

July 2020

Racial-Ethnic Disparities in Stroke



Health Disparities in Stroke

The American Heart Association/American Stroke Association Scientific Statement

[Cruz-Flores S, Rabinstein A, Biller J, et al. Racial-ethnic disparities in stroke care: the American experience: a statement for healthcare professionals from the American Heart Association/American Stroke Association. Stroke. 2011;42\(7\):2091-2116.](#)

A brief summary:

Racial categories defined by US federal government: white, black or African American, Asian, American Indian/Alaskan Native, and Native Hawaiian/other Pacific Islander.

Ethnic categories: Hispanic/Latino or Not of Hispanic/Latino origin

Some biological determinants may explain prevalence and incidence of stroke and morbidity/mortality compared to whites. However, racial disparities in stroke care exist.

Epidemiology:

Blacks or African Americans have a higher prevalence of HTN, diabetes and left ventricular hypertrophy than whites.

Hispanics have a higher prevalence of metabolic syndrome and diabetes than whites and blacks or African Americans.

Presence of 2 risk factors of stroke is higher in American Indians/Alaskan Natives than whites.

Prevalence:

Non-Hispanic whites, prevalence of stroke is ~2.3%

Non-Hispanic blacks or African Americans is ~4.0%

Black or African American children have a higher risk of stroke compared to white children; Relative Risk 2.12 (partly, but not fully explained by sickle cell)

Hispanics (any race), prevalence is ~2.6%

American Indians/Alaska Natives, prevalence is ~6.0%

Differential burden of stroke mortality: racial-ethnic minorities have higher rates of stroke mortality in the US. More marked among blacks or African Americans and people under 54 years of age.

Differences in disease awareness: Lack of awareness of stroke symptoms and signs, Lack of awareness of stroke symptoms and signs, Causal role of risk factors

Differences in attitudes, beliefs, and compliance: Denial of disease, concern for potential or experienced side effects of medications, absence of symptoms, hierarchy of need, burden of filling RX's, attending MD visits. [Lower health literacy](#) plays a role. (Link to the 2018 AHA/ASA Scientific Statement on health literacy). Perceived or true presence of racial discrimination with the healthcare system has a negative impact on compliance.

Disparities in access to care: Less likely to use ED services. Delayed arrivals to ED. Often have longer wait times in ED. Partly lack of awareness/education, but evidence suggests existence of bias in care.

Disparities in access to stroke rehab: Access to rehabilitation services has conflicting findings for minorities; however, they have longer stays and poorer functional status than whites.

Potential contributing and confounding factors: socioeconomic status, public awareness, perception of resource availability, literacy, mistrust of the healthcare system, language barriers, religious and cultural beliefs, cultural isolation, access to transportation, immigration status, healthcare provider issues.

Notes, these may be mediators for or barriers to interventions.

Differences in access to research: rates of participation, barriers to participation.

PRAXIS Podcast: Exploring Racism and Medicine

As we explore health disparities, we must recognize the impact that racism and other forms of marginalization have on health outcomes and access to healthcare for our patients.

The **PRAXIS Podcast**, hosted by Edwin Lindo, JD at the University of Washington, is a valuable resource for all healthcare workers wanting to learn more about theory and history of racism in healthcare and working towards health justice.

[PRAXIS PODCAST LINK](#)

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