

EPIDEMIOLOGY

Undiagnosed Alzheimer's disease and related dementias among foreign-born Middle Eastern and North African adults in the United States

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Tiffany B Kindratt, University of Texas at Arlington, Arlington, TX, USA.

Email: tiffany.kindratt@uta.edu**Abstract**

Background: Alzheimer's disease and related dementias (ADRD) disparities exist by race/ethnicity and nativity (Mehta & Yeo, 2017). Non-Hispanic blacks and Hispanics are more likely to have ADRD and to be undiagnosed than non-Hispanic whites (Amjad et al., 2018; Gianattasio et al., 2019). The prevalence of undiagnosed ADRD among Middle Eastern and North African (MENA) adults in the US remains unknown. MENA men tend to report better health than women regardless of immigrant status (Read & Reynolds, 2012). Our aims were to: 1) estimate and compare estimates of suspected undiagnosed ADRD among foreign-born MENA adults compared to US- and foreign-born non-Hispanic whites and 2) compare estimates stratified by sex.

Method: We linked data from the 2000-2017 National Health Interview Survey and 2001-2018 Medical Expenditure Panel Survey (ages ≥ 65 years, $n = 23,981$). ICD-9 (290/294/331/797) and ICD-10 (F03/G30) codes were used to measure ADRD diagnosis. Undiagnosed ADRD was suspected if a participant reported having a cognitive limitation without a corresponding ADRD diagnosis. Bivariate and multivariable logistic regression analyses adjusted for age, sex, and potentially modifiable risk factors (education, hearing loss, hypertension, depression, social isolation, and diabetes) were conducted.

Result: The prevalence of suspected undiagnosed ADRD was highest among foreign-born MENA adults (15.8%) compared to US- (8.1%) and foreign-born (11.8%) non-Hispanic whites. The age-adjusted and sex-stratified prevalence of suspected undiagnosed ADRD was higher among MENA women (22.5%) than MENA men (9.3%) and lowest among US-born white men (7.6%). In fully adjusted logistic regression models, foreign-born MENA adults had 1.98 times greater odds (95% CI = 1.09-3.60) of undiagnosed ADRD compared to US-born non-Hispanic whites. There were no differences between foreign-born MENA men and US-born non-Hispanic white men. Foreign-born MENA women had 2.89 times greater odds (95% CI = 1.49-5.60) of undiagnosed ADRD compared to US-born white women.

Conclusion: This study contributes the first national estimates of suspected undiagnosed ADRD among MENA men and women. Furthermore, our study highlights that

the underdiagnosis of ADRD among MENA adults may be driven by women. Results will help to facilitate policy decisions and advocate for resources to be allocated for interventions to improve the health of this underrepresented but increasingly visible minority population.