

## **A Conceptual Model of Historical Trauma: Implications for Public Health Practice and Research**

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### **Abstract**

Historical trauma theory is a relatively new concept in public health. The premise of this theory is that populations historically subjected to long-term, mass trauma—colonialism, slavery, war, genocide—exhibit a higher prevalence of disease even several generations after the original trauma occurred. Understanding how historical trauma might influence the current health status of racial/ethnic populations in the U.S. may provide new directions and insights for eliminating health disparities. This article offers an analysis of the theoretical framework of historical trauma theory and provides a general review of the literature. A conceptual model is introduced illustrating how historical trauma might play a role in disease prevalence and health disparities. Finally, implications for public health practice and research are discussed.

**Key Words:** historical trauma theory, racial/ethnic health disparities, minority health, American Indian/Alaskan Native, public health, social epidemiology

### **Introduction**

Eliminating racial/ethnic health disparities is a key objective in public health. To that end, modern epidemiology relies primarily on the biomedical model for understanding the determinants of population health. The approach is constrained, however, as McMichael<sup>1</sup> has pointed out, by a preoccupation with proximate risk factors and a focus on the health of individuals rather than of particular populations. One of the contributions of social epidemiology has been to expand the search for causal influences on health to social pathways, social transitions and their institutional contexts.<sup>2,3</sup> As Elder<sup>3</sup> has eloquently stated, “lives are lived in specific historical times and places...if historical times and places change, they change the way people live their lives.”

Historical trauma theory is the embodiment of this sentiment. The premise is that populations historically subjected to long-term, mass trauma exhibit a higher prevalence of disease even several generations after the original trauma occurred.<sup>4-7</sup> Historical trauma theory is a relatively new concept in public health; thus, empirical evidence presently offers weak support for the validity of the theory and its connection to contemporary health disparities. Yet, for many, the concept makes intuitive sense. In fact, a large body of interdisciplinary research seemingly lends support to the theory, making it deserving of further empirical research.

Understanding how historical trauma influences the current health status of racial/ethnic populations in the U.S. may provide new directions and insights for eliminating health disparities. This article offers an analysis of the theoretical framework of historical trauma theory and provides a general review of the literature. A conceptual model is introduced illustrating how historical trauma might play a role in disease prevalence and health disparities. Finally, implications for public health practice and research will be discussed.

## Historical Trauma Theory

Historical trauma theory incorporates and builds upon three theoretical frameworks in social epidemiology.<sup>2</sup> The first is psychosocial theory, which links disease to both physical and psychological stress stemming from the social environment. In this framework, psychosocial stressors not only create susceptibility to disease, but act as a direct pathogenic mechanism affecting biological systems in the body. The second theoretical framework is political/economic theory, which addresses the political, economic and structural determinants of health and disease such as unjust power relations and class inequality. The third is social/ecological systems theory, which recognizes the multilevel dynamics and interdependencies of present/past, proximate/distal, and life course factors in disease causation.<sup>1,2</sup>

In understanding how and why certain populations have a higher burden of disease than others, historical trauma theory provides a macro-level, temporal framework for examining how the "life course" of a population exposed to trauma at a particular point in time compares with that of unexposed populations. Based on a review of the literature, at least four distinct assumptions underpin this theory: (1) mass trauma is deliberately and systematically inflicted upon a target population by a subjugating, dominant population; (2) trauma is not limited to a single catastrophic event, but continues over an extended period

of time; (3) traumatic events reverberate throughout the population, creating a universal experience of trauma; and (4) the magnitude of the trauma experience derails the population from its natural, projected historical course resulting in a legacy of physical, psychological, social and economic disparities that persists across generations. The three basic constructs of the theory are the historical trauma experience, the historical trauma response, and the intergenerational transmission of historical trauma.<sup>4, 8</sup>

