DISCLOSURES:

- Laura Montgomery-Barefield, M.D. : None
- Kathy Scott-Gurnell, M.D. : None

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THE BODY KEEPS SCORE ADVERSE CHILDHOOD EXPERIENCES (ACE), RACIAL TRAUMA AND IT'S SEQUELAE

LAURA MONTGOMERY-BAREFIELD,M.D.
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2

2

GOALS AND OBJECTIVES

- Define the social determinants of health (SDOH)
- Discuss how SDOH and adverse childhood experiences (ACE) impact health and well-being
- Identify the impacts of bias and racism on healthcare, and their roles as risk factors for exposure to culturally-informed ACE (C-ACE)
- Describe the economic effects and health outcomes associated with C-ACE
- Recognize the role of managed care in influencing pertinent changes in care that can help to decrease C-ACE

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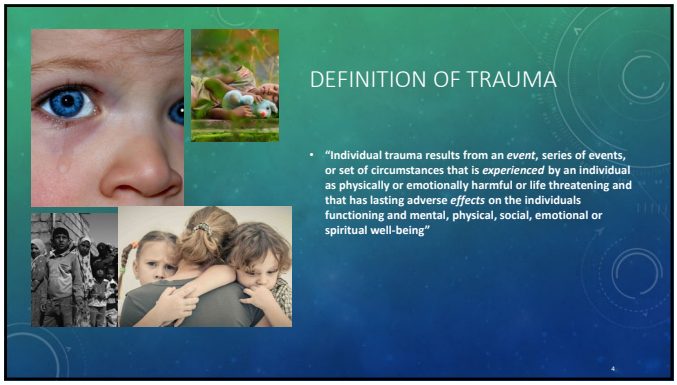
DEFINITION OF TRAUMA
• "Individual trauma results from an *event*, series of events, or set of circumstances that is *experienced* by an individual as physically or emotionally harmful or life threatening and that has lasting adverse *effects* on the individuals functioning and mental, physical, social, emotional or spiritual well-being"
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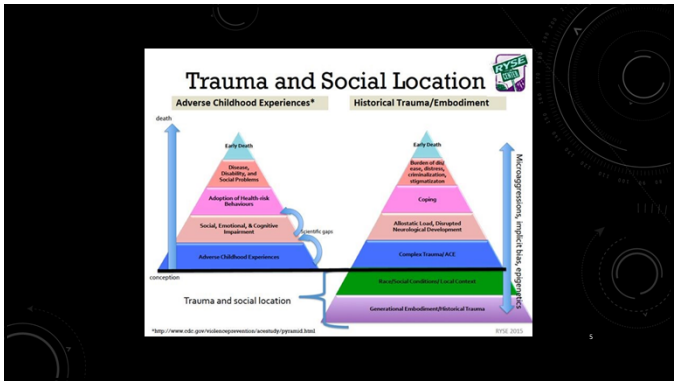
Trauma and Social Location
Adverse Childhood Experiences*
Historical Trauma/Embodiment
death
conception
Early Death
Disease, Disability, and Social Problems
Adoption of Health-risk Behaviours
Social, Emotional, & Cognitive Impairment
Adverse Childhood Experiences
Scientific gaps
Trauma and social location
Coping
Allostatic Load, Disrupted Neurological Development
Complex Trauma/ ACE
Race/Social Conditions/ Local Context
Generational Embodiment/Historical Trauma
Macro-aggressions, implicit bias, stigma etc.
*http://www.cdc.gov/violenceprevention/acestudy/pyramid.html
RYSE 2015
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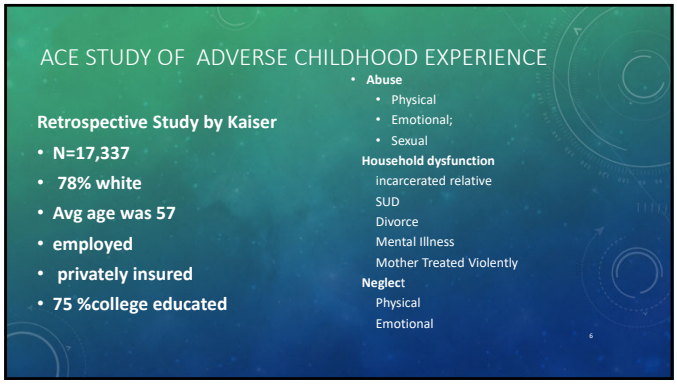
ACE STUDY OF ADVERSE CHILDHOOD EXPERIENCE
Retrospective Study by Kaiser
• N=17,337
• 78% white
• Avg age was 57
• employed
• privately insured
• 75 %college educated
• Abuse
• Physical
• Emotional;
• Sexual
Household dysfunction
incarcerated relative
SUD
Divorce
Mental Illness
Mother Treated Violently
Neglect
Physical
Emotional
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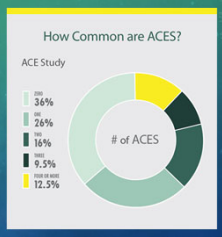
ACE FINDINGS:

