

Graduate Medical Education Training and the Health of Indigenous Peoples

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John F. Kennedy once said, “For a subject worked and reworked so often in novels, motion pictures, and television, American Indians are... the least understood and the most misunderstood Americans of us all.”¹ Today, Native Americans remain misunderstood and even invisible in the United States. Thus, it is not surprising that Rashid et al’s English language scoping review of graduate medical education (GME) curricula for Indigenous peoples has found that minimal curricula exist.²

Most of the studies included in the scoping review originated in the United States, where Native American history is largely absent throughout our entire educational system. Where Native curriculum exists, it rarely covers Native Americans living today. The findings of the 2016-2018 Reclaiming Native Truth project, an initiative to understand how Native Americans are perceived in the United States, illustrate the profound lack of awareness regarding Native people. Reclaiming Native Truth researchers found that information about Native Americans rarely reaches most Americans.^{3,4} They also found that many of the mistruths about Native Americans stem from the US K-12 education system. Specifically, Reclaiming Native Truth researchers learned that 27 states fail to include Native Americans anywhere in their curricula.^{3,4} In their study of representation of Native Americans in K-12 curriculum, Shear et al found that the educational standards of 87% of states require no Native American history after 1900.⁵

Teaching the truth about Native Americans has not always been thought to be in the interest of local, state, or federal governments. It is well-documented that US government policies and acts, such as boarding schools, relocation, and termination, were intended to assimilate Native Americans into a primarily White Christian society with the goal of possessing Native lands and resources. Despite US government attempts to acculturate Native peoples, their cultures remain intact and must play a central role when addressing their substantial health disparities, as demonstrated by work by Indigenous

researchers, Melissa Walls and Melissa Lewis, and their colleagues.^{6,7}

Native Americans experience disparities in morbidity for nearly every major disease category, but perhaps the most telling statistic is the rate at which Native Americans died from COVID-19. Like the H1N1 influenza in 2009, COVID-19 resulted in significantly greater mortality rates for Native Americans than for any other population. Native American age-adjusted COVID-19 mortality rates are higher than any other ethnic group and 2 times that of Whites, according to the American Public Media Research Lab’s evaluation of Centers for Disease Control data.⁸ Native Americans’ higher morbidity rates for most chronic diseases, including cancer, heart disease, diabetes, and autoimmune disorders, likely contribute to these higher COVID-19 mortality rates.

Various reasons are given for Native American health disparities. As David Jones points out, these reasons may be influenced by the political and economic interests of a given group and have included behaviors of Native Americans themselves.⁹ Susceptibility to diseases has been attributed to poor nutrition, bad behaviors, physical weakness, and unfortunate genetics. As Jones and others note, Native American health disparities have existed in tandem with disparities in wealth and power persisting since European contact.⁹

Since Europeans arrived on this continent, Native people have been relegated to second class citizens on their own land. The history of Native Americans is one of constant mistreatment, displacement, and loss of autonomy. As Native populations were weakened by warfare and starvation, epidemics of foreign diseases killed millions. Native Americans were forcefully moved from their traditional lands and banned from practicing traditional ways. People whose culture developed over thousands of years were expected to adapt to White ways of living on new and economically limited land bases. The US government promised—but has yet to help develop—needed infrastructure in Native communities. Additionally, in keeping with its efforts to acculturate

Native Americans, the US government in the 1950s and 1960s relocated Native families to cities with promises of education, housing, and jobs that rarely materialized. The US government also terminated several Tribes, notably the Menominee of Wisconsin and Klamath of Oregon, thereby ending its responsibility to these Tribal nations.¹⁰ Largely because of these and many other policies, Native Americans have the nation's highest rates of poverty,^{11,12} and subsequently, little status. Michael Marmot has written extensively about the relationship of social status to health outcomes, arguing that lower status in the social hierarchy increases risk for disease and decreases life expectancy.¹³

Given that Native Americans are the only US population that has been guaranteed health care, such gross health disparities might seem surprising. Unknown to most physicians and other health care professionals, the US government promised health care to Native people indefinitely in return for the millions of acres of land signed over through treaties. In 1955, to provide care for Native people, the US government established the Indian Health Service (IHS) as part of the US Public Health Service. Although this health care was guaranteed, the IHS has never been fully funded. The IHS 2021 per capita spending was \$4,140, a fraction of the \$10,680 national health per capita spending in the same year.¹⁴ Underfunding results in understaffing, poor infrastructure, rationing of care, and critically, reinforcement of the message that the health of Native Americans is not important.

It is not just poverty or an underfunded health care system that results in Native American health disparities. Native patients' experiences with health care systems are not generally positive. Puumula et al surveyed Upper Midwest emergency department clinicians on their perceptions of Native patients and found a disturbing bias against Native American adults and children.¹⁵ Their findings illustrate the discrimination that Native Americans experience throughout the health care system. Much of the bias toward Native Americans likely comes from, or is reinforced by, a lack of understanding of the population.

Given these major gaps in knowledge regarding Native American history, culture, and health it's easy to understand why US trainees and faculty lack skills to provide high-quality care for Native Americans. At the University of Minnesota, 65 first-year medical students receive 8 hours of basic lessons on Native American health. Each year most students comment that they were completely unaware of Native American history and the subsequent social determinants of health that contribute to critical health

disparities. But this early training is unlikely to be sufficient to combat the stereotypes and biases they may encounter later in GME training. Specific curricula during residency could be a reinoculation of information or, since most medical schools have little or no education about Native Americans, the only information residents receive.