## A Review of the Literature

All trauma experiences are technically historical in nature. Most of the body of work on psychic trauma has focused on the psychological effects of individuals' rather than populations' exposure to traumatic events.<sup>9-11</sup> In 1980, Post-Traumatic Stress Disorder (PTSD) was formally accepted by the American Psychiatric Association as a diagnosis describing the severe and long-term effects of exposure to traumatic stressors like combat, sexual assault, child abuse, motor vehicle accidents or natural disasters.<sup>12</sup> Research indicates that individuals diagnosed with PTSD have elevated odds of behavioral health risks and social dysfunction.<sup>9, 12</sup> Another study found that experiences of chronic trauma created deep emotional scars affecting life-long patterns of interpersonal relationships, the ability to master life-skills and role performance.<sup>9</sup> More recently, clinical studies have linked chronic stress associated with PTSD to physical health. Chronic stress has been linked to impairment of the nervous system, the hypothalamic-pituitary-adrenal (HPA) axis, and cardiovascular, metabolic, and immune systems. These impairments contribute to chronic diseases such as diabetes, hypertension, and cardiovascular disease.<sup>9, 10, 12, 15, 16</sup> The literature also reveals that responses to deliberate perpetration of mass trauma are very different from those caused by accident or forces of nature. Trauma as the result of deliberate intent produces a profound sense of dismay and alienation. Intentional violence threatens basic assumptions about an orderly, just world and the intrinsic invulnerability and worthiness of the individual.<sup>13, 14</sup>

A key feature of historical trauma theory is that the psychological and emotional consequences of the trauma experience are transmitted to subsequent generations through physiological, environmental and social pathways resulting in an intergenerational cycle of trauma response.<sup>4, 6-8, 17-21</sup>

Historical trauma transmission was first conceptualized in the 1960s, based on studies of persistent trauma among Holocaust survivors and their families after World War II.<sup>4, 17</sup> Since then, a number of studies

have found that offspring of Holocaust survivors manifested an array of trauma response pathology and experienced themselves as “different or damaged” by their parents’ experiences.<sup>4, 15, 17, 21</sup> Though these findings are not without controversy, disagreement centers primarily around inadequacies in methodological complexity and study design.<sup>4, 17, 22</sup> More recently, studies in other populations—Palestinian, Russian, Cambodian, African American and American Indian—have documented that offspring of parents affected by trauma also exhibited various symptoms of PTSD or “historical trauma response.” These symptoms included an array of psychological problems such as denial, depersonalization, isolation, memory loss, nightmares, psychic numbing, hypervigilance, substance abuse, fixation on trauma, identification with death, survivor guilt and unresolved grief.<sup>4-8, 17, 20, 23-29</sup>

In the last decade, the majority of historical trauma research has been with American Indian/Alaskan Native (AIAN) populations. Brave Heart and DeBruyn<sup>5</sup> first published on the concept of historical trauma in the AIAN population in the mid 1990s. Brave Heart<sup>8</sup> defined historical trauma as “the cumulative and collective psychological and emotional injury sustained over a lifetime and across generations resulting from massive group trauma experiences.” Faimon<sup>30</sup> described historical trauma experienced by the (American Indian) Dakota nation as an “indescribable terror and the legacy of terror that remains after 140 years, as evidenced by repression, dissociation, denial, alcoholism, depression, doubt, helplessness and devaluation of self and culture.” She also elaborated on the intergenerational legacy of shame, guilt, and distrust embedded in collective memory and passed down through seven generations. The Aboriginal Healing Foundation<sup>18</sup> describes historical trauma as a cluster of traumatic events and as a disease itself. The symptoms of historical trauma as a disease are the maladaptive social and behavioral patterns that were created in response to the trauma experience, absorbed into the culture and transmitted as learned behavior from generation to generation.<sup>18</sup>