64% had at least one or more ACE

12.5% had 4 or more ACE

36% *HAD ZERO ACE*



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C-ACE: THE PHILADELPHIA ACE STUDY

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Table 1. Demographic Characteristics of Participants in the Kaiser Study and BRFSS ACE Suvey, and Philadelphia Residents, 18 years and older, 2013

Kaiser Study		BRFSS ACE Survey		Philadelphia Residents	
Race		**Race**		**Race**	
White	74.8% (n=12,968)	White, non-Hispanic	75% *(N=19,770)*	White	38.8% *(N=466,677)*
Black	4.6% (n=798)	Black, non-Hispanic	10% *(N=2,662)*	Black	36.1% *(N=434,312)*
Hispanic	11.2% (n=1,942)	Hispanic	8.5% *(N=2,217)*	Latino	11.4% *(N=136,697)*
Asian	7.2% (n=1,248)	Other, non-Hispanic	5% *(N=1,381)*	Asian	6.2% *(N=74,916)*
Other	1.9% (n=329)			Biracial	7.4% *(N=88,939)*
Education		**Education**		**Education**	
Not HS graduate	7.2% (n=1,248)	<High school	10% *(N=2,646)*	<High school	20.0% *(N=202,166)*
HS graduate	17.6% (n=3,051)	High school	28% *(N=7,379)*	HS graduate	35.7% *(N=359,983)*
Some college	35.9% (n=6,224)	> High school	62% *(N=16,175)*	Some college	21.8% *(N=220,191)*
College graduate or higher	39.3% (n=6,813)			College graduate	22.5% *(N=226,748)*
All Participants	17,337		26,229	**Total Residents**	1,201,541

Data Source: Felitti, et al.[xxi] and Centers for Disease Control and Prevention[xxii] and Nielsen-Claritas 2013 Pop-Facts Database. Prepared by the Research and Evaluation Group at PHMC

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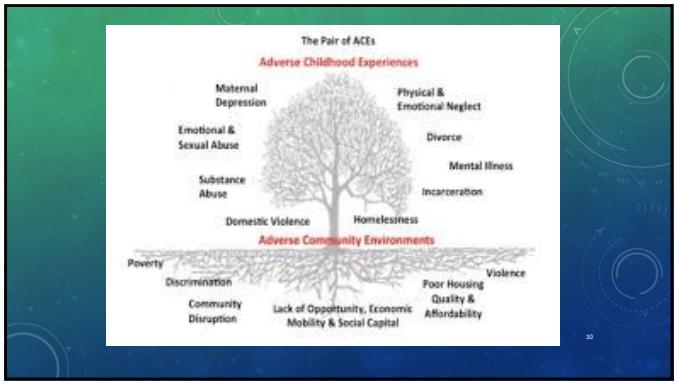
The Pair of ACEs
Adverse Childhood Experiences
Maternal Depression
Physical & Emotional Neglect
Emotional & Sexual Abuse
Divorce
Mental Illness
Substance Abuse
Incarceration
Domestic Violence
Homelessness
Adverse Community Environments
Poverty
Violence
Discrimination
Poor Housing Quality & Affordability
Community Disruption
Lack of Opportunity, Economic Mobility & Social Capital
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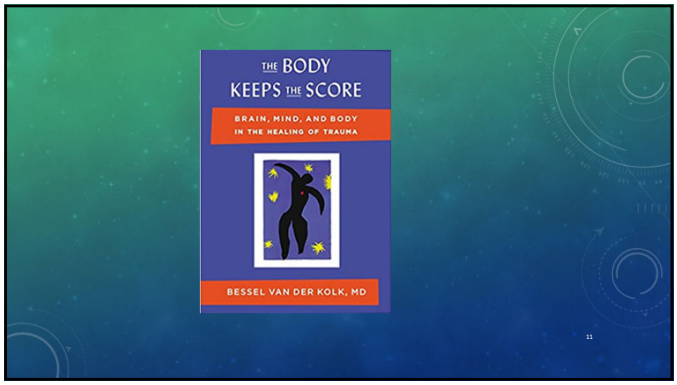
THE BODY KEEPS THE SCORE
BRAIN, MIND, AND BODY IN THE HEALING OF TRAUMA
BESSEL VAN DER KOLK, MD
11

