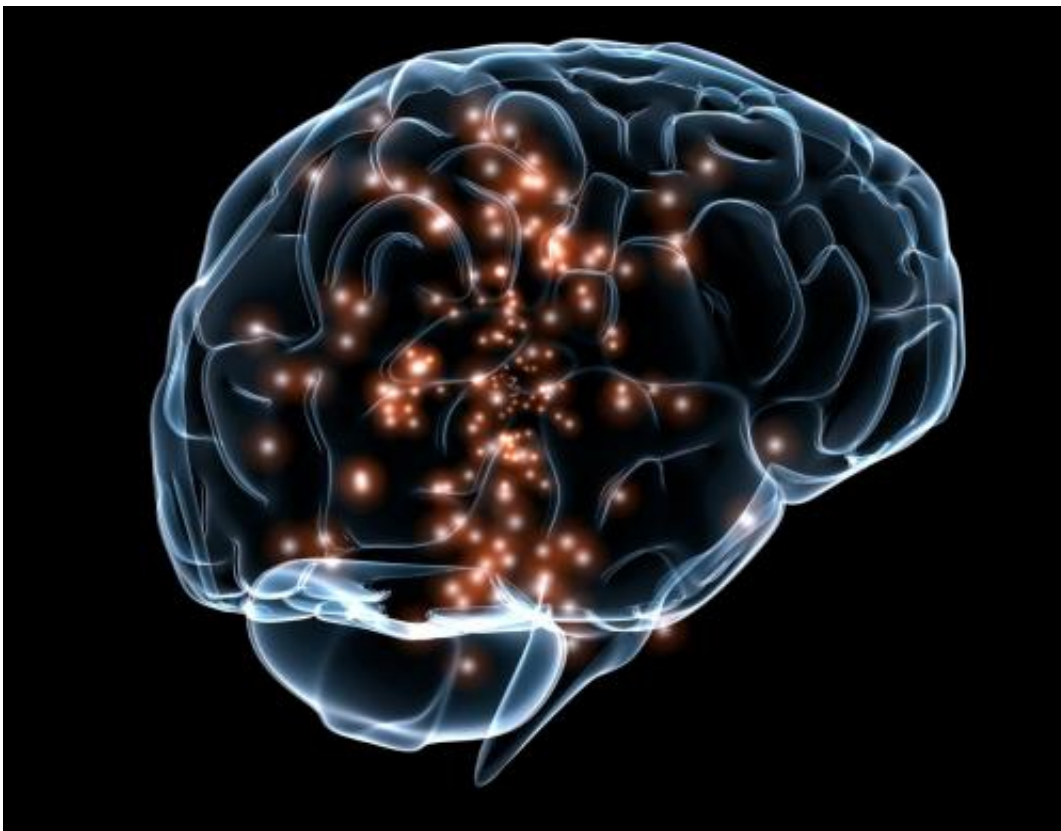


Study suggests racial discrimination during midlife associated with Alzheimer's disease pathology later in life

April 10 2024



Credit: Wikimedia Commons

Racial discrimination experienced during midlife is associated with Alzheimer's disease pathology, according to a new study from researchers at Wake Forest University School of Medicine and the

University of Georgia.

The findings [appear](#) online in *Alzheimer's & Dementia*.

"We know that Black Americans are at an elevated risk of Alzheimer's disease and other dementias compared to non-Hispanic white Americans, but we don't fully understand all the factors that contribute to this disproportionate risk," said Michelle Mielke, Ph.D., professor of epidemiology and prevention at Wake Forest University School of Medicine.

Mielke, who is a co-corresponding author of the study, said that these racial disparities cannot be attributed to only genetic differences and that research suggests that exposure to racism and its associated stress may increase the risk of dementia.

For the present study, the research team used 17 years of data, which included interviews and blood draws, from a sample of 255 Black Americans who participated in the Family and Community Health Study, a multi-site and longitudinal investigation, which was initiated in 1996 and included more than 800 families in the U.S.

Since the beginning of the Family and Community Health Study, data has been collected every two to three years to study the health and well-being of Black Americans.

In the current study, researchers analyzed serum biomarkers, which are associated with Alzheimer's disease and related dementias, including serum phosphorylated tau181 (p-Tau181), a marker of Alzheimer's pathology; neurofilament light (NfL), a non-specific marker of neurodegeneration; and glial fibrillary acidic protein (GFAP), a marker of brain inflammation.

To measure racial discrimination, the study team surveyed individuals about discriminatory events they experienced such as encountering disrespectful treatment by store owners, salespeople or [police officers](#), being called racial slurs, being excluded from social activities, and not being expected to do well because of being a Black American.

"We found no correlations between racial discrimination and increased levels of the serum biomarkers in 2008 at Wave 5 when participants were a mean age of 46 years," said Ronald L. Simons, Ph.D., professor of sociology at the University of Georgia and co-corresponding author of the study.

"However, 11 years later when the study participants were roughly 57 years old, we found that increased discrimination during middle age significantly correlated with higher levels of both p-Tau181 and NfL."

While additional research is needed to better understand the complexity of these processes, Mielke said it's clear that future studies should also focus on the challenges and racism experienced by Black Americans to further understand their risk of dementia.

"These findings provide evidence that the chronic stress of [racial discrimination](#) often encountered by Black Americans in midlife become biologically embedded and contribute to Alzheimer's disease pathology and neurodegeneration later in life," Mielke said.

"This research can help inform policies and interventions to reduce [racial disparities](#) and reduce [dementia](#) risk."

More information: Racial discrimination during middle age predicts higher serum phosphorylated tau and neurofilament light chain levels a

decade Later: a study of aging black Americans, *Alzheimer's & Dementia* (2024). [DOI: 10.1002/alz.13751](https://doi.org/10.1002/alz.13751)

Provided by Atrium Health Wake Forest Baptist

Citation: Study suggests racial discrimination during midlife associated with Alzheimer's disease pathology later in life (2024, April 10) retrieved 21 May 2024 from <https://medicalxpress.com/news/2024-04-racial-discrimination-midlife-alzheimer-disease.html>

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