Recently, researchers have begun to identify historical trauma as a precipitating condition influencing racial/ethnic health disparities. Williams, Neighbors and Jackson<sup>31</sup> identified race-related historical trauma as a large-scale, systems-related macro-stressor that adversely impacts both the physical and mental health of the affected racial/ethnic group. Walters and Simoni<sup>32</sup> described historical trauma from an indigenous fourth-world context, in which a minority indigenous population exists in a nation where a colonizing, subordinating majority holds institutionalized power and privilege. The subordination of

indigenous populations and the cumulative effects of injustice and discrimination are characterized as a “soul wound” that impacts health outcomes for Native people. Duran and Walters<sup>33</sup> suggested that temporal patterns of exposure to cultural and historical trauma may act as covariates in HIV/AIDS behavior among AIAN populations. Finally, Leary<sup>7</sup> and Reid, Mims and Higginbottom<sup>20</sup> assert that African Americans have sustained traumatic psychological and emotional injury as a direct result of slavery, perpetuated by social/institutional inequality, racism and oppression.

The literature on historical trauma is largely theoretical and qualitative in nature. More quantitative studies are needed to build on existing work and to connect historical trauma with public health and disease outcomes. Whitbeck et al.,<sup>17</sup> for example, developed a Historical Loss Scale and a Historical Loss Associated Symptoms Scale as a measure of historical trauma in American Indian elders. Baker and Gippenreiter<sup>34</sup> conducted a study designed to measure the physical and mental health effects of historical trauma in the grandchildren of victims of the Stalin Purge of 1937–39.

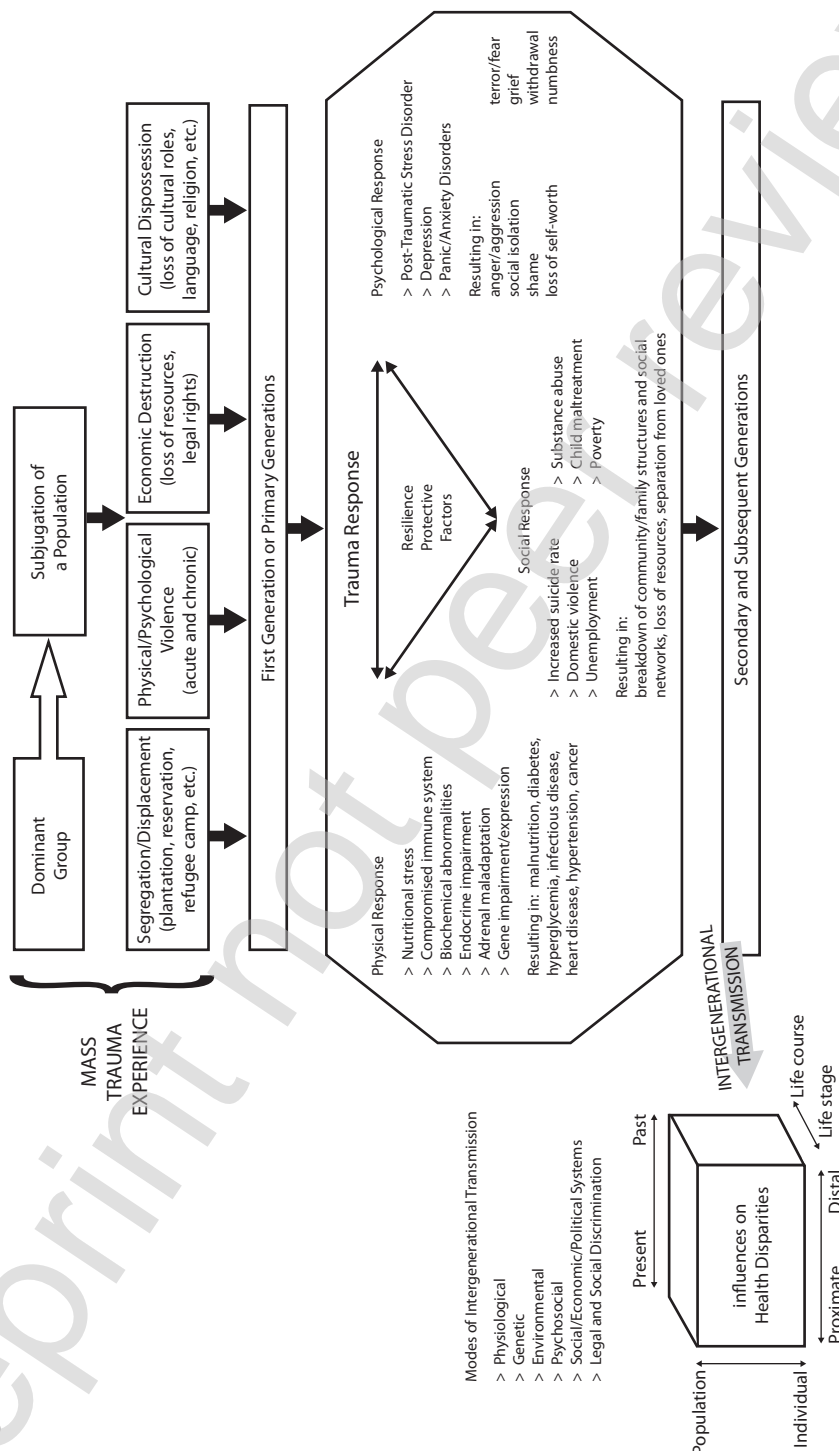
In addition, the literature on trauma (psychic and historical) primarily focuses on the psychosocial/psychobiological sequelae of the trauma experience. Little is written about the physical effects resulting from exposure to mass trauma—injuries, infectious and chronic diseases, malnutrition—and whether they persist through future generations. However, a large body of empirical research on the Dutch Famine of 1944 (see the works of M. Susser; A. Ravelli; L. Lumey; and J. McClellan) and a growing body of research on the fetal origins of disease (see D. Barker and D. Benyshek) indicate that physical ramifications of trauma exposure can carry over to subsequent generations via genetic mutation, impairments in gene expression and physiological adaptations.

