Adverse Childhood Experiences and Resilience in Native American Families and Communities

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Native Americans report high rates of adverse childhood experiences (ACEs). ACEs are correlated with a variety of negative outcomes in adulthood and can be attributed in part to historical trauma. Participation in indigenous practices, family support, and social connectedness can contribute to the resilience needed to cope with the adverse impact of ACEs.

Introduction

dverse childhood experiences (ACEs) include exposure to abuse, neglect, and a chaotic home environment [1]. This often involves sexual, physical, and emotional abuse; neglect; witnessing violence at home; or living with someone with alcohol or illicit drug use problems. Research has shown that ACEs are correlated with a variety of negative outcomes in adulthood including experiencing violence in adult intimate relationships, depression, suicide attempts, alcohol, illicit drug use, chronic drug dependency, smoking, risky sexual behaviors, and obesity [1]. ACEs have also been negatively associated with self-rated physical and mental health [2]. Current research has demonstrated that Native American persons have reported the largest number and greatest variety of ACEs when compared to any other race/ ethnicity [3]. Furthermore, American Indians and Alaska Natives (AI/AN) are more likely to have experienced a greater total of ACEs when compared to non-Spanishspeaking White children [4]. Additionally, Native American persons exposed to ACEs reported higher rates of physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect, witnessing violence, parental substance abuse, parental incarceration, and parental mental illness than any other persons of another racial/ethnic group [3].

The research continues to suggest that AI/AN are disproportionately affected by childhood traumas, which can often be attributed to suffering that has been passed down generationally from years of historical trauma [4]. McKinley and colleagues describe the concept of historical oppression as "the chronic, pervasive, and intergenerational experiences of oppression that, over time, may be normalized, imposed, and internalized into the daily lives of many Indigenous peoples (including individuals, families, and communities)" [5].

State-level Centers for Disease Control and Prevention (CDC) data show an association between ACEs and

increased risk for some of the leading causes of death including cancer, diabetes, heart disease, suicide, and drug overdose [6]. North Carolina's American Indian population is at higher risk for these and other conditions even without considering ACEs: a report from the North Carolina State Center for Health Statistics found that American Indians in North Carolina showed significant health disparities when compared to White populations for diabetes, hypertension, asthma, and obesity [7]. The leading causes of death for American Indians in North Carolina are cancer, heart disease, and unintentional injury; additionally, American Indians die at twice the level of Whites in our state from diabetes, HIV/AIDS, motor vehicle injuries, and homicide [8]. While there are many factors that contribute to health care disparities, like access to and affordability of medical care, higher ACEs in American Indian communities cannot be overlooked.

How ACEs Impact AI/AN Children and Women

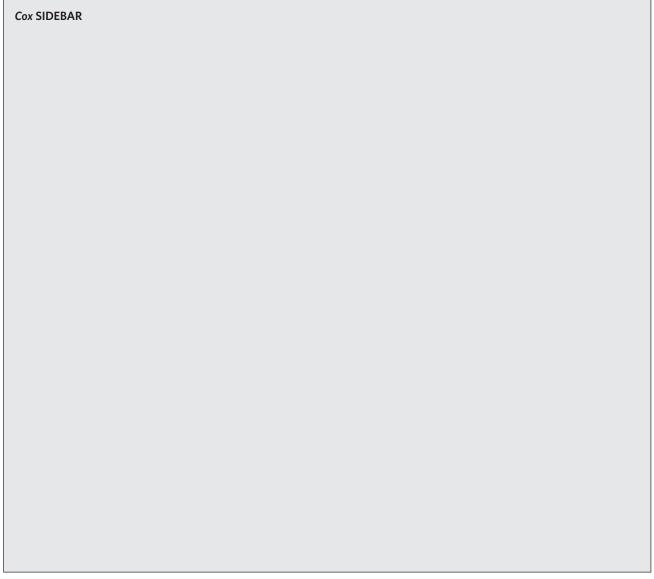
One study found that AI/AN children were 1.5 times more likely to live in families with difficulty covering even the basic necessities like food or housing [4]. This study also found that 35.7% of AI/AN children lived with divorced/separated parents when compared to non-Hispanic White children, and 4.2% of AI/AN children, compared to 2.5% of non-Hispanic White children, experienced the death of a parent [4]. These disparities continued into the school setting as AI/AN children were two to three times more likely to encounter problems in school such as grade failures and need for counseling when compared to any other races/ethnicities [4]. Furthermore, AI/AN children on average experienced an ACE score that was 2.32 times higher than individuals who identified as White, Black, or Hispanic [9].