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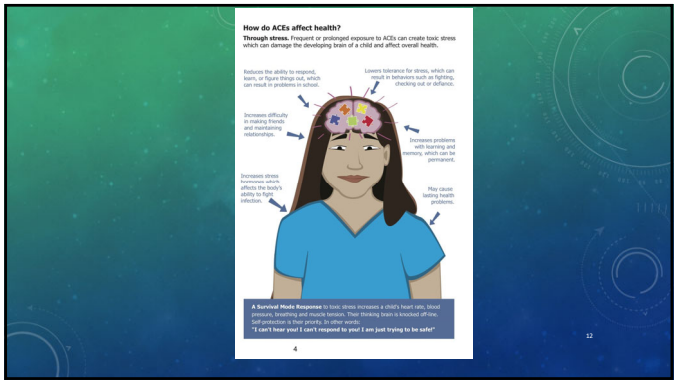
How do ACEs affect health?
Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.
Reduces the ability to respond, learn, or figure things out, which can result in problems in school.
Lowers tolerance for stress, which can result in behaviors such as fighting, checking out or defiance.
Increases difficulty in making friends and maintaining relationships.
Increases problems with learning and memory, which can be permanent.
Increases stress hormones which affects the body's ability to fight infection.
May cause lasting health problems.
A Survival Mode Response to toxic stress increases a child's heart rate, blood pressure, breathing and muscle tension. Their thinking brain is knocked offline. Self-protection is their priority. In other words:
"I can't hear you! I can't respond to you! I am just trying to be safe!"
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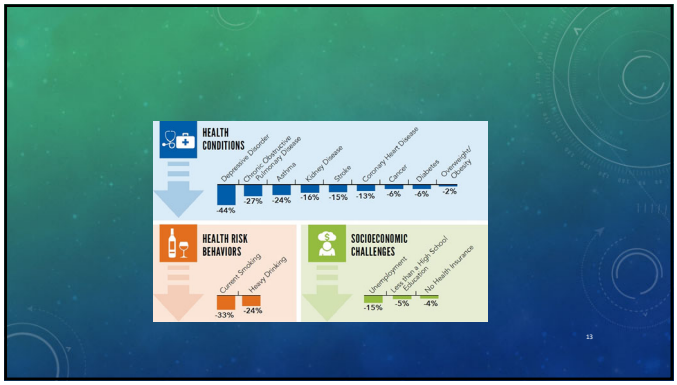
HEALTH CONDITIONS
Depressive Disorder -44%
Chronic Obstructive Pulmonary Disease -27%
Asthma -24%
Kidney Disease -16%
Stroke -15%
Coronary Heart Disease -13%
Cancer -6%
Diabetes -6%
Overweight/ Obesity -2%
HEALTH RISK BEHAVIORS
Current Smoking -33%
Heavy Drinking -24%
SOCIOECONOMIC CHALLENGES
Unemployment -15%
Less than a High School Education -5%
No Health Insurance -4%
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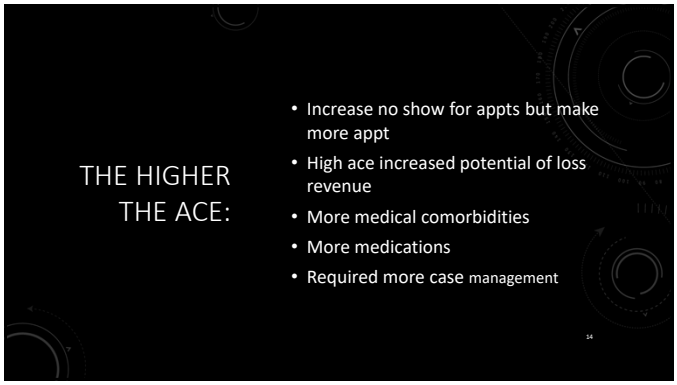
THE HIGHER THE ACE:
• Increase no show for appts but make more appt
• High ace increased potential of loss revenue
• More medical comorbidities
• More medications
• Required more case management
14

