The background features a series of horizontal stripes in black, white, and blue. Interspersed among these stripes are geometric patterns, specifically inverted triangles and diamonds, in red and blue. The overall design is symmetrical and has a traditional, possibly Indigenous, aesthetic.

Multigenerational Trauma, ACE's, and Resilience

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a tweet from Lin-Manuel Miranda, 6 am

Gmorning.

Breathe deep.

That hitch in your breath is a record scratch.

That throbbing in your temple is the bass, and you control the volume knob.

The scars in your mind and your heart are grooves that run deep.

YOUR music. YOUR heart. YOUR life.

You got the aux cord.

Bump it

Introduction

- how do families and communities successfully wrestle with the challenges of past and present trauma?
- how can we use our knowledge about the effects of trauma on mental and physical health to guide healing?
- what is the connection between multigenerational (intergenerational, historical) trauma and adverse childhood experiences (ACEs)?

Brief review of ACEs concept

- from 1995 to 1997, over 17,000 Kaiser Permanente HMO members completed a survey of Adverse Childhood Experiences (ACEs)
 - 75% white, all adults
- two-thirds reported one ACE, 20% reported three or more

Dose-response relationship found

- 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
- Multiple sexual partners
- Sexually transmitted diseases
- Smoking
- Suicide attempts
- Unintended pregnancies
- Early initiation of smoking
- Early initiation of sexual activity
- Adolescent pregnancy
- Risk for sexual violence
- Poor academic achievement

How do ACEs cause these problems?

- not fully understood
- stress hormones may continue to be dysregulated after early stress
- epigenetic factors (needs further study)
- increased risky behaviors may be related to decreased safety-seeking

ACE questionnaire break

- complete the ACE questionnaire on the table (optional)
- you do not need to share your score

CDC: national ACEs data

Prevalence of ACEs by Category for Participants Completing the ACE Module on the 2010 BRFSS.

ACE Category	Women	Men	Total
	Percent (N =32,539)	Percent (N =21,245)	Percent (N =53,784)
ABUSE			
Emotional Abuse	34.1%	35.9%	35.0%
Physical Abuse	15.8%	15.9%	15.9%
Sexual Abuse	15.2%	6.4%	10.9%
HOUSEHOLD CHALLENGES			
Intimate Partner Violence	15.6%	14.2%	14.9%
Household Substance Abuse	27.2%	22.9%	25.1%
Household Mental Illness	19.3%	13.3%	16.3%
Parental Separation or Divorce	23.1%	22.5%	22.8%
Incarcerated Household Member	5.2%	6.2%	5.7%

Note: Reports and articles that use data from other years and/or other states may contain different estimates.

CDC: national ACEs data

ACE Score Prevalence for Participants Completing the ACE Module on the 2010 BRFSS.

Number of Adverse Childhood Experiences (ACE Score)	Women	Men	Total
	Percent (N =32,539)	Percent (N =21,245)	Percent (N =53,784)
0	40.0%	41.4%	40.7%
1	22.4%	24.9%	23.6%
2	13.4%	13.2%	13.3%
3	8.0%	8.1%	8.1%
4 or more	16.2%	12.4%	14.3%

Note: Reports and articles that use data from other years and/or other states may contain different estimates.

Source: Centers for Disease Control and Prevention. *Behavioral Risk Factor Surveillance System Survey ACE Module Data, 2010*. Atlanta, Georgia: U.S.

ACEs and caregivers

- original ACEs study: 12.5% of the Kaiser group had a score of four or more
- California 2011 and 2013 statewide adult data: 16% had a score of 4 or more
- survey of California in-home care providers at a conference: **54.5%** had a score of 4 or more
- survey of child service providers in the NE had higher scores than their overall demographic group

It's not surprising: CA home visitors, like other caregivers, have high ACE scores.

