

Adverse Childhood Experiences: a public health approach to improve perinatal outcomes

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Objectives

- Discuss the impact of adverse childhood experiences (ACES) on adult wellbeing and perinatal outcomes
- Identify ways to develop community level efforts to identify and mitigate ACES
- Leave with concrete ideas for incorporating trauma informed care into programs and policies at your home institutions



*The well-being of mothers, infants & children determines the health of the next generation and can help **predict** future public health challenges for families, communities and the medical care system"*

-Healthy People 2020

The Impact of ACEs on Individuals and Communities

REVIEW OF THE BACKGROUND DATA

The five parts of ACEs science

Epidemiology of childhood adversity -- ACE surveys (who, how many, with what consequences). Original 10 questions (family focused), plus community and systems trauma.

Neurobiology -- Effects of toxic stress from ACEs on a child's developing brain.

Health consequences -- Long-term effects of toxic stress from ACEs on the body.

Epigenetic consequences -- Effects of toxic stress from ACEs that are passed from generation to generation.

Resilience research -- Ranging from studies that examine how brains can heal, to how trauma-informed schools heal children.

Adverse Childhood Experiences ARE COMMON

Household Dysfunction		Neglect		Abuse	
Substance Abuse	27%	Emotional	15%	Emotional	11%
Parental Sep/Divorce	23%	Physical	10%	Physical	28%
Mental Illness	17%			Sexual	21%
Battered Mothers	13%				
Criminal Behavior	6%				



ACEs ARE INTERRELATED

ACE Interplay © 2014

Prevalence of ACES

- Study of children held in a Chicago detention center found >50% had experienced more than six traumatic events prior to their detainment
- 60% of 0-17 experienced or witnessed maltreatment, bullying, or assault within year
- Incarcerated women were more likely to report a history of childhood sexual or physical abuse
- 70% of women age 18-69 in three prisons report sexual abuse - rape
- Incarceration is less safe for men and safer for women

http://www.justicepolicy.org/images/upload/10-07_REP_HealingInvisibleWounds_JI-PS.pdf37

Chronic Disease...merely a **symptom** of the problem and **not the problem itself**

Chronic Diseases of concern in the perinatal population

- Diabetes
- Hypertension
- Cardiovascular Disease
- Obesity
- Autoimmune disease

Reproductive Health/Sexual Behavior concerns(based on research from the CDC)

- Sexually Transmitted Diseases
- Unintended Pregnancy
- Teen Pregnancy

Results from Confidential Women's Health Questionnaire: Perinatal

Sonoma County 2014-2016

Percent of women screening positive for select risks on perinatal women's health questionnaire by their reported parents' substance use history (n=4892), Community Clinics, Sonoma County 2014-2016

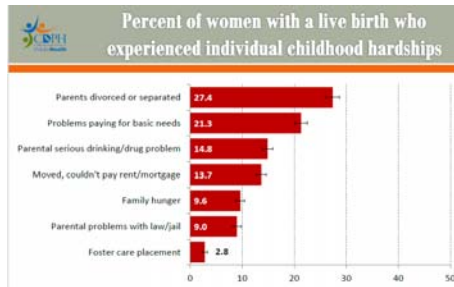
	All women screened		Women screened reporting Parents(s) had a problem with substances		Women screened reporting Parents(s) did not have a problem with substances		95% Confidence Interval
	n	%	n	%	n	%	
Total women screened	4892	100	915	18.7	3977	81.3	
Depressed in past month	742	15.2	255	27.9	485	12.3	2.2* 1.9-2.4
Tobacco use in past 3 months	587	12	223	24.4	361	9.1	2.4* 2.1-2.7
Ever had difficulties due to substance use*	364	7.4	209	22.8	155	3.9	3.2* 3.3-4.1
Marijuana use in past 3 months	486	10	207	22.7	279	7.0	2.5* 2.3-2.9
Alcohol use in past month	727	14.9	177	19.4	549	13.9	1.4* 1.2-1.6
Intimate partner violence ever	401	8.2	165	18.1	235	5.9	2.5* 2.2-2.8
Other drugs in past 3 months	216	4.4	91	10.0	123	3.1	2.4* 2.0-2.7

