

Trauma Informed Health Care Pharmacist SUD ECHO

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Agenda

- Review TIC concepts
 - Physiology and health effects of trauma
 - ACES, adolescent & adult trauma
- Health disparities and racism
- Trauma Informed Health Care
 - What is it?
 - Why bother?
- Discussion



What is Trauma? (SAMHSA)

- Individual trauma results from an event, series of events, or set of circumstances that are experienced by an individual as physically or emotionally harmful or life threatening and that have lasting effects on the individuals' functioning and mental, physical, social, emotional or spiritual well-being



What is Trauma?

- Includes, but not limited to:
 - Experiencing or witnessing physical, sexual or emotional violence
 - Natural disasters
 - Terrorism & war
 - Losses
 - Persistent cultural & racial inequities
 - Racism



The Experience of Trauma

(SAMHSA)

- “How the individual labels, assigns meaning to, and is disrupted physically and psychologically by an event will contribute to whether or not it is experienced as traumatic.”
- Resilience and prior trauma experiences are key factors



We All Experience Trauma

Remember:

- trauma effects all of us
- the same principles apply to interactions with our colleagues
- learning about and interacting with those who have experienced trauma can trigger us!



Trauma Experiences

- Profound life events
- Childhood
- Adolescent/Adult
- Current & Ongoing
- Past
- Multiple
- Multi/Inter/Intra-generational, Historic



Adverse Childhood Events (ACE) Study

(Feletti & Anda, et al., 1998)

- Over 17,000, mostly white and college educated Kaiser Permanente patients

- Questioned about childhood trauma
 - Physical, emotional, or sexual abuse or neglect
 - Witnessing domestic violence
 - Mental illness or substance abuse in childhood home
 - Parental separation or divorce
 - Incarcerated household member

- Questioned about health in adulthood



Adverse Childhood Events (ACE) Study

(Feletti & Anda, et al., 1998)

Outcomes

- Physical health (major causes of death)
 - Obesity, DM, depression, suicide, STIs, heart disease, cancer, stroke, COPD, broken bones
- Health behaviors
 - Smoking, alcohol and drug use/abuse
- Life potential
 - Decreased graduation, academic achievement, longevity
- Outcomes were dose-related; the more ACES the greater risk of negative health outcomes



AI/AN Children & Trauma (SAMHSA & NICWA)

- Compared to non-Indian peers:
 - 2.5 x more likely to experience trauma
 - Abuse and neglect
 - Violence reported by family members
 - Incarcerated parent(s)



