Black and Hispanic people in US less likely to get treatment for stroke complications

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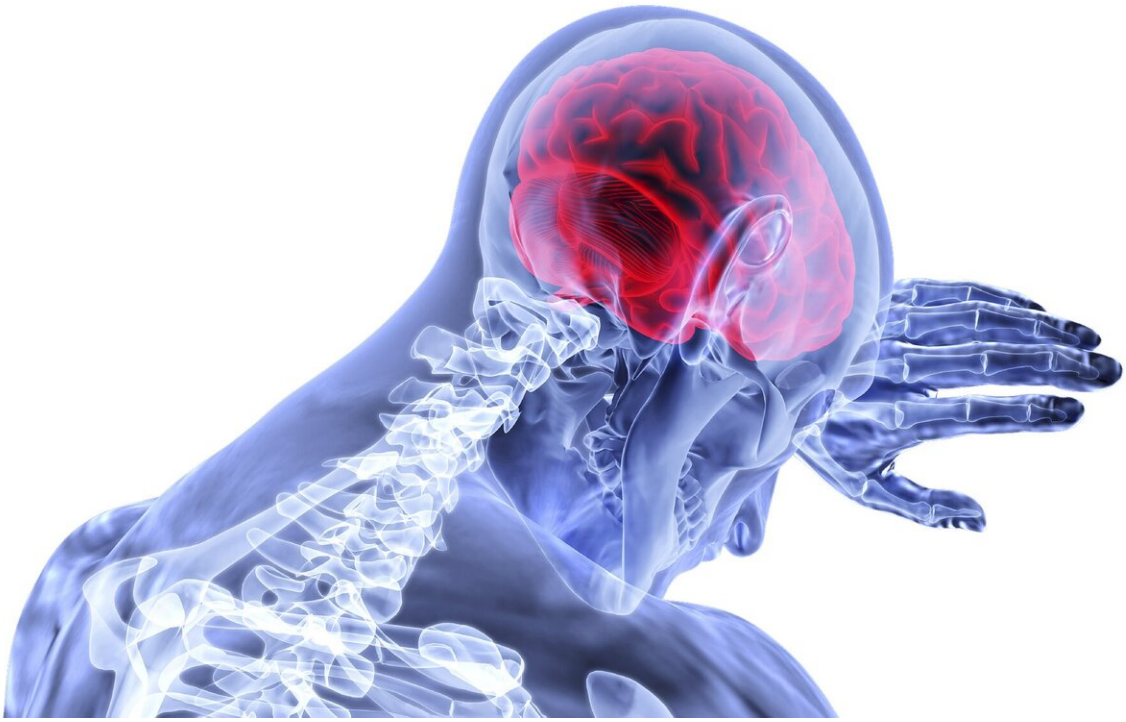

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Analysis of 20 years of electronic health records across the U.S. finds Black and Hispanic stroke survivors were less likely than white stroke survivors to receive treatment for common complications during the first year after their stroke, according to preliminary research to be presented at the American Stroke Association's International Stroke Conference

2023. The meeting, to be held in person in Dallas and virtually Feb. 8-10, 2023, is a world premier meeting for researchers and clinicians dedicated to the science of stroke and brain health.

Despite increases in recent decades in the overall stroke survival rates in the U.S., Black and Hispanic adults in the U.S. still consistently fare worse in their recovery from a stroke when compared to their peers who are white. According to a new study, differences in the treatment of complications immediately after a stroke may possibly explain these persistent health disparities.

"A constellation of symptoms may manifest after a stroke; however, not all complications are life-threatening events. Some complications may be more subtle and go undetected by the medical community and, as a result, people from different racial or ethnic groups may not receive equitable treatment," said lead study author "Stroke may have a devastating impact on an individual's quality of life, and I think we owe it to our patients to do what we can to improve their level of function and quality of life after a stroke."

In this study, Using electronic medical records from 65 large health care centers across the U.S., the analysis included patients hospitalized with stroke between August 2002 and July 2022. The records were divided into three patient groups (Black, non-Hispanic white and Hispanic): 80,564 Black stroke survivors were matched to 80,564 non-Hispanic white stroke survivors; and 28,375 non-Hispanic white stroke survivors were matched to 28,375 Hispanic stroke survivors. All participants were older than 18 years with an average age of 64 and 54% were male.

Stroke survivors were matched based on 41 factors that may affect recovery, including age, sex and other health conditions, such as hypertension and diabetes (Type 1 and 2). After matching there were no significant group differences for any of 41 factors. For the analysis,

researchers reviewed medications prescribed for six common stroke complications: central nervous system arousal/fatigue (foggy brain function); mood irregularities (depression/anxiety); spasticity (muscle stiffness); sleep problems; bladder incontinence; and seizure. They then compared the differences in the treatment of these conditions after a stroke among the people who had these complications at three points in time: 14 days, 90 days and 365 days after the stroke.

The analysis revealed:

- Black stroke survivors were significantly less likely to be treated for any complications except seizure, compared to stroke survivors who were white. The largest difference was seen in the treatment of arousal/fatigue, spasticity, and mood at the 14-day mark. Compared to stroke survivors who were white adults, those who were Black adults were 30% less likely to be treated for central nervous system arousal, 27% less likely to be treated for spasticity and 17% less likely to be treated for mood irregularities.
- In the comparison of Hispanic vs. non-Hispanic white stroke survivors at the 14-day mark, Hispanics survivors were 20% less likely to receive treatment for central nervous system arousal; 19% less likely to receive treatment for spasticity; and 16% less likely to receive treatment for mood irregularities.
- Little to no differences in the treatment of seizure were seen between the three patient groups at all three time periods.

"When a patient is having a seizure, the physical manifestations are often clear and demand urgent treatment. However, for other symptoms like foggy brain function or depression, health care professionals must dig a little deeper to assess for these signs or symptoms and determine if treatment is warranted. This difference between seizures and the other more subtle symptoms is the important take away," Simmonds said. "We

found that the disparities among different population groups narrowed a little over time, and this likely shows that some of these conditions are being recognized and treated. However, even at the one-year mark, the overall treatment disparities remain for the treatment of nearly all post-stroke complications."

The main limitation of this analysis is that a large database review like this can identify racial disparities in stroke care, however, it is less attuned to identify the specific factors driving them. "These differences are real and persistent, so it's a matter of finding them, one by one, and filling these gaps," Simmonds said.

The research team plans to test various intervention strategies that may help stroke survivors who are Black or Hispanic achieve a better functional recovery after their stroke.

"Communication moving forward is important. Many people survive their stroke, so health care professionals need to ask patients about these other subtle symptoms that may indicate additional complications, in addition to traditional risk factors such as blood glucose levels or blood pressure. These other domains have an important impact on our patients' post-stroke, day-to-day quality of life."

"It is very important for stroke survivors to receive treatment for subsequent complications. Successful recovery and quality of life depend upon the identification and management of post stroke complications," said American Stroke Association, a division of the American Heart Association, volunteer expert Karen L. Furie, M.D., M.P.H., FAHA, vice chair of the Association Stroke Brain Health Science Subcommittee and professor and chair of neurology at the Warren Alpert Medical School of Brown University in Providence, Rhode Island. "Understanding the factors that contribute to these differences in treatment will empower clinicians to deliver high-quality,

equitable care to stroke patients." Dr. Furie was not involved in this study.

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More information: professional.heart.org/en/meet … al-stroke-conference

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