Source: Sonoma County Confidential Women's Health Questionnaire: Perinatal, 2014-2016; Accessed 2-27-2017

*Substances: alcohol, marijuana or other drugs

N Significant p<.0001

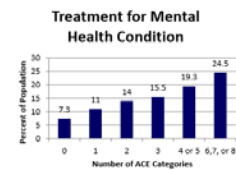
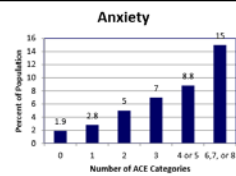
Source: "Considering Maternity Care through the Lens of the Social Determinants of Health", Dr. Connie Mitchell, CDPH, October 2014



The Maternal and Infant Health Assessment (MIHA) is an annual population-based survey of women with a recent live birth with a sample size of 100,000 in 2013-14. Percentages and 95% confidence intervals are significantly different from zero with a live birth in 2013-14 and 2012-13.

A Large Portion of Mental Illness Is Attributable to ACEs...

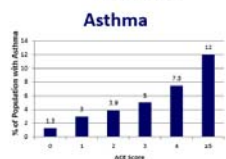
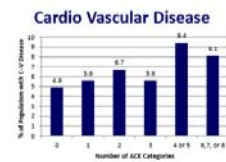
Depression
 Serious & persistent mental illness
 Frequent mental distress
 Nervousness
 Suicide attempts
 Emotional problems restrict activities



ACE Interface

A Significant Portion of Chronic Disease is Attributable to ACEs

Cardio Vascular Disease
 Cancer
 Diabetes
 Asthma
 Auto Immune Disease
 Chronic obstructive pulmonary disease
 Ischemic heart disease
 Liver Disease



Centers for Disease Control and Prevention
MMWR Morbidity and Mortality Weekly Report
 Weekly / Vol. 59 / No. 49 December 17, 2010

Adverse Childhood Experiences Reported by Adults — Five States, 2009

TABLE 1. Percentage of adults aged ≥18 years reporting adverse childhood experiences (ACEs), by ACE category and selected characteristics — Behavioral Risk Factor Surveillance System (BRFSS), five states, 2009

Characteristic	Survey population	Verbal abuse % (95% CI)	Physical abuse % (95% CI)	Sexual abuse % (95% CI)	Mortality II household member % (95% CI)	Household member in prison % (95% CI)	Substance-abusing household member % (95% CI)	Parents separated/divorced % (95% CI)	Witness domestic violence % (95% CI)
Total*	26,229	23.9 (23.0–24.9)	14.8 (14.0–15.6)	12.2 (11.5–12.8)	19.4 (18.5–20.4)	7.2 (6.5–7.8)	29.1 (28.1–30.2)	26.6 (25.5–27.7)	18.3 (17.5–19.2)
Sex									
Men	9,474	24.8 (23.3–26.4)	14.3 (13.0–15.5)	6.7 (5.9–7.7)	16.7 (15.3–18.3)	7.7 (6.5–9.1)	27.5 (25.8–29.3)	26.5 (24.7–28.3)	15.7 (14.4–17.1)
Women	16,755	26.9 (25.8–28.1)	15.4 (14.5–16.3)	17.2 (16.3–18.2)	22.0 (20.9–23.1)	6.7 (6.0–7.5)	30.8 (29.4–31.8)	26.7 (25.5–27.9)	16.9 (15.9–17.9)

What is already known on this topic?

- Adverse childhood experiences (ACEs) are common and are associated with multiple mental and physical health problems

What does this report add?

- ACEs prevalence ranges from a low of 6.7% of respondents reporting having had a family member in prison to 29.1% reporting living with a substance-abusing household member. Reporting multiple ACEs was common; 8.7% of respondents reported five or more ACEs

What are the implications for public health practice?