Stevens, Jane. www.ACEsConnection.com, blog 8/10/2016

Prevalence of Adverse Childhood Experiences (ACEs) Among Child Service Providers. Esaki N and Larkin H. *Families in Society: The Journal of Contemporary Social Services* 2013, 94(1), 31–37

By age group, WA state

ACE Profiles Across Birth Cohorts

	Age 18–34	Age 35–49	Age 50–64	Age 65–79	
Cumulative	1975–1991	1960–1974	1945–1959	1930–1944	
ACE score	31.9%	28.0%	27.7%	12.5%	Design-based <i>F</i>
0	33.04%	31.35%	36.64%	48.26%	10.29***
1	20.84	22.24	22.69	23.75	
2	14.27	15.02	14.61	12.84	
3	10.13	11.04	10.19	6.68	
4	7.42	7.82	7.01	4.59	
5+	14.31	12.53	8.86	3.88	

Distinct Contributions of Adverse Childhood Experiences and Resilience Resources: A Cohort Analysis of Adult Physical and Mental Health Logan-Greene P et al. Soc Work Health Care. 2014; 53(8): 776–797.

By age group, WA state

ACE Profiles Across Birth Cohorts

	Age 18–34	Age 35–49	Age 50–64	Age 65–79	
Cumulative	1975–1991	1960–1974	1945–1959	1930–1944	
Parental depression	29.49%	24.7%	20.17%	12.16%	58.84 ^{***}
Parental substance use	33.55	35.1	33.17	22.48	23.09 ^{***}
Parental imprisonment	13.74	06.61	03.65	01.55	112.89 ^{***}
Parental divorce	34.86	33.12	20.93	17.16	87.57 ^{***}
Witnessing violence	18.34	19.06	16.53	11.28	13.90 ^{***}
Physical abuse	18.92	21.08	18.31	12.87	72.09 ^{***}

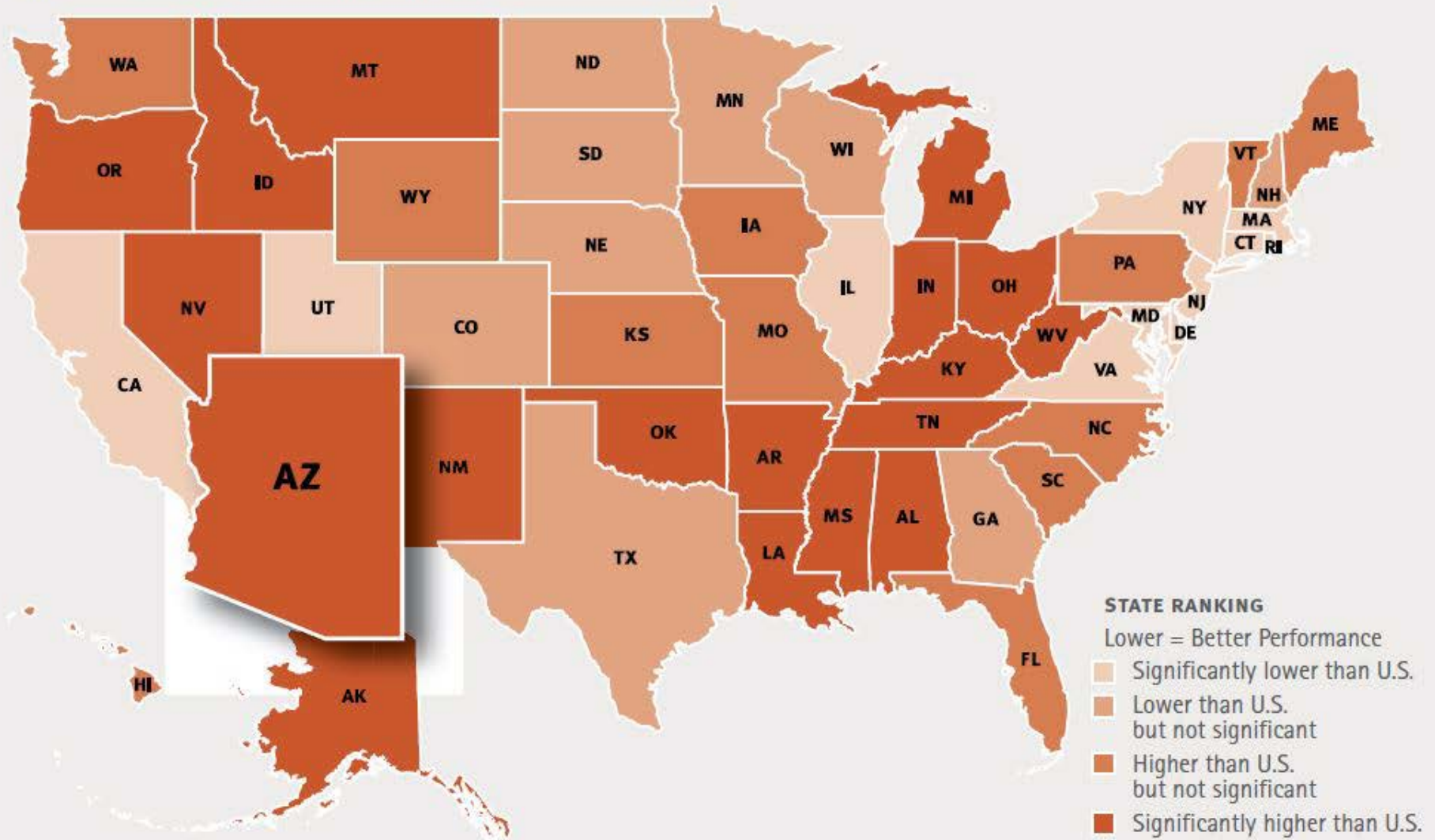
^{***} $p \leq .001$.