Lifetime Trauma

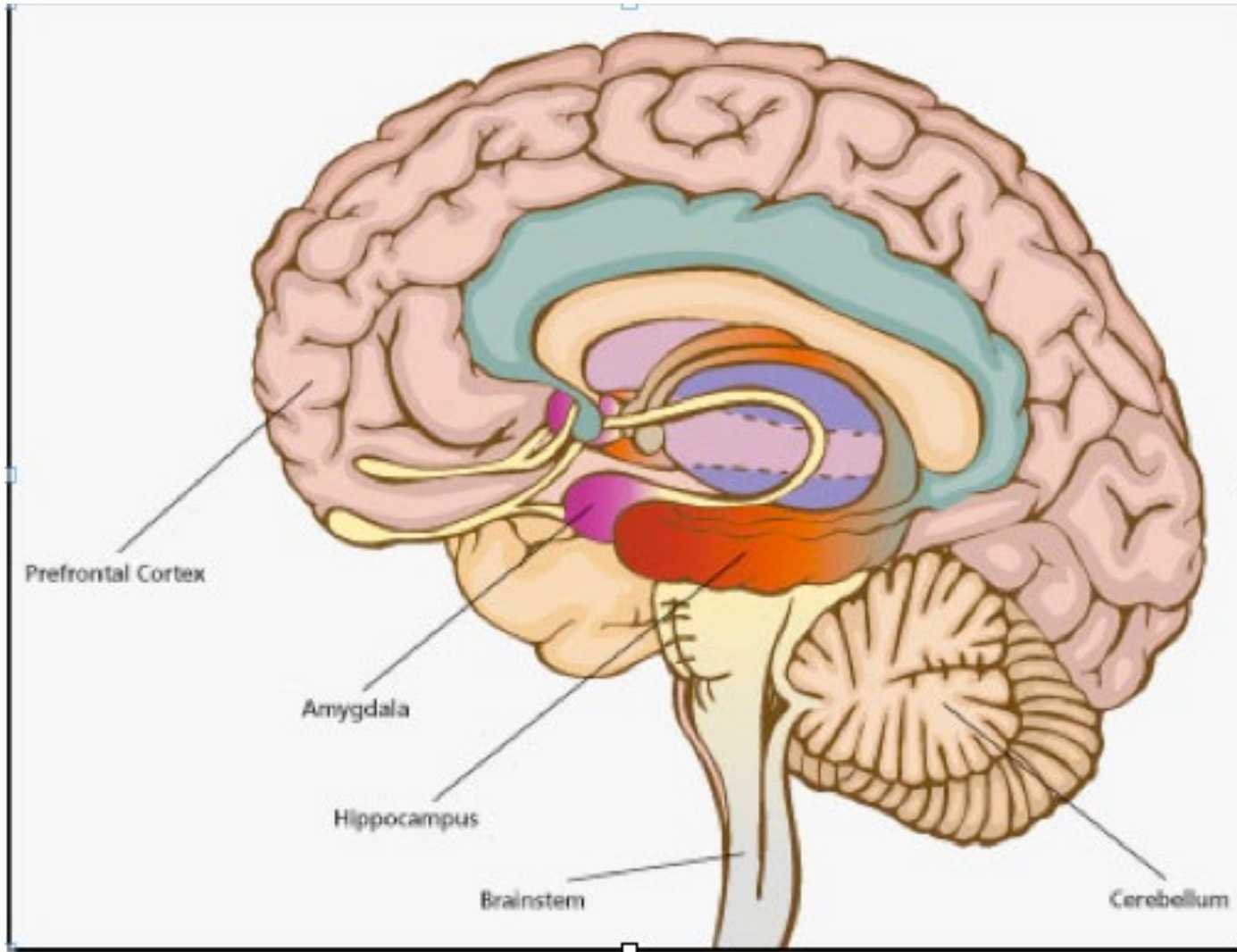
- Important to not just focus on childhood trauma!
- Childhood trauma is a risk factor for revictimization
- Adult trauma has similar effects
- Multiple/Repeated trauma has a cumulative impact



The Neurophysiology of Trauma



The brain on trauma





Key Functions of Prefrontal Cortex

- Higher level thinking and ‘top-down’ regulation
 - Problem solving, reason
 - Choosing where you focus attention and thoughts
 - Holding thoughts, memories, and other information in mind (so you can imagine alternatives to your present and past)
 - ‘Focusing inside’ and reflecting on your feelings, thoughts and actions
 - Inhibiting habits and automatic responses, including unhelpful ones
 - Regulating emotions, including how strong they are, how long they last, and how you express them (or not)



Our Reptilian/Primitive Brain: 'Bottom-up' regulation



The Hippocampus



- a finger-sized cluster of neurons, is the hub of memory and learning: *all conscious memory* must be processed through this structure of the brain.
- functions like a memory chip in a computer. It is involved in verbal and emotional memory.
- highly sensitive to stress hormones (e.g., cortisol).



