

Examining Alzheimer's Disease-Related Dementia Disparities among US-Born and Non-US-Born Black Adults: A Perspective on Socioeconomic and Social Determinants of Health

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INTRODUCTION

- Alzheimer's disease and related dementias (ADRD) disproportionately impact Black individuals, with incidence rates nearly double those of White individuals.
- Black individuals often face significant challenges that lead to missed or delayed diagnoses of ADRD, frequently resulting in detection at more advanced stages.
- The broad classification of Black populations as a monolithic group may obscure unique ethnracial factors contributing to these disparities.
- This study compares ADRD data between US-born and non-US-born Black individuals to guide targeted interventions.

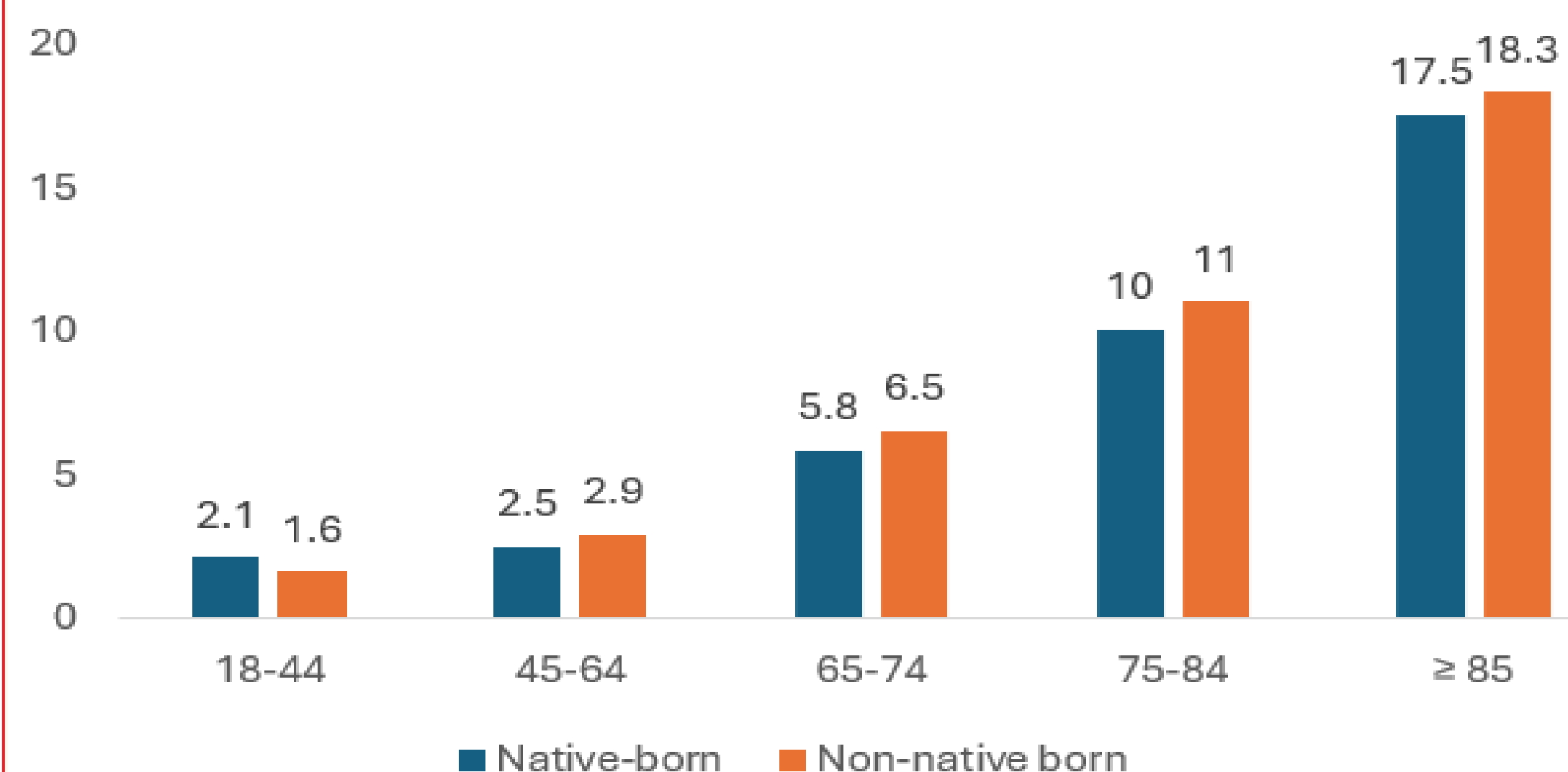
METHODS

- We conducted a retrospective cohort study using deidentified data from the *All of Us* Research Program.
- We analyzed data from 77,069 Black individuals, divided into US-born (N=72,311) and non-US-born (N=4,758) cohorts. ADRD diagnoses were extracted using ICD codes.
- Descriptive statistics, propensity score matching, and binary logistic regression were used to compare ADRD prevalence and assess the impact of demographic and socioeconomic factors between cohorts.

