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Title

Black business ownership and self-reported stroke risk factors among Black residents

Priority 1 (Research Category)

Social determinants and vulnerable populations

Presenters

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Abstract

Context: Racial differences in stroke incidence may be explained by area-level racial differences in economic power. Objective: To examine the association between Black business ownership and stroke risk factors among Black adults. Study Design: Cross-sectional analysis. Datasets: Pooled data from the 2017 and 2019 Selected Metropolitan/Micropolitan Area Risk Trends of the Behavioral Risk Factor Surveillance System; 2017 Annual Business Survey ; and 2015-2019 American Community Survey. Population: Non-Hispanic Black residents living in 123 metropolitan/micropolitan statistical areas (MMSA) (N=31,149). Exposures: Black business ownership defined at the MMSA level as (1) the ratio of Black-owned businesses to non-Black owned businesses divided by the ratio of Black residents to non-Black residents (BBO1) and (2) the ratio of Black-owned businesses to White-owned businesses divided by the ratio of Black residents to White residents (BBO2). Outcomes: Self-reported hypertension, diabetes, high cholesterol, and smoking status, specified as dichotomous (presence/absence of construct). Analysis: Eight multivariate logistic regressions regressed self-reported hypertension, diabetes, high cholesterol, and smoking status on Black business ownership (BBO1/BBO2) controlling for age, gender, income, education, and region. Survey weights were used to account for the complex survey design and standard errors were clustered at the MMSA level. Average marginal effects (AME) were reported. Results: The BBO1 and BBO2 median scores were 0.14 (IQR: 0.12-0.22) and 0.12 (IQR: 0.09-0.16), respectively. In multivariate logistic regressions, BBO1 was inversely associated with hypertension (AME: -0.11; 95%CI: -0.20,-0.03), and diabetes (AME:-0.08; 95%CI:-0.13,-0.03), but not associated with cholesterol (AME:0.05; 95%CI: -0.01,0.11) and smoking (AME:0.03; 95%CI:-0.04,0.10). BBO2 was directly associated with smoking (AME: 0.09; 95%CI 0.04-0.14) but not associated with hypertension (AME:-0.05, 95%CI: -0.15,0.05), diabetes (AME:-0.03; 95%CI:-0.10,0.04), and cholesterol (AME:0.01; 95%CI: -0.06,0.09). Conclusion: Black Americans were less likely to report a diagnosis of hypertension and diabetes in MMSA with greater equity between Black-owned businesses and the Black population (BBO1). In MMSA with greater equity between Black and White owned businesses relative to

their respective populations (BB02), Black residents were more likely to report smoking, which warrants further investigation.