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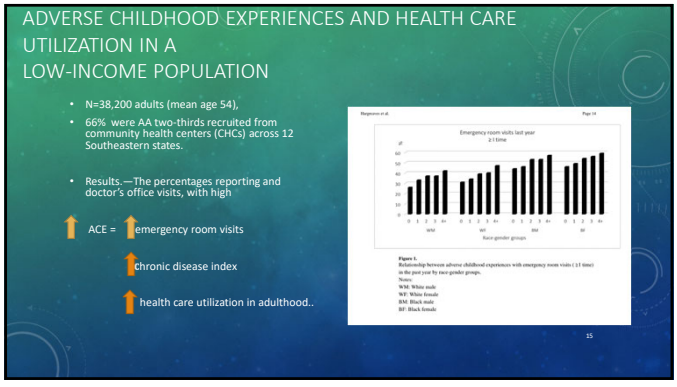
ADVERSE CHILDHOOD EXPERIENCES AND HEALTH CARE UTILIZATION IN A LOW-INCOME POPULATION
• N=38,200 adults (mean age 54),
• 66% were AA two-thirds recruited from community health centers (CHCs) across 12 Southeastern states.
• Results.—The percentages reporting and doctor's office visits, with high
ACE = emergency room visits
chronic disease index
health care utilization in adulthood..
15

15

FINDINGS:

- Inequality is a disease.
- Unequal access to basic care
  - The wait list too long eye exam 1day vs 1year
  - The organs came from poor blacks 30% came from the uninsured they gave and never received
- Toxic stress of poverty and violence (ACE) and SDOH
- Decreases Life expectancy (14 yr difference)

16

16

BEYOND ACE

Immigration Status	Housing Conditions	Gender discrimination	War and Social Conflict
Poverty	Opioid Crisis	**Racism**	

17

17

WHAT DO YOU THINK OF WHEN YOU HEAR THE WORD 'DOCTOR'?" A HIGH SCHOOL STUDENTS PERSPECTIVE…

"Hero. Medicine. Caretaker. *Death.*"

"I think about the family members I've lost to the medical system, a system that failed to treat them with dignity or respect."

"Yeah, and doctors don't think we feel pain the same as White people do, so they give us less medicine."

"I really want to be a doctor, but I'm terrified to be a patient."

https://www.nejm.org/doi/full/10.1056/NEJMpv2105339

18

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Health Care and Quality
Neighborhood and Built Environment
Social and Community Context
Education Access and Quality
Economic Stability
SDOH

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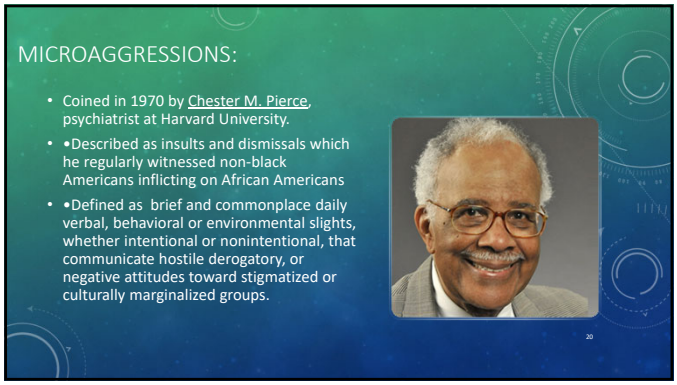
MICROAGGRESSIONS:
• Coined in 1970 by Chester M. Pierce, psychiatrist at Harvard University.
• •Described as insults and dismissals which he regularly witnessed non-black Americans inflicting on African Americans
• •Defined as brief and commonplace daily verbal, behavioral or environmental slights, whether intentional or nonintentional, that communicate hostile derogatory, or negative attitudes toward stigmatized or culturally marginalized groups.
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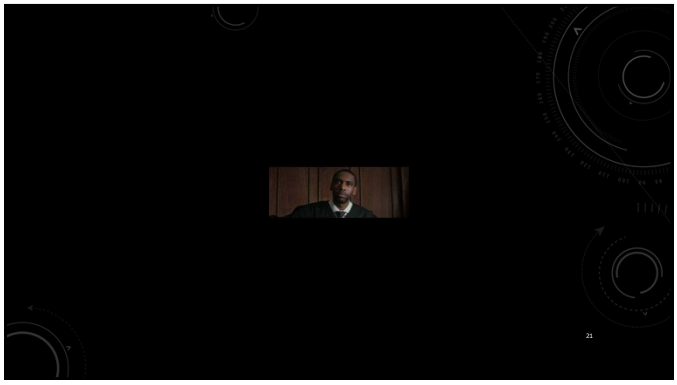
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WAS THIS REALLY RACISM?

