



CALIFORNIA AREA INDIAN HEALTH SERVICE Project ECHO®

Recognizing and Responding to Adversity and Toxic Stress in Native American Youth

Steven Sust and Shoshoni Gensaw-Hostler 2/10/22



Learning Objectives

At the end of this presentation, participants will be able to:

- Recognize the concept that lifelong disparities are determined by social, behavioral and economic factors.
- List three practical therapeutic interventions working with youth presenting clinically with adverse experiences.
- Acquire new knowledge in understanding advocacy for clients experiencing toxic stress in American Indian and Alaska Native communities.





Introducing the Presenter

Steven Sust is the middle child of 3 boys born to Hong Kong immigrant parents who raised them in downtown Philadelphia. He received a bachelor's degree in psychology from GWU, medical degree from UVA, and postgraduate training at UPenn and Stanford. His work experiences range broadly from state psychiatric hospitals, county specialty MH clinics and emergency rooms to school mental health and schizophrenia research at NIMH. Current interests include primary care behavioral health integration, cultural psychiatry, school mental health, and working with underserved populations.



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Disclosure Statement

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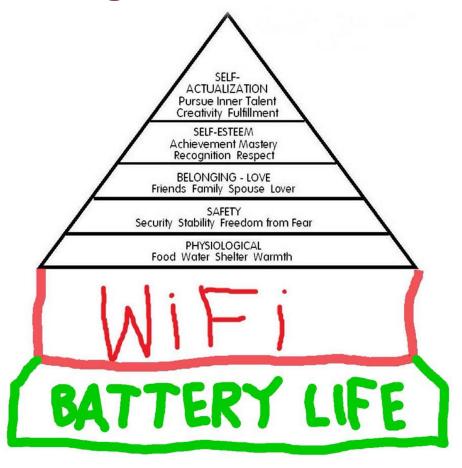
Personal Disclosures

- •I am a cisgender male of Cuban influenced Chinese descent
- I have no formally diagnosed family history of mental illness
- I have sought out and received my own mental health care
- •I have both knowingly and unknowingly contributed to bias and most "isms," and will try to improve upon these areas of growth





Starting From a Humanistic Perspective











The Continuum of Stress

STRESS IN CHILDHOOD

Three Types

Stress is a mental, physical, or biochemical response to a perceived threat or demand. Stress is a natural and inevitable part of childhood. But the type of stress can make a difference in the impact on a child's brain and body, as well as potential effects that can last a lifetime.

POSITIVE STRESS

Normal, typical childhood experiences

Child care drop off and pick up



Common Stressors



Common Stressors

Buffering

Brain & Body

Long-term

Playground injuries



Losing a game

No buffering support necessary



Temporary, mild elevation in stress hormones





TOLERABLE STRESS

More complicated, scary, challenging, and long-lasting



Natural or manmade tragedy

Parents' divorce

Poverty





Caring adult buffers stress

More severe, continuing cardiovascular and hormonal response







Adaption and recovery likely, but potential for lasting physical or emotional damage



TOXIC STRESS

Severe, long-lasting, uncontrollable, and/or frequent stress



Physical, sexual, or mental abuse



Neglect



Severe economic hardship



Common Stressors

Brain & Body

No adult buffers child from stress



Prolonged activation of stress response system Disrupted development of brain circuits

Immune system depression



Possible lifelong changes, such as:



Heart disease Alcoholism



Memory, learning, multitasking difficulties





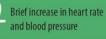
http://www.nimh.nih.qov/health/publications/stress/index.shtml

http://developingchild.harvard.edu/topics/science of early childhood/toxic stress response

http://www.cdc.gov/ncipc/pub-res/pdf/childhood_stress.pdf

http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/wp3





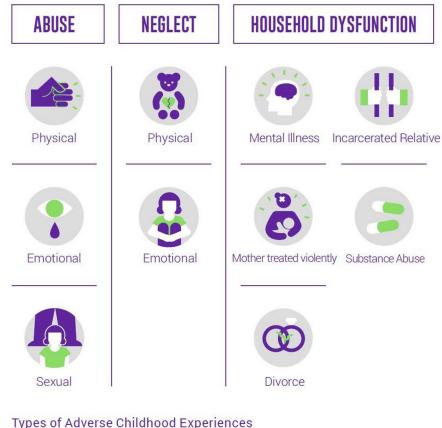






Adverse Childhood Experiences(ACEs)

The three types of ACEs include



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







Imperfect Epidemiology

Child Maltreatment* Rate (Unique Victims per 1,000 Population), by Race¹ and Hispanic Origin: 2017



¹Estimates for specific race groups have been revised to reflect the new OMB race definitions, and include only those who are identified with a single race. Hispanics may be of any race.

