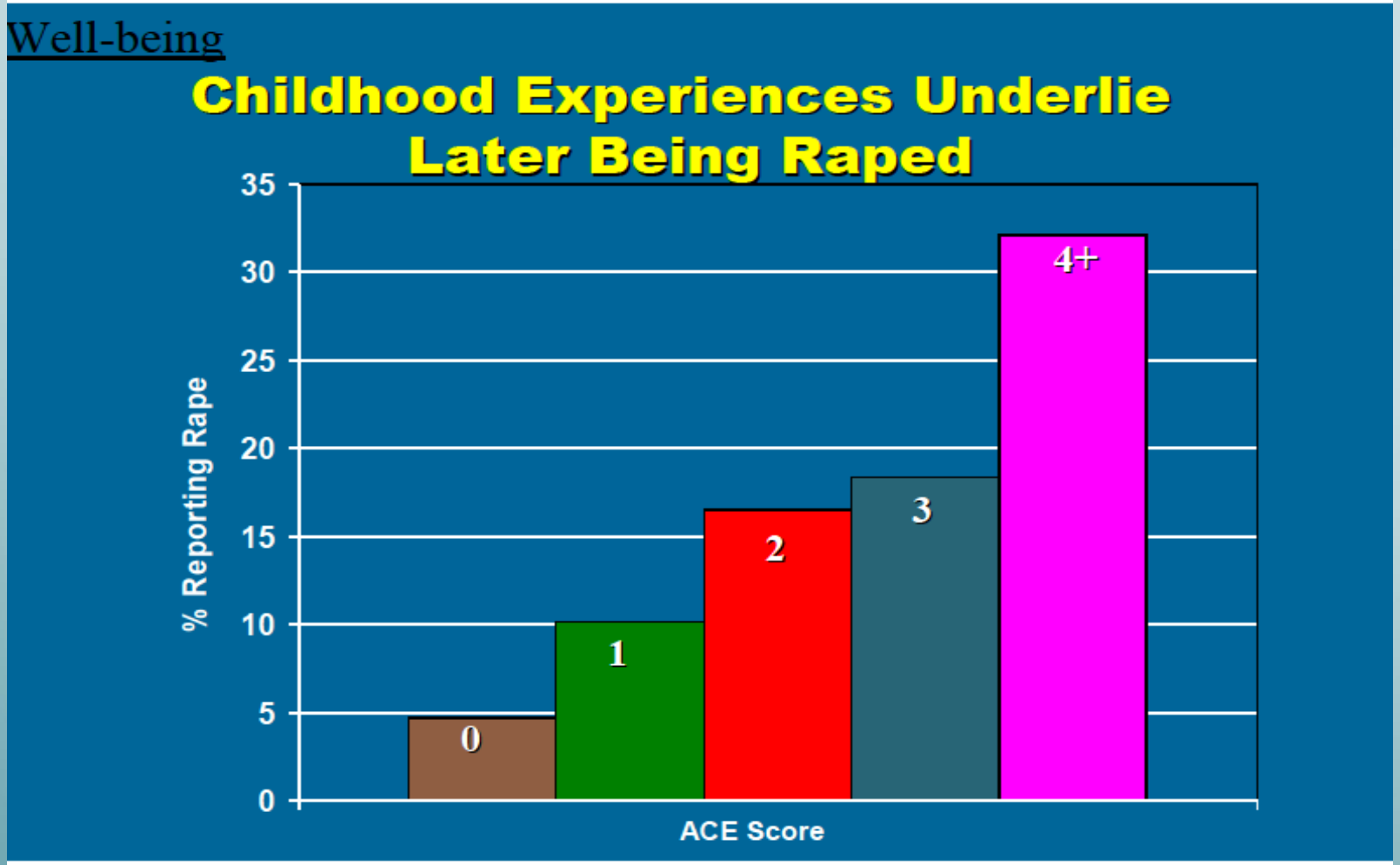
Well-being


ACE Score and the
Risk of Perpetrating Domestic Violence
Women
Men
Risk of Perpetration (%)
15
10
5
0
0 1 2 3 4 ≥5
0 1 2 3 4 ≥5
ACE Score

Well-being


ACE Score and the Risk of Being a Victim of Domestic Violence
Women
Men
Risk of Victimization (%)
15
10
5
0
0 1 2 3 4 ≥5
0 1 2 3 4 ≥5
ACE Score

Well-being

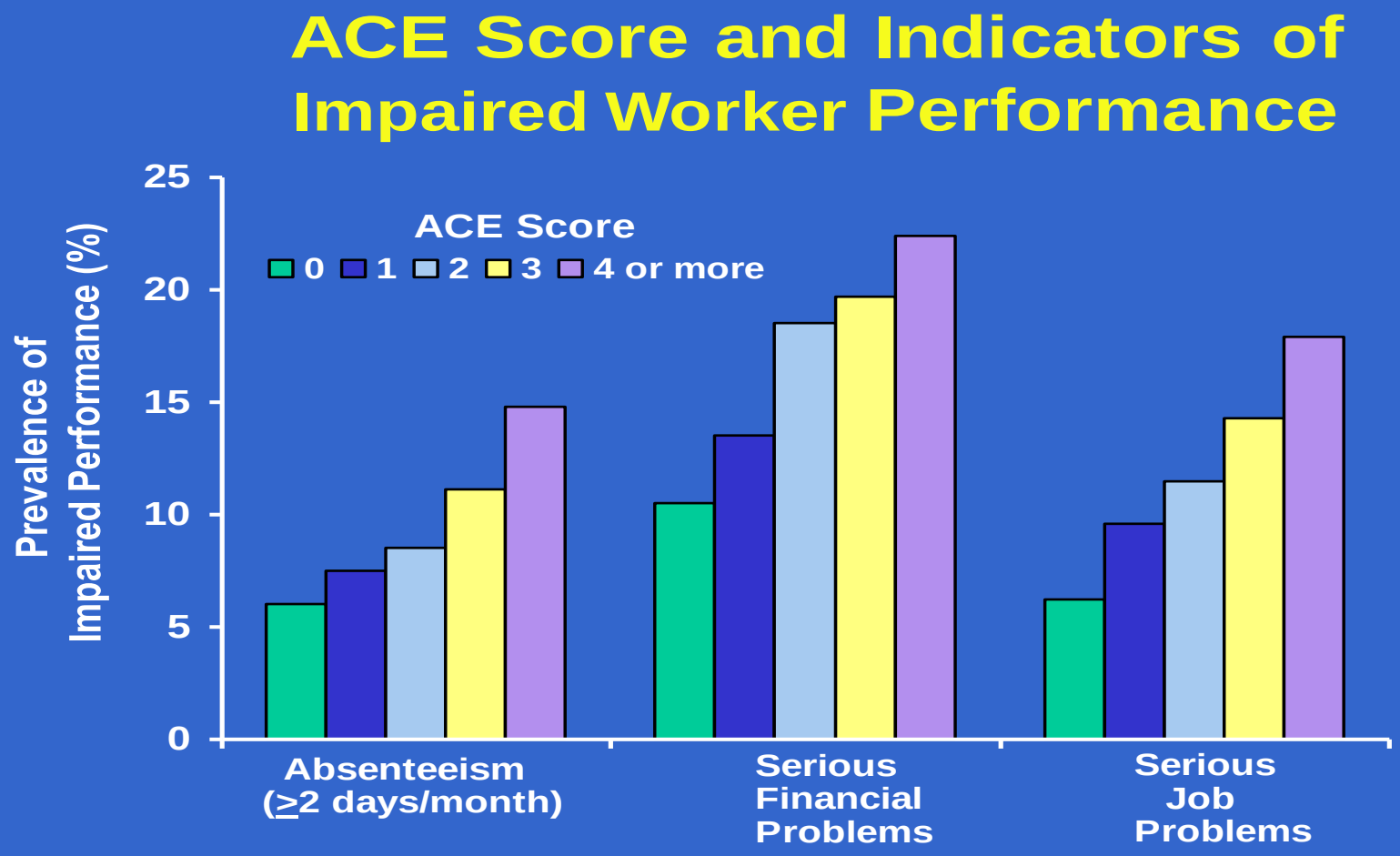

Childhood Experiences Underlie Later Being Raped
% Reporting Rape
35
30
25
20
15
10
5
0
0
1
2
3
4+
ACE Score

It's Hard To Give Up Something That ALMOST Works!