The Amygdala



- An almond-sized structure that stores memories of fearful experiences
- Constantly monitors environment for threats
- Activates the fight-flight-freeze stress response when “danger” is detected
 - Increase heartrate & respirations
 - Increased blood flow to brain and limbs, decreased to other organs
- When highly activated, interferes with function of hippocampus
 - Filing memories of events cease





High Stress = Impaired Prefrontal Cortex (PFC)

- Stress chemicals basically **turn it off**
- Old and primitive brain structures take control
- **We can't...**
 - Control our attention
 - Remember our values
 - Think logically
 - Over-ride emotional reflexes or habits



Immediate Trauma/Stress Responses

■ When the PFC is taken 'off-line':

- Primitive brain is in charge
- Automatic/involuntary defense circuitry activated
- Fight-Flight-Freeze response
- Reflex and habit behaviors take over

■ Evolutionary origins:

- Rational thought is too slow
- Reflexes are instantaneous

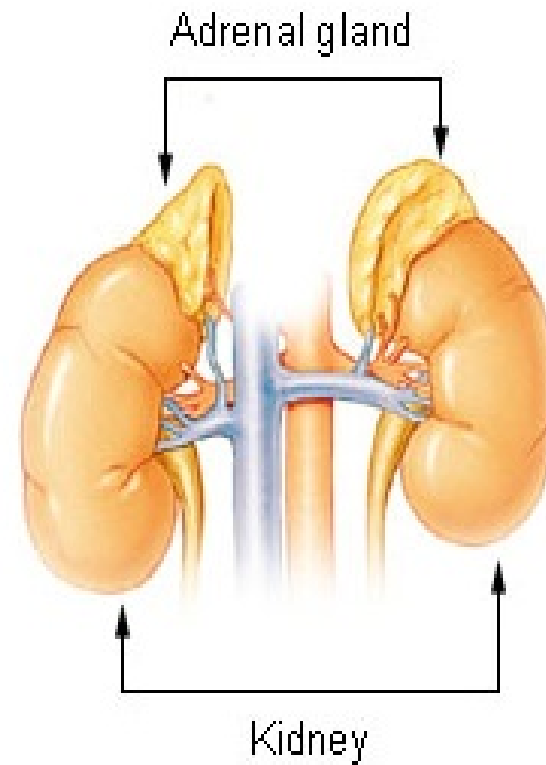
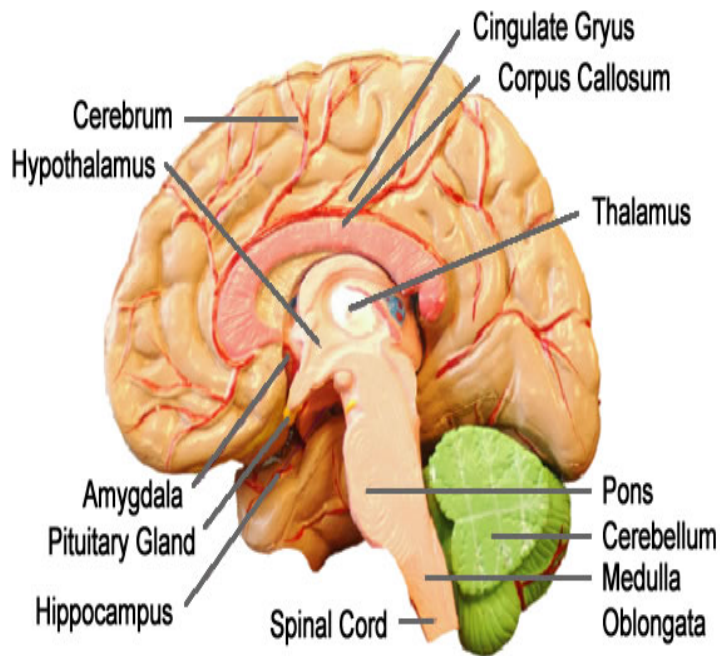