Distinct Contributions of Adverse Childhood Experiences and Resilience Resources: A Cohort Analysis of Adult Physical and Mental Health Logan-Greene P et al. Soc Work Health Care. 2014; 53(8): 776–797.

- The number of Arizona children with two or more ACEs is significantly higher than in the U.S. as a whole. In Arizona children ages 12 to 17, 44.4% have experienced two or more ACEs, compared to the national average of 30.5%.
- As children age, the number of those who have experienced two or more ACEs increases.
- It is estimated that nearly **70,000** Arizona children have **more than five ACEs**.*

2011/12 National Survey of Children's Health. Maternal and Child Health Bureau in collaboration with the National Center for Health Statistics. 2011/12 NSCH Data prepared by the Data Resource Center for Child and Adolescent Health, Child and Adolescent Health Measurement Initiative. www.childhealthdata.org

*Estimates generated from 2011/12 NSCH data set and 2010 Kids Count population estimates



National Survey of Children's Health 2011-2012: ACEs in children

- AI/AN children compared to non-Hispanic white (NHW) children
 - twice as likely to have 2+ ACEs
 - two and a half times as likely to have 3+ ACEs
 - three times as likely to have 4+ ACEs
- depression, anxiety, and ADHD much higher for AI/AN children with 3+ ACEs than with 0 or 1
- *this is a great study-citation below*

Adverse Childhood Experiences among American Indian/Alaska Native Children: The 2011-2012 National Survey of Children's Health. Kenney M and Singh G. Scientifica (Cairo). Published online 2016 Jul 26.

doi: <https://dx.doi.org/10.1155%2F2016%2F7424239>

Factors associated with higher ACEs score in AI/AN children

- low birth weight
- single mother, no father present
- income at or under the Federal poverty level
- adult without high school diploma
- non-supportive neighborhood

ACEs effects start early

- effect of ACEs on physical health is seen in childhood
 - asthma, obesity
- kids with two or more ACEs were almost 3 times as likely to repeat a grade in school as kids with 0

Stressors add up: all ages

- people with more adverse childhood events (ACEs) tend to continue having stressful events in life
- cumulative disadvantages “compile and compound”, helping to perpetuate trauma and contributing to transmission to future generations

Other stressors

- discrimination stress is also associated with numerous physical and mental health problems
 - racial and ethnic minorities
 - sexual minorities
 - women
 - other devalued groups
- low education, low income

Intergenerational trauma

- “ A collective complex trauma inflicted on a group of people who share a specific group identity or affiliation- ethnicity, nationality, religious affiliation.
- It is the legacy of numerous traumatic events a community experiences over generations and encompasses the psychological and social responses to such events.”