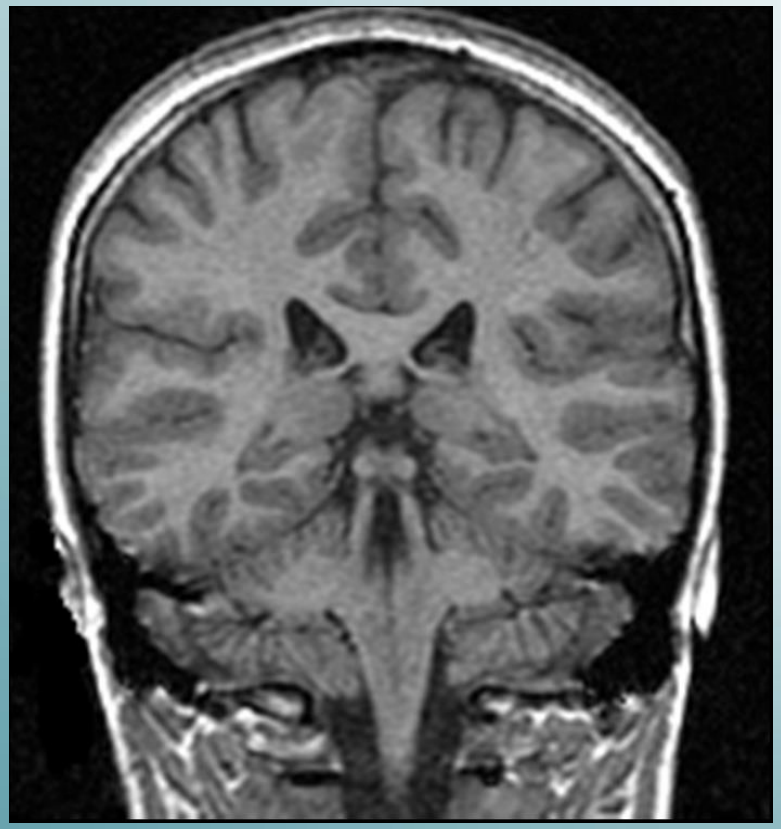
~ Vincent Felitti, MD

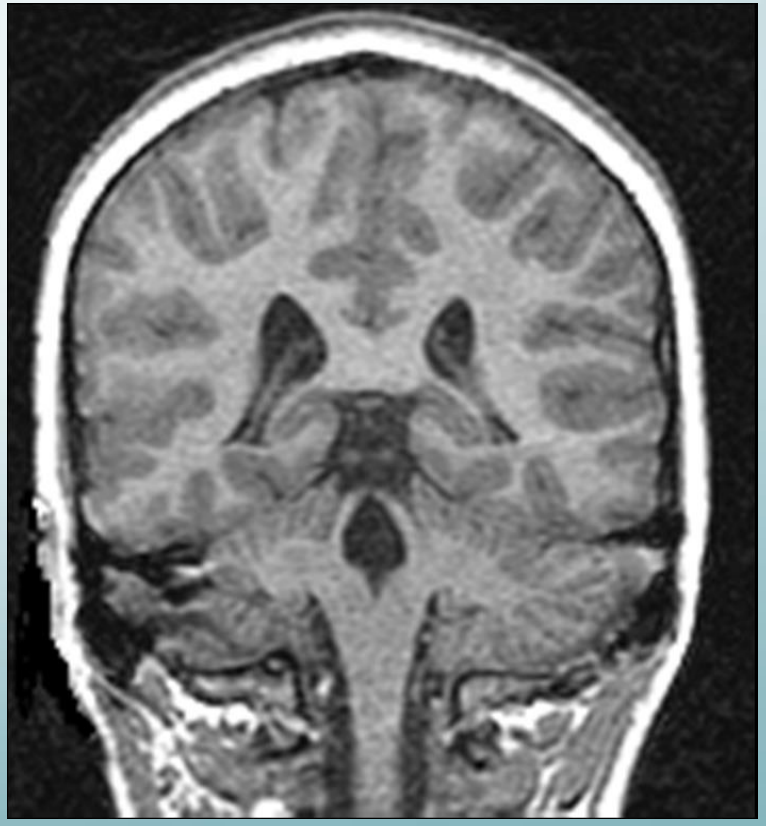
Smoking, ETOH, Opiates, Meth, Violence, Benzo's, Eating Disorders, Cutting, . . . Rise of Hopelessness,...

Poverty does not lead to ACE's, . . .
. . . Poverty is the result of ACE's.



What Does Trauma Do To The Brain?



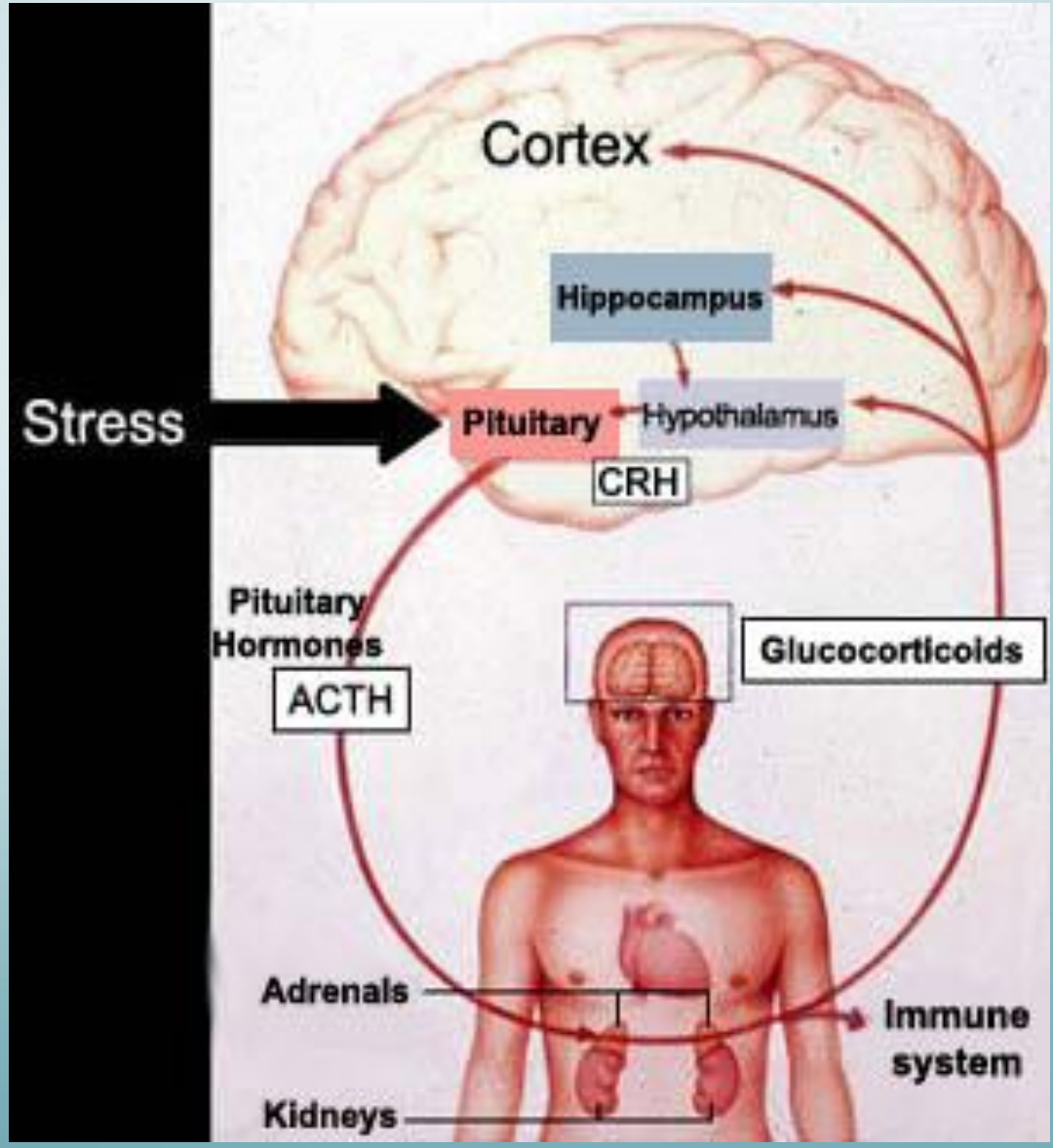


The Hypothalamic-Pituitary-Adrenal Axis (HPA Axis)

Corticotropin-releasing hormone (CRH) → Adrenocorticotropic hormone (ACTH) → Glucocorticoid hormones (Cortisol)

HPA Axis Controls:

- Growth
- Reproduction
- Metabolism
- Blood Pressure
- Water Conservation
- Lactation
- Child Birth
- Responses to Stress
- And More, . . .