Source: U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth, and Families, Children's Bureau. (2019). Child Maltreatment 2017. Retrieved from https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

childtrends.org

Reflecting numerous factors, including poverty and institutional biases, non-Hispanic black, American Indian or Alaska Native, and multiple-race children have higher rates of reported child maltreatment than other children. In 2017, the reported maltreatment rate for non-Hispanic black children was 14 per 1,000 children, 14 per 1,000 for American Indian and Alaska Native children, and 11 per 1,000 for multiple-race children. This compares with rates of 9 for non-Hispanic Pacific Islander children, 8 for Hispanic children, 8 for non-Hispanic white children, and 2 for non-Hispanic Asian children (Appendix 2).

* Estimates for white, black, American Indian/Alaskan Native and Asian/Pacific Islander youth in this report do not include Hispanic youth. Hispanic children and youth may be of any race.





From Bench to Bedside

THE MARKING OF A GENOME

The expression of genes can be modified by chemical marks on the DNA and on the proteins around which it wraps. Some are considered stable, whereas others change throughout life.

DNA Methyl Histone

DNA methylation: Methyl groups are attached directly to cytosine bases in DNA and generally

Phosphate group

Acetyl group

Histone modification: The histone proteins around which DNA wraps can be methylated, phosphorylated, acetylated and more. These marks influence the binding of other proteins, chromatin structure and gene expression. They can generally be remodelled throughout life.



...fertilization

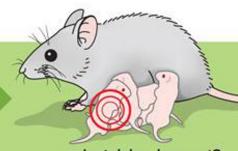
Just after embryo formation, methyl groups are stripped from the paternal DNA and methylation is reset for development.

silence nearby genes. Removal of these marks occurs during...



...fetal development

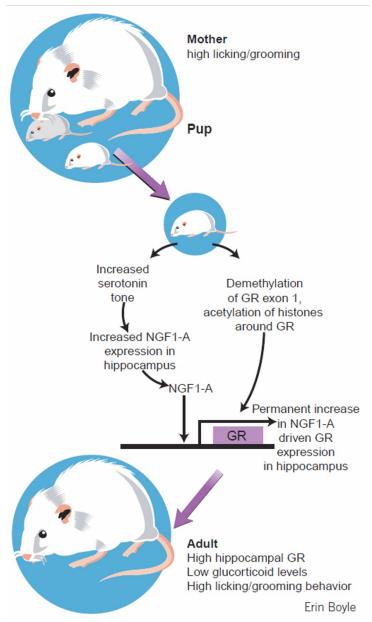
Genome-wide demethylation occurs again during the development of primordial sex cells (sperm or eggs) in the fetus.

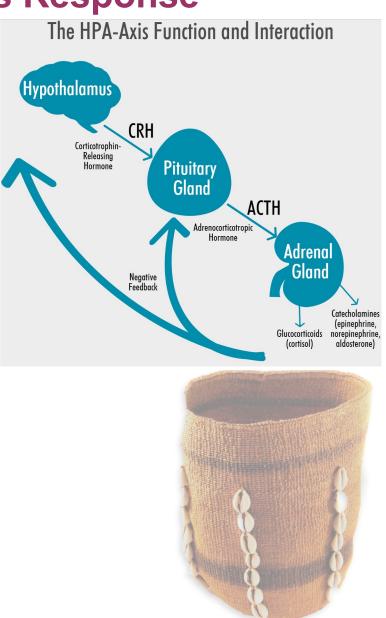


...perinatal development?