- Evidence-based child abuse prevention programs, such as home visitations and parenting programs, might improve health by reducing ACEs

MMWR / December 17, 2010 / Vol. 59 / No. 49

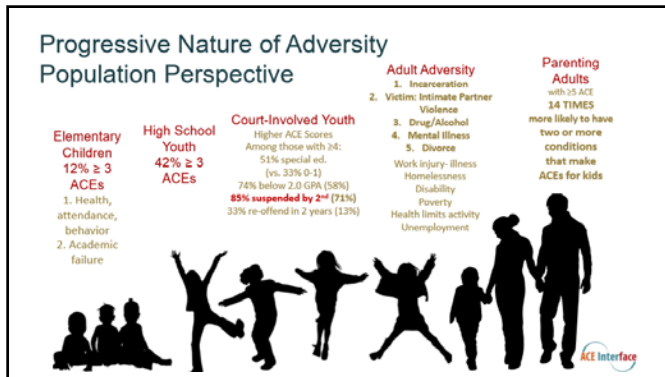
Final Insights from the ACE Study

Adverse childhood experiences are common but typically unrecognized

- Their link to major problems later in life is strong, proportionate, and logical
- They are the nation's most basic public health problem
- It is comforting to mistake intermediary mechanism for basic cause

What presents as the 'Problem' may in fact be an attempted solution.

- Treating the solution may be threatening and cause flight from treatment
- Primary prevention is presently the only feasible population approach
- Using this information clinically will be resisted, by us



<https://www.womenshealth.gov/files/documents/white-paper-opioid-508.pdf>

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<https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>

ORIGINAL RESEARCH

Screening for Adverse Childhood Experiences in a Family Medicine Setting: A Feasibility Study

Patricia T. Glouva, MD, Ardis L. Olson, MD, and Deborah J. Johnson, MHA

Introduction: The role of adverse childhood experiences (ACEs) in predicting later adverse adult health outcomes is being widely recognized by makers of public policy. ACE questionnaires have the potential to identify in clinical practice unaddressed key social issues that can influence current health risks, morbidity, and early mortality. This study seeks to explore the feasibility of implementing the ACE screening of adults during routine family medicine office visits.

The responses to each ACE question and the proportion with any risk and high-risk ACE scores are summarized in Table 1. There were no significant differences by age or sex. Higher-risk ACE scores (≥ 4) were present in 10% of patients at preventive health visits compared with 30% at chronic illness follow-up (30%) and 33% at other nonacute visits ($\chi^2 = .04$).

doi: 10.3122/jahfm.2016.03.150310

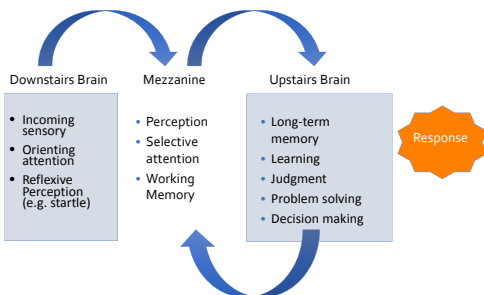
How Do ACES Cause These Negative Effects?

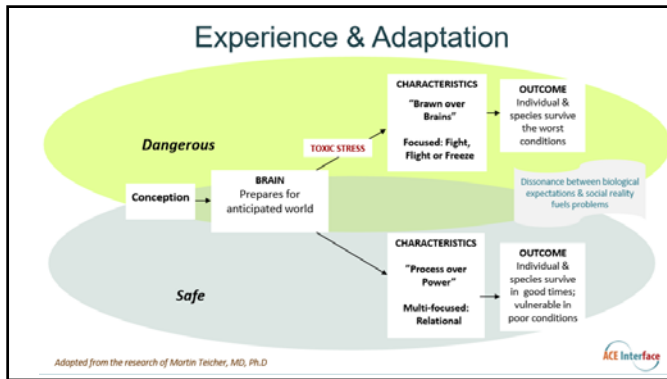
REVIEW OF THE SCIENCE

Your DNA Isn't Your Destiny

The science of epigenetics reveals how the choices you make can change your genes - and those of your kids.