Stressful Situations

- Fight or Flight responses initiate secretion of Adrenaline Cortisol and other Neurochemicals
  - Prolonged F-F states maintain elevated 'C' levels
- Contributes to variety of stress-related changes in the body
- Traumatized groups maintain elevated levels of stress for prolonged periods
- Prior to age 18, this can alter trajectory of normal development

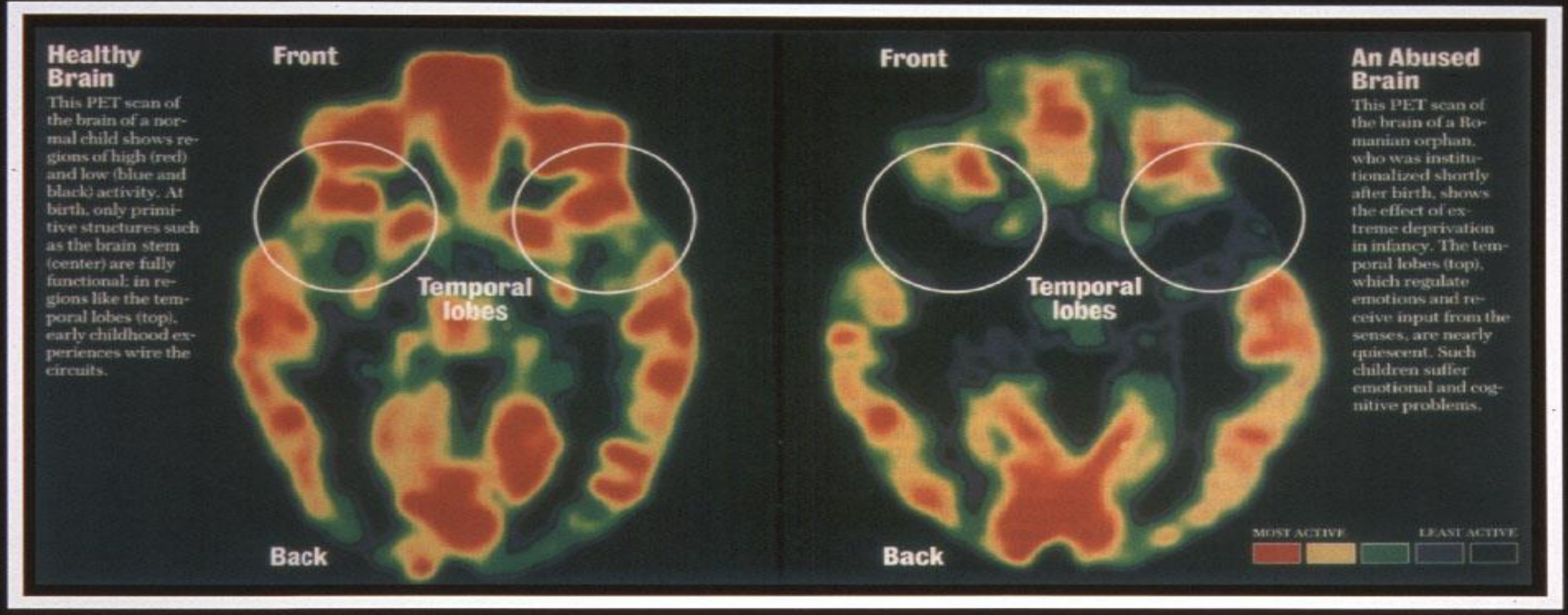
Impact of Prolonged, Elevated Levels of Cortisol (As caused by chronic stress)

- Impaired cognitive function
- Blood sugar imbalances (e.g.., Hyperglycemia & Diabetes)
- Lowered immunity and inflammation response
- Elevated blood pressure
- Suppressed thyroid function
- Decrease in muscle tissue
- Slowed wound healing
- Increased abdominal fat (Obesity)
- Increased levels of bad cholesterol
- Destabilizes Mood
- And more, . . .

Bridging the Gaps Between Historical Trauma, the Brain and Health

Elevated Levels of Cortisol & Neurochemicals:

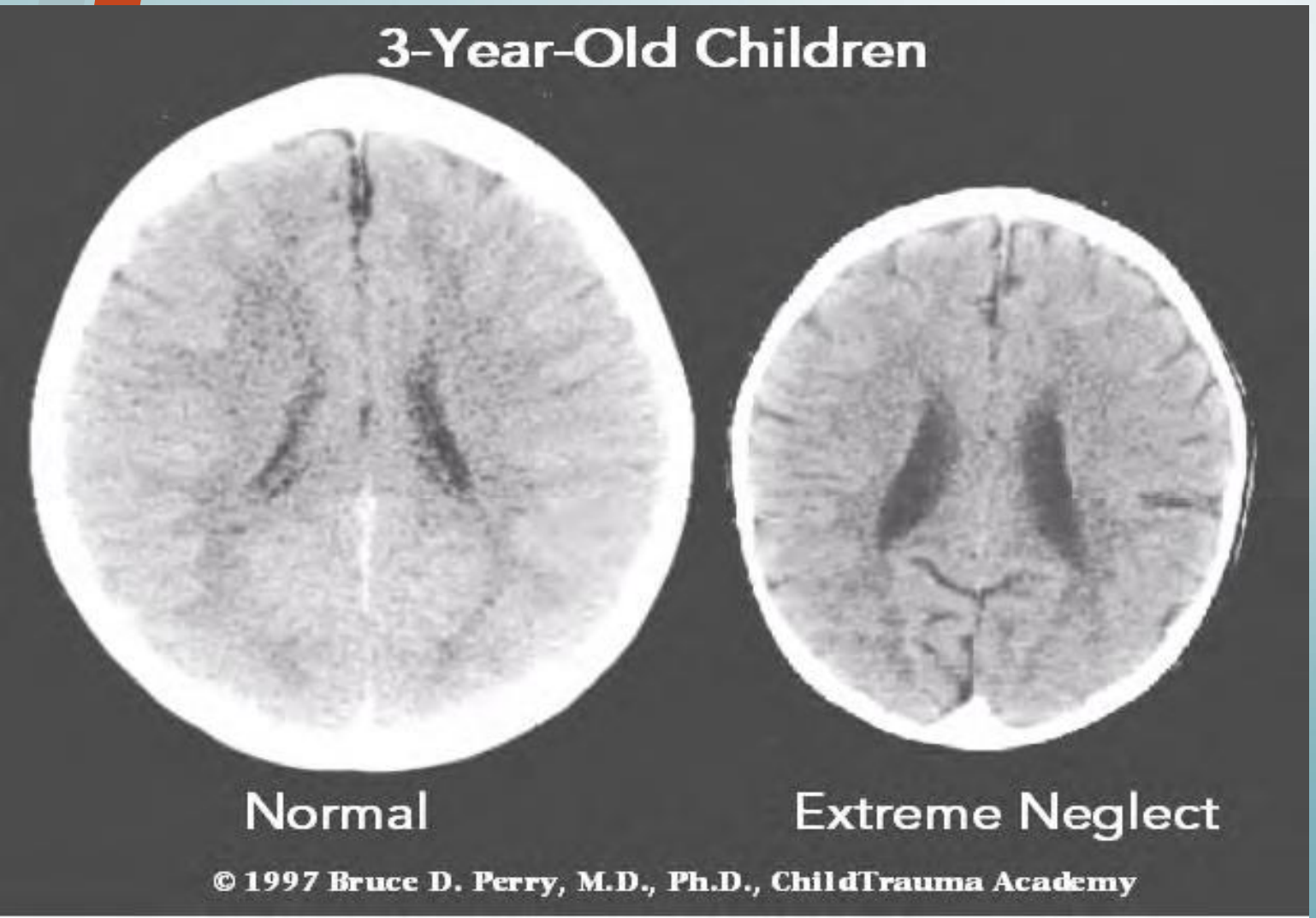
Interfere with Maintenance of Serotonin and Norepinephrine levels, . . . Contribute to development of depressive episodes and common chemical make-up in suicidal individuals.



Shows the effects of extreme deprivation. The temporal lobes regulate emotion and receive input from the senses. When we can't receive input clearly, we mis-interpret, misread social cues, & can be louder, quieter, more aggressive or more withdrawn because of emotional and cognitive problems. Just can't think straight.

Early Trauma Can Impact The Rest of Our Lives

Amygdala, Hippocampus and Prefrontal Cortex



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.

