Racial Differences in Late-Life Cognitive decline and risk of Alzheimers Disease

https://neurodegenerationresearch.eu/survey/racial-differences-in-late-life-cognitive-decline-and-risk-of-alzheimers-disease/

Principal Investigators

BARNES, LISA L

Institution

RUSH UNIVERSITY MEDICAL CENTER

Contact information of lead PI
Country

USA

Title of project or programme

Racial Differences in Late-Life Cognitive decline and risk of Alzheimers Disease

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

€ 5,112,952.29

Start date of award

30/09/2004

Total duration of award in years

11

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)... Behavioral and Social Science... Brain Disorders... Cerebrovascular... Clinical Research... Clinical Research - Extramural... Dementia... Minority Health for IC Use... Neurodegenerative... Neurosciences... Prevention

Research Abstract

? DESCRIPTION (provided by applicant): The prevention of Alzheimer’s disease (AD) and cognitive decline in our aging population is a major public health priority. The older Black population is growing at a rapid pace and a significant body of evidence suggests that they suffer a greater burden of cognitive impairment and dementia compared to older Whites. Studies which collect brain tissue from well-characterized older Blacks with sufficient cognitive follow-up and risk factors are crucial to advance our understanding of the pathologic substrates underlying AD in older Blacks. In prior funding periods, the Minority Aging Research Study (MARS) made considerable progress identifying risk factors for cognitive decline in older Blacks. We enrolled a large cohort of well-characterized persons, followed them annually, and reported social, psychological, and medical risk factors related to cognitive decline, many of which appear to increase the burden of impairment compared with Whites. We also obtained autopsy from a subsample of participants who agreed to brain donation. The overall goal of the proposed continuation is to address gaps in the understanding of racial differences in the relation of risk factors and the pathologic substrates of incident AD and late-life cognitive decline. Leveraging ten years of data collection on risk factors, cognitive and motor function, a unique source of brain tissue, and donated data on Whites from ongoing studies at Rush, we propose to continue collecting clinical and postmortem data on MARS participants, test whether motor function may serve as a new biomarker for AD, and quantify new histopathologic and postmortem brain MRI indices to measure the impact of cerebrovascular pathologies in Blacks who come to autopsy. Aim 1 will examine racial differences in the association of demographic, lifestyle, and motor risk factors with incident AD. Aim 2 will examine nonlinear change in cognition and test hypotheses regarding racial differences in the effects of risk factors on changes in slope before and after incident AD. Aim 3 will evaluate racial differences in change in mobility and the associations of mobility with incident AD. Finally, Aim 4 will obtain more extensive data on cerebrovascular disease pathologies and postmortem brain MRI indices to determine the relation of brain indices to cognitive and motor function in Blacks, and compare the burden of cerebrovascular pathologies in Blacks and Whites. The proposed study provides a unique opportunity to answer critical questions about a large understudied segment of our aging society.

Lay Summary

PUBLIC HEALTH RELEVANCE: This study will integrate postmortem brain examination into an ongoing cohort study of risk factors for AD in older Blacks and compare them to matched Whites to identify racial differences in the pathologic substrates of AD. These data are critical t reduce disparities and the burden of AD and cognitive decline in a rapidly growing and understudied population.

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

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N/A