RACISM AS A ROOT CAUSE APPROACH: A NEW FRAMEWORK

If the population you are engaging with is experiencing at least one of the following, racism is likely at the root of this population's health outcome disparities:

- Barriers to wealth accumulation
- Educational inequities
- Disproportionate burden of displacement and housing insecurity
- Disparate treatment in the justice system
- Disparities by skin tone and/or color

22

RACE AS A SOCIAL DETERMINANT OF HEALTH:

- Landmark study in 2016:
- **Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites**
- Results:
  - **40% 1st and 2nd year medical students believed that the skin of black people is thicker than white skin.**

Students who believed that black people are not as sensitive to pain as white people were less likely to treat black people's pain appropriately.

Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. Proc Natl Acad Sci U S A. 2016;113(16):4296-4301. doi:10.1073/pnas.1516047113

23

24

THE IMPACT OF RACISM ON CHILD AND ADOLESCENT HEALTH

Racism is a driver of health inequities.

Affects the wellbeing, expectations and aspirations of our children

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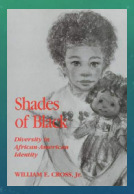
BLACK AMERICAN RACIAL IDENTITY (WILLIAM CROSS)



1. PRE-ENCOUNTER largely unaware of race or racial implications
2. ENCOUNTER: forced by event or series of events to acknowledge the impact of racism in one's life and the reality that one cannot truly be white
3. IMMERSION/EMERSION: simultaneous desire to surround oneself with visible symbols of one's racial identity
4. INTERNALIZATION: secure in one's own sense of racial identity; pro-black
5. INTERNALIZATION-COMMITMENT: found ways to translate one's personal sense of blackness into a plan of action or a general sense of commitment to concerns of blacks as a group

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THE PROCESS:

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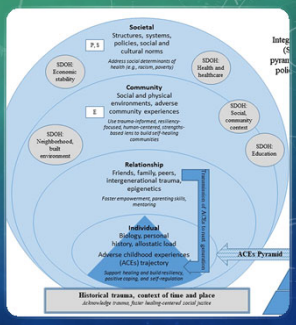
BEST PRACTICE FOR HEALTH EQUITY



https://onlinelibrary.wiley.com/cms/asset/ec1b5f11-c4dc-4d51-8fa1-01133f7e52de/spc312486-fig-0001-m.jpg

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TARGETED UNIVERSALISM

https://diversity.ucsf.edu/sites/diversity.ucsf.edu/files/Targeted_Universalism_with_john_a_powell_at_UCSF_slideshow.pdfTargeted Universalism provides a solution to structural inequities.

29

29

THE ROLE OF MANAGED CARE IN INFLUENCING CHANGE:

MAKE THE ACHIEVEMENT OF EQUITY A STRATEGIC GOAL.

- Encourage Primary care and MH providers to be self aware of their own bias
- Advocated for policies that improve the lived experience of these kids
- Promote policies and cross-sector partnerships that improve health outcomes

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ACTION ITEMS :

- *Changing* social norms that accept or allow indifference to violence and adversity is important in the prevention of ACEs
- *Promote* Social Norms that Protect Against Violence and Adversity
- *Promote community norms* around a shared responsibility for the health and well-being of all children
- Support parents and positive parenting, including norms around safe and effective discipline
- Foster healthy and positive norms around gender, masculinity, and violence to protect against violence towards intimate partners, children, and peers
- Reduce stigma around help-seeking
- *Enhance connectedness* to build resiliency in the face of adversity