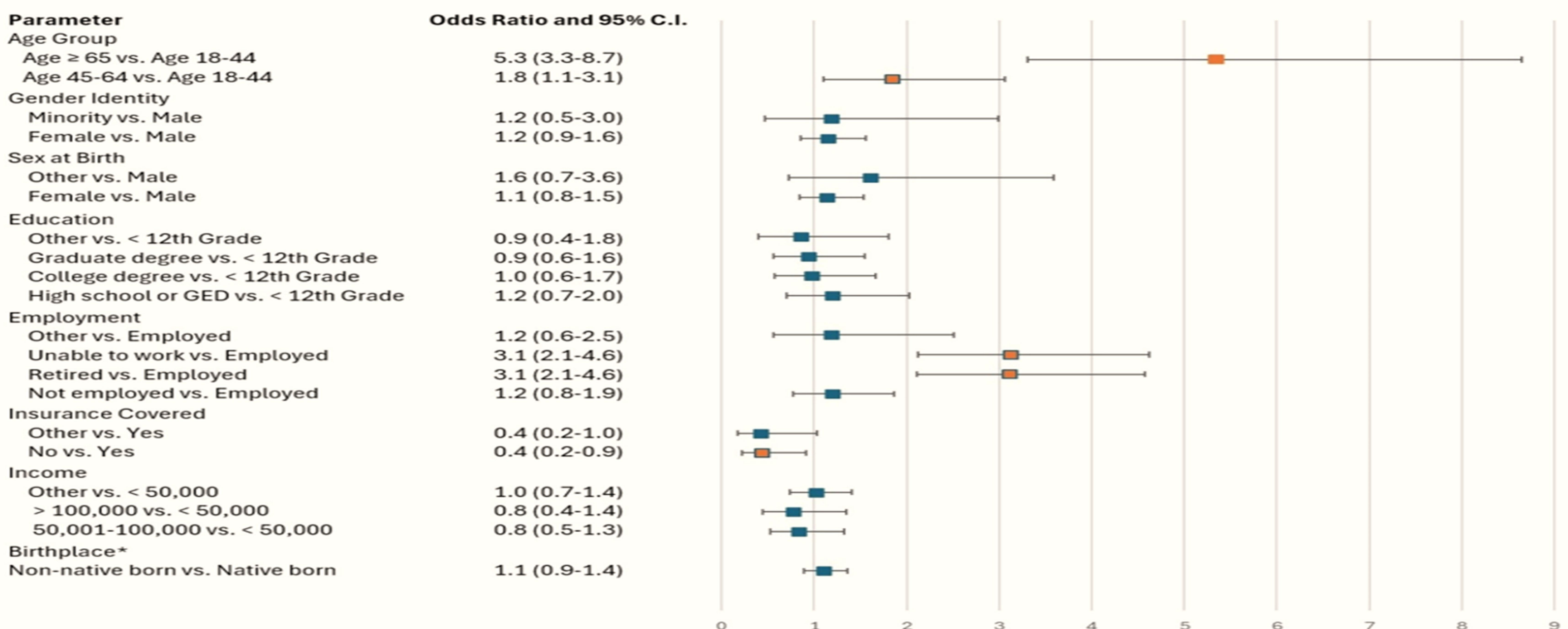
RESULTS

Participants: Before Matching		Participants: After Matching	
US-Born:	Mean age 54.6 (SD=14.7) N=72,311	US-Born:	Mean age 54.9 (SD=14.8) N=4,758
Non-US-Born:	Mean age 55.2 (SD=14.9) N=4,758	Non-US-Born:	Mean age 55.2 (SD=14.9) N=4,758

Percentage of ADRD Across US-born and Non-US-born Black Adults After 1:1 Propensity Score Matching



Influence of Socioeconomic and Environmental Factors on the Odds of ADRD After 1:1 Propensity Score Matching



Abbreviations: CI, confidence interval.

*All demographic and socioeconomic factors, including age group, gender identity, sex at birth, education, employment, insurance, and income, are controlled as confounders. The odds ratio compares the non-US-born cohort to the US-born cohort, where an odds ratio greater than 1 indicates higher odds of an ADRD diagnosis in the non-US-born cohort compared to the US-born cohort

MAIN FINDINGS

- Higher Prevalence in Non-US-born Blacks:** Non-US-born Black individuals showed a higher ADRD prevalence (4.12%) compared to US-born Blacks (3.76%).
- Age as a Key Risk Factor:** ADRD prevalence significantly increased with age, notably among those aged 65 and older.
- Impact of Employment Status:** Retirees and individuals unable to work had a higher ADRD prevalence compared to employed individuals.
- Socioeconomic Influences:** Higher education levels were associated with lower ADRD risk among non-US-born Blacks, and higher income levels were linked to reduced ADRD risk in both groups.

DISCUSSION

- The higher ADRD prevalence in non-US-born Black individuals may reflect differences in cultural, environmental, or healthcare access factors (**SDOH**) that warrant further investigation.
- The significant increase in ADRD risk with age emphasizes the need for enhanced screening and preventive measures targeted at older populations.
- The associations between higher education and income levels with reduced ADRD risk suggest that addressing socioeconomic disparities could be key in mitigating ADRD prevalence.
- These findings underscore the need to tailor ADRD strategies to address **SDOH** disparities and enhance health equity.