ACES and Why They Matter in Healthcare

IHS Trauma Informed Care & Historical Trauma Informed Care Webinar Series: Part I in 3 Part Series for Healthcare Providers

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Introduction

- IHS has partnered with the University of New Mexico School of Medicine Division of Community Behavioral Health to
- Present an integrated approach to Historical Trauma, Trauma, and Trauma Informed Care in health and behavioral health settings
- Rollout of:
  - A series of webinars
  - Monthly case consultations
- Today's webinar is Part I in a 3 part series for healthcare providers

Objectives

- As a result of having participated in this webinar, participants will be able to:

  - Review the neurobiological effects of acute, toxic, and chronic stress.
  - Summarize 5 consequences of adverse childhood experiences on physical and behavioral health.
  - Discuss three healthcare behaviors that can arise as a result of adverse childhood experiences, and helpful ways to work with these behaviors.

Polling Question

- What is your primary professional affiliation?

1. MD/DO, Nurse practitioner, Physicians Assistant
2. Nurse
3. Medical assistant
4. Psychiatrist
5. Psychologist
6. Social worker (LCSW, LISW)
7. Other therapist (LPCC, etc.)
8. Supervisor/administrator
9. Front Desk Staff
10. Community health representative
11. Peer support worker

Trauma, historical trauma, Trauma-informed paradigm

What Is Trauma?

"trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being"

Substance Abuse and Mental Health Services Administration. Trauma-Informed Care in Behavioral Health Services. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801.

Trauma Informed Paradigm

"What happened to this person?"

"What's strong with you?"

Historical trauma informed:

"What tribal traumatic events happened over time?"

"What kind of school did you and family members attend?"

Standard Paradigm

"What's wrong with this person?"
"What's wrong with you?"

NOT asking about collective tribal history

NOT asking about boarding school history or other tribal-specific experiences and culture

Impact of Trauma on American Indian and Alaska Native Communities

- AI/AN between 2-3 times more likely to meet PTSD criteria compared to US adult population
- 2.5 times greater risk than the national average of experiencing physical, emotional, and/or sexual abuse
- AI/AN youth have the highest rates of emotional or physical neglect across all populations
- Up to 74% of AI/AN youth have experienced at least one traumatic event during childhood
- 12-16% of AI/AN homes experience alcohol and/or drug abuse (national average is 4-6%)
- Unresolved grief and historical trauma can become ingrained in the identity of individuals and communities

Slide courtesy of Christopher Morris

Gone & Trimble, 2012; DS Bigfoot, 2008; Brave Heart & DeBruyn, 1998; Copeland et al., 2007; National Center for Children in Poverty, 2007; Beals et.al., 2013

Historical Trauma and Unresolved Grief

- ***Historical trauma*** - Cumulative emotional and psychological wounding from massive group trauma across generations, including lifespan
- ***Historical trauma response*** (HTR) is a constellation of features in reaction to massive group trauma, includes ***historical unresolved grief*** (similar to Child of Survivors Complex re: Jewish Holocaust survivors and descendants, Japanese American internment camp survivors and descendants), depression, PTSD

(Brave Heart, 1998, 1999, 2000)

Types of Trauma

- Single event
  - E.g. being in a car crash, natural disaster, sexual assault, medical procedure
- Multiple events, over time
  - E.g. incest, war, racism, micro-aggressions, multiple medical procedures
  - Can lead to Complex Trauma
- Vicarious or secondary trauma
- Multigenerational including historical trauma

Caveats

- What is traumatic to 1 person may not be to another
- Trauma affects a person's neurobiology in ways that are long lasting or permanent
- Trauma can lead to
  - adverse health outcomes
  - PTSD
- Not everyone who has experienced trauma develops PTSD or adverse health outcomes
- Cumulative trauma has cumulative effects
- There are effective treatments for trauma

Culture and Trauma

Culture determines acceptable responses to trauma and shapes the expression of distress

- Culture affects what qualifies as a legitimate health concern and which symptoms warrant help
- Culture can provide a source of strength, unique coping strategies, and specific resources.
- Cultural assessment is essential for appropriate diagnosis and care

Stress, neurobiology, and epigenetics

Healthy and Toxic Stress

- Healthy stress
  - Stress is a normal part of life, part of healthy development
  - Helps us to grow and change
  - Moderate degree, short lived, E.g. meeting new people, taking a new job
  - Occurs in the context of stable, supportive relationships
- Toxic stress
  - Level or chronicity of stress that overwhelms coping systems (both biological and supportive relationships)

Three Levels of Stress Response

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.

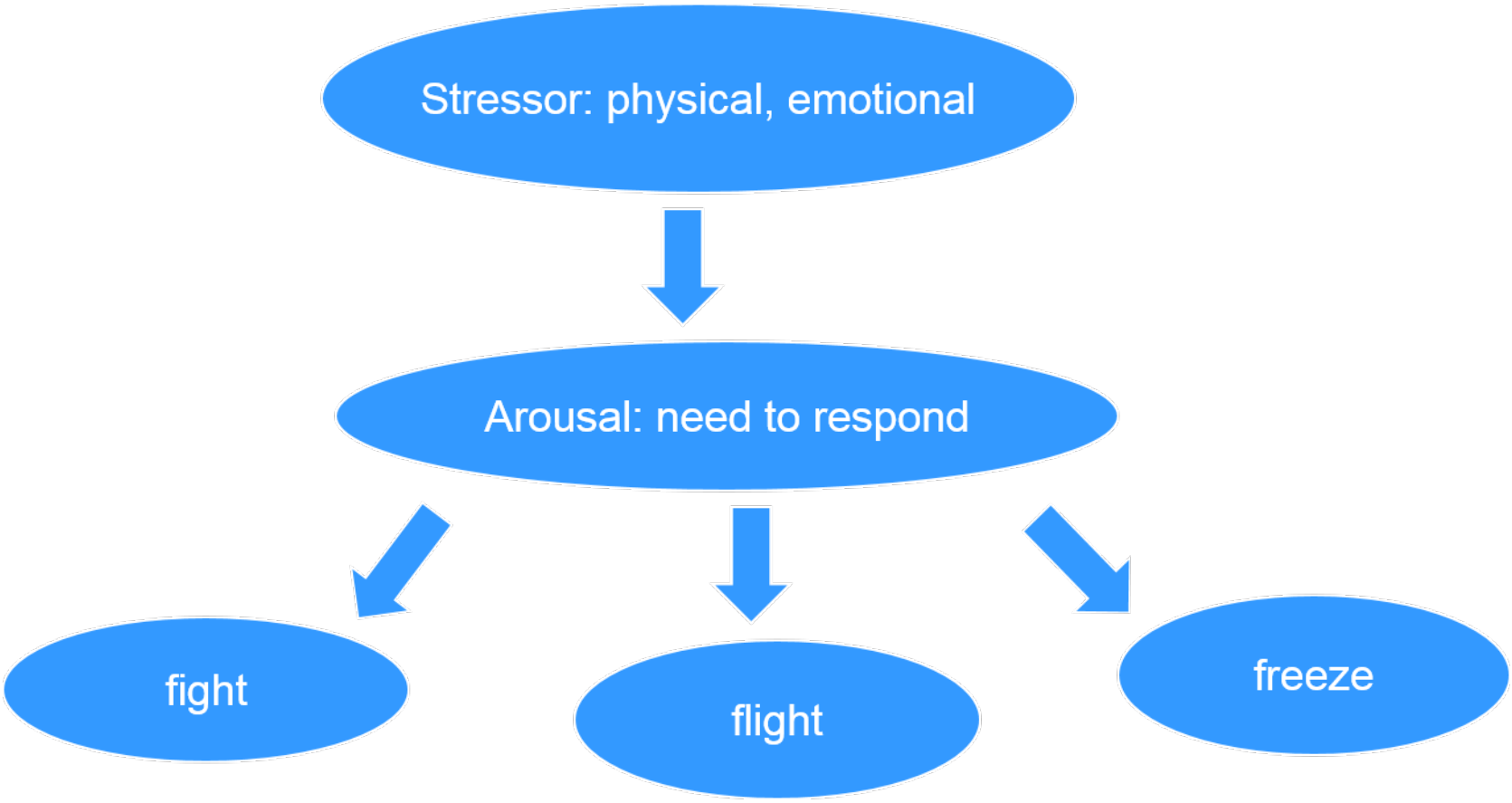
Acute Stress

- Our bodies are designed to deal with acute stress
- Fight/flight/freeze reaction is initiated
- This stress response system increases our ability to survive danger
- Once stress is over systems return to normal (homeostasis) via negative feedback loops