Memory... and the Trauma brain

- Short term (Working memory) isn't very good – frontal lobe activation is decreased
- LT Declarative memory is usually impaired – damage to hippocampus and problems with working memory
- HOWEVER – LT - Implicit memory is strong for threatening stimuli

Connecting to behavior: Do survivors forget appointments, treatment plans, what was discussed last time? But, is their memory for threat situations or details good?

Executive Function... and the Trauma brain

- Frontal lobe function is impaired – affecting judgment, decision making, planning, reasoning
- Impulse control is more difficult
- Needed regulation is not online - attention and emotion can get out of wack
- Anxiety related, perseverative loops - OCD

Connecting to behavior: Do survivors persevere, fixate? Do they show problems with impulse control? Struggle with making decisions or planning?

Neurobiology Take Aways

- Simple to complex – Survival mechanisms act first and faster than the thinking brain.
- When we are threatened – brain moves resources away from thinking toward survival.

Our brain learns patterns.

Neurons that fire-together-wire-together.

How Can We Mitigate the Effects of ACES?

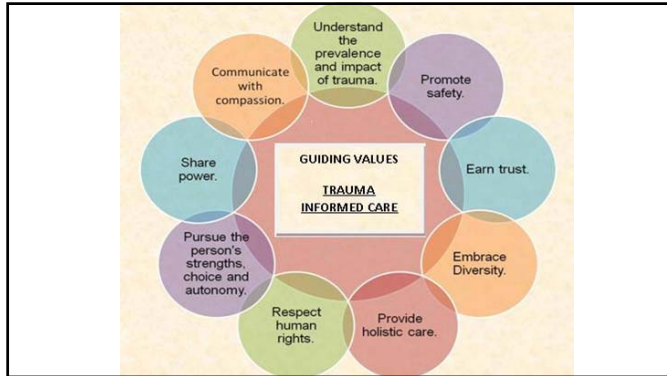
TRAUMA – INFORMED CARE

Trauma Informed Care

"A program, organization, or system that is trauma-informed:

1. **Realizes** the widespread impact of trauma and understands potential paths for recovery;
2. **Recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
3. **Responds** by fully integrating knowledge about trauma into policies, procedures, and practices; and
4. Seeks to actively **resist** re-traumatization"

(SAMHSA, 2014)



Trauma Informed Care-in Practice

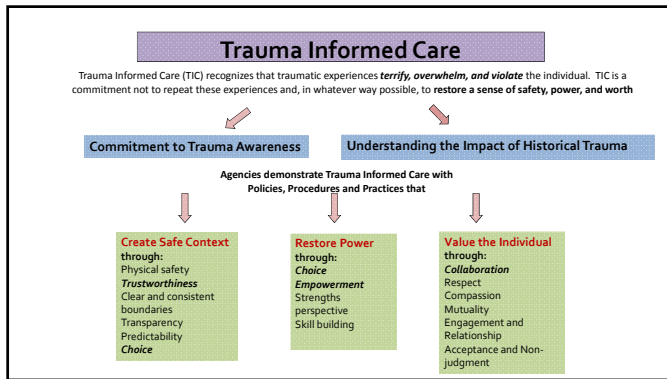
With a foundation of awareness and understanding, organizations can strive to reflect three central principles of TIC, by creating policies, procedures, and practices that:

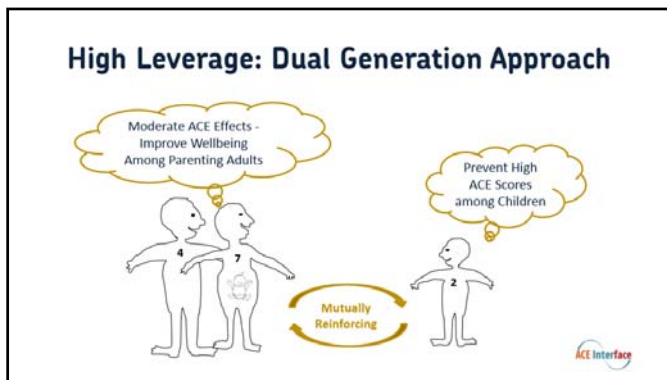
- Create safe context
- Restore power
- Value the individual

Recognition and Awareness

Considerations

- Central to trauma informed care is the recognition that **services can be re-traumatizing** for both the service recipient and the workforce.
- Understanding the prevalence of trauma within the population served by **your agency builds awareness** and is an important component of trauma informed care.





