

BACKGROUND

- ❖ Vaccine hesitancy has significantly hindered uptake of the COVID-19 vaccines in the United States.
- ❖ Rural communities face unique challenges such as limited access to telehealth, large geographical distances to care, and a greater risk of COVID-19 related deaths.
- ❖ Social connectedness and maintaining social connections may be a source of social support, however, previous literature notes that rural populations were more likely to feel socially disconnected during the pandemic.

OBJECTIVES

- ❖ To determine if there is a relationship between social connectedness, rurality, and vaccine hesitancy among Medicare Beneficiaries during the COVID-19 pandemic.

METHODS

Study Design:

- ❖ Retrospective, Cross-sectional

Data Source:

- ❖ Fall 2020 Medicare Current Beneficiary Survey (MCBS) COVID-19 supplement
 - ❖ Nationally representative, publicly available data
 - ❖ Sample of community dwelling Medicare beneficiaries living in the U.S.

Study Population:

- ❖ Medicare beneficiaries aged 65 and older who responded to the COVID-19 supplement

Study Measures:

- ❖ Vaccine hesitancy:
 - ❖ “If a vaccine that protected you from the coronavirus was available to everyone, would you get it?” (Yes/ No)
- ❖ Rurality:
 - ❖ Metropolitan area – population of ≥50,000
 - ❖ Micropolitan area – population between 10,000 - ≤ 50,000
- ❖ Social connectedness:
 - ❖ “Since 07/2020 have you felt more socially connected to family and friends, less socially connected to family and friends, or about the same?”
 - ❖ Coded as: Same social connectedness / Change in social connectedness
- ❖ Covariates: Age, sex, race, income, disease count, region