Acute Stress Response

- Autonomic nervous system (ANS) activated:
  - Release of adrenaline (epinephrine)
  - Increased sympathetic tone causes dry mouth, increased HR, RR, BP, increased muscle tone
  - Digestion is inhibited
- Hypothalamic-pituitary-adrenal (HPA) axis HPA axis activated:
  - CRH and AVP released from hypothalamus, bind to anterior pituitary, releases ACTH, acts on adrenals to release glucocorticoid (cortisol)
  - Cortisol promotes mobilization of stored glucose (for energy), decreases immune function (decreases inflammation)
- Endorphins released =decreased sense of pain
- Oxytocin increased

Defense Cascade:
Fight, Flight, or Freeze



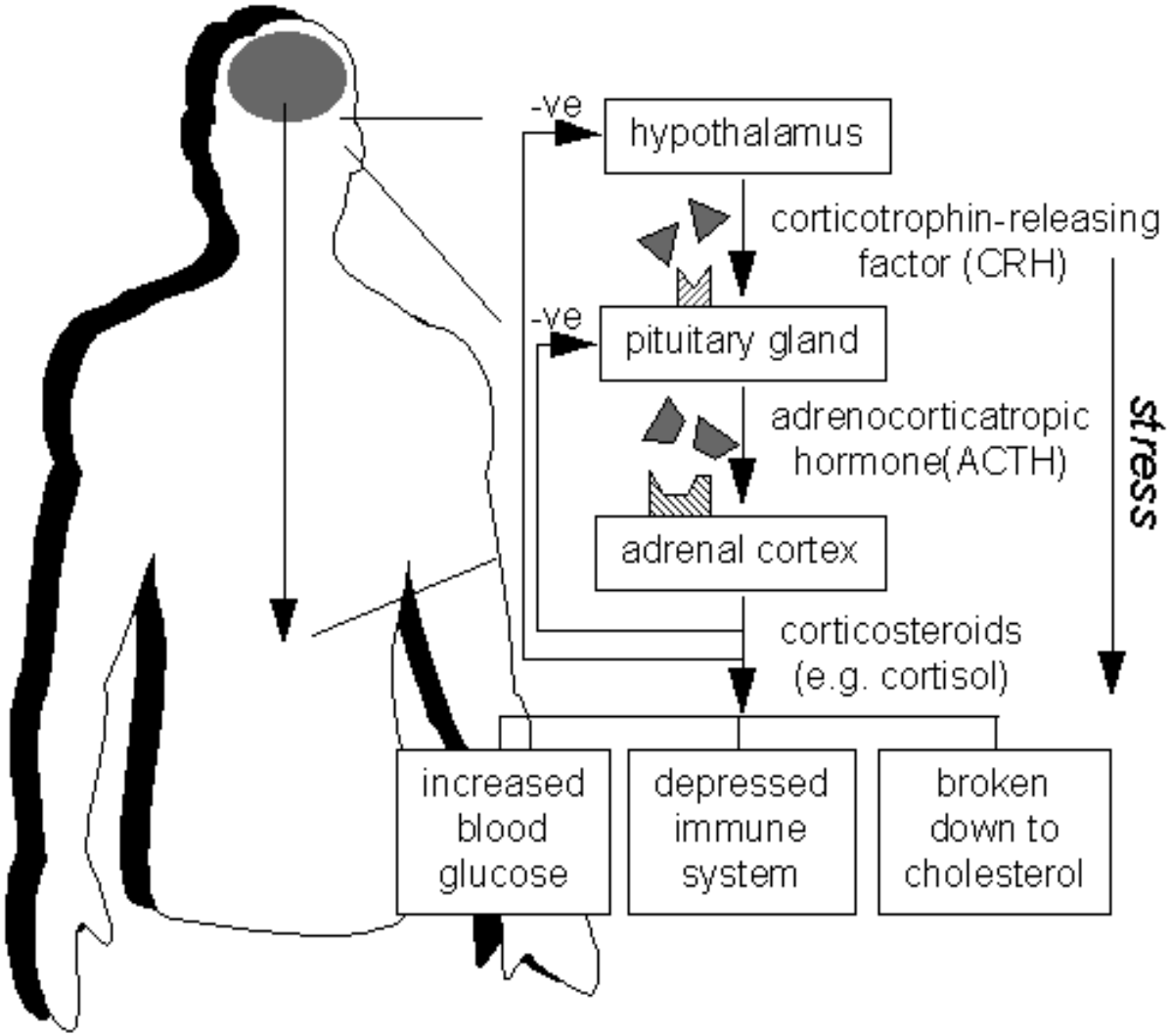
Freeze Response

- Attentive immobility
- Usually lasts for only a few seconds
- Allows person to assess the danger and decide whether to fight or flee
- Often begins with freeze (assess the situation, hide from predator, then respond)
- Includes opioid-mediated analgesia, lower HR
- Increased occurrence in people with trauma histories when person is exposed to a cue associated with a previously negative event
- Can lead to immobility, dissociation

Dissociation

- Our mind's "safety valve"
- When overstimulated, we shut down, or dissociate thoughts from feelings/body from thoughts
- Can manifest as:
  - Fainting
  - Emotional numbing
  - Amnesia
  - Conversion into physical symptoms
  - Fragmentation of sense of self
- Can lead to dissociative disorders (DSM 5)

HPA Feedback Loop



http://psychology.unn.ac.uk/andrew/PY013/Image119.gif

Chronic Stress

- Chronic stress
  - Our bodies are not designed to deal with stress that doesn't go away
  - Same systems are activated as in acute stress, but are activated over and over
  - This has adverse effects
    - Initial high levels of cortisol then blunted corticosteroid release
    - Brain changes (high levels of cortisol are toxic)
      - Impairs neural plasticity, damages the hippocampus which impairs memory
    - Epigenetic changes
  - These adverse effects lead to increased risk of physical and psychiatric illness

Normal Brain Development

- The brain isn't structurally complete at birth
- It is designed to develop based upon cues from the environment
  - Brain growth requires
    - Interaction with loving, predictable people
    - A healthy physical environment
- Children haven't yet developed fully the ability to regulate arousal
- They require help from adults

https://www.aap.org/en-us/Documents/ttb_aces_consequences.pdf

How Trauma Interferes With Normal Brain Development

- Trauma interferes with normal biological maturation
  - Adversely effects neurodevelopment
    - Structurally
    - Neuroendocrine systems
    - Immune system
    - Epigenetics
- Traumatized parents often have difficulty helping their children's brain development

