The Pillars of Health Disparities Science—Race, Ethnicity, and Socioeconomic Status
Eliseo J. Pérez-Stable, MD; Monica Webb Hooper, PhD

A health disparity is a preventable or avoidable health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have experienced systematically greater obstacles to health based on identification as racial and ethnic minority individuals and/or by their socioeconomic status (SES). These fundamental drivers are the foundation of the science that the National Institute on Minority Health and Health Disparities (NIMHD), National Institutes of Health (NIH), funds. The NIMHD strongly recommends that race and ethnicity and SES be measured using standardized questions and considered in the analyses of research results. Underserved rural residents, sexual and gender minority groups, and persons with disabilities are also designated as populations with health disparities by NIMHD/NIH and remain a research priority through an intersectionality lens of race and ethnicity and SES.1

Health disparities research was launched by the landmark Report of the Secretary’s Task Force on Black and Minority Health that documented disparities in life expectancy as well as selected causes of death (1979-1981) by race.2 One major finding was that 80% of the excess mortality observed among Black or African American and other racial and ethnic minoritized populations was due to cardiovascular disease, stroke, cancer, chemical dependency, diabetes, homicide, unintentional injuries, and infant mortality. In addition, the life expectancy gap between Black and White persons exceeded 5 years even with overall population improvement; these differences persist today.3

The Office of Minority Programs was created at the NIH in 1990 to address these problems and to implement the recommendations of the Task Force on Black and Minority Health. The goals of the research agenda included understanding and improving upstream health determinants and factors that influence downstream racial and ethnic differences in morbidity and mortality. In 2000, congress authorized the National Center on Minority Health and Health Disparities; in 2010, the Patient Protection and Affordable Care Act authorized the transition to NIMHD. The congressional mandate of NIMHD is to lead and coordinate research in partnership with all entities at the NIH that seeks to improve the health of all racial and ethnic minority groups and economically disadvantaged persons.

Pillars of Health Disparities Science
Race and ethnicity, conceptualized together herein as an identity social construct, is the first pillar of health disparities science. Racial and ethnic categorizations, based on phenotype, are consequential to the lived experiences of individuals and groups and reflect the social hierarchy of access to power, wealth, and opportunity. Racial and ethnic groups in the US are periodically set by the Office of Management and Budget, reflecting the changing demographics and evolving sociocultural concepts. Ethnicity refers to the broader cultural expression in certain geographic regions and may be based on shared history, traditions, language, and religion. These constructs function centrally in shaping the inequitable distribution of health outcomes within and across populations.

Socioeconomic status is the second health disparities science pillar, referring to individual, household, or family-based social and economic position. Researchers most often use years of educational attainment or adjusted household income in reference to the poverty level as measures
of SES. Lower SES is strongly linked with health outcomes, including mortality, and contributes to health disparities through limited resources and opportunities to engage in health-promoting activities relative to high educational attainment and income. Insufficient access to nutritious and affordable food, greater exposure to environmental hazards, and targeted tobacco and alcohol product marketing exemplify structural factors affecting groups with lower SES. Higher chronic psychosocial stressors, less robust social support networks, and less access to high-quality health care often characterize living conditions among persons with lower SES.

Recent NIMHD-sponsored research underscored the importance of continued focus on these 2 pillars. Within the 20 years preceding the COVID-19 pandemic, county-level analyses of life expectancy found widespread and enduring disparities by race and ethnicity. The economic burden of health disparities, measured by excess medical care expenditures, lost labor productivity, and premature death, exceeded $970 billion in persons without a college degree in 2018. Moreover, the 2021 National Healthcare Quality and Disparities Report further highlighted disparities in process, quality, and outcomes that emphasized the need to remain steadfast in the NIMHD focus.

Together, these pillars are fundamental to the study of health disparities. They are often closely correlated but overall explain different variance in evaluating pathways to health disparities. These pillars play significant roles in determining discrimination exposure, the quality of health care, and overall living conditions. Acknowledging the significance of race and ethnicity and SES enables researchers and policymakers to address the root causes of health disparities and implement data-driven interventions to improve equity.

Intersectionality With Other Disadvantaged Social Groups and Chronic Conditions

Integrating intersectionality into health disparities science provides a meaningful framework on which to deepen the understanding of these issues. The combination of social identities, such as being Black and not having a college degree or being Latino and identifying as a sexual and gender minority individual, is associated with multiple layers of health-related disadvantage. Recognizing the significance of intersectionality with race and ethnicity and/or SES is essential to understanding the unique challenges faced by other populations designated as experiencing health disparities and all persons with a diagnosed condition. Rural communities often confront geographic, economic, and social barriers that limit access to health care services and resources, which compounds health disparities. Sexual and gender minority individuals and persons with disabilities may encounter challenges related to discrimination, stigma, and culturally incompetent health care that can compromise health outcomes. By prioritizing research on the intersectionality of these factors, targeted interventions designed to address the diversity within disadvantaged populations can be developed, tested, and implemented. The possible intersections on which to focus should also be applied to advance science among populations defined by other sociodemographic factors and diagnosed conditions, such as mental illness, diabetes, arthritis, and heart failure.

Health Equity Is an Aspirational Goal

Establishing aspirational goals to guide science and policies can lead to significant and sustainable health improvements for all individuals. For example, setting a goal that 80% of persons with hypertension have controlled blood pressure is achievable with coordination among health systems, clinicians, patients, and communities. Eliminating access to tobacco products and hypercaloric processed foods for youths will require community-level policy changes and partnerships with families. These goals should extend beyond reducing disparities and encompass creating a health-related landscape that ensures everyone has access to the resources and opportunities necessary to achieve optimal health.
Health Disparities Science Must Remain Focused

Health disparities research must remain focused on race and ethnicity and SES as the 2 science pillars even though other indicators of marginalization and social determinants of health are essential to consider. There has been limited sustainable progress in reducing health disparities during the 23 years of NIMHD’s existence, and this is not acceptable. The large annual economic cost to society from these disparities exceeds the annual NIH budget by a factor of 10. Finally, there are multiple examples of effective interventions that have not been implemented in the most disadvantaged populations. There is an urgency around identifying and addressing the specific mechanisms through which health disparities persist. Understanding how structural and individual factors interact with members of racial and ethnic minority groups and populations with lower SES will elucidate the complex web of influences that create and maintain disparities. Such research will contribute to the development of targeted interventions, higher-quality clinical care, and policies addressing the intergenerational, intersectional, and diverse needs within and across racial and ethnic minoritized communities and groups with lower SES, with the goal of reducing gaps in outcomes. By focusing health disparities science on race and ethnicity and SES, anchored in the principles of justice and inclusivity, we can move closer to a future where health equity becomes a reality for all.

ARTICLE INFORMATION


Open Access: This is an open access article distributed under the terms of the CC-BY License. © 2023 Pérez-Stable EJ et al. JAMA Health Forum.

Corresponding Author: Eliseo J. Pérez-Stable, MD, Office of the Director, National Institute on Minority Health and Health Disparities, National Institutes of Health, 6707 Democracy Blvd, Ste 500, Bethesda, MD 20892 (eliseo.perez-stable@nih.gov).

Author Affiliations: Office of the Director, National Institute on Minority Health and Health Disparities, National Institutes of Health, Bethesda, Maryland.

Conflict of Interest Disclosures: None reported.

REFERENCES


4. Case A, Deaton A. Life expectancy in adulthood is falling for those without a BA degree, but as educational gaps have widened, racial gaps have narrowed. Proc Natl Acad Sci USA. 2021;118(11):e2024777118. doi:10.1073/pnas.2024777118