Education during residency is an essential component to address Native American health disparities. In particular, the lack of GME programs training physicians to care for Native American communities is a major gap and represents a lost opportunity.¹⁶ A trained physician workforce, aware of culture and health alone, however, will not eradicate Native American health inequities because disparities also exist in education outcomes, poverty, and class status. Jones gives examples of physician efforts to eliminate health disparities that failed because other inequities were not addressed.⁹ To significantly change Native American health disparities, the US government must fulfill its promises to fully fund health care and education, as well as infrastructure to support Native American communities.

As Rashid et al point out in their scoping review, "A collaborative approach to creating core Indigenous curricula involving community stakeholders with training in the community is a viable path forward."² By learning about Native Americans from Native community members, trainees and physicians gain information necessary to work further upstream in addressing inequities. Students in many medical schools are now learning how to advocate for patients outside the clinical realm, such as in policy and community activism. Effective policy development and community activism for Native Americans should be led or guided by Native people. Marmot writes that decreased social status yields loss of autonomy, which in turn increases health disparities.¹³ Thus, efforts to raise the health status of Native Americans, whether through the development and implementation of GME curriculum, generation of policy, or community activism, must also recognize and promote Native American sovereignty.

References

1. ICF Staff. 6 Things JFK Did—or Didn't Do—for Natives Before His Death. *Indian Country Today*. Published March 3, 2021. Accessed December 4, 2022. <https://indiancountrytoday.com/archive/6-things-jfk-did-or-didnt-dofor-natives-before-his-death>
2. Rashid M, Nguyen J, Foulds JL, Dennett L, Cardinal N, Forgie SE. A scoping review of Indigenous health curricular content in graduate medical education.

- J Grad Med Educ.* 2023;15(1):24-36. doi:10.4300/JGME-D-22-00180.1
3. First Nations Development Institute. Compilation of All Research from the Reclaiming Native Truth Project. Published 2018. Accessed December 4, 2022. <https://www.firstnations.org/publications/compilation-of-all-research-from-the-reclaiming-native-truth-project/>
 4. National Congress of American Indians. Becoming Visible: A Landscape Analysis of State Efforts to Provide Native American Education for All. Accessed December 4, 2022. https://www.ncai.org/policy-research-center/research-data/prc-publications/NCAI-Becoming_Visible_Report-Digital_FINAL_10_2019.pdf
 5. Shear SB, Knowles RT, Soden GJ, Castro AJ. Manifesting destiny: re/presentations of Indigenous peoples in K-12 U.S. history standards. *Theory Res Soc Educ.* 2015;43(1):68-101. doi:10.1080/00933104.2014.999849
 6. Brockie TN, Elm JHL, Walls ML. Examining protective and buffering associations between sociocultural factors and adverse childhood experiences among American Indian adults with type 2 diabetes: a quantitative, community-based participatory research approach. *BMJ Open.* 2018;8(9):e022265. doi:10.1136/bmjopen-2018-022265
 7. Lewis ME, Smith J, Wildcat S, Anderson A, Walls ML. The health effects of a Cherokee grounded culture and leadership program. *Int J Environ Res Public Health.* 2022;19(13):8018. doi:10.3390/ijerph19138018
 8. Gawthrop E. Color of Coronavirus: COVID-19 deaths analyzed by race and ethnicity. APM Research Lab. Published November 22, 2022. Accessed December 4, 2022. <https://www.apmresearchlab.org/covid/deaths-by-race>
 9. Jones DS. The persistence of American Indian health disparities. *Am J Public Health.* 2006;96(12):2122-2134. <https://doi.org/10.2105/ajph.2004.054262>
 10. Nesterak M. The 1950s plan to erase Indian Country. Uprooted: APM Reports. Accessed December 15, 2022. <https://www.apmreports.org/episode/2019/11/01/uprooted-the-1950s-plan-to-erase-indian-country>
 11. Poverty USA. Poverty Facts. Accessed December 15, 2022. <https://www.povertyusa.org/facts>
 12. Asante-Muhammad D, Kamra E, Sanchez C, Ramirez K, Tec R. Racial Wealth Snapshot: Native Americans. Accessed December 15, 2022. <https://ncrc.org/racial-wealth-snapshot-native-americans/>
 13. Marmot M. *The Status Syndrome: How Social Standing Affects Our Health and Longevity*. Owl Books: 2005.
 14. National Indian Health Board. Advancing Health Equity Through the Federal Trust Responsibility: Full Mandatory Funding for the Indian Health Service and Strengthening Nation-to-Nation Relationships the National Budget Formulation Workgroup's Recommendations on the Indian Health Service Fiscal Year 2024 Budget. Accessed December 6, 2022. https://www.nihb.org/legislative/budget_formulation.php
 15. Puumala SE, Burgess KM, Kharbanda AB, et al. The role of bias by emergency department providers in care for American Indian children. *Med Care.* 2016;54(6):562-569. doi:10.1097/mlr.0000000000000533
 16. Tobey M, Ott A, Owen M. The Indian Health Service and the need for resources to implement graduate medical education programs. *JAMA.* 2022;328(4):327-328. doi:10.1001/jama.2022.10359



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