The impact of having a greater ACE score can even be seen when comparing ACE scores between different subgroups in the Native populations. For example, AI/AN chil-

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dren with two or more ACEs were significantly more likely to suffer from depression and anxiety disorders than AI/AN children with less than two ACEs [4]. Additionally, AI/AN children with three or more ACES were more likely to need prescription medications, to require elevated service needs, and to experience functional limitations when compared to other AI/AN children with less than two ACEs [4]. Research shows that having a higher ACE score is positively associated with negative outcomes when compared within a group and compared between groups [4]. Another important distinction between AI/AN children is that those who reported lower incomes also reported higher ACE scores, and those who reported higher educational attainment reported lower ACE scores [9]. The largest demographic disparity within the AI/AN community was found among sexual orientation subgroups. AI/AN individuals who identified as gay/lesbian experienced an ACE average of 4.05 and those who identified as bisexual had an average ACE score of 3.22, while those who identified as heterosexual had an average ACE score of 2.21 [9].

Native American women are also severely affected by the adverse outcomes associated with ACEs. They have the highest rates of emotional abuse and sexual abuse when compared to any other race/ethnicity [3]. When compared to Native American men, Native American women had a higher average ACE score of 2.52 compared to 2.12 [9]. While Native American women only make up 1% of the total US population, they experience some of the highest rates of lifetime violence such as childhood abuse, intimate partner violence, and sexual assault [1]. Furthermore, Native women are overrepresented in the justice system and experience higher incarceration rates (2.6% of all women prisoners) when compared to any other ethnicities/races [1]. A study that compared non-Native women prisoners and Native women prisoners found that the latter reported higher total ACEs (five or more) than the former, and higher ACE scores



were associated with a greater likelihood of perpetrating violence in intimate partner relationships [1]. Studies also show that AI/AN children, relative to White children, were two to three times more likely to have a parent who served time in jail (18% versus 6%), to have observed domestic violence (15.5% versus 6.3%), and to have been a victim of violence/witnessed violence in their neighborhood (15.9% versus 6.7%) [4]. This research shows how the cycle of violence disproportionately affects Native American women, and this cycle of violence begins at a young age for Native children.

The Role of Resilience

A study of American Indian adults with type 2 diabetes demonstrated that ACEs had a negative correlation with self-rated physical and mental health. However, higher levels of connectedness and social support among the same group of subjects were associated with better physical and mental health [2]. Specifically, social support improved physical health and involvement in spiritual activity improved men-

tal health [2]. In other words, subjects who had previously shown lower self-rated physical and mental health scores due to ACEs were able to improve their mental and physical health scores with social support and connectedness. Additionally, the study found that participation in indigenous cultural practices created a protective association with the participants' health even when accounting for ACE exposures and demographics [2]. Likewise, another study found a positive relationship between ACEs and depressive symptoms within the AI population, but higher social support among AI helped alleviate depressive symptoms [10]. These findings show the potential for adult social support to mitigate some of the negative outcomes associated with ACEs among Als. The importance of social and cultural integration cannot be overlooked as a component of wellness, especially within AI populations.

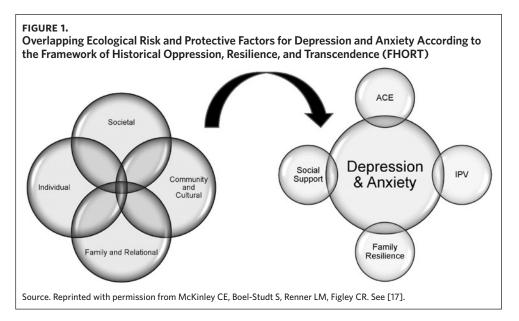
It has been argued that prevention of ACEs in the general population could lead to the reduction of many of the leading causes of morbidity and mortality [11]. Bellis and



coauthors conclude that a 10% reduction in the prevalence of ACEs could result in annual savings of \$105 billion, primarily related to health care costs, and argue for "rebalancing expenditure towards ensuring safe and nurturing childhoods" [12]. In a prenatal and early childhood home visitation program administered by nurses, those receiving the intervention presented significantly fewer instances of child abuse and neglect [13]. Among single-parent, lowerincome women receiving the intervention, the use of welfare programs, criminal behavior, child abuse, and neglect were all reduced following the birth of their first child [13]. The visiting nurses connected families with health and human services they needed and engaged family and friends in the pregnancy, birth, and early care of the child. The theoretical bases of the program were self-efficacy, human ecology, and human attachment.