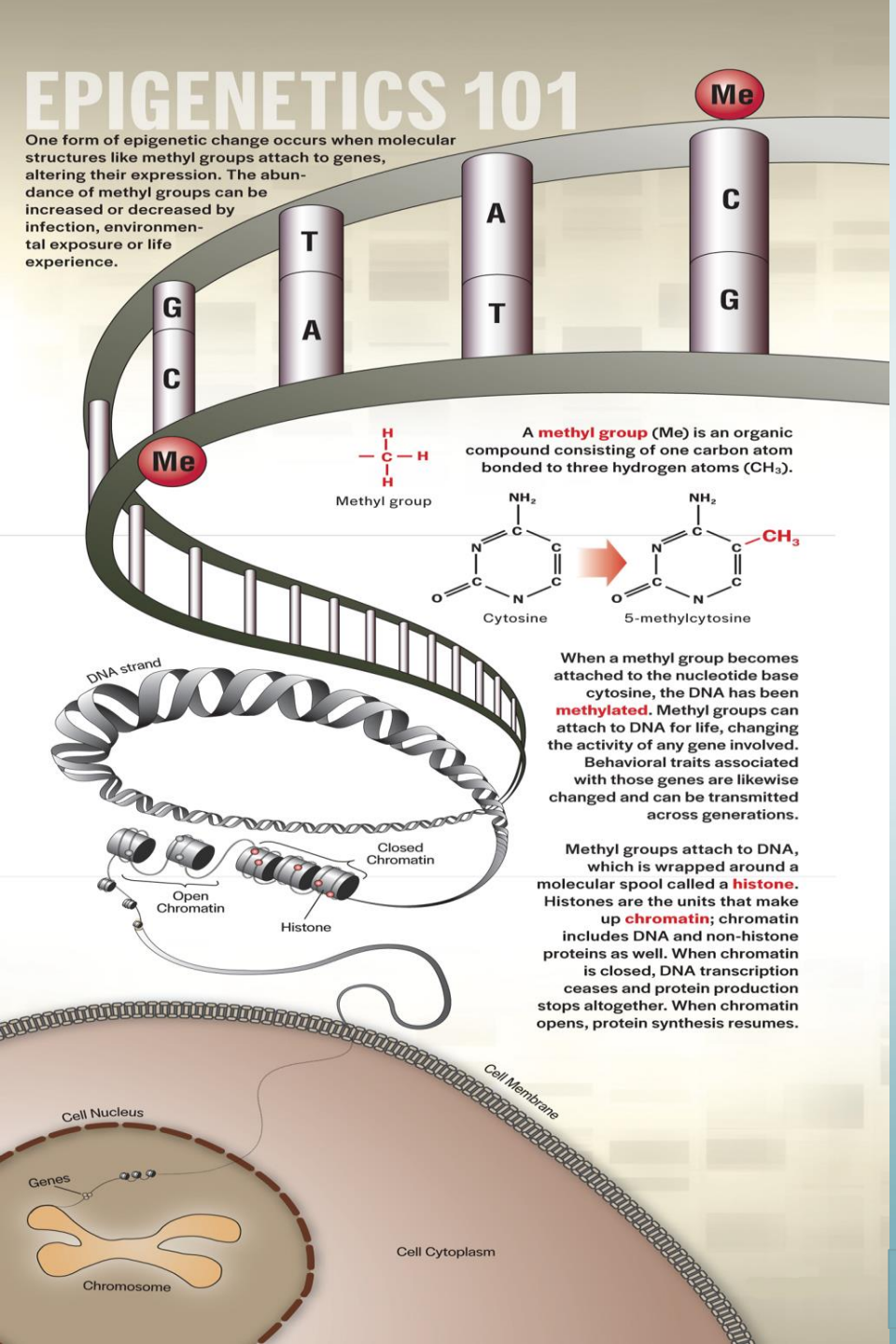
Top 10 Leading Causes of Death:

American Indians / Alaska Natives

1) Heart disease
2) Cancer
3) Unintentional Injuries
4) Diabetes
5) **Chronic Liver Disease & Cirrhosis**
6) Stroke
7) Chronic lower respiratory diseases
8) **Suicide**
9) Nephritis, Nephrotic syndrome, and Nephrosis
10) Influenza and Pneumonia

Everyone Else

1) Heart disease
2) Cancer
3) Stroke
4) Chronic lower respiratory diseases
5) Unintentional injuries
6) **Alzheimer's disease**
7) Diabetes
8) Influenza and Pneumonia
9) Nephritis, Nephrotic syndrome, and Nephrosis
10) **Septicemia**



Behavioral Epigenetics, Toxic Stress & ACE's

One form of epigenetic change occurs when molecular structures like Methyl Groups attach to genes, altering their expression. The abundance of methyl groups can be increased or decreased by infection, environmental exposure or life experience.

Methyl groups attach to genes for life, changing the activity of any gene involved. Behavioral Traits associated with those genes are likewise changed and can be transmitted across generations.

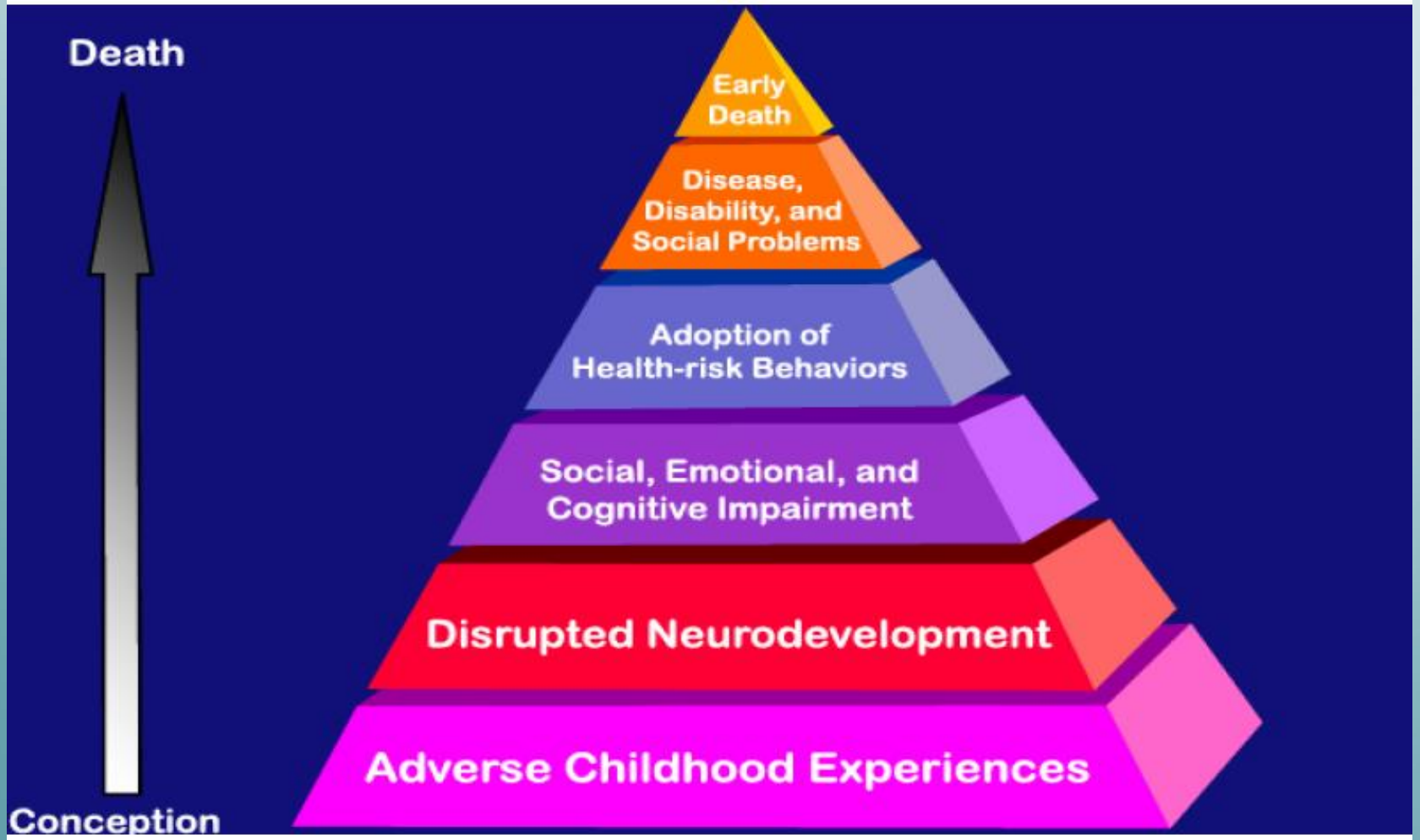
Influences of maternal and paternal PTSD on epigenetic regulation of the glucocorticoid receptor gene in Holocaust survivor offspring,