Intergenerational trauma connections

- mental health problems and violence
- substance abuse (BraveHeart, 2003)
- cultural alienation and depression (Menzies, 1999)
- hopelessness (Strickland, 2006)

Trauma and view of time, place, relationships

- having a safe “home base” but visiting a country where war erupts
 - strong sense of seeking safety (“I want to go home!”)
 - past is intact, future is fine if safety is reached
 - “home base” is still safe and reliable
 - attachments are a source of strength

Trauma and view of time, place, relationships

- being drafted to a war
 - seeking full safety (“I want to go home!”) must be abandoned for survival
 - avoiding medium-risk behaviors can seem silly
 - the past is real but painful to recall, the future may or may not exist
 - attachments are intense in the moment, but loss is overwhelming
 - true grieving leaves you vulnerable

Trauma and view of time, place, relationships

- after an entire community is traumatized
 - “home base” may not feel safe any more, or it may be gone (relocation)
 - it may still feel silly to avoid non-immediate danger (health practices, seatbelts)
 - the expectation of loss may be prominent in attachments, no truly “safe” place to grieve
 - the past may be too painful to connect with
 - difficult to envision/plan the future

Pillars of healing

- the Aboriginal Healing Foundation was set up in 1998 to address the legacy of abuses in the Canadian residential school system
- in 2006 they released the report, “Promising Healing Practices” which defined Pillars of Healing

Pillar 1: Legacy Education

- teaching the history builds a shared understanding of experiences, allows trauma responses to be seen as a result of external forces
 - builds self-reflection, connection, compassion
- strengthens youth/adult relationships – enhancing sense of safety, restoring continuity of time sense

Pillar 2: Cultural Interventions

- any type of community activity connecting members through identity, practice, tradition
 - ceremony
 - arts
 - food preparation
 - language
- fosters elder/youth connection (past-present-future)

Pillar 3: Therapeutic Interventions

- these address a specific health outcome or community problem
 - substance abuse, mental health problems
 - interpersonal violence
- based on traditional practices
 - alone or integrated into medical care, school or legal interventions

Qualities of Resilience



Resilience factors: individual

- sense of mastery, self-esteem, and perceived social support
- self-reflection, life satisfaction
- good sleep!
 - people with higher ACEs report more sleep problems which may be a part of how health is affected
 - infants of women with higher ACEs also have more sleep disorders

Stress and Health: Major Findings and Policy Implications Thoits, PA. Journal of Health and Social Behavior. 2010; 51(S) S41–S53 245-258

Kajeeveta S, Gelaye B, Jackson CL, Williams MA. *Adverse childhood experiences are associated with adult sleep disorders: a systematic review.* Sleep medicine. 2015;16(3):320-330.

Resilience factors: youth

- having a good relationship with at least one adult
- having good communication skills
- believing that the future is positive
- *these factors can be built and strengthened*

Resilience factors: youth

- these factors predicted better school engagement despite ACEs score
 - “staying calm and in control when faced with a challenge”
 - having a medical home

Brief Resilience Scale (BRS) break

- add up all results for a range of 6 to 30
- you do not need to share your score

Resilience factors: community

Table 1. Community Resiliency Scale

a.	I have support from others to help me stay healthy.
b.	I do things to stay healthy.
c.	I can deal with the problems that I have in my life.
d.	The physical environment in my community negatively affects my health.
e.	I am satisfied with the quality of the current health care services in my community.
f.	People in my community help out one another.
g.	Residents in my community feel isolated from other parts of the province.
h.	The people in my community are open to new ideas.
i.	People who live in my community have similar values or ideas.
j.	There is a sense of pride among people in my community.
k.	Leaders in my community listen to the residents.
l.	My community has strong community leadership.
m.	The changes in my community are positive.
n.	When a problem occurs, community members are able to deal with it.
o.	Residents of my community participate in community events.

Resilience factors: community

- 15-item scale, each scored 1 to 5 (not at all to very much) for possible 75 points
- items 'd' and 'g' are scored 5 to 1 (negative resilience factors)

Resilience factors: community

- strong leaders
 - who listen to residents
- positive changes *can* happen
- when a problem occurs we are capable of dealing with it
- sense of pride in community

Summary

- multigenerational trauma connects to increased adverse childhood experiences
- ACEs drive worse health, substance abuse and thus perpetuate loss/trauma
- healing needs to occur in the context of relationships and community

Qualities of Resilience



