Racial and ethnic disparities in stroke outcomes

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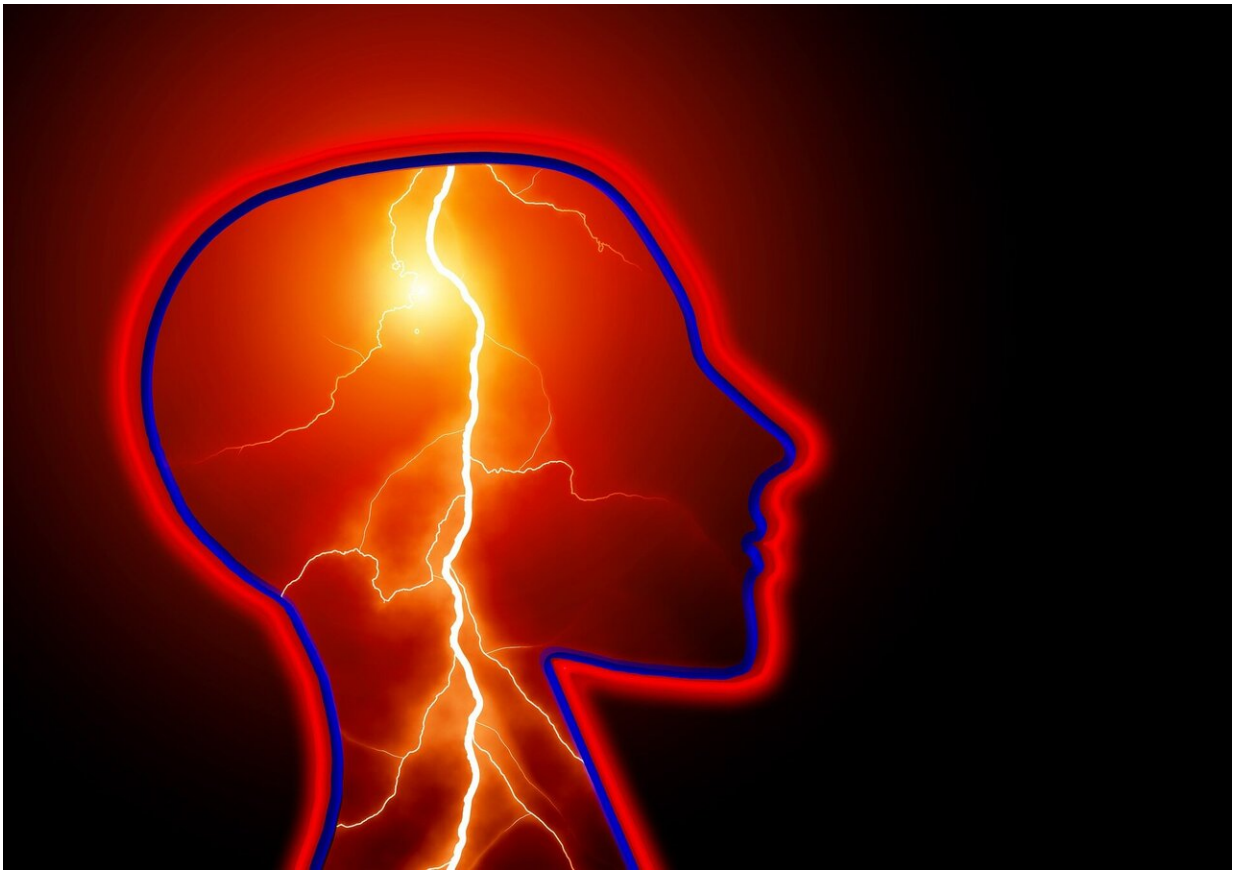

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Stroke is the fifth leading cause of death in the U.S. Despite declines in stroke mortality in the overall population in recent decades, disparities in

incidence remain persistent among Black and Hispanic Americans. Now a new study has found that inequality in survival among Black and Hispanic Americans varies by stroke type.

"While racial and ethnic disparities in stroke outcomes exist, differences by stroke type are less understood. Current evidence for racial and ethnic disparities in stroke mortality, particularly by stroke type, is needed to better understand and characterize the scope of this health inequity," explained corresponding author Hugo J. Aparicio, MD, MPH, assistant professor of neurology at Boston University School of Medicine and an investigator at the Framingham Heart Study.

Health disparities in stroke patients were investigated among patients admitted to VA hospitals in the U.S. between the years 2002-12. Strokes were categorized into three types: acute ischemic stroke (AIS), intracerebral hemorrhage (ICH), and subarachnoid hemorrhage (SAH). Race and ethnicity data were collected, and patients were categorized as either non-Hispanic White, non-Hispanic Black (African American), or White or Black Hispanic (Latino). The researchers then compared the incidence of death at various time periods after the stroke (hospital admission date to 30 days, 31-90 days, 91 days to one year, and greater than one year).

While Black patients were less likely to die within the first 30 days of hospital admission for AIS, compared to White patients, Black patients experienced higher mortality (3.2 percent higher) compared to White patients within the first 30 days following ICH, while Hispanics had similar mortality compared to Whites for ICH. For SAH, Hispanics had a higher 30-day mortality (10.3 percent higher) compared to Whites, but no other differences in mortality were seen between the two groups for other time periods.

According to the researchers, some causes of disparities seen in survival

could be attributed to decreased access to health care services (e.g., for blood pressure medication prescription), less community outreach for preventive health interventions, or variations in acute care or post-hospital discharge processes of care for minority populations. "Furthermore, the prevalence of uncontrolled high blood pressure in the Black population could contribute to higher rates of stroke. Therefore further investigation categorized by stroke type is warranted to address determinants of health inequity, such as individual health risk factors, care process within the hospital, or factors outside the healthcare system, that could be contributing to stroke mortality," adds Dr. Aparicio.

The researchers believe future studies should investigate group differences in vascular risk factors and risk factor management, stroke severity, the effects of structural racism, and social determinants of health that may contribute to this inequity in stroke survival.

These findings appear in the journal *Neurology*, the medical journal of the American Academy of Neurology.

More information: Racial and Ethnic Differences in Short- and Long-term Mortality by Stroke Type, *Neurology* (2022).

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