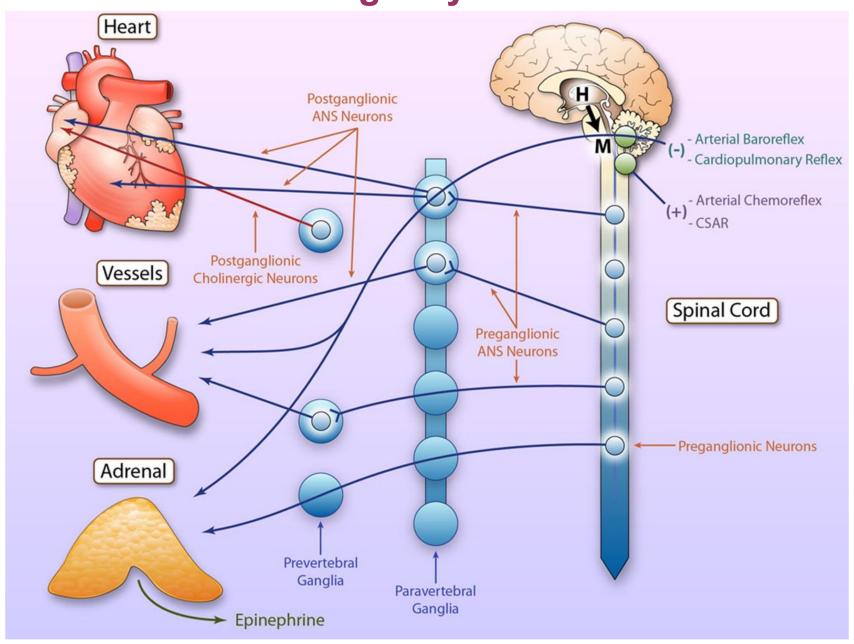
Before and after birth, diet and stress may contribute to further demethylation of genes, which may influence behaviour.

Endocrine Stress Response





Adrenergic Systems



Initial Medication Options

Drug Name	Duration	Dosages	Usual Starting Dose	FDA Max Daily Dose	Editorial Comments
Clonidine (Catapres)	12 hour ½ life	0.1, 0.2, 0.3 mg	0.05mg QHS if <45kg, other- wise 0.1mg QHS Caution if <5 yr.	(Not per FDA) 27-40kg 0.2mg 40-45kg 0.3mg >45kg 0.4mg	Often given to help sleep, also treats tics, can have rebound BP effects
Clonidine XR (Kapvay)	12-16 hours	0.1, 0.2 mg	0.1mg QHS	0.4mg daily	Lower peak blood level, then acts like regular clonidine (similar 1/2 life). Still is sedating. Approved for combo with stimulants
Guanfacine (Tenex)	14 hour ½ life	1, 2 mg	0.5mg QHS if <45kg, other- wise 1mg QHS Caution if <5 yr.	(Not per FDA) 27-40kg 2mg 40-45kg 3mg >45kg 4mg	Often given to help sleep, also treats tics, can have rebound BP effects
Guanfacine XR (Intuniv)	16 hour ½ life	1, 2, 3, 4 mg	1mg QD if over 6 years old (full dosage 0.05 to 0.12mg/kg)	4mg daily	Lower peak blood level, then acts like regular Tenex (similar 1/2 life) Still is sedating. Ap- proved for combo with stimulants

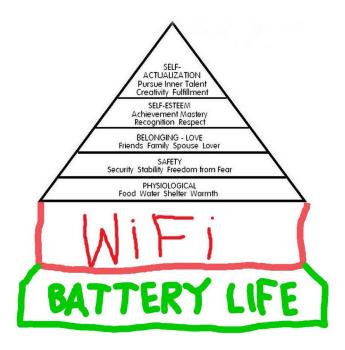


ink to Washington Partner Access Line



Brief intermission

List some of your favorite coping skills for youth and young adults









Strengths-based Approach



Contents lists available at ScienceDirect

Child Abuse & Neglect





Research article

Positive childhood experiences predict less psychopathology and stress in pregnant women with childhood adversity: A pilot study of the benevolent childhood experiences (BCEs) scale



Angela J. Narayan^{a,b,*}, Luisa M. Rivera^c, Rosemary E. Bernstein^b, William W. Harris^d, Alicia F. Lieberman^b

Table 1BCEs Items and Frequencies for Prenatal Sample and Postnatal Follow-up.

When you were growing up, during your first 18 years of life...