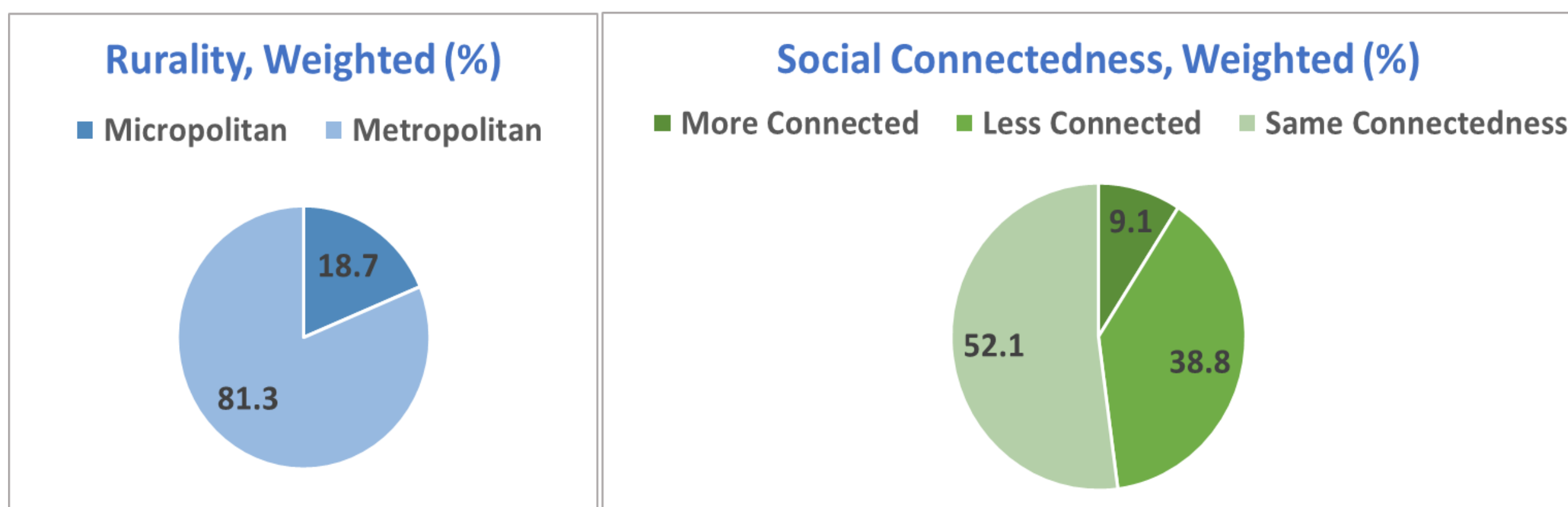
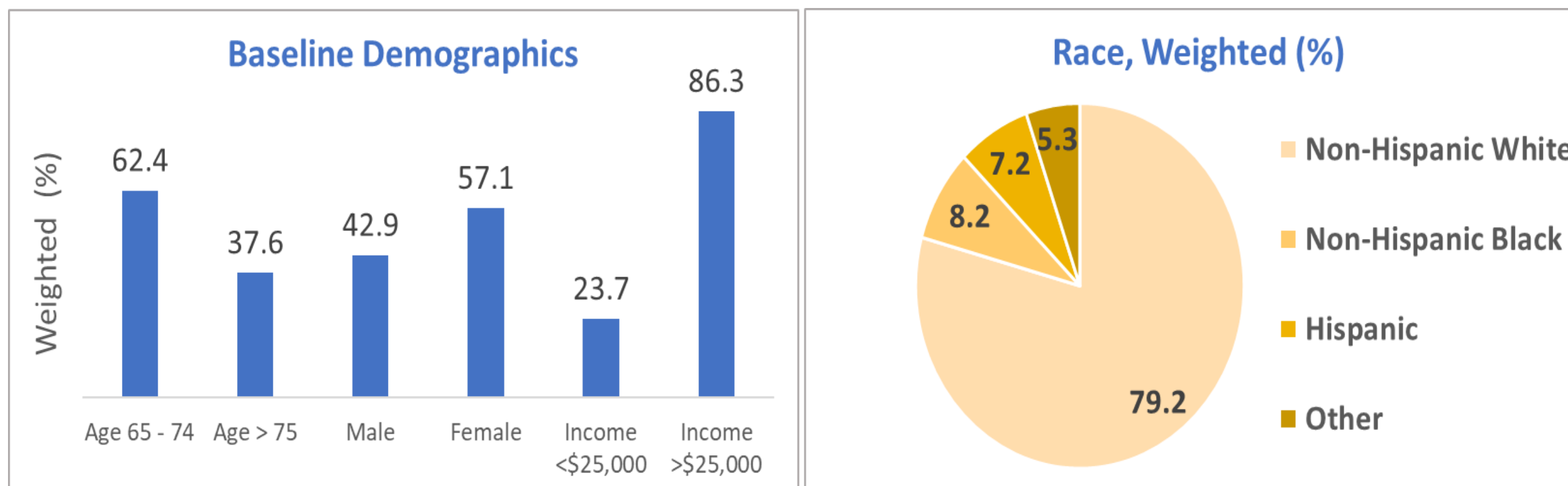
METHODS

Data Analysis:

- ❖ Weighted means and percentages were used to assess demographic characteristics
- ❖ Bivariate and multivariable logistic regression analyses were used to assess factors associated with vaccine hesitancy
- ❖ MCBS survey design complexities were accounted for by applying MCBS sample weights to produce accurate estimates and replicate weights were used to produce standard errors associated with the weighted estimates
- ❖ All analyses were conducted using the Stata 16.0.
- ❖ The SIUE Institutional Review Board deemed this study as not human subjects research (Protocol # 1367).