Responding to Threat

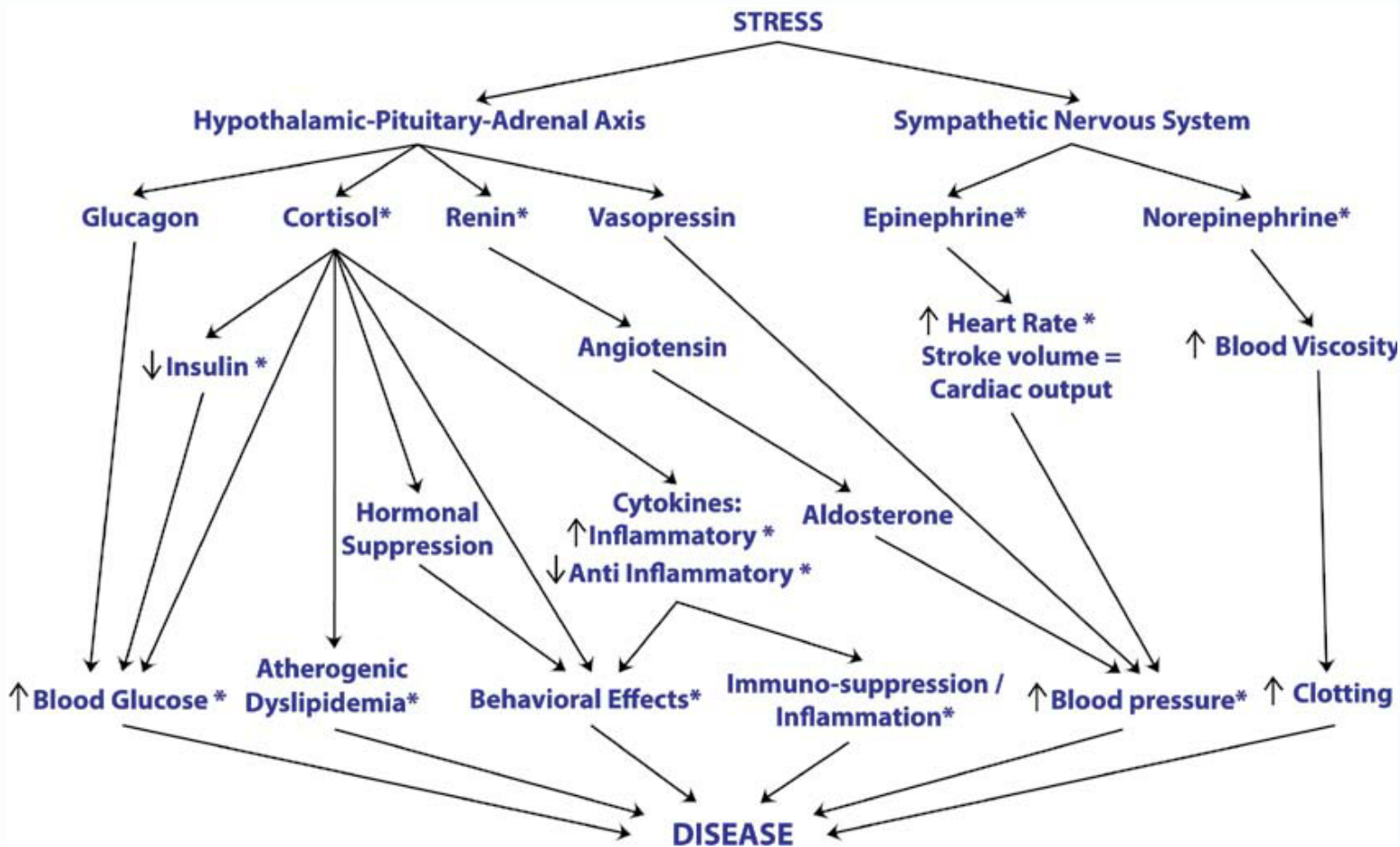


The Hypothalamic-Pituitary-Adrenal (HPA) Axis

Major Parts of the Brain



Physiology of Long Term Stress



Multiple & Repeated Trauma

- Hardwires the brain to over-respond
- Results in depression, anxiety, PTSD
- Results in Disease
 - Impaired immune system
 - Increased inflammatory response
 - Genetic alterations via methylation
 - Shortening of telomeres



What's Racism Got to Do With It?