https://www.aap.org/en-us/Documents/ttb_aces_consequences.pdf

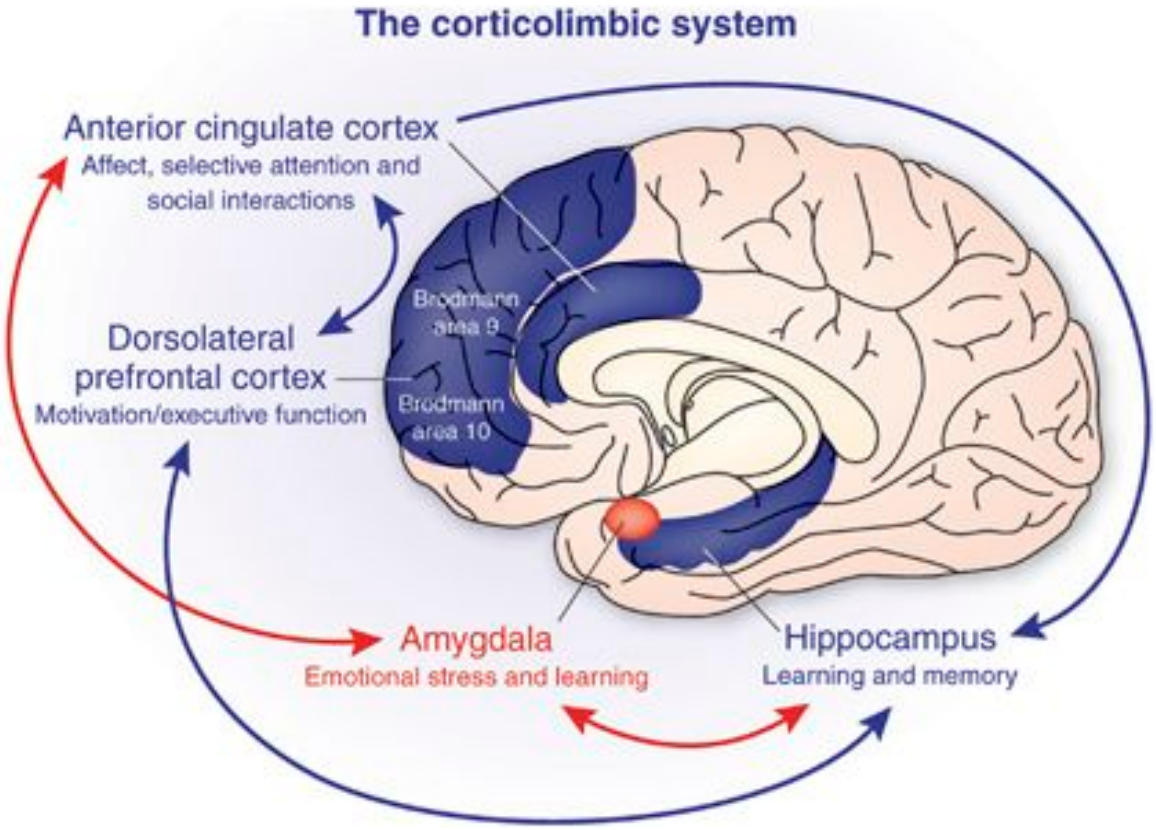
Neurobiological Effects of Early Stress

- Early stress has lasting effects on HPA axis and norepinephrine
  - Long-term changes in glucocorticoid response to stress
  - Decreased genetic expression of cortisol receptors in the hippocampus and increased expression of CRF in the hypothalamus
  - Inhibited hippocampal neurogenesis
  - Decreased expression of alpha-2 noradrenergic receptors in the locus coeruleus
  - Also affects 5-HT and GABA

Structural Brain Changes with Early Life Stress

- The earlier the stress/abuse and the longer it lasts, the more likely a person will have:
  - Decreased cerebral volume
  - Decreased corpus callosum size
  - Decreased hippocampal volume (adults)
  - Abnormalities in the amygdala

Corticolimbic System



https://au.pinterest.com/explore/anterior-cingulate-cortex/

Adverse Cognitive Effects of Early Life Stress

- Glucocorticoids are increased during the stress response
- Glucocorticoids can impair neural plasticity =damage the brain
  - Brain regions that take a long time to mature are particularly susceptible
- Increased the HPA axis stress response
  - reaction even when no stress present

Clinical Effects Of Stress Induced Neurobiological Changes

- Decreased ability to put experience into words
  - Problems with declarative memory
- Decreased ability to think through a situation
  - Especially when emotionally aroused
  - =problems with executive functioning
- Memory problems
  - Difficulty with time frame
  - Difficulty sequencing (what came first, when, what came next)
- Instead, people experience strong emotions, sounds, smells, impressions (often nonverbal)
  - When combined with decreased ability to problem solve, can result in emotional outbursts

Overarousal and Underarousal

- Hypervigilence or underarousal are adaptive in times of danger
  - Fight, flight, or freeze
- These same behaviors are maladaptive in school, work, medical settings
  - Overreactions
    - Triggered by sights, smells, tone of voice
  - Lack of reaction/passivity

Anhedonia and Reward Seeking Behavior

- Early life stress can lead to anhedonia and compensatory increased reward seeking behavior
  - substance use, promiscuity
- May be related to abnormalities in dopamine system
  - decreased DA response to reward stimulating cues
- Increased smoking may be self medication for anhedonia
  - nicotine stimulates dopamine

Addicted to Stress?

- Some evidence that chronic exposure to stress may cause chronically elevated endogenous opiates
- When stress is relieved, people feel worse rather than better (sx of opiate withdrawal?)
- Results in paradoxical behavior—people seek out stressful or re-traumatizing situations to increase their endorphins

State Dependent Memories

- Traumatic memory is deeply imprinted
  - especially fearful memories
- These memories tend to be state dependent
  - Increased during times of emotional arousal
- Results in: Stress responses out of proportion to the current stimulus

What is Epigenetics?

- Functional changes in genes without altering their DNA sequence
- Is the way gene expression is influenced by experience/environment
- Controls which genes are expressed, & how much/when
- Usually transient/ reversible
- Some of these changes can be stabilized and inherited (animal models)
- Can be transmitted to offspring (from one generation to another)

Epigenetics and Stress/Trauma

- Stress and trauma trigger epigenetic changes
- Studies show that childhood abuse causes increased or decreased methylation in certain genes (e.g., involved in immune function, glucocorticoid receptors, stress response, neurotransmitter activity)
- PTSD is associated with suppressed cortisol levels (due to hypersensitivity of the glucocorticoid receptor & enhanced negative feedback) (HPA axis abnormalities)

http://learn.genetics.utah.edu/content/epigenetics/inheritance/; Voisey et.al., 2014;; Zannas et.al., 2015)

Intergenerational Transmission

- Children of trauma survivors are at increased risk for mental and physical illnesses
- Parental PTSD leads to alterations in the HPA axis function of children
- This is mediated by developmental programming of glucocorticoid signaling via epigenetic modifications
- Stress during mother's pregnancy can affect epigenetics in the fetus
- Some epigenetic changes prior to pregnancy (and paternal epigenetic changes) can be passed on to children

Aces & Why trauma matters in primary care

Why Trauma Matters in Primary Care

- 59% of men and women experience at least one adverse childhood experience (ACE) in their lifetime
- 9% experience 5 or more ACEs
- 49% of children have experienced at least 1 ACE
  - Children with trauma are 2.5 times more likely to have to repeat a grade in school
- Trauma impacts health, behavioral health, family, work, school
- If we identify trauma we can help patients get treatment
- Their lives can be changed

Behavioral Health Statistics

- 90% of people in public behavioral health clinics have experienced trauma
- 43-80% of people in psychiatric hospitals have experienced physical or sexual abuse
- 2/3 of adults in addiction treatment and 70% of teens experienced childhood abuse and neglect

Physical Health

- Women with PTSD symptoms have a 2x increased risk for Type II diabetes
- Women without PTSD but with trauma histories have 45% higher rates of CVD
- Women with 4+ symptoms of PTSD have 60% higher rates of CVD

ACE (Adverse Childhood Experience) Study

- Looked at the relationship between childhood abuse and neglect and later-life health and well-being
- Original ACE study done from 1995-1997 at Kaiser Permanente in S California in collaboration with US CDC
- Surveyed 17,000+ HMO members who completed a confidential survey given to them when they came for their physical exam
  - 70% Caucasian
  - 70% college educated