Historical Trauma and the American Indian Contribution to the story

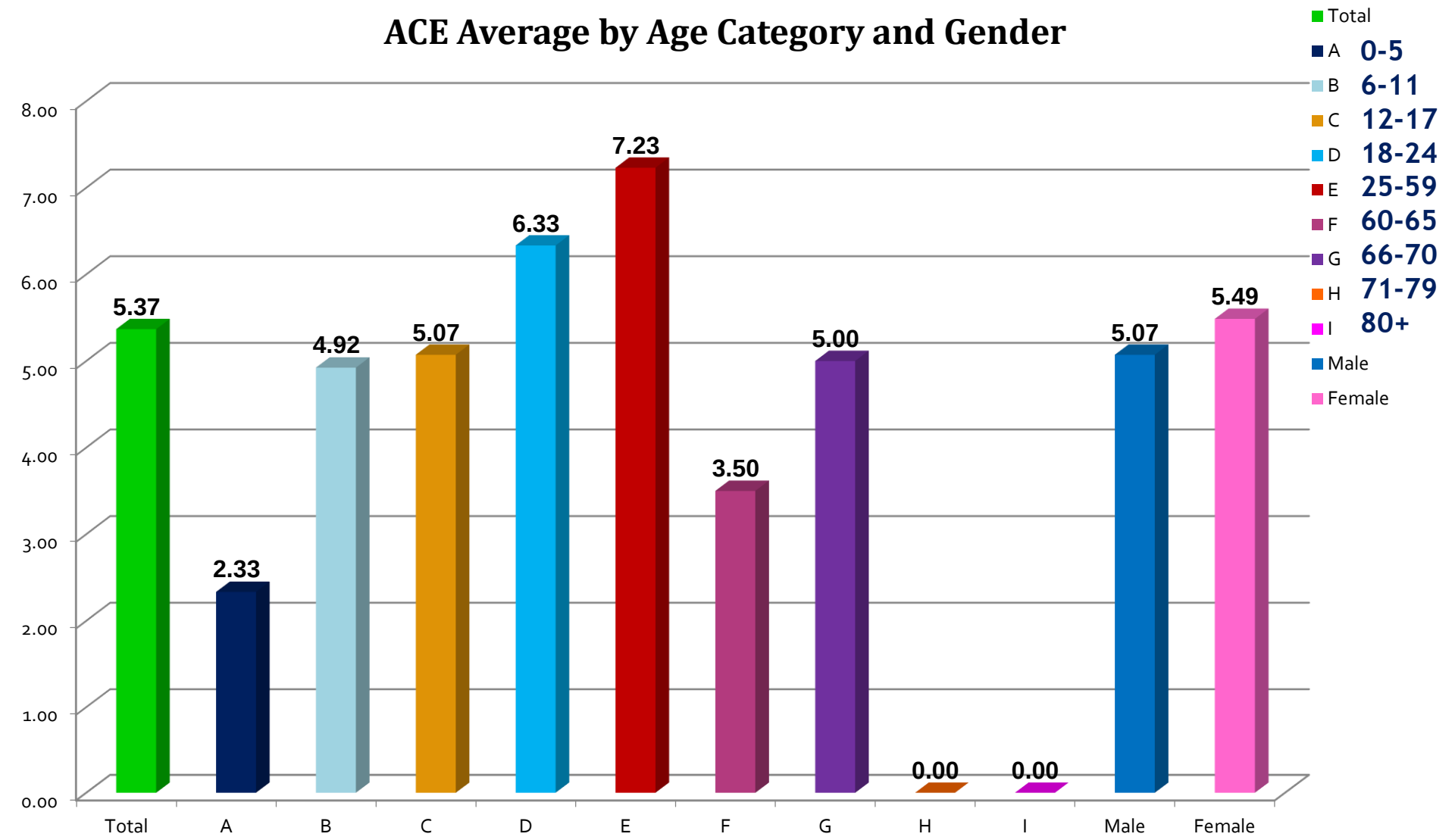
1) Heart disease **(1.4 x the national average)**
2) Cancer **(1.5-2.5x national average depending on type and gender)**
3) **Unintentional Injuries** **(Ages 1-44 = leading cause of death)**
4) Diabetes **(2x the national average; Pima Indians = Highest rate in world)**
5) Chronic Liver Disease and Cirrhosis **(3x the national average)**
6) Stroke **(40% higher chance of dying than Caucasions)**
7) Chronic lower respiratory diseases **(COPD, Emphysema, Chronic Bronchitis)**
8) **Suicide** **(2-9x the national average)**
9) Nephritis, Nephrotic syndrome, and Nephrosis
   (Women 40% higher kidney/pelvic cancer death)
10) Influenza and Pneumonia

- **Indian Infant Death Rate** **(40% higher than Caucasions)**
- **Lowest Life Expectancy in North America – 2nd Lowest in northern Hemisphere**

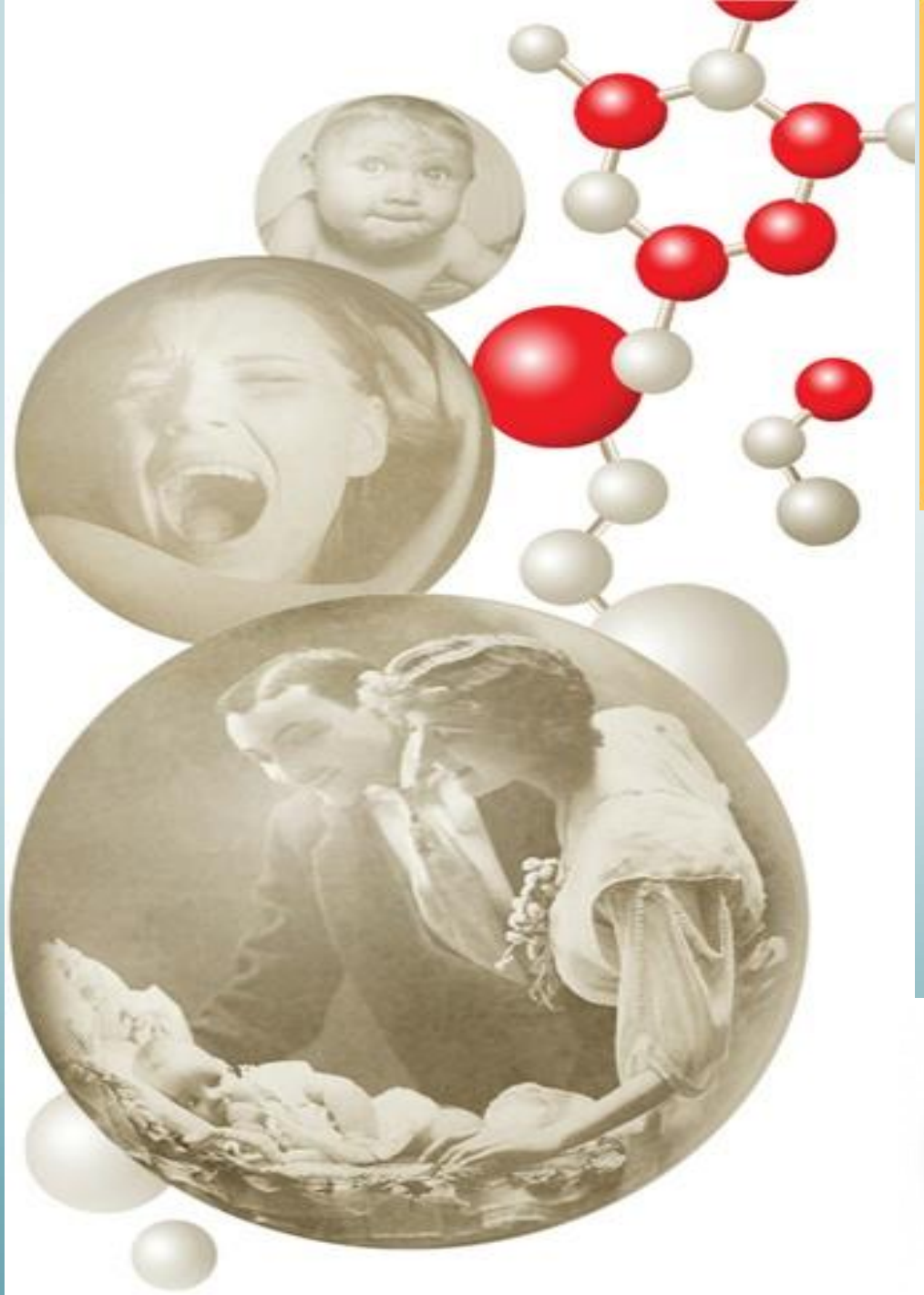
ACE Study also tells us that 4 or more ACE's increase our chances of experiencing major psychosocial, environmental and medical problems in adulthood and,
Increases our chances of premature death, . . .