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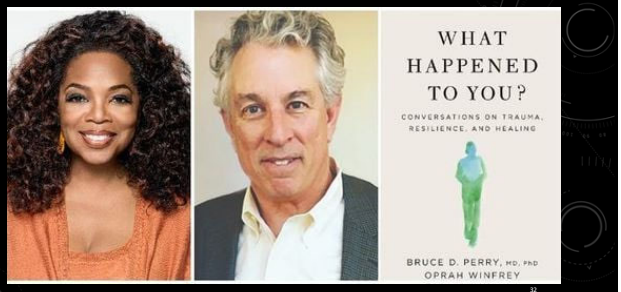

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SIX KEY PRINCIPLES OF A TRAUMA-INFORMED APPROACH

- Safety
- Trustworthiness and Transparency
- Peer Support
- Collaboration and Mutuality
- Empowerment, Voice and Choice
- Cultural, Historical, and Gender Issues

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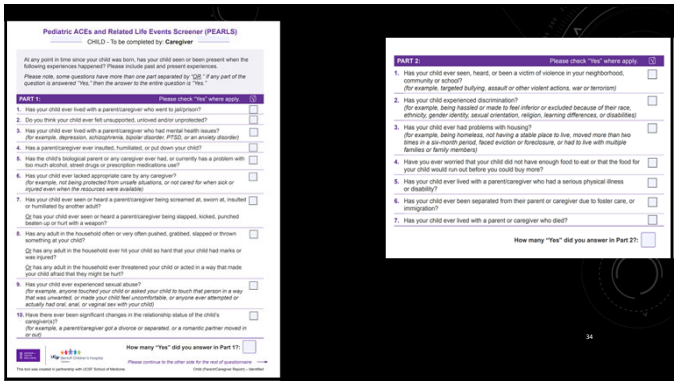

Pediatric ACEs and Related Life Events Screener (PEARLS)

CHILD - To be completed by: **Caregiver**

At any point in time since your child was born, has your child seen or been present when the following experiences happened? Please include past and present experiences.

Please note, some questions have more than one part separated by "OR." If any part of the question is answered "Yes," then the answer to the entire question is "Yes."

PART 1:	Please check "Yes" where apply
1. Has your child ever lived with a parent/caregiver who went to jail/prison?	
2. Do you think your child ever felt unsupported, unloved and/or unprotected?	
3. Has your child ever lived with a parent/caregiver who had mental health issues? *(for example, depression, schizophrenia, bipolar disorder, PTSD, or an anxiety disorder)*	
4. Has a parent/caregiver ever insulted, humiliated, or put down your child?	
5. Has the child's biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs or prescription medications use?	
6. Has your child ever lacked appropriate care by any caregiver? *(for example, not being protected from unsafe situations, or not cared for when sick or injured even when the resources were available)*	
7. Has your child ever seen or heard a parent/caregiver being screamed at, sworn at, insulted or humiliated by another adult? Or has your child ever seen or heard a parent/caregiver being slapped, kicked, punched beaten up or hurt with a weapon?	
8. Has any adult in the household often or very often pushed, grabbed, slapped or thrown something at your child? Or has any adult in the household ever hit your child so hard that your child had marks or was injured? Or has any adult in the household ever threatened your child or acted in a way that made your child afraid that they might be hurt?	
9. Has your child ever experienced sexual abuse? *(for example, anyone touched your child or asked your child to touch that person in a way that was unwanted, or made your child feel uncomfortable, or anyone ever attempted or actually had oral, anal, or vaginal sex with your child)*	
10. Have there ever been significant changes in the relationship status of the child's caregiver(s)? *(for example, a parent/caregiver got a divorce or separated, or a romantic partner moved in or out)*	

How many "Yes" did you answer in Part 1?:

Please continue to the other side for the rest of questionnaire →

This tool was created in partnership with UCSF School of Medicine

Child (Parent/Caregiver Report) – Identified

PART 2:	Please check "Yes" where apply.
1. Has your child ever seen, heard, or been a victim of violence in your neighborhood, community or school? *(for example, targeted bullying, assault or other violent actions, war or terrorism)*	
2. Has your child experienced discrimination? *(for example, being hassled or made to feel inferior or excluded because of their race, ethnicity, gender identity, sexual orientation, religion, learning differences, or disabilities)*	
3. Has your child ever had problems with housing? *(for example, being homeless, not having a stable place to live, moved more than two times in a six-month period, faced eviction or foreclosure, or had to live with multiple families or family members)*	
4. Have you ever worried that your child did not have enough food to eat or that the food for your child would run out before you could buy more?	
5. Has your child ever lived with a parent/caregiver who had a serious physical illness or disability?	
6. Has your child ever been separated from their parent or caregiver due to foster care, or immigration?	
7. Has your child ever lived with a parent or caregiver who died?	