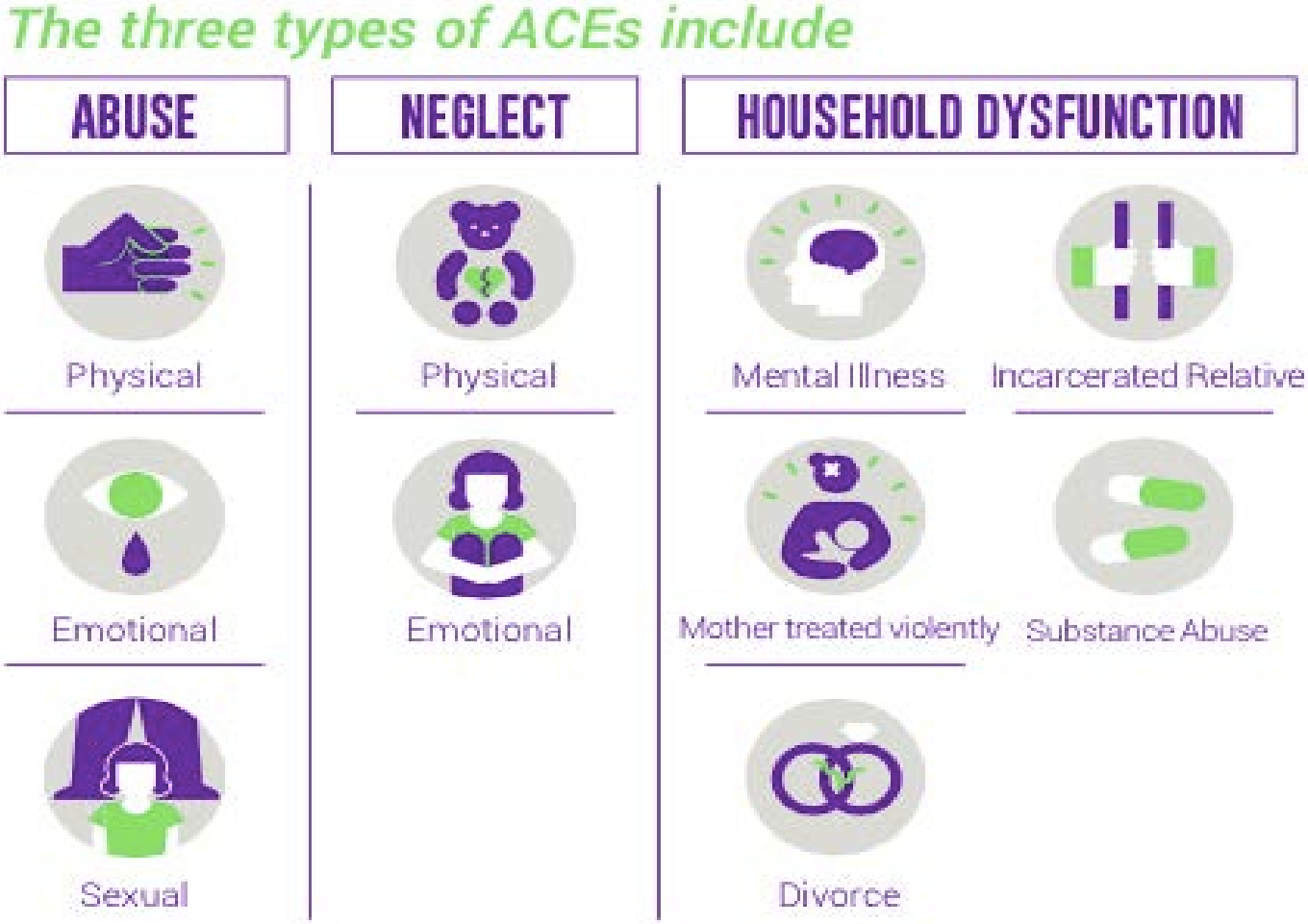
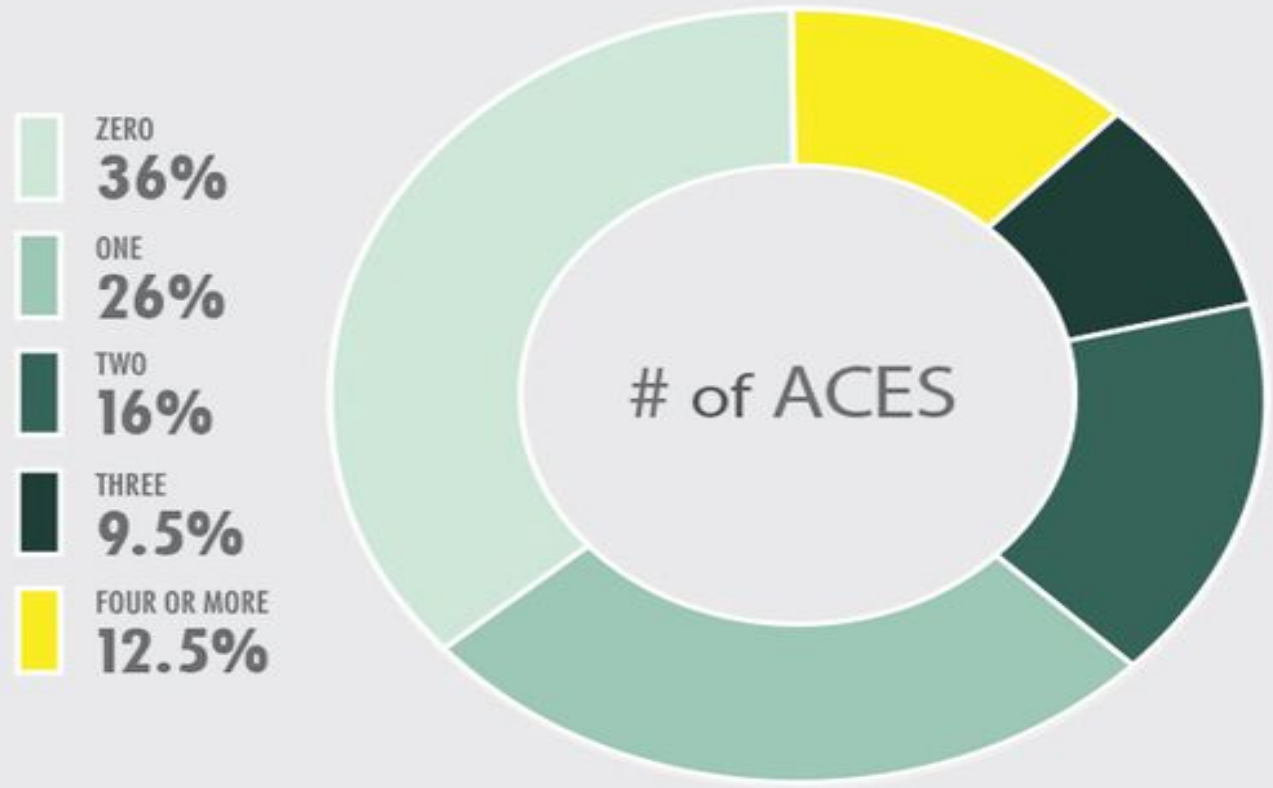


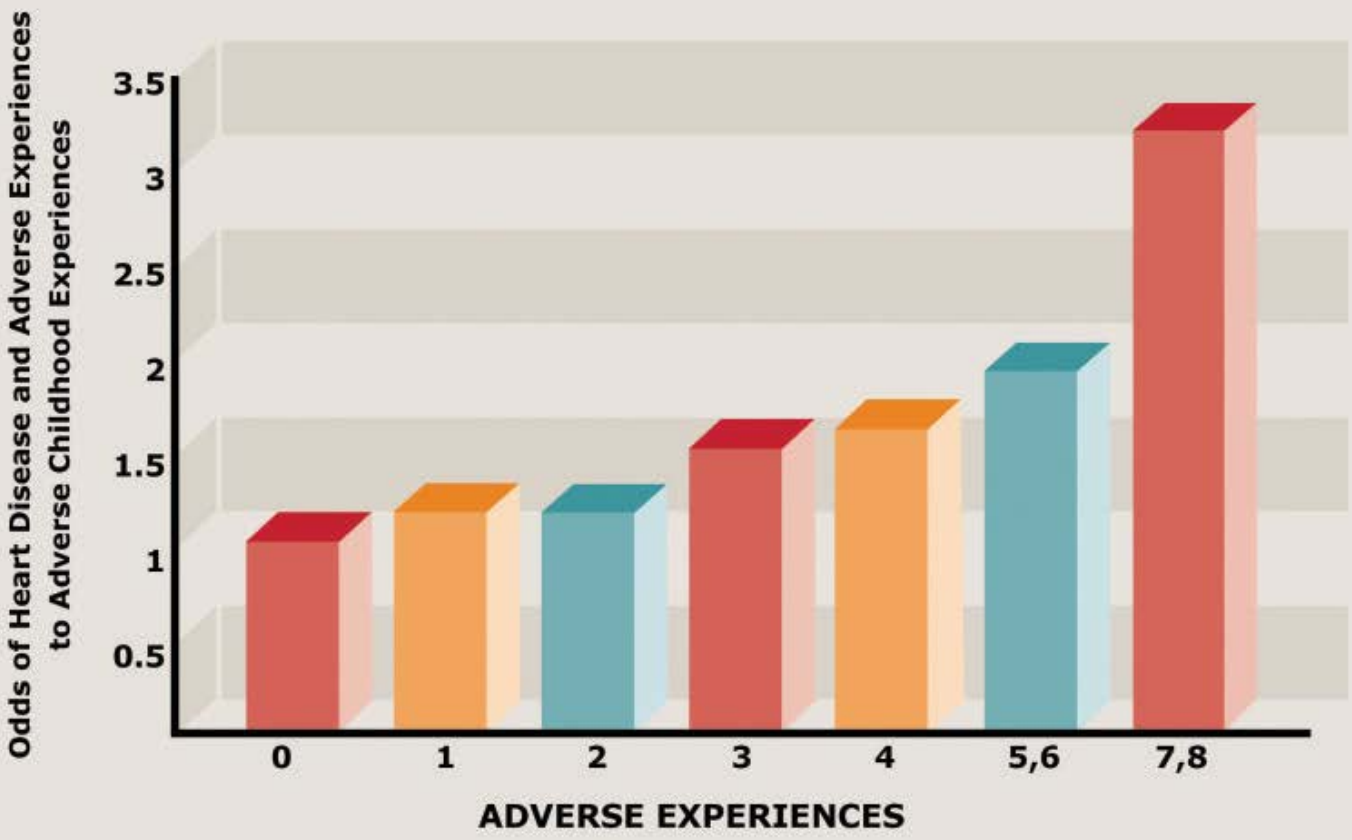
FIGURE 1: Types of Adverse Childhood Experiences
Image courtesy of the Robert Wood Johnson Foundation