Most Important

- Standards don't substitute for hearing directly from staff and those seeking or using services
 - **Safety** (emotional and physical)
 - **Power** (collaboration, choice, empowerment)
 - **Self-Worth** (relationship, strengths-focus, respect)
- Feedback sought and used
- Supervision, coaching, reflection

Profile: Emily Adler, Health Resilience Specialist for CareOregon

As one of 32 **health resilience specialists** employed by CareOregon, the state's largest Medicaid managed care plan, Emily Adler **works with high utilizers** who've frequently been hospitalized or visited the emergency department for what appear to be avoidable problems.

More than half of these patients have experienced trauma, which often manifests in the difficulties they have managing their health. Because Adler, a social worker, finds such trauma affects her patients' willingness to seek care, she keeps this in mind as she offers them help navigating the care system, connecting to social support services, and achieving their health goals.

An **evaluation** of the program found that on average, **behavioral health visits** among members working with health resilience specialists increased by 16 percent, while **E.D. visits** and hospitalizations dropped by roughly 20 percent.

<http://www.commonwealthfund.org/publications/newsletters/transforming-care/2016/june/profile>

Panelists agreed that there is a public health emergency—the crisis being exemplified by an increase in suicides in wealthier communities such as Palo Alto, CA, and opioid overdoses across all income levels. They expressed conviction that there is potential for real systems change through neuroscience-informed policy and practice.



<https://acestoohigh.com/2016/12/05/congressional-briefing-addresses-public-policy-to-improve-response-to-aces/>

What is required to Provide TIC?

- Secure, healthy adults
- Good emotional management skills
- Intellectual and emotional intelligence
- Able to actively teach and be role model
- Consistently empathetic and patient
- Able to endure intense emotional labor
- Self-disciplined, self-controlled, and never likely to abuse power

Adapted from Bloom, S. Sanctuary Model

The Reality

- We have a workforce that is under stress
- We have a workforce that absorbs the trauma of the consumers
- We have a workforce populated by trauma survivors
- We have organizations that can be oppressive
- All of this has an impact
- We have organizations that come to resemble the behavior we're trying to help

Adapted from Bloom, S. Sanctuary Model

What Difference Does Being Trauma-Informed Make?

- Patient can participate in their own care
- Patients (and staff) gain skills for self-regulation and self-advocacy
- Patients (and staff) can remain engaged even when there are bumps in the road
- The working environment is more rewarding
- Patient follow through is improved
- Vicarious trauma/worker stress is reduced

REFLECTION - Within Your Work Setting -

- Think about your first point of contact with a patient/family.
- What is your organization doing well to promote safety, power, value?
- What could be improved?
- Who do you need support from to effect positive change?

Brainstorm

- What moved you? Surprised you?
- Affirmed your ideas or perspective?
- What information/discussion impacted you?
- What strategies will you be excited to take back to your agency/group for more discussion?

"The ACE Study gave me my humanity – my mind and body adapted to the experience I had as a child just like everyone else's did. I just had more adversity."

"I feel human now. When I want something for my children, people know it's because I want something better for them than I had for myself."

<https://thrivewa.org/work/trauma-and-resilience-4/>

Link to download the NEAR at Home Toolkit – quotes from the toolkit

www.acesstudy.org
www.cdc.gov/violenceprevention/acesstudy
www.acestoohigh.com
www.communityresiliencecookbook.org
www.developingchild.harvard.edu

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