Impact of Unresolved Trauma on American Indian Health Equity

“Grounding Public Health in US History”

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Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.
Enrolled Tribal Member
American Indians and Alaska Natives as a Share of the Total Population, by State, 2009-2011

Total: 2.5 million = 1% of U.S. Population

American Indian and Alaska Native includes people of Hispanic origin.
SOURCE: KCMU analysis of 2009 - 2011 ACS.
Historical Context

1492
Historical Context

1790
You will do well to try to inoculate the Indians by means of Blanketts, as well as to try every other method that can serve to Extirpate this Execrable Race. I should be very glad your Scheme for hunting them Down by Dogs could take effect…
Historical Context
Historical Context
Dakota War of 1862

VALUE OF AN INDIAN SCALP

Minnesota Paid Its Pioneers a **Bounty** for Every **Redskin** Killed

It is not generally known in latter day Minnesota history that the state treasury once paid out cash as bounties for Sioux Indian scalps, just as this and many other states are now paying for wolf scalps. State Treasurer Koerner yesterday, in looking over the 1863 report of State Treasurer Charles Schaff, discovered the following item among the disbursements of that year:

J. C. Davis, Sioux scalp................$25

This item occurs in the list of disbursements, amounting in all to $7,870.06, under the head " Suppressing Indian War." The $25 paid to J. C. Davis for
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The State reward for dead Indians has been increased to $200 for every red-skin sent to Purgatory. This sum is more than the dead bodies of all the Indians east of the Red River are worth.
AI/AN Population by County

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1.
AI/AN Population Decline and Recovery, 1492 – 2010
Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives

Historical Trauma

Genocide

Chronic Disease Disparities
Historical Trauma

Gestational Stressors

Birth

Chronic Disease Disparities

Boarding School Experiences
- Abuse (physical, sexual)
- Neglect
- Abandonment
- Forced Removal
- Loss of culture & language
- Forced Christianity
- Lost traditional parenting & family structure

Genocide
Historical trauma is the collective emotional wounding across generations that results from massive cataclysmic events – Historically Traumatic Events (HTE)*

- The trauma is held personally and transmitted over generations. Thus, even family members who have not directly experienced the trauma can feel the effects of the event generations later
TOM TORLING—NAVAJO

As he entered the school in 1882.

As he appeared three years later.
Epigenetics

Epigenetics refers to the study of changes in the regulation of gene activity and expression that are not dependent on DNA sequence.
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**Childhood Stressors**

**Chronic Disease Disparities**

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**Adverse Childhood Experiences**
- Abuse (physical, sexual)
- Neglect
- Substance Abuse in home
- Mental Health Dx in home
- Witnessing violence
- Divorce
- Food insecurity
- Family member in prison
Impact of ACEs on Health

ACES can have lasting effects on:

- Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)
- Behaviors (smoking, alcoholism, drug use)
- Life Potential (graduation rates, academic achievement, lost time from work)

ACEs have been found to have a graded dose-response relationship with 40+ outcomes to date.

Risk for Negative Health and Well-being Outcomes

*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.*
Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

CDC NCIP, DVP
Inter-Generational Basis for Chronic Disease Disparities Among American Indians and Alaska Natives

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Adulthood Stressors

- FDPIR

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Adverse Adulthood Experiences

- Alcoholism & SA
- Suicide rates / death rates
- Poverty / Poor nutrition
- Racism / Toxic Stress
- Role models
  - Few positive
  - Many negative
  - Parenting
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**Chronic Disease Disparities**

Next generation
What's Killing Our Children?
Child and Infant Mortality among American Indians and Alaska Natives

A National Academy of Medicine Discussion Paper

Unintentional injuries represent 41% of all deaths among American Indian and Alaska Native children.

Across all age groupings, deaths of American Indian and Alaska Native youth are 2–4 X higher than for white youth.

The overall American Indian and Alaska Native death rate for SIDS among infants is more than double that for the non-Hispanic white population.

Policy-level interventions with potential to make a dramatic impact:
- Alcohol control policies
- Supportive breastfeeding policies
- Cultural preservation programs
- Motor vehicle policies
- Gun control policies

Significant Challenges

Social Determinants
- Poverty
- Trauma
- Politics & Policy
- Inattention/Neglect
- Racism
- Inequity

Outcomes
- Health Disparities
- Education Inequality
- Generational Poverty
- Ongoing Racism
- Worsening Inequity
- Suffering and Death

Need to address equity in a comprehensive manner—medical, behavioral, public health, policy, economic, education, etc…
EQUALITY

EQUITY
Equality, Equity, Systemic Barriers
UND Programming

Indians Into Medicine (INMED)
1973, >240 physicians

Indigenous Health MPH
Online, Fall 2019

Indigenous Health PhD
Summer 2020

Indigenous Trauma & Resilience Research Center
Measures of stress and resilience
ACEs and culture as protective measures
Impact of traditional foods on nutritional epigenetics
Indigenous Health PhD

- Principles of Indigenous Health—1 & 2
- Applied Biostatistics
- Applied Epidemiology
- Quantitative Methods
- Qualitative Methods
- Mixed Methods
- CBPR & Tribally-Driven Research Frameworks
- Indigenous Research Methods
- American Indian Health Policy
- Indigenous Health Policy
- Public Health Program Evaluation
- Indigenous Evaluation Frameworks
- Indigenous Leadership & Ethics
UND Indigenous Health Scholars

- Donald Warne, MD, MPH (*Oglala Lakota*)
- Siobhan Wescott, MD, MPH (*Athabascan*)
- Melanie Nadeau, PhD, MPH (*Ojibwe*)
- Nicole Redvers, ND, MPH (*Dene’*)
- Ursula Running Bear, PhD, MA (*Sicangu Lakota*)