How Common are ACES?



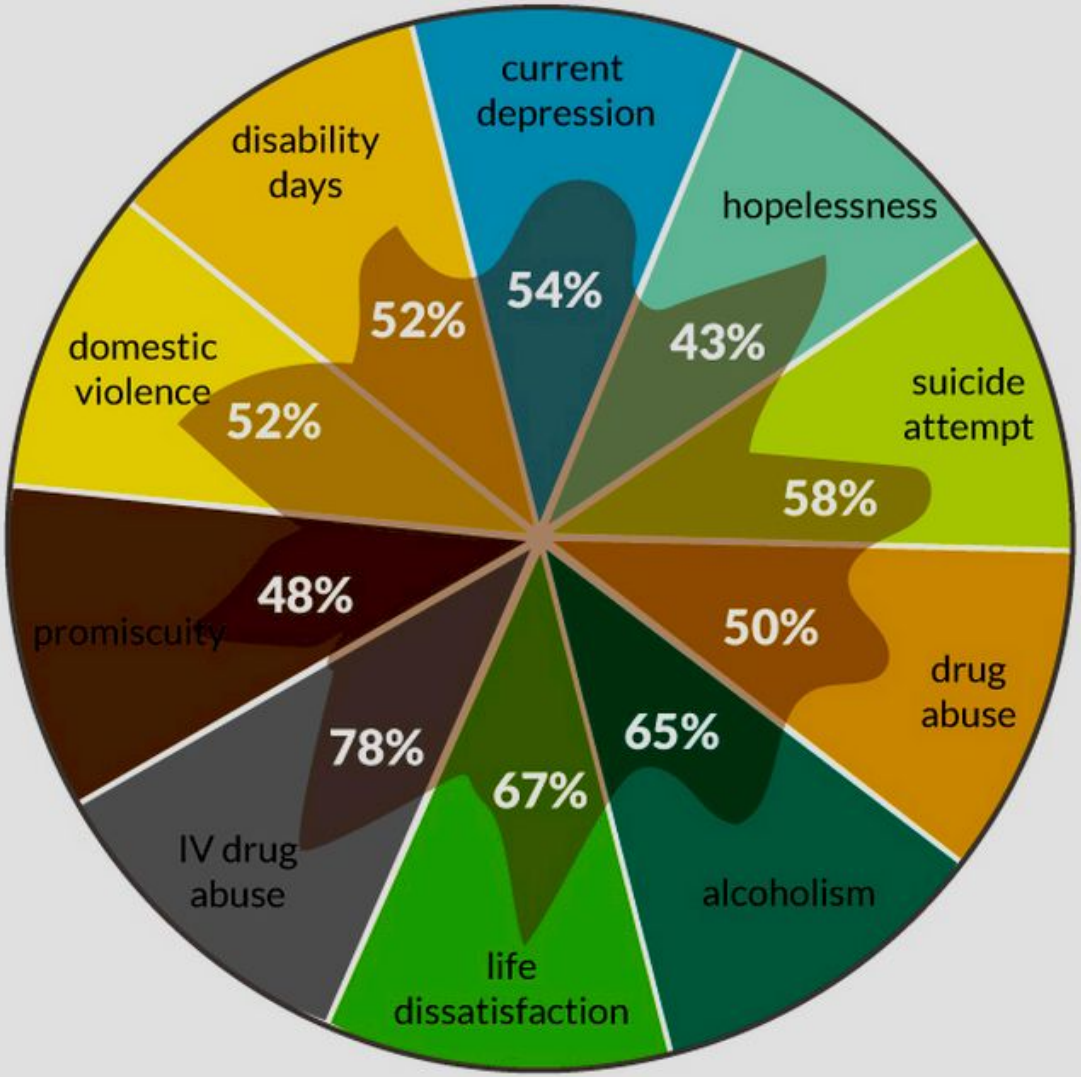
CDC.Gov

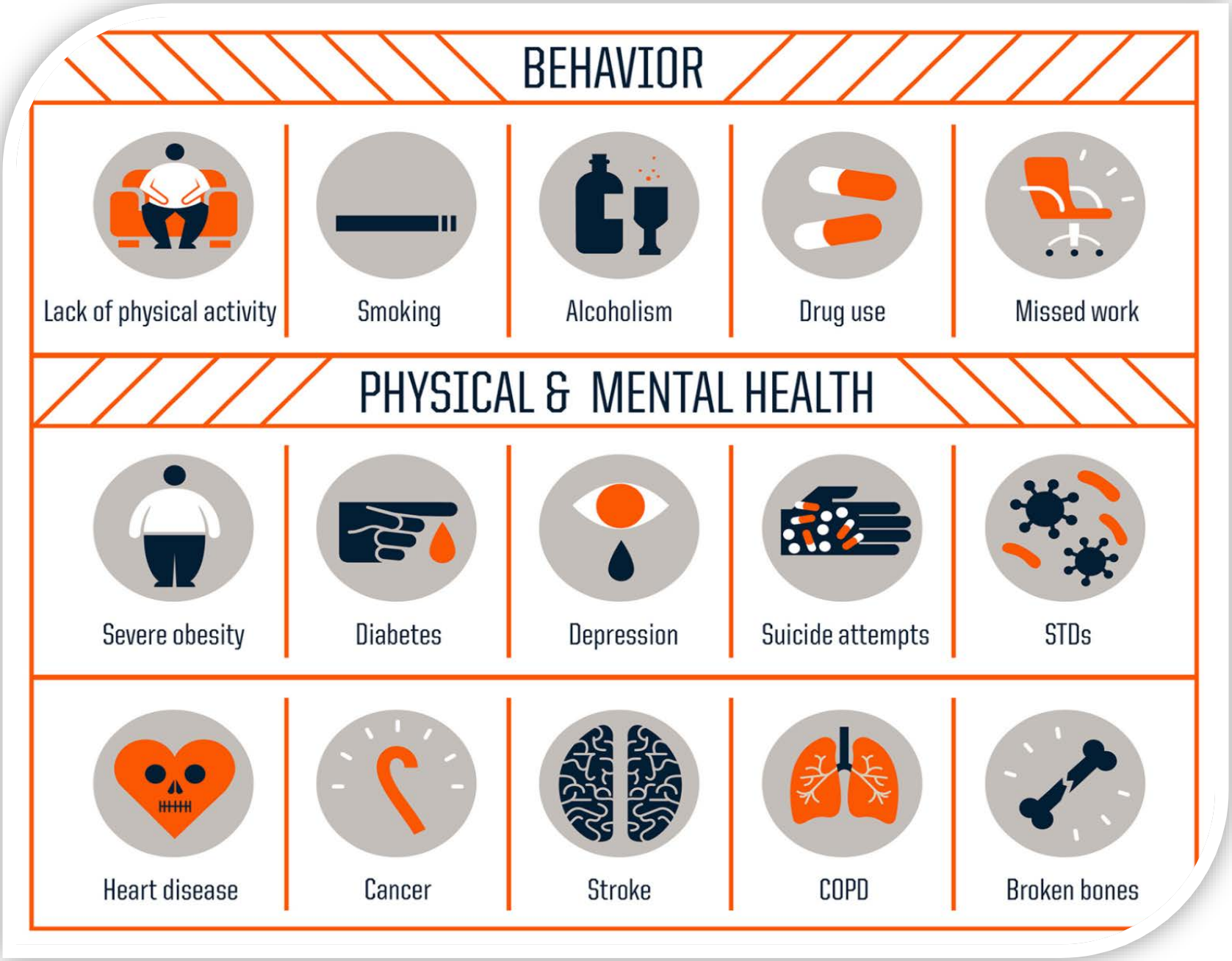
Odds of Heart Disease With Increasing Aces