ACE Average by Age Category and Gender



Practical Example:



Practical Example: Tonier Cain

Trauma by Age 9

- Verbal and Physical Abuse by Mother
- Molestation
- Parentification: Left to care for younger siblings
- Started Drinking Alcohol to find relief

Terrified and Alienated by age 11

- Rescued by the system, but, . . .
- Separated from siblings
- Placed with a family member

Hopeless at age 14

- Mother wanted her back
- **Attempted Suicide >>>>>>**
- Placed with an alcoholic aunt
- Married as a child

19 years old and beyond

- Drug Addiction
- Mental hospitals and institutions
- Introduction to the criminal justice system


ANNAPOLIS POLICE DEPT.
8 7 4 6 0 8 2 8 89
ANNAPOLIS POLICE DEPT.
8 7 4 6 0 8 2 8 89

Retraumatized

- Arresting Officers
- Correctional Officers
- Drug Addiction Counselors
- Doctors and Nurses
  - Over-medication = Sedation
- Hospital Desensitization
  - Seclusion and Restraint
- Mental Health Professionals
- Barriers to State Agency Assistance

- **Punished for calling out for help the wrong way, . . .**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DATE
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ANNAPOLIS
POLICE DEPARTMENT


ID NO.
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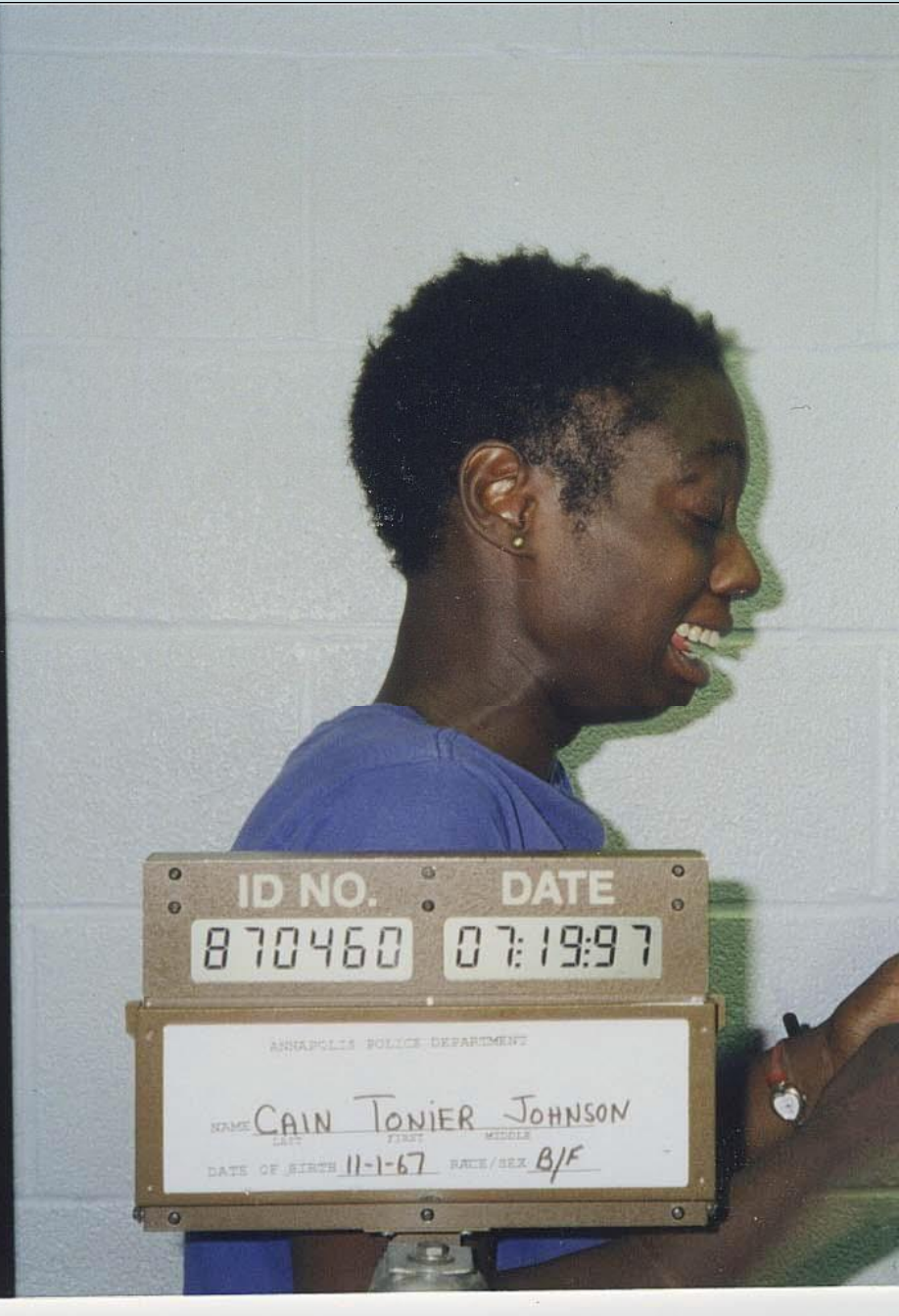
ANNAPOLIS POLICE DEPARTMENT
NAME CAIN TONIER JOHNSON
DATE OF BIRTH 11-1-67
RACE/SEX B/F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ANNAPOLIS POLICE DEPARTMENT
NAME CAIN TONIER JOHNSON
DATE OF BIRTH 11-1-67
RACE/SEX B/F

After Trauma-Informed Treatment

- Suffered from 1974 – 1998, . . .
- Drug and alcohol free
- Medication free
- Secure attachment with daughter
- Advocate
- Board Member
- Council member
- Homeowner and more

FORMER INMATE/ADDICT WORKS TO AID COMMUNITY….

What if . . .

- Before age 9 someone recognized her situation,…
- What if one of those providers was brave enough to call the trauma they saw what it was,…
- What if all her school employees, hospital staff, state agencies, rehabs., arresting officers, healthcare providers were all trained in trauma-informed care,…

Perhaps, . . .

This child,

. . . Turns into this woman, . . .

. . . and this one …

. . . And this mother, . . .

Before she becomes this one!


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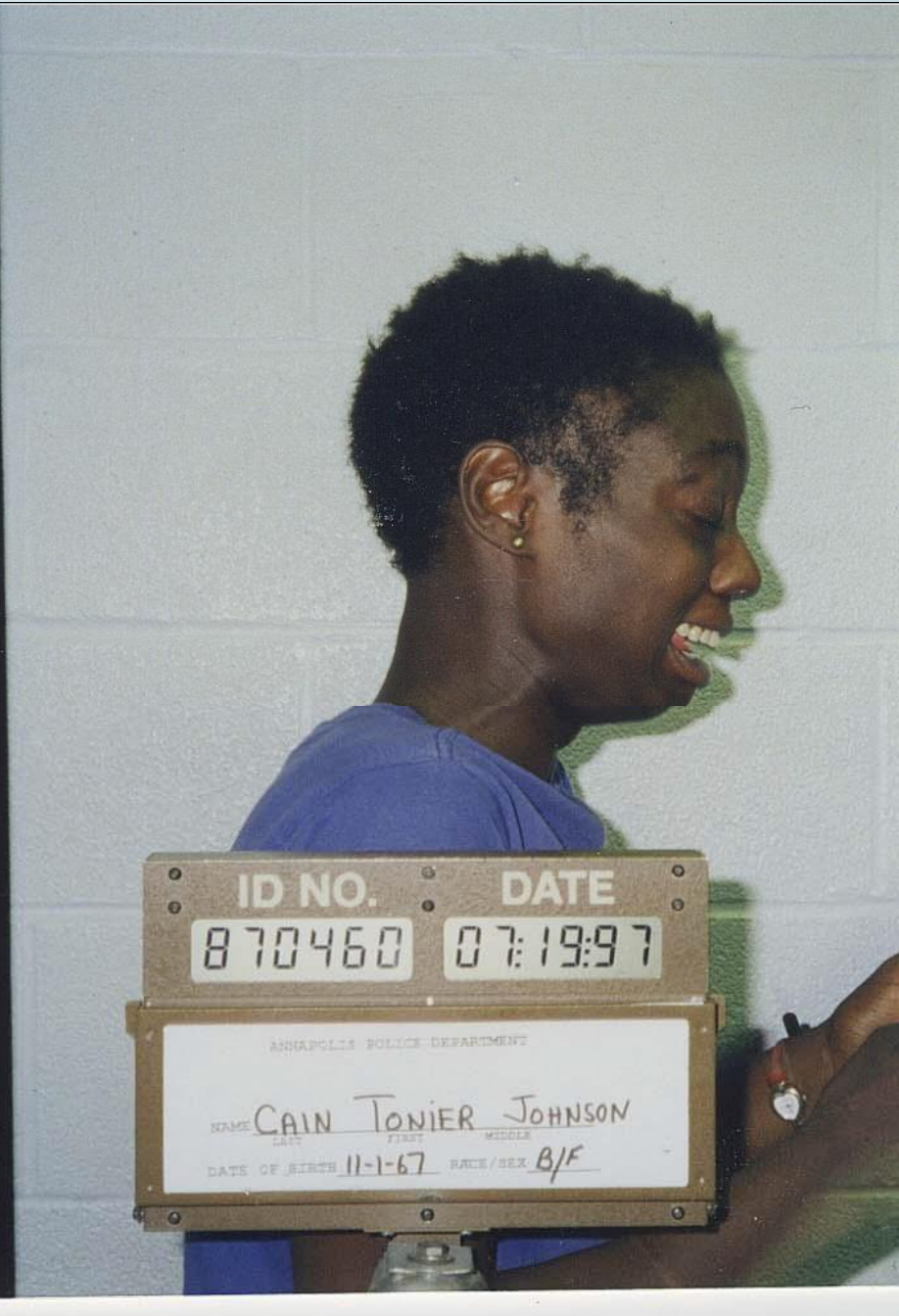
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Wouldn’t that be nice?