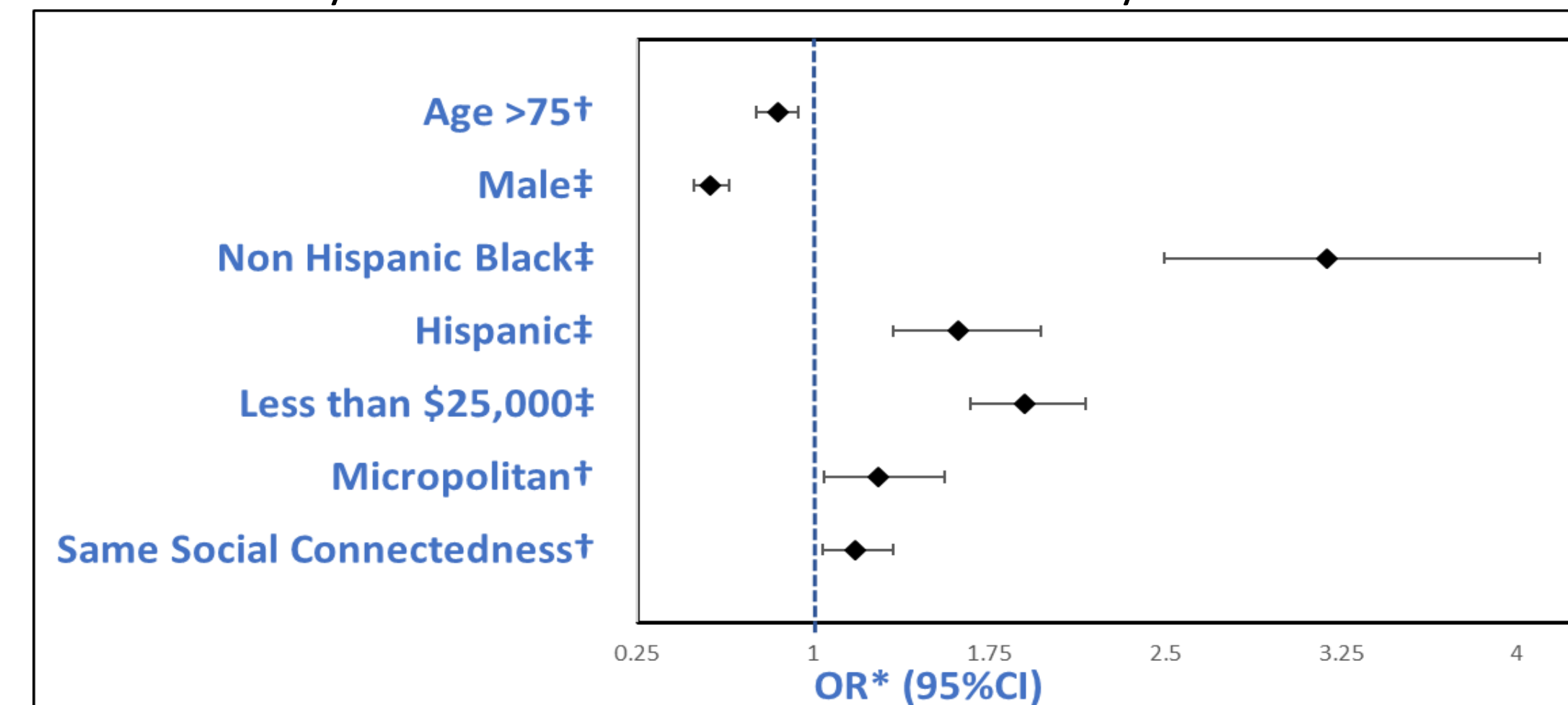
RESULTS

- ❖ A total of 6,725 (weighted N = 40, 469,855) 65 years and older members were included in this study