http://developingchild.harvard.edu/resources/five-numbers-to-remember-about-early-childhood-development/

ACE AND POPULATION ATTRIBUTABLE RISKS





http://www.npr.org/assets/imp/2015/02/20/aces-2_cutsom.jpg

Adverse Health Outcomes with ACEs

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease
- Depression
- Fetal death
- Health-related quality of life
- Illicit drug use
- Ischemic heart disease
- Liver disease
- Poor work performance
- Financial stress
- Risk for intimate partner violence

Premature Death

People with 6+ ACEs died nearly 20 years earlier than those with ACE of 0

Chronic Disease

- Headaches 2x higher with ACE>5
- COPD 2.6 x higher with ACE>5 (only partially mediated by higher rates of smoking)
- Ischemic heart disease 3.5x risk in ACE of 7
- Autoimmune disease (>2 ACEs 100% increased risk for rheumatic diseases)
- Stroke
- Diabetes
- Hepatitis 2.5x increase in ACE>4

Health Risk Behaviors

- Risk for adult alcohol use increased 2-4x with ACES>1, independent of parental alcohol use
- Increased risk of alcohol use by age 14
- Drug use
- Obesity
- Smoking

- Other
  - Disability
  - Unemployment
  - Lower educational attainment
  - Lower income
- Rx drug use 40% increased in ACE>5

Mental Health

- Depression 4.5x increase ACE>4
- Suicidality 12x increase ACE>4
- Impaired memory of childhood (declarative memory)
- Hallucinations
- Anxiety

Reproductive Health/Sexual Behavior

- Teen pregnancy
- Early onset of sexual activity
- Unintended pregnancy
- Fetal death
- STDs

Victimization and Perpetration

Intimate partner violence

–risk of IPV (victim and perpetration) increased 3.5 times for women and 3.8 times for men in those who had all 3 forms of experiencing abuse or witnessing DV in childhood

Health Disparities in AI/AN

- AI/AN have lower life expectancy
- Reservation-based AI/AN have higher rates of death from:
  - Tuberculosis 750% higher
  - Alcoholism 524% higher
  - Diabetes 293% higher
  - Unintentional injuries 153% higher
  - Homicide 103.3% higher
  - Suicide 66% higher

ACE Scores Among AI/AN children compared with non Hispanic white children

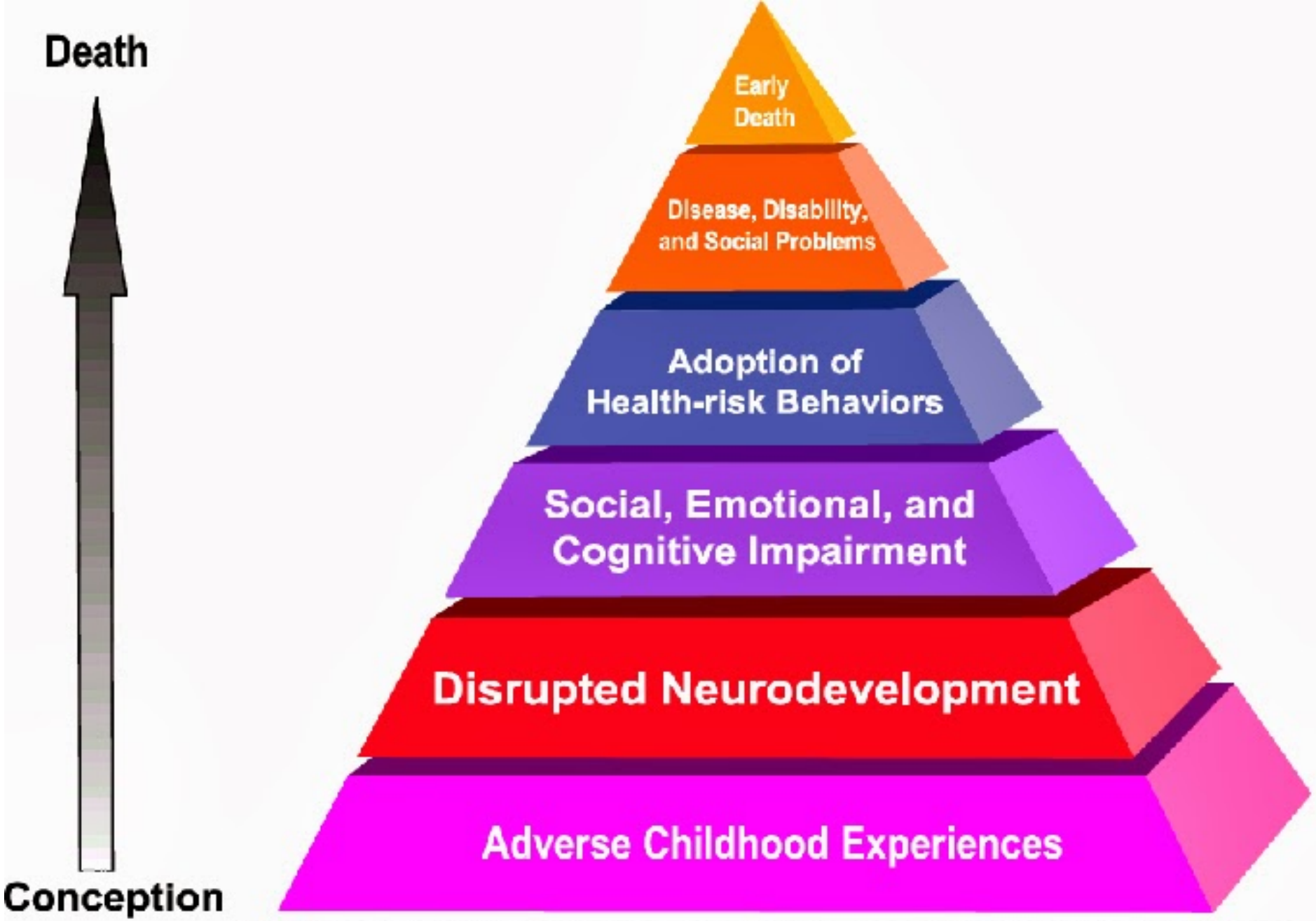
AI/AN

- 2+ACEs 40.3%
- 3+ ACEs 26.8%
- 4+ ACEs 16.8%
- 5+ ACEs 9.9%

Once adjusted for sociodemographic variables, the differences between the 2 populations went away

