

# Lifecourse health, cerebral pathology and ethnic disparities in dementia

<https://neurodegenerationresearch.eu/survey/lifecourse-health-cerebral-pathology-and-ethnic-disparities-in-dementia/>

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### Country

USA

## Title of project or programme

Lifecourse health, cerebral pathology and ethnic disparities in dementia

## Source of funding information

NIH (NIA)

## Total sum awarded (Euro)

€ 11,998,745.87

## Start date of award

01/06/2016

## Total duration of award in years

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

### **Research Abstract**

? DESCRIPTION (provided by applicant): A primary objective of the 2012 National Alzheimer's Plan Act was to decrease racial disparities of dementia. While it is known that certain ethnoracial groups such as Blacks have higher rates of dementia, reasons for disparities are unknown. The NIH State of the Science on Preventing Cognitive Decline recommended a life course approach to identifying modifiable risk and protective factors. Whether early life factors contribute to ethnic disparities in dementia and cognitive decline and how these variables relate to brain changes that may mediate disparities is not well understood. Further, effects of risk and protective factors may vary across ethnoracial groups. Most of what is known about risk and protective factors and brain mechanisms for dementia is from studies of non-Hispanic whites. We propose an unprecedented lifecourse study of disparities in late life cognitive decline and dementia using a large multi-ethnoracial sample of current Kaiser Permanente health system members who participated in the Multiphasic Health Study (MHS) extending from 1964-1991. MHS data, joined with electronic medical records from 1996-present, provide up to 50 years of comprehensive, prospectively collected data. Eighteen hundred (450 Black, 450 Hispanic, 450 White, 450 Asian) MHS participants aged 65+ will receive cognitive and clinical evaluations at 3 time points to rigorously characterize prevalence and incidence of dementia and measure cognitive decline using well-validated tests for ethnoracially diverse older adults. Structural MRI and Amyloid PET will be obtained on a random sub sample of 400 non-demented individuals to characterize cerebral amyloid burden, vascular lesions, and neuronal injury (atrophy). Our objectives are to delineate why there are racial/ethnic disparities in dementia and how life course risk and protective factors and brain mechanisms differ across ethnoracial groups. We will do so with three Specific Aims: 1) Evaluate ethnoracial differences in dementia incidence and cognitive decline, 2) Evaluate how early life experience, life course health, and genetics influence ethnoracial differences in cognitive decline and dementia, 3) Characterize paths by which ethnicity/race and cumulative vascular risk influence brain status (amyloid, vascular brain injury, atrophy) and cognitive decline.

### **Lay Summary**

**PUBLIC HEALTH RELEVANCE:** In 2012 President Obama signed the National Alzheimer's Plan Act with a primary objective to decrease racial disparities of dementia. While it is known that certain ethnoracial groups such as Blacks have higher rates of dementia, reasons for these disparities are unknown. We propose an unprecedented lifecourse study of ethnic disparities in late life cognitive outcomes using a large multi-ethnic sample with over 5 decades of prospectively collected life history and health data. Our overall objectives are to delineate why there are racial/ethnic disparities in dementia and how risk and protective factors and brain mechanisms differ across ethnoracial groups.

**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