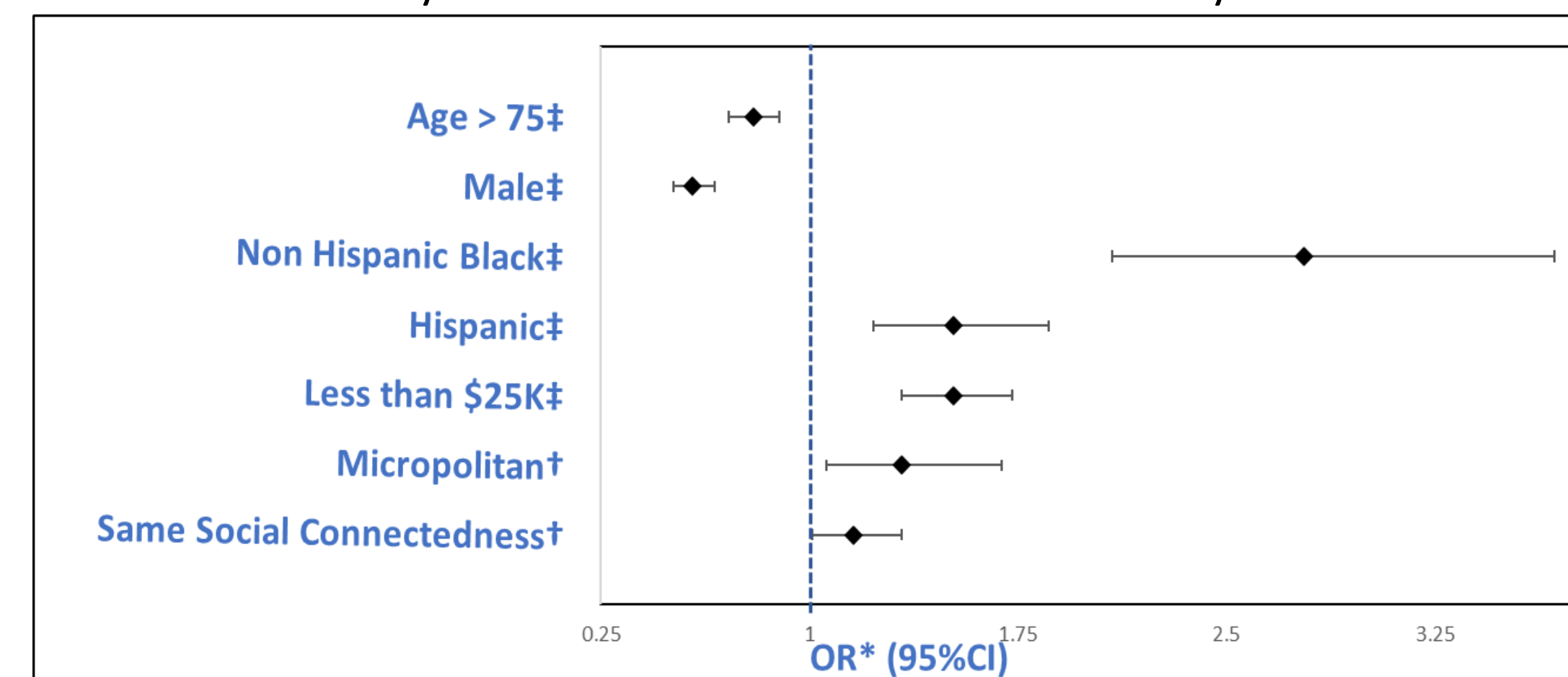


RESULTS

Bivariate Analysis: Associations with vaccine hesitancy



Multivariable Analysis: Associations with vaccine hesitancy



Reference categories: Age 65 – 74, Female, Non-Hispanic white, More than \$25,000, Metropolitan, and Change in social connectedness. Multivariable analysis also controlled for region, and disease count. Only significant results are noted.

*OR= Odds Ratio, 95%CI= 95% Confidence Intervals, † p < 0.05, ‡ p < 0.0001

CONCLUSIONS

- ❖ This study found that micropolitan residency and no change in social connectedness during the pandemic were associated with vaccine hesitancy
- ❖ Future studies should account for both physical and social connectedness to better understand the needs of rural populations

DISCLOSURE

- ❖ Aneesh Asokan, Maithili Deshpande, Nothing to disclose