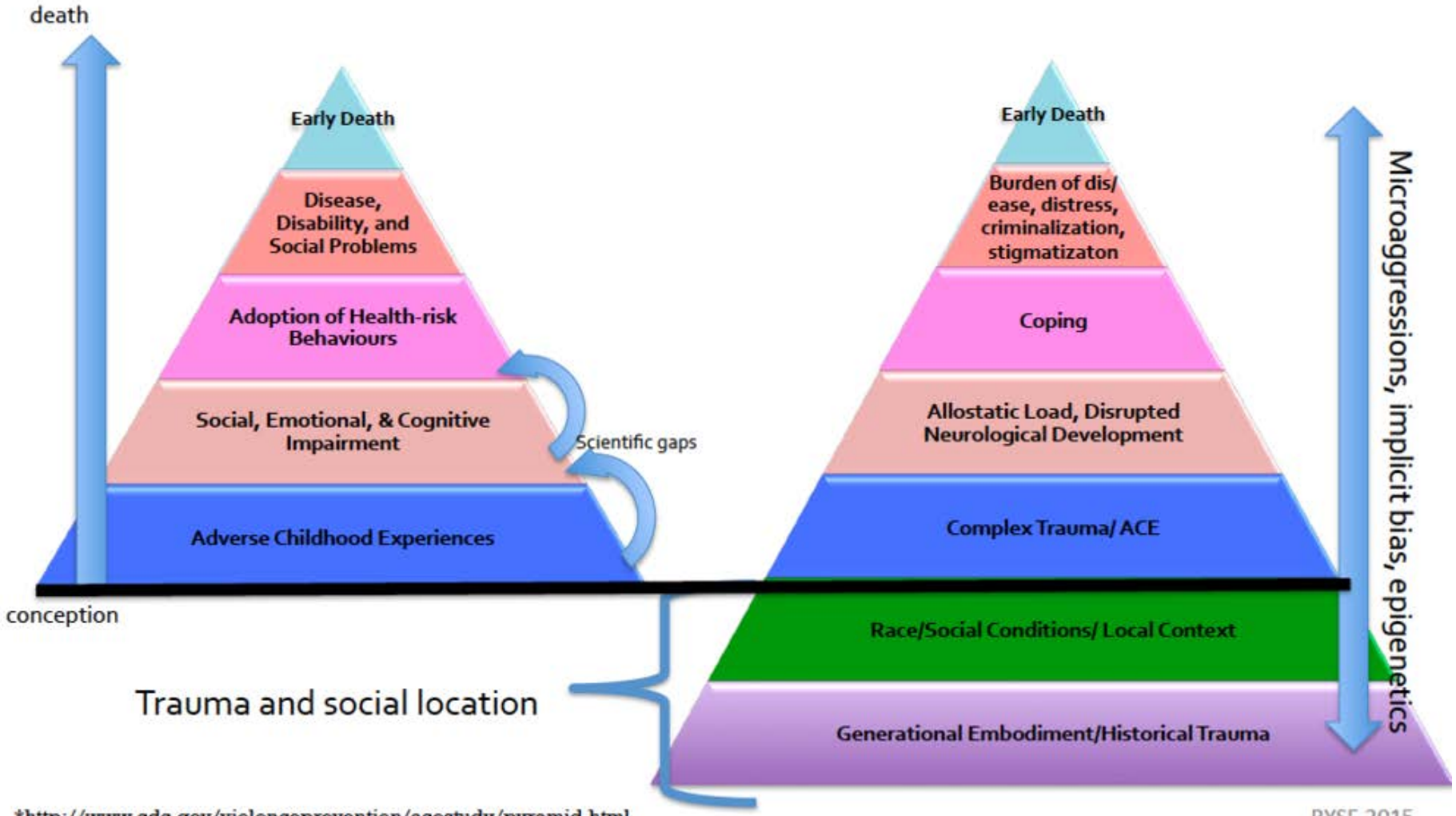
NHW

- 21%
- 11.5%
- 6.2%
- 3.3%



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

Trauma and Social Location



Ask about ACEs in Primary Care

- Excellent tool for estimating risk for many major health problems
- Can be helpful preventively
- Can help providers avoid re-traumatizing patients through medical procedures
- Some providers are uncomfortable asking about childhood adversity
  - No standard protocol for what to do with the results
  - Afraid patient will have negative emotional reactions

Effects of Childhood Abuse on Healthcare Behaviors-Avoiding Healthcare

- Avoidance of care
  - Decreased access of pap smears and mammography (childhood sexual abuse)
  - Delay in seeking treatment
  - Missed appointments
  - Multiple rescheduled appointments
  - Decreased adherence to treatment
  - Reluctance to ask questions/raise issues

Effects of Childhood Abuse on Healthcare Behaviors-Overutilization of Care

- Asking for unnecessary tests or procedures
- Excessive need for reassurance/anxiety
- Can be combined with underutilization of care

Effects of Childhood Abuse on Healthcare Behaviors-Trauma Reactions

- Trauma reactions while receiving medical care
  - Pain response
  - Unusual body awareness/sensations
  - Emotional response
  - Behavior
  - Over disclosure of personal information

How to Respond to Angry Patients (fight)

- Calm, slow voice
- Calm physical setting
- Maintain safety for yourself and patient
- Listen
- Reflect back to patient
- Don’t defend/argue
- Minimize power differential

How to Respond to Scared Patients (flight)

- Reassurance
- Provide information
- Relaxation
- Grounding
- Provide safe degree of physical space
  - Touch versus move back

How to Respond to Dissociated Patients (freeze)

- Reassurance about safety
- Check for comprehension/engagement
- Relaxation
- Grounding

Treatment of Trauma

- Make systems trauma informed
- Trauma-Specific Treatment
- Traditional or culturally-based healing
- Increase attachment/ social/community support

Refer to Therapy?

- Many patients don't want to go to behavioral health
  - Stigma
  - Lack of confidentiality
  - Time
  - Money
  - Availability
- Not all patients with trauma histories need to go to therapy

Role of Healthcare Providers in Treatment of Trauma

- Healthcare providers have a key role
  - Avoid re-traumatizing patient
  - Corrective emotional experiences
  - Encourage increased community/social support
  - Good health care
- Offer therapy referral
  - Know what therapy does/doesn’t do
  - Know the alternatives

Upcoming Webinars and Case Consultations for Healthcare Providers

- Part II: Trauma, Attachment & DSM 5 Diagnoses
  July 6 12 pm MST
- Part III: Vicarious Trauma & Burnout in Healthcare Providers & How a Trauma Informed System Can Help
  August 24 12-1 MST
- Monthly case consultations 10:00-11:00 MST
  - July 5, Aug 23, Sept 20, Oct 18,. Nov 15, Dec 13, 2017
  - Jan 17, Feb 14 2018

Websites

ACES Connection http://www.acesconnection.com/

ACES Too High www.acestoohigh.com

Child Trauma Academy http://childtrauma.org/nmt-model/

International Society for Traumatic Stress Studies (ISTSS)

www.istss.org

The National Council for Behavioral Health

https://www.thenationalcouncil.org/topics/trauma-informed-care/

National Child Traumatic Stress Network (NCTSN)

http://www.nctsn.org/

Websites-continued

PTSD: National Center for PTSD (US Department of Veterans Affairs)

https://www.ptsd.va.gov/

SAMHSA National Center for Trauma-Informed Care and Alternatives to Seclusion and Restraint (NCTIC)

https://www.samhsa.gov/nctic

SAMHSA National Child Traumatic Stress Initiative (NCTSI)

https://www.samhsa.gov/child-trauma

TF-CBTWeb https://tfcbt.musc.edu/

References

- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., … Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience*, *256*(3), 174–186. http://doi.org/10.1007/s00406-005-0624-4
- Bremness, A., & Polzin, W. (2014). Commentary: Developmental Trauma Disorder: A Missed Opportunity in DSM V. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *23*(2), 142–145.
- Brockie, T. N., Heinzelmann, M., & Gill, J. (2013). A Framework to Examine the Role of Epigenetics in Health Disparities among Native Americans. *Nursing Research and Practice*, *2013*, 410395. http://doi.org/10.1155/2013/410395

References-2

- Felitti, V., Anda, R., Nordenberg D., Williamson, M, Spitz, A., Edwards, V., Koss, M.,Marks, J. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 1998, 14:245-258
- Figley, C.R. (ed.) (1995) Compassion Fatigue: Secondary Traumatic Stress Disorders from Treating the Traumatized, NY Brunner-Mazel
- Kirsten Havig (2008) The Health care Experience of Adult Survivors of Child Sexual Abuse, Trauma, Violence, and Abuse Vol9, Issue 1, pp 19-33

