

Offspring Study of Mechanisms for Racial in Alzheimers Disease

<https://neurodegenerationresearch.eu/survey/offspring-study-of-mechanisms-for-racial-in-alzheimers-disease/>

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USA

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Offspring Study of Mechanisms for Racial in Alzheimers Disease

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NIH (NIA)

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1

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Basic Behavioral and Social Science... Behavioral and Social Science... Brain Disorders... Cardiovascular... Clinical Research... Clinical Research - Extramural... Dementia... Health Disparities for IC Use... Minority Health for IC Use... Neurodegenerative... Neurosciences... Prevention

Research Abstract

The overall aim of this study is to identify underlying biological and sociocultural mechanisms of racial/ethnic disparities in cognitive function among a middle-aged cohort of 3,000 offspring whose parents do and do not have Alzheimer's Disease (AD). Studies of non-Hispanic Whites have shown that children of people with AD are at increased risk of developing the disease, and that factors such as parental age at onset and APOE allele status may modify risk associated with a family history of AD. Rates of AD are two to three times higher among Hispanic and African American than among non-Hispanic White elders and the prevalence of many cardiovascular and demographic risk factors for AD is higher among ethnic minorities than among non-Hispanic Whites. However, potential mediators and modifiers of family risk have not been well examined among racial and ethnic minorities, nor has much prior work been conducted among families where data from detailed clinical and biomarker examinations on parents were available from in-person examinations. Since pathology begins to manifest in the brain in the fifth and sixth decades of life, we propose that mechanisms for racial/ethnic disparities can be more clearly revealed in middle age and thus help to clarify the determinants and pathways of ethnic disparities in cognitive impairment with aging and potential critical periods for intervention. Our overarching hypothesis is that the primary mode of transmission of parental AD risk among racial/ethnic minorities is via vascular and social pathways, while the primary transmission of parental AD risk among Whites is via genetic pathways that affect amyloid deposition in the brain. Specifically, the project will 1) determine which biological mediators of parental risk of AD on offspring cognition differ most across race/ethnicity, 2) determine which educational, economic, and social moderators of parental risk of AD on offspring cognition differ most across race/ethnicity, and 3) use directly measured parental risk factor data to refine our understanding of mechanisms of racial/ethnic disparities in AD.

Lay Summary

The prevalence of AD and the societal and economic burden associated with AD treatment and care is expected to rise as baby boomers enter old age. This is particularly true of African Americans and Hispanics who are at higher risk for AD than similarly aged non-Hispanic Whites. Offspring of elders with AD are at increased risk of developing the disease. It is therefore critical to identify factors that may increase or lower risk of AD, and may reduce disparities in AD, particularly in the 4th and 5th decades of life when pathology begins to manifest in the brain and when intervention may delay or prevent onset.

Further information available at:

Types:

Investments > €500k

Member States:

United States of America

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A