- Racism causes health disparities!!!
- Racism is traumatic
- The trauma of racism is multigenerational
- Historic trauma creates an underlying layer of trauma
- Racism creates & reinforces the structural factors that hold groups in a cycle of oppression & trauma



Racism as Trauma

- Historic, inter & multigenerational
 - Daily micro and macro-aggressions
 - Stress & emotional injuries
 - Environmental stress & toxins
 - Physical injuries
 - Loss
 - Disease
 - Decreased lifespan
-
- Like with ACEs and abuse, the effects are cumulative or compounding



Health Care Responses to Trauma & Health Disparities

- Trauma informed approaches to health care and health care systems
- Trauma informed approaches to research



Trauma Informed Approach

- Incorporates knowledge of the presence and effects of trauma
- Changing the dialogue from “What is wrong with you?” to ‘What has happened to you?’



In Other Words

- Not shaming or blaming patients or colleagues who are triggered by seemingly innocuous events or who practice 'destructive' health behaviors
- Remembering that how we respond to stress on emotional and physical levels has a lot to do with our trauma history and our learned responses to trauma



A Trauma Informed Approach: The 4 R's (SAMHSA)

- **REALIZE:** the widespread impact of trauma on individuals, communities & organizations
- **RECOGNIZE:** signs and symptoms of trauma in clients, families, staff and others
- **RESPOND:** by fully integrating knowledge about trauma into policies, procedures, practice
- **RESIST:** seek to actively resist re-traumatization of clients and staff



Key Principles of a Trauma-Informed Approach (SAMHSA & others)

- Safety: emotional/psychological and physical
- Trustworthiness & transparency: clear information & expectations, transparent decisions
- Peer support: Offer mutual self-help from advocates and professional survivors
- Collaboration & Mutuality: emphasize partnering and leveling of power among staff and with patients. Shared power & decision making
- Empowerment, Voice & Choice: Recognize & build upon strengths. Belief in primacy, resilience and ability to heal. Understand effects of power imbalances on voice and choice
- Cultural, Historical and Gender Issues: recognize and address victimization, examine organizational structure & responses including stereotypes, biases & structural racism. Respond to the racial, ethnic & cultural needs. Address historical trauma



Why does TIC matter?

- Includes the use of universal trauma precautions and trauma-specific care
- Allows healing rather than just treating
- Improves patient and provider experiences
- When the patient is an active partner, they are more likely to carry through



Thank you for the contributions of the following:

 SAMHSA

 Center for Health Care Strategies

 Russel Strand

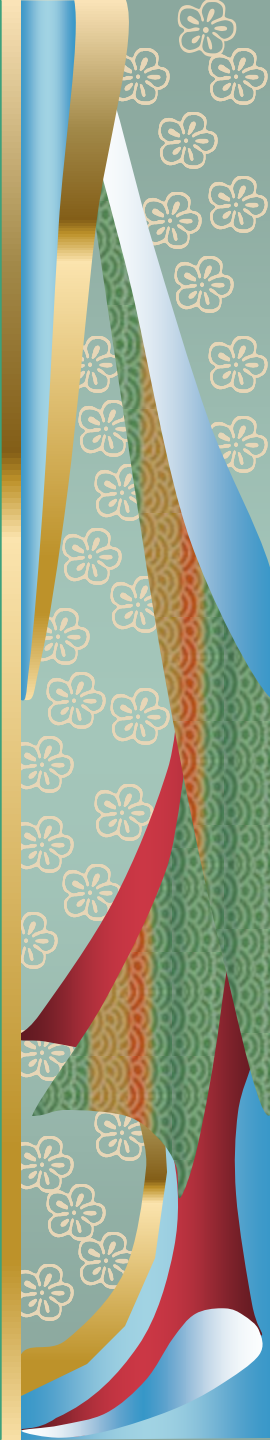
 Rebecca Campbell, PhD

 Jim Slater, PharmD



Resources

- Center for Health Care Strategies, Inc
- SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach
- Trauma-Informed Care Implementation Resource Center
- National Child Trauma Stress Center
- Futures Without Violence
- Many, many more!
- Numerous YouTube videos that address the neurobiology and physiology of trauma (request list from Diane if interested)



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