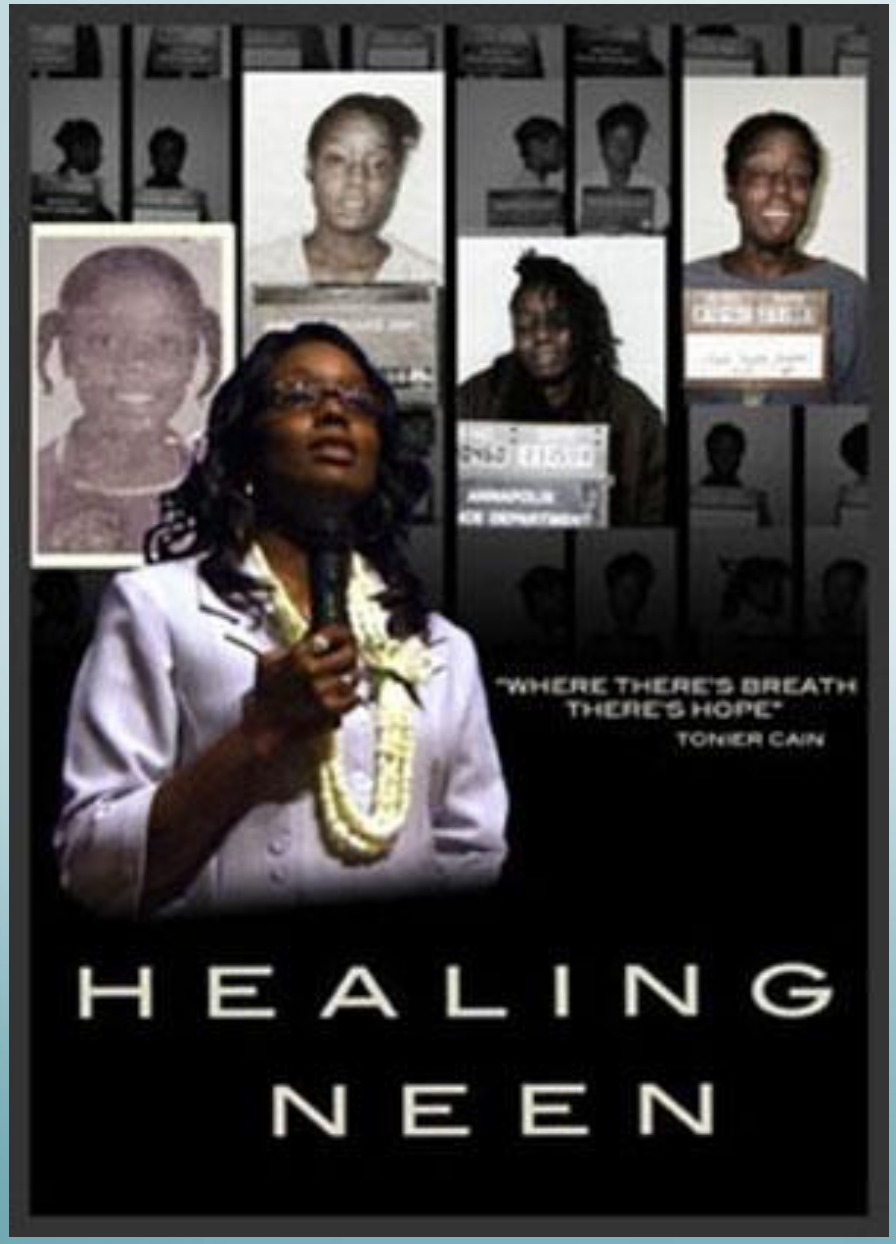
The Trauma Informed Approach

- Provides the foundation for a basic understanding of the psychological, neurological, biological, and social impact that trauma and violence have on us all.

- Incorporates proven practices into current work flows to deliver services that acknowledge the role that violence and victimization play in the lives of almost every individual entering our system of care.

Do not look where you fell, but where you slipped.

~ African Proverb


"WHERE THERE'S BREATH
THERE'S HOPE"
TONIER CAIN
HEALING
NEEN

Dr. Elisa Nicholas

Primary Care Before Behavioral Health Integration, . . .

Next Steps, . . .

- **What does the data, epigenetics and Tonier's story tell us?**
  - ACE's are Everywhere & they are Changing Our Country.
    - Culture of Violence (Political Side Step)
  - **Culture of Trauma** (Violence is a Symptom of the Bigger Problem)

- **How does this relate to Healthcare?**

  We are Tasked with the basics, . . .
  - Prevention Education
  - Preventative Care
  - Effective Screenings for Suicide, Anxiety, Depression, DV, Smoking, Weight, BP, and ACE's.
  - Early interventions and **Ease of Access** to Behavioral Health Care
    - All Help to Impact Suicide Rates, Health and Wellness, Absenteeism & Job Performance, Financial Problems,…

Healthcare Facts Supporting
Trauma Informed Care and Behavioral Health Integration

Between 50-70% of depressed persons first seek help from a PC provider;

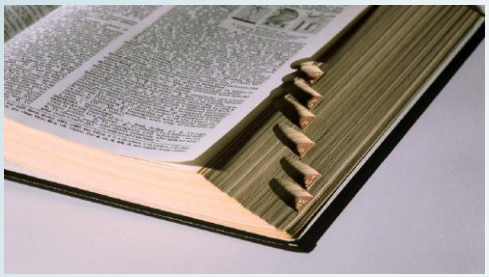
Approximately 45 % of people who die from suicide had contact with a PCP within one month of their death.

Patients with chronic medical illnesses are 2-3x more likely to suffer from depression;

2/3 of primary care patients with psychiatric diagnoses have significant medical/physical illness

45%-55% of Chronic Pain Patients have a Co-morbid Diagnosis of PTSD

Behavioral Health Integration



- Behavioral Health integrated into Primary Care settings;

  Or

- Primary Care integrated into Behavioral Health settings.

Why Integrate?

- The U.S. has the population with the lowest life expectancy of any population in this hemisphere next to Haitians. (AI/AN)
- By 2020, behavioral health disorders will surpass all physical diseases worldwide as a major cause of disability.
- HHS, CDC and all Regulatory Agencies are recommending that all FQHC's integrate healthcare by moving toward the PCMH Model (Treat the Whole Person and Increase P.E.I.)
- Half of all lifetime cases of mental illnesses begin by age 14 and three-fourths by age 24. (TAY suicide rates = 2nd or 3rd per ethnicity)
- Over 33,300 Americans die every year as a result of suicide.
- CDC's Public Health Surveillance Program Office estimated the cost of mental illness at approximately $300 billion ***in 2002***.

Substance Abuse and Mental Health Services Administration SAMHSA

More Reasons Why, ...