One of the challenges to quantitative research may be conceptualizing how events that took place in the distant past affect the present. The literature review did not produce a general conceptual model illustrating how all of the described elements of historical trauma interact in a manner that influences contemporary health disparities.

## **A Conceptual Model of Historical Trauma**

The conceptual model of historical trauma introduced here attempts to synthesize the literature and delineate physical, psychological and social pathways linking historical trauma to disease prevalence and health disparities (Figure 1).

Figure 1. Conceptual Model of Historical Trauma





The model posits that historical trauma originates with the subjugation of a population by a dominant group. Successful subjugation requires at least four elements:<sup>18</sup> (1) overwhelming physical and psychological violence, (2) segregation and/or displacement, (3) economic deprivation, and (4) cultural dispossession.

The dominant group enforces subjugation through various means including military force, bio-warfare, national policies of genocide, ethnic cleansing, incarceration, enslavement, and/or laws that prohibit freedom of movement, economic development, and cultural expression.<sup>4, 5, 18, 19, 24, 32, 35–41</sup> Though overt legitimization of subjugation may be rescinded over time, its legacy remains in the form of racism, discrimination and social and economic disadvantage.<sup>6, 7, 20, 31, 32, 42</sup> The universal experience of subjugation constitutes significant physical and psychological trauma for the affected population.