References 3

- (Herman, J. (1997). *Trauma and recovery: The aftermath of violence from domestic abuse to political terror*. New York: Basic Books.)
- Mary Kay Kenney and Gopal K. Singh, "Adverse Childhood Experiences among American Indian/Alaska Native Children: The 2011-2012 National Survey of Children's Health," *Scientifica*, vol. 2016, Article ID 7424239, 14 pages, 2016. doi:10.1155/2016/7424239
- Natalie J. Sachs-Ericsson, Nicole C. Rushing, Ian H. Stanley, and Julia Sheffler In my end is my beginning: developmental trajectories of adverse childhood experiences to late-life suicide, Aging & Mental Health Vol. 20 , Iss. 2,2016
- Pechtel, P., & Pizzagalli, D. A. (2011). Effects of Early Life Stress on Cognitive and Affective Function: An Integrated Review of Human Literature. *Psychopharmacology*, *214*(1), 55–70. http://doi.org/10.1007/s00213-010-2009-2

References-4

- Yehuda & Bierer, (2009) *J of Traumatic Stress, 22* (5)
- Yehuda, et al., (2005) *J of Clinical Endocrinology & Metabolism, 90* (7)
- Walters et al., (2011) *Du Bois Review: Social Science Research on Race, 8*(1)

Relevant Recent HT Publications

- Brave Heart, M.Y.H., Elkins, J., Tafoya, G., Bird, D., & Salvador (2012). *Wicasa Was'aka*: Restoring the traditional strength of American Indian males. *American Journal of Public Health*, *102* (S2), 177-183.
- Brave Heart, M.Y.H., Chase, J., Elkins, J., & Altschul, D.B. (2011). Historical trauma among Indigenous Peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs*, *43* (4), 282-290.
- Brave Heart, M.Y.H. & Deschenie, T. (2006). Resource guide: Historical trauma and post-colonial stress in American Indian populations. *Tribal College Journal of American Indian Higher Education*, *17* (3), 24-27.
- Brave Heart, M.Y.H. (2003). The historical trauma response among Natives and its relationship with substance abuse: A Lakota illustration. *Journal of Psychoactive Drugs, 35*(1), 7-13.

References-Brave Heart

- **Brave Heart**, M.Y.H., Lewis-Fernández, R, Beals, J, Hasin, D, Sugaya, L, Wang, S, Grant, BF., Blanco, C. (2016). Psychiatric Disorders and Mental Health Treatment in American Indians and Alaska Natives: Results of the National Epidemiologic Survey on Alcohol and Related Conditions. *Social Psychiatry and Psychiatric Epidemiology, 51* (7), 1033-1046.

- **Brave Heart**, M.Y.H., Chase, J., Elkins, J., Nanez, J., Martin, J., & Mootz, J. (2016). Women finding the way: American Indian women leading intervention research in Native communities. *American Indian and Alaska Native Mental Health Research Journal 23* (3), 24-47.

- **Brave Heart**, M.Y.H., Bird, D.M., Altschul, D., & Crisanti, A. (2014). Wiping the tears of American Indian and Alaska Native youth: Suicide risk and prevention. In J.I. Ross (Ed.), *Handbook: American Indians at Risk* (pp. 495-515). Santa Barbara, CA: ABC- CLIO Greenwood.

References-Brave Heart-continued

- Brave Heart, M.Y.H. (1999) *Oyate Ptayela*: Rebuilding the Lakota Nation through addressing historical trauma among Lakota parents. *Journal of Human Behavior and the Social Environment, 2*(1/2), 109-126.
- Brave Heart, M.Y.H. (2000) *Wakiksuyapi*: Carrying the historical trauma of the Lakota. *Tulane Studies in Social Welfare, 21-22*, 245-266.
- Brave Heart, M.Y.H. (2001) Clinical assessment with American Indians. In R.Fong & S. Furuto (Eds), *Cultural competent social work practice: Practice skills, interventions, and evaluation* (pp. 163-177). Reading, MA: Longman Publishers.
- Brave Heart, M.Y.H. (2001) Clinical interventions with American Indians. In R. Fong & S. Furuto (Eds). *Cultural competent social work practice: Practice skills, interventions, and evaluation* (pp. 285-298). Reading, MA: Longman Publishers.

References-Brave Heart continued

- Beals, J., Manson, S., Whitesell, N. Spicer, P., Novins, D. & Mitchell, C. (2005). Prevalence of DSM-IV disorders and attendant help-seeking in 2 American Indian reservation populations. *Archives of General Psychiatry, 162,* 99-108.
- Beals J, Belcourt-Ditloff A, Garroutte EM, Croy C, Jervis LL, Whitesell NR, Mitchell CM, Manson SM, Team AI-SUPERPFP (2013) Trauma and conditional risk of posttraumatic stress dis- order in two American Indian reservation communities. Soc Psych Psych Epid 48(6):895–905. doi:10.1007/s00127-012-0615- 5
- Beals J, Manson SM, Croy C, Klein SA, Whitesell NR, Mitchell CM, AI-SUPERPFP Team (2013) Lifetime prevalence of post- traumatic stress disorder in two American Indian reservation populations. J Trauma Stress 26(4):512–520. doi:10.1002/jts. 21835
- Brave Heart MYH (1998) The return to the sacred path: healing the historical trauma response among the Lakota. Smith Coll Stud Soc 68(3):287–305. doi:10.1080/00377319809517532

References-Brave Heart continued

- Legters, L.H. (1988). The American genocide. *Policy Studies Journal, 16* (4), 768-777.
- Lewis-Fernandez, R. & Diaz, N. (2002). The cultural formulation: A method for assessing cultural factors affecting the clinical encounter. Psychiatric Quarterly, 73(4), 271-295.
- Manson, S., Beals, J., O'Nell, T., Piasecki, J., Bechtold, D., Keane, E., & Jones, M. (1996). Wounded spirits, ailing hearts: PTSD and related disorders among American Indians. In A. Marsella, M. Friedman, E. Gerrity, & R. Scurfield (Eds), *Ethnocultural aspects of Posttraumatic Stress Disorder* (pp. 255-283). Washington DC: American Psychological Association.
- Robin, R.W., Chester, B., & Goldman, D. (1996). Cumulative trauma and PTSD in American Indian communities (pp. 239-253). In Marsella, A.J., Friedman, M.J., Gerrity, E.T., & Scurfield, R.M. (Eds), *Ethnocultural aspects of Post-traumatic Stress Disorder.* Washington, DC: American Psychological Press

References-Brave Heart continued

- Robin, R., Chester, B., Rasmussen, J., Jaranson, J. & Goldman, D. (1997). Prevalence and characteristics of trauma and posttraumatic stress disorder in a southwestern American Indian community. *American Journal of Psychiatry, 154*(11), 1582–1588.
- Shear, K., Frank, E., Houck, P.R., and Reynolds, C.F. Treatment of complicated grief: A randomized controlled trial, 2005, *JAMA, 293* (21), 2601-2608.
- US Senate Miscellaneous Document, #1, 40th Congress, 2nd Session, 1868, [1319]

References-Brave Heart continued

- Brave Heart, M.Y.H. (1999) Gender differences in the historical trauma response among the Lakota. *Journal of Health and Social Policy, 10*(4), 1-21.
- Brave Heart, M.Y.H. (1999). “Oyate Ptayela: Rebuilding the Lakota nation through addressing historical trauma among Lakota parents.” Journal of Human Behavior in the Social Environment, 2(1-2), 109-126.
- Whitbeck LB, Adams GW, Hoyt DR, & Chen X, (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Psychology,* 33(3-4):119-30.
- Brave Heart MYH, DeBruyn LM (1998) The American Indian holocaust: healing historical unresolved grief. Am Indian Alaska Nat 8(2):56–78. doi:10.5820/aian.0802.1998.60
- Beals J, Manson SM, Croy C, Klein SA, Whitesell NR, Mitchell CM, AI-SUPERPFP Team (2013) Lifetime prevalence of post- traumatic stress disorder in two American Indian reservation populations. J Trauma Stress 26(4):512–520. doi:10.1002/jts. 21835