People with high ACE scores and positive interpersonal traits (emotional and social skills and effective coping strategies) are less likely to experience the adverse health

outcomes associated with ACEs [14]. The impact of ACEs may be mitigated in part by social-ecological resilience, which is defined by Ungar and Liebenberg as the capacity of individuals to: 1) navigate their way to resources that sustain well-being; 2) draw on physical and social ecologies to provide those resources; and 3) work with their families and communities to negotiate culturally meaningful ways for resources to be shared [15]. Support from community and family can allow an individual experiencing childhood trauma to acquire positive coping strategies and interpersonal traits that serve as protective factors counteracting the effects of ACEs. Narayan and colleagues developed and tested the Benevolent Childhood Experiences (BCEs) scale to assess positive early life experiences in adults with histories of childhood maltreatment and other adversities. They found that higher levels of BCEs offset the effects of ACEs on prenatal stress and psychopathology [16]. Other beneficial experiences that have been associated with resilience include having a trusted caregiver, healthy attach-



ment bonds, effective parenting behaviors, and community resources [17]. McKinley and colleagues have noted that Native American family resilience is associated with fewer symptoms of anxiety and depression, with social and community support also reducing levels of anxiety [5].

Measuring Historical Oppression as a Clinical Tool

McKinley (formerly Burnette) and colleagues have developed a framework of historical oppression, resilience, and transcendence (FHORT). This is an American Indianfocused approach, developed over a period of 10 years in collaboration with partner tribal organizations to frame risk and protective factors within this cultural context [18]. The FHORT framework (Figure 1) defines historical oppression to include contemporary oppression (psychological trauma, ACEs, intimate partner violence, and economic inequality) exacerbated by historical traumas such as boarding schools that removed children from their homes and cultural environments. It provides a culturally relevant framework, which can be used to explain, predict, and prevent violence. The FHORT characterizes well-being (harmony across physical, social, psychological, and spiritual domains) as a balance between ecological risk and protective factors [18].

McKinley and colleagues also developed and validated the Family Resilience Inventory (FRI) to assess the resilience of one's family of origin and current family in order to assess protective factors across generations. Development of the FRI was a collaborative effort of nearly 10 years working with 436 participants in Southeastern Native American tribes [19]. The scale consists of two 20-item scales (resilience in one's current family and resilience in one's family of origin) (Table 1). The scales have strong reliability and validity. The FRI can be used to document family protective and promotive factors as well as the absence of such factors. In addition to research purposes, practitioners can use the scale to identify potential contributors to ACEs and how they could be addressed in patient families going forward.

In a JAMA Viewpoint article, Jones and coauthors argue, "clearly, prevention of ACEs is a societal and community challenge, but clinicians also have an important role" [20]. They urge the use of screening tools available through the American Academy of Pediatrics and the National Child Traumatic Stress Network to identify ACEs as well as to assess social supports, protective factors, and resiliency [21, 22]. They also encourage incorporating trauma-informed care into clinical practice, including using

| TABLE 1. Family Resilience Inventory (FRI) To Assess Protective Factors Across Generations | |
|--|---|
| We know what is expected of each other | "They [children] know what to expect. They know what we expect of them. They know before they can have the remainder of the day to themselves they've got to do some things first. Clean your room or clean the dishes. We even will clean the house as a family actually." |
| Education is valued | "That's what I told her, 'I don't care if you do anything with your degree, but I want you to have a degree, something to fall back.' I just felt because I would have wanted that." |
| We express love and affection freely | "If you're going to go somewheretell your parents that you love them before you leave." |
| We laugh a lot | • "You kind of laugh a lot and that kind of thing because otherwise it's too stressful. If you don't laugh, you cry." |
| We have a lot of family time together | "What I most liked was he gave me attention. We'd go out fishing, hunting, just like regular guys and we'd go out with female friends and everything and working together, share things together." |
| Source. McKinley CE. 202 | 0. |

culturally responsive assessments, promoting resilience and protective factors, addressing trauma-related somatic and mental health issues, and making appropriate referrals and linkages to support services.

In summary, ACEs have significant and potentially debilitating health impacts on many individuals and families, with higher rates and worse outcomes in Native communities. At the same time, evidence is growing regarding the benefits of and potential to strengthen resiliency as a means of counteracting the impact of ACEs. Assessment tools and culturally relevant theories/frameworks have helped inform clinical and public health practice. Of particular benefit to Native American families may be the role of family protective and promotive factors. Therefore, medical and public health interventions promoting family resilience and involvement hold significant promise. This might include engaging extended family members in clinic appointments and holding public health interventions alongside family gatherings or as part of community-wide cultural events. NCM

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