As the model illustrates, primary generations are the direct victims of subjugation and loss, which threaten their population and economic and cultural survival. Having witnessed great loss of life and endured brutality, starvation, and disease, many survivors are plagued with physical injuries, malnutrition, and high rates of infectious and chronic diseases.<sup>5, 18, 30, 43</sup> Their psychological and emotional responses stem from experiencing violence, severe stress, pervasive hardship and <relentless> unrelenting grief at the loss of kin, land, and way of life.<sup>5, 13, 18, 37, 39–41, 44</sup> Trauma response in primary generations may include PTSD, depression, self-destructive behaviors, severe anxiety, guilt, hostility, and chronic bereavement.<sup>9–11, 13</sup> Psychological and emotional disorders may well translate into physical disease, and vice versa.<sup>9, 12</sup>

Secondary and subsequent generations are affected by the original trauma through various means. Extreme trauma may lead to subsequent impairments in the capacity for parenting.<sup>4</sup> Physical and emotional trauma can impair genetic function and expression, which may in turn affect offspring genetically, through in utero biological adaptations, or environmentally.<sup>4, 11, 18, 45, 46–49</sup> Evidence suggests that disorders such as mental illness, depression and PTSD can be genetically transmitted to secondary and subsequent generations.<sup>1, 45, 50</sup> Maternal malnutrition contributes to poor-quality breast milk and low-birth-weight babies.<sup>51</sup> Some studies indicate that maternal care and depressive state are also major determinants of endocrine and behavioral stress responses in offspring.<sup>50, 52</sup> Further, some evidence suggests that physiological adaptations made by a fetus in response to in utero stressors are correlated with a number negative health outcomes throughout life.<sup>49</sup> According to Benyshek,<sup>46</sup> research shows that Type 2 diabetes in adults

may be caused by metabolic adaptations of the fetus in response to maternal malnutrition. The disorder is then propagated throughout subsequent generations via hyperglycemic pregnancies.<sup>46</sup>

Maladaptive behaviors and related social problems such as substance abuse, physical/sexual abuse, and suicide directly traumatize offspring and are indirectly transmitted through learned behavior perpetuating the intergenerational cycle of trauma.<sup>4, 53-56</sup> Secondary and subsequent generations also experience "vicarious traumatization" through the collective memory, storytelling and oral traditions of the population. Traumatic events become embedded in the collective, social memories of the population. Offspring are taught to share in the ancestral pain of their people and may have strong feelings of unresolved grief, persecution and distrust.<sup>18, 24, 30</sup> They may also experience original trauma through loss of culture and language, as well as through proximate, first-hand experiences of discrimination, injustice, poverty, and social inequality. Such experiences validate their ancestral knowledge of historical trauma and reinforce the historical trauma experience and response.<sup>24, 31</sup>

Finally, the cumulative effects of historical trauma on the population, mitigated to some degree by the existence of resiliency and protective factors, result in a surfeit of social and physical ills that ultimately lead to population-specific health disparities. Historical trauma has been called a "disease of time."<sup>18</sup> From this perspective, the poor health status of affected populations can be argued as the result of the accumulation of disease and social distress across each succeeding generation.

## **Case Study: Historical Trauma and Health Disparities in the AIAN Population**

Descriptions and details of the subjugation of AIAN people through colonization, war and genocide have been provided by many authors and will not be repeated here. (See Stannard, 1992; Thornton, 1987; Aboriginal Healing Foundation, 2004; and Brave Heart & DeBruyn, 1998). However, to illustrate how historical trauma might influence health disparities, one pertinent historical event will be recounted and associated with the current health status of the AIAN population.

The introduction of infectious diseases was the single most devastating impact of the European colonization of the Americas. Known as virgin soil epidemics, measles and small pox alone decimated over 90% of the indigenous population by some estimates.<sup>18</sup> Until the early 1900s, measles and small pox epidemics struck every seven to eleven



years, resulting in great loss of life, habitual food scarcity, starvation and chronic illness.<sup>18</sup>

