

The Prevalence of Risk Factors for Cognitive Impairment among Middle Age and Older Adults: The LitCog Study

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Background and Objective

- The majority of cognitive aging studies to date have focused on older adulthood (ages 65+).
- Evidence has emerged suggesting that clinically meaningful cognitive decline may present earlier on.
- Several known or suspected risk factors for cognitive impairment and Alzheimer's disease and related dementias manifest during middle age including:
 - new or poorly managed chronic conditions
 - entrenched lifestyle behaviors
 - psychosocial stressors
- Our objective was to explore these risk factors by age in the LitCog cohort.

Methods

Setting

- Adults ages 55-74 were recruited from an academic internal medicine clinic and six federally qualified health centers in Chicago (N=900).
- Interviews were conducted every 2.5 years to investigate changes in cognitive function, health literacy, and health self-management.

Measures

- Chronic conditions, income status, and Body Mass Index (BMI): Participant self-report
- Smoking habits: The Behavioral Risk Factor Surveillance System (BRFSS)
- Health literacy: Newest Vital Sign (NVS)
- Global health, anxiety, depression and physical functioning: Patient-Reported Outcomes Measurement Information System (PROMIS)

Analysis

- Chi-square statistics and one-way ANOVA were used to evaluate associations between behavioral and psychosocial characteristics and age groups.

Results

- The study population had a mean age of 63 years (SD=5.5), 69% are female, and 47% are white.
- Over half (54%) of the study population had limited health literacy, according to the NVS.
- Of the 900 participants, 279 (31%) were <60 years old, 284 (31.6%) were 60-64, 182 (20.2%) were 65-69, and 155 (17.2%) were 70+ years old.