- People with persistent Mental Illness are dying 25 years earlier than the rest of the population.
  - American Indians die earlier, . . . (ACE's?)
- Between 50-70% of depressed persons first seek help from a PC provider

More Reasons, . . .

- 45% of people who die from suicide had contact with a PCP within one month of their death.
  - Deaths by overdose often associated with prescriptions provided at these visits.
    - R/X medication abuse and Chronic Pain epidemic have compounded this risk/liability

Source: Luoma, Martin and Pearson, Am. J. Psychiatry, 2002

Recommended Screening Tools

Screen for Depression and Refer

WHO's Work!

- Patient Health Questionnaire - 9:
  - **PHQ-9 Data** :
    - Reported average of 26% of patients had psychiatric disorders while another 13% have significant functional impairment (39% of patients are willing to disclose Sx's and/or get help.)
    - Rural health clinics report 80-90% pt.'s have comorbid medical condition & depressive disorder. (⇧ rates of chronic pain, PTSD, Anxiety: = ⇧ ACE'S)

Recommended Screening Tools

Get QPR Suicide Prevention Training

for ALL Primary Care Providers and Staff

- Have you had any recent thoughts about death or suicide?
- Were you feeling suicidal when this injury occurred?
- Have you ever attempted suicide in the past?
- Are you feeling suicidal now?

Recommended Screening Tools

Screen for Anxiety

GAD-7

Scoring: 0-4 = Normal; **5-9** = Mild; **10-14** = Moderate; **15-21** = Severe

- At the threshold score of 10, GAD-7 has a sensitivity of 89% and a specificity of 82% for generalized anxiety disorder.
- For Panic disorder sensitivity 74%, specificity 81%
- For social anxiety disorder sensitivity 72%, specificity 80%
- For post-traumatic stress disorder sensitivity 66%, specificity 81%

Recommended Screening Tools

Screen For ACE's and Develop Age and Population Specific Informed Interventions

- Abuse
  - Emotional – recurrent threats, humiliation
  - Physical—beating, not spanking
  - Contact sexual abuse
- Household Dysfunction
  - Mother treated violently
  - Household member was alcoholic or drug user
  - Household member was imprisoned
  - Household member was chronically depressed, suicidal, mentally ill, or in psychiatric hospital
  - Not raised by both biological parents
- Neglect
  - Physical
  - Emotional

Recommended Interventions

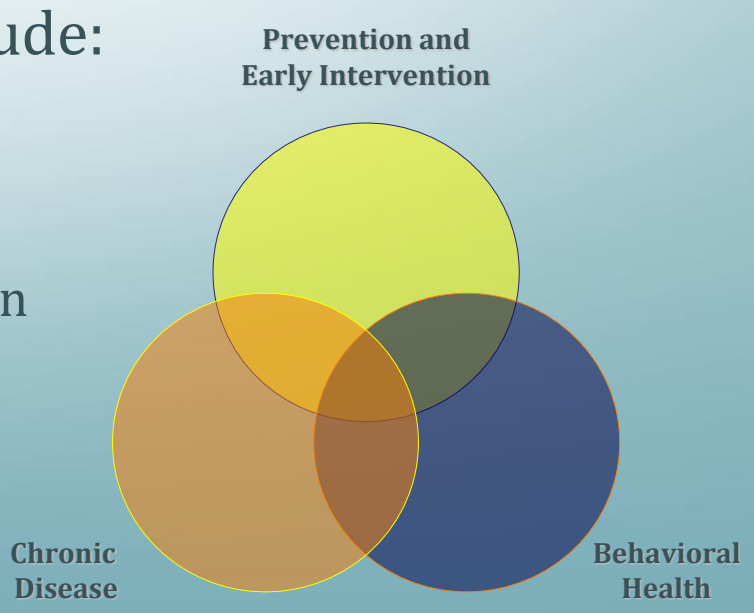
Develop an Integrated Program

Develop Continuing Education Incentives that Meet Population Needs

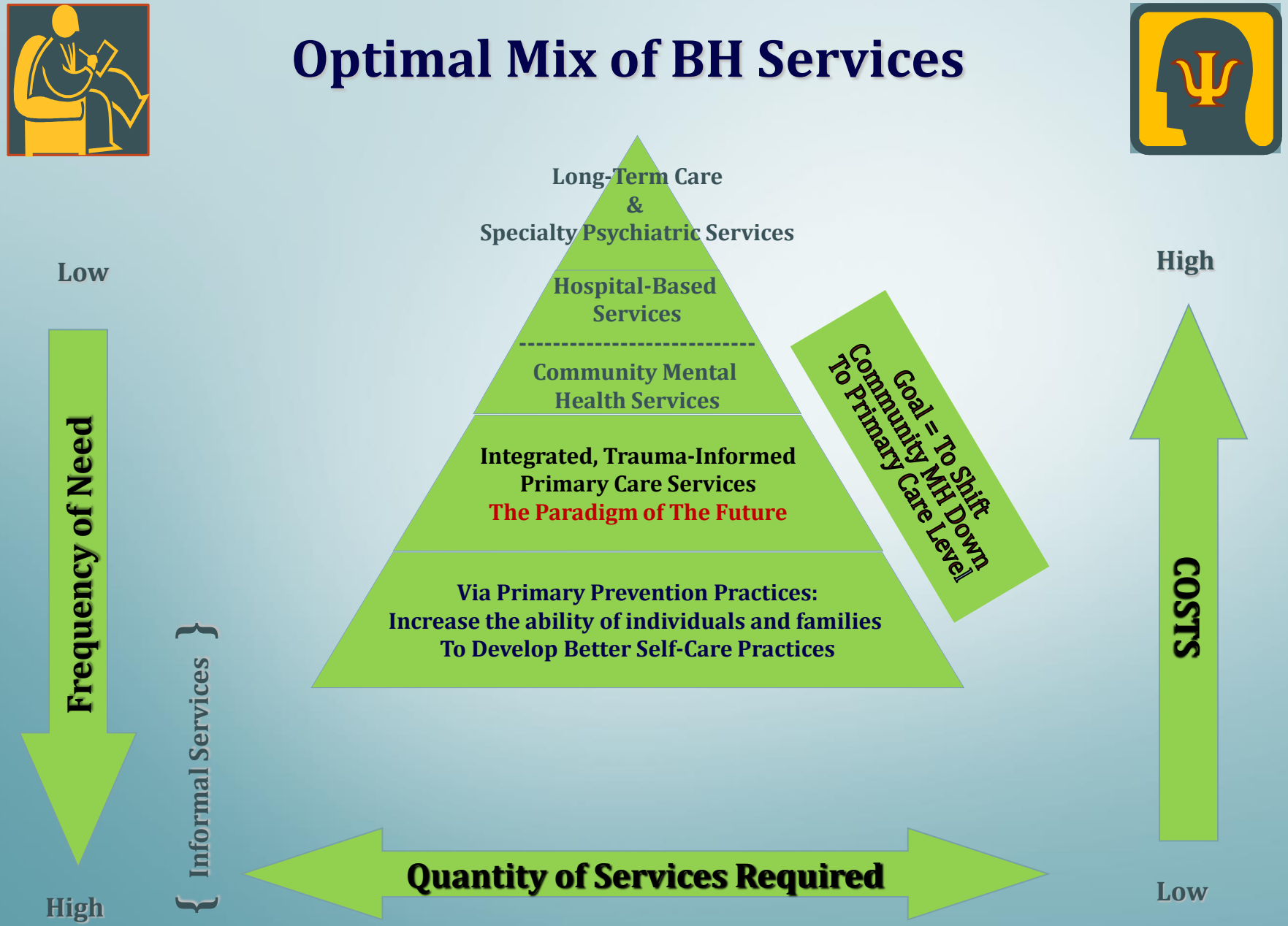
- Trauma- Focused CBT and EMDR
- Acceptance and Commitment Therapy for Pain Patients
- Bio/Neuro Feedback for Pain and Trauma, Diabetic, Anxiety Disordered, Hypertensive Patients,…
- Parenting and Anger Management **Education**
- Marital and Divorce Therapy
- Family Therapy
- Well-Parent Programs in OB-GYN / Women's Health Programs

A Brighter Future for Health Care

- Innovative Primary Care initiatives seeks to improve the health status of Americans through integration
  (Bio-psychosocial/Cultural Model)
  - Interrelated areas of focus include:
    - Chronic Disease
    - Behavioral Health
    - Prevention and Early Intervention



Optimal Mix of BH Services



- **Public Health: Where the rubber of Healthcare meets the road of Life**
- **Where Behavioral Health and Primary Care Unite**
- **Where The Focus Is Not To Cure The Individual But, To Heal The Masses**

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