How many "Yes" did you answer in Part 2?:

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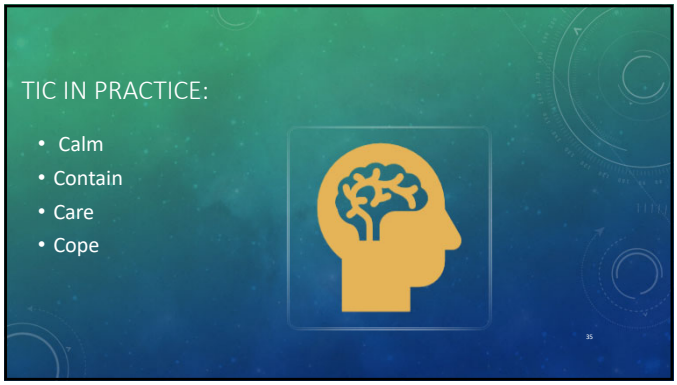

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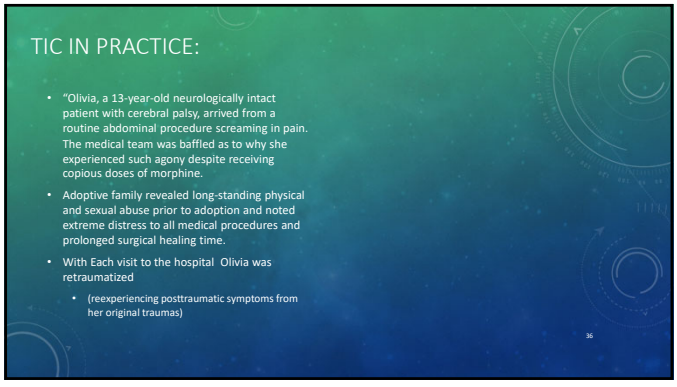

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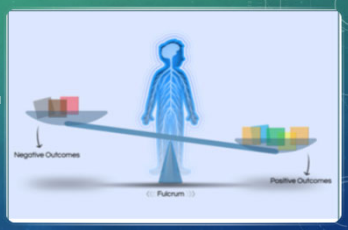
RESILIENCE: STACK THE SCALE

- **Facilitating supportive adult-child relationships;**
- Building a sense of self-efficacy and perceived control;
- providing opportunities to strengthen adaptive skills and self-regulatory capacities; and
- mobilizing sources of faith, hope, and cultural traditions.
- **Learning to cope with manageable threats is critical for the development of resilience.**



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RESOURCES FROM THE ACADEMY OF PEDIATRICS:

https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/resilience/Pages/Training-Toolkit.aspx

38

38

THE BODY KEEPS SCORE: HEALING TECHNIQUES:

Exercise
Mindfulness
Biofeedback
EMDR
Yoga
Parent Child Interaction Therapy (PCIT)
Play therapy
Family Therapy

39

39

IN SUMMARY :

ACE and Extended ACE are common and is a major economic burden in this country that negatively affect health outcomes.

In particular, Racism is a toxic stress that has far reaching mental and health effects for the victim, bystander and perpetrator.

Targeted Universalism provides a solution to structural inequities.

Best Practice includes efforts at the Individual, Familial, Community and Society levels

Addressing toxic stress requires trauma informed care approach and being aware that clinic and hospital settings may trigger re-traumatization in vulnerable youth.

Building resilience require stacking the scale with more positive outcomes

40

40

RESOURCES FOR PEDIATRICIANS AND MENTAL HEALTH PROVIDERS TO SCREEN FOR ACE:

aces aware
SCREEN. TREAT. HEAL.

Screening tools:
https://www.acesaware.org/screen/screening-tools/

Work flow algorithms
https://www.acesaware.org/wp-content/uploads/2019/12/ACE-Clinical-Workflows-Algorithms-and-ACE-Associated-Health-Conditions.pdf

Preventing Adverse Childhood Experiences

https://vetoviolence.cdc.gov/apps/aces-training/#/mhp/3-1-3#top

41

41