Item	Question	Prenatal $(n = 101)$	Postnatal $(n = 77)$
1	Did you have at least one caregiver with whom you felt safe?	90%	96%
2	Did you have at least one good friend?	87%	92%
3	Did you have beliefs that gave you comfort?	69%	75%
4	Did you like school?	67%	81%
5	Did you have at least one teacher who cared about you?	82%	90%
6	Did you have good neighbors?	59%	71%
7	Was there an adult (not a parent/caregiver or the person from #1) who could provide you with support or	78%	81%
	advice?		
8	Did you have opportunities to have a good time?	86%	91%
9	Did you like yourself or feel comfortable with yourself?	67%	79%
10	Did you have a predictable home routine, like regular meals and a regular bedtime?	81%	82%
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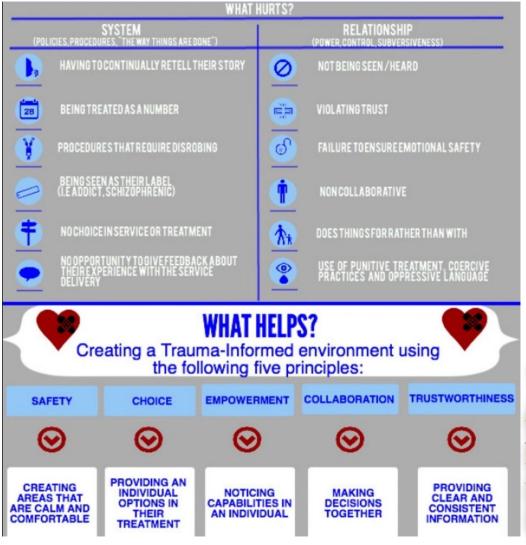
a University of Denver, Department of Psychology, United States

b University of California, San Francisco, Department of Psychiatry/Child Trauma Research Program, United States

^c Department of Anthropology, Emory University, United States

d Children's Research and Education Institute, New York City, United States

Trauma Informed Care







Presenter Contact Information

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- Child, adolescent, and general psychiatrist
- Stanford University
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Toxic Stress

"I am just a human being trying to make it in a world that is rapidly losing it's understanding of being human"

"Historically speaking, we went from being Indians to pagans to savages to hostiles to militants to activists to native americans. It's 500 years later and they still can't see us. We are still invisible"

-John Trudell







Introducing the Presenter

Shoshoni is a member of the Yurok Tribe. She was raised on the Yurok reservation in rural Northern California. She was the first member of her family to receive a bachelor's degree in Psychology with a minor in Native American Studies from Humboldt state University and a Masters in Psychology with emphasis in Counseling From Humboldt State University. Areas of study include body image and eating disturbances, and suicidality. She has worked within Native communities for 20 years in a variety of areas including education, social services, housing, transit, Diabetes care and more. Current interests include comprehensive program development, direct clinical care,



Shoshoni Gensaw-Hostler, AMFT, MA Noh-sue-no-wow' Suicide Program Manager Yurok Tribe





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Trauma Informed Application:

Self awareness- values work

Be aware of not contributing to clients stress load.

- -Am I within a position of power within this institution
- -Do I take extra steps to create safe space for clients
- -How do I benefit from the current institutional framework

Advocacy!

Be aware that positive experiences can be stress inducing. This is an appropriate and expected reaction.









Screenings:

- Ages and Stages questionnaire
- ACES, AAHC's (ACE Associate Health Conditions)
- CYW ACE-Q child, teen. teen SR
- SEEK Parent screening Questionnaire revised (PSQ-R)
- SWYC
- Pediatric Traumatic Stress Screening Tool
- We Care Survey

Medical Home Portal - Toxic Stress Screening





Achievable goals for Clinicians

Team approach -trust, safety collaborative decision making

Environment is calm, safe and empowering

Education about the impacts of current and past trauma and adversity on health

Onsite community based resources and treatment







Achievable goals for Clinicians



Teach ACE-associated health conditions and stress response regulation

- Supportive relationships
- high quality sufficient sleep
- balanced nutrition
- regular physical activity
- mindfulness and meditation
- experience nature
- mental health supports
- ASK







Menominee Tribe



To strengthen resiliency through culture, acknowledging trauma informed care and bringing ACES education to our community.

ACEs_infographic_print_2015.4.5_v2_flat.pdf
LocalCommunityHealthImpactOfTrauma.jpg (687×890) (menominee-nsn.gov)





Resources

Two Feather NAFS youtube channel

"He Oranga Ngākau: Māori Approaches to Trauma Informed Care" with Dr. Linda Tuhiwai Smith - YouTube

"Healing the Soul Wound" with Dr. Eduardo Duran Conversation - YouTube

Ka'm-Tem

https://kamtem-indigenousknowledge.com/#:~:text=Ka%E2%80%99m-t%E2%80%99em%20translates%20in%20the%20Yurok%20language%20as%20a,of%20resistance%2C%

Books:

Heart Berries by Terese Marie Mailhot (goodreads.com)

Ka'm Tem







Presenter Contact Information

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