Figure 1: Percentages of cognitive impairment risk factors by age group

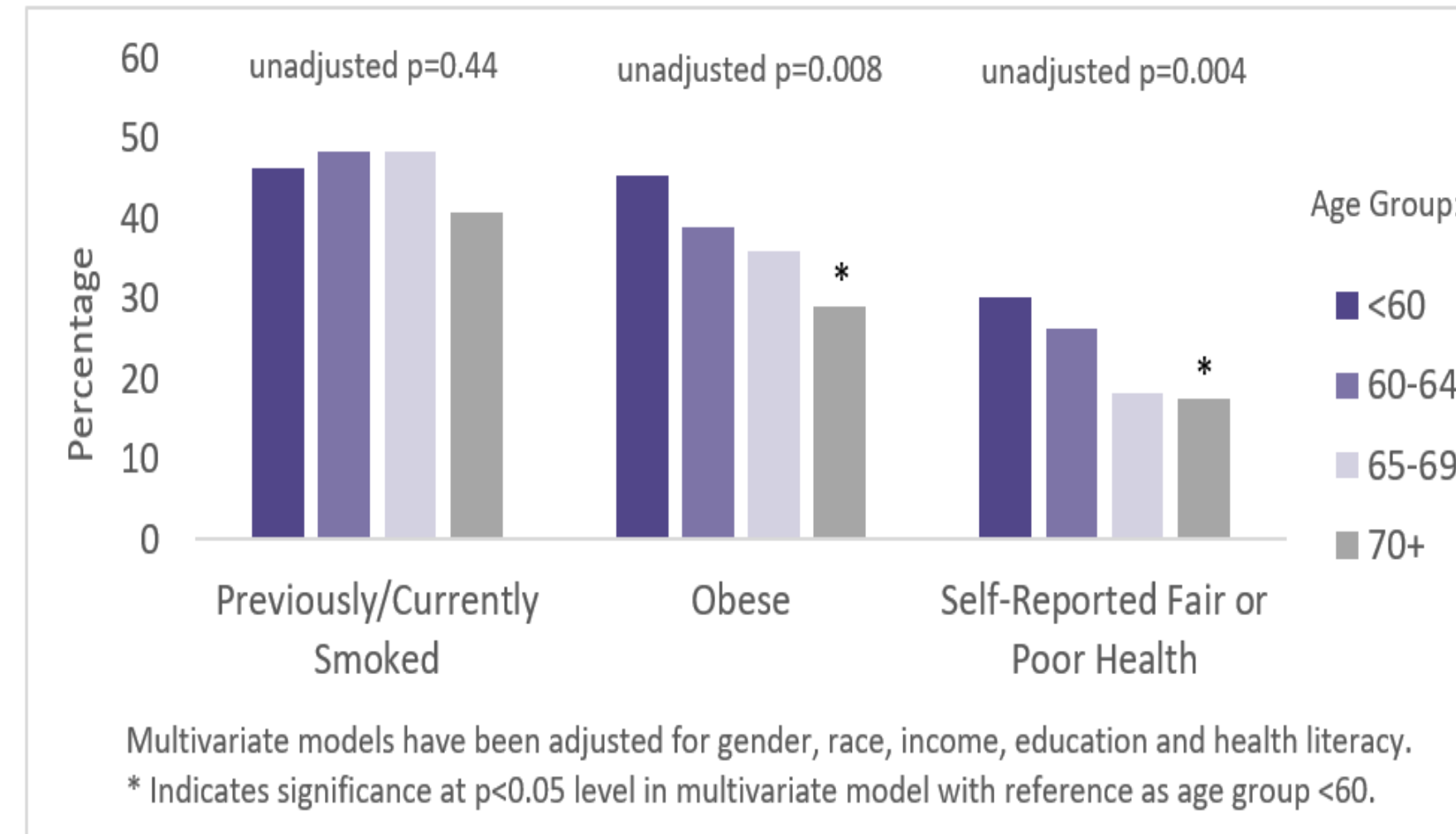
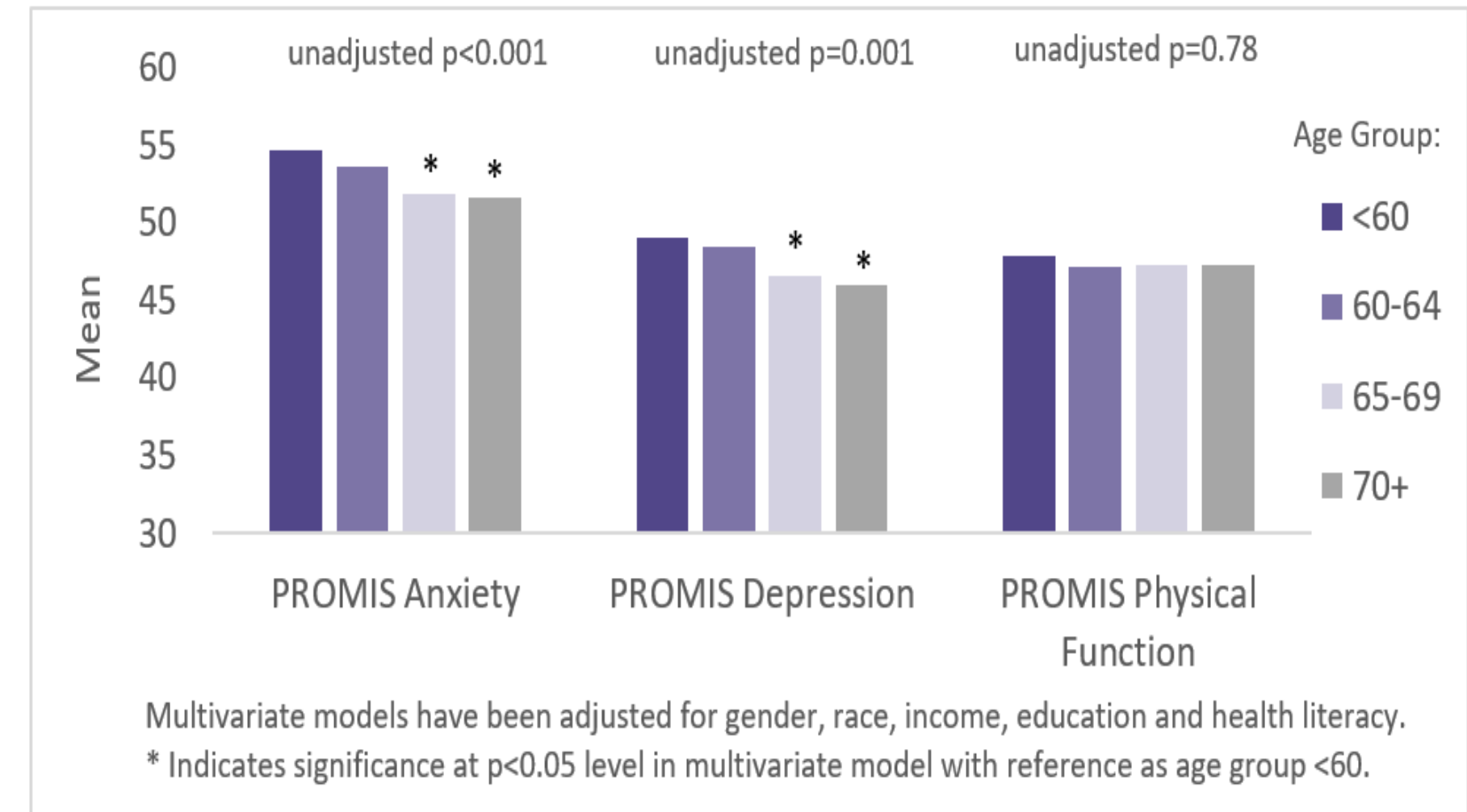


Figure 2: Means of cognitive impairment risk factors by age group



- In **Figure 1**, the late middle age adults (<60):
 - Had significantly higher rates of obesity (45.4% vs. 38.8%, 35.8%, 29.0%).
 - Were more likely to self-report "fair" or "poor" overall health (30.2% vs. 26.1%, 18.1%, 17.4%).
- In **Figure 2**, the late middle age adults (<60):
 - Had significantly greater number of anxiety symptoms (M=54.7 (9.1) vs. 53.6 (8.3), 51.8 (9.1), 51.6 (8.9) and depressive symptoms (M=49.0 (9.8) vs. 48.5 (9.1), 46.6 (8.4), 46.0 (7.9)).
- Smoking status, total number of chronic conditions, and physical function were consistent across age groups.

Conclusions & Practical Implications

- Late middle age adults were associated with higher rates of specific lifestyle behaviors, psychosocial stressors, and worse health status than the older adults in this sample.
- Further exploration of risk factors for cognitive impairment among middle age and older adults may inform health system strategies to prevent, better detect or manage cognitive impairment.