Recurrent epidemics meant that the population had little time to reproduce fully immune offspring.<sup>18</sup> Exposure to infectious disease compromised cellular immunity, facilitated the spread of viruses and created susceptibility to other diseases such as tuberculosis, hepatitis and influenza.<sup>18, 51, 57</sup> Food scarcity and starvation, a by-product not only of the epidemics but of government policies, may also have led to metabolic and behavior adaptations. In a paper titled "Diseases Among Indians," published in 1892 in the *Weekly Journal of Medicine and Surgery*, Dr. A.B. Holder<sup>57</sup> writes, "The buffalo is gone and Government rations or scant subsistence by their own labor, is the Indians' present diet. In this change is found a factor in the causation of consumption and scrofula." He further states that food rations furnished by the government were inconsistent and insufficient to maintain health. After a period of fasting, the next supply of food rations would arrive and there would be a feast in which most of the food was consumed. This resulted in a regular succession of fasts and feasts that "deranges digestion and assimilation and fits the constitution for the invasion of tuberculosis."<sup>57</sup>

Though it was only one of many historical tragedies,<sup>6, 18, 58, 59</sup> infectious disease had a devastating impact on the health of American Indians and Alaskan Natives. One could argue that the population health of contemporary AIANs never recovered from the extensive physical, psychological, social and cultural trauma of European colonization.<sup>42</sup> Today, this population has the poorest health status of any racial/ethnic population in the United States.<sup>42</sup> Compared to the U.S. average, American Indians are 770% more likely to die from alcoholism, 650% more likely to die from tuberculosis, 420% more likely to die from diabetes, 280% more likely to die from accidents, 190% more likely to commit suicide and 52% more likely to die from pneumonia or influenza.<sup>42</sup> For some Native populations in the U.S., life expectancy is lower than every country in the Western Hemisphere, with the exception of Haiti.<sup>60</sup>

## Implications for Public Health Practice and Research

Pearce<sup>61</sup> states that modern epidemiology embraces a paradigm that "focuses on the individual, blames the victim, and produces interventions that can be harmful." Many Native and non-Native allied public health professionals have begun to change this by developing intervention programs that integrate theories of historical trauma, community capacity and community empowerment.<sup>8, 23-25, 33, 55, 62-64</sup>

These programs are designed to be holistic, culturally relevant, and respectful of indigenous self-understanding of historical trauma and its impact on community health. Symptoms of historical trauma—like diabetes, suicide, and domestic violence—are addressed from a different perspective and through a new paradigm different from traditional health programs that subscribe to Western belief systems and inherent dominant culture biases.<sup>55, 62</sup> The work pioneered in AIAN communities provides a model for addressing health disparities in other minority populations.

Connecting the past with the present is inherent in many cultural traditions. Historical trauma theory contextualizes “time and place.” It validates and aligns itself with the experiences and explanatory models of affected populations and recognizes issues of accountability and agency. It creates an emotional and psychological release from blame and guilt about health status, empowers individuals and communities to address the root causes of poor health and allows for capacity building unique to culture, community and social structure.<sup>62</sup>

Historical trauma theory is a rich-in-variables framework whose application to public health is invaluable. More empirical research is necessary to fully understand, operationalize and validate the theoretical constructs of historical trauma. More work is also needed to link measures of historical trauma to health outcomes. The majority of research on historical trauma has been conducted with American Indian populations and is largely qualitative. More evaluative research is needed on the effectiveness of intervention programs. More empirical research is needed to gain a better understanding of the manifestations and prevalence of historical trauma among indigenous populations, as well as the specific mechanisms of intergenerational transmission. Research needs to be conducted in other minority populations in the U.S. to determine the existence of historical trauma or if there are trauma response variations dependent on intensity, length and context of exposure, time passed since exposure, resiliency, protective or cultural factors. The conceptual model of historical trauma introduced here is intended to help public health practitioners and researchers gain a broader perspective of health disparities and aid in the development of new approaches for improving the health status of racial/ethnic populations in the United States.

## Acknowledgments

Many thanks to Michelle Chino, Ph.D., for making this paper possible. Her expertise, support and mentorship were invaluable. Special

thanks to Roland Sotero for his insightful comments and contributions and to an anonymous reviewer who took the time to provide an in-depth critique.

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