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SPECIAL TOPICS
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Regional/Racial Prevalence of Metabolic Syndrome: The MSM Regional Assessment Health Surveillance Study, 2003–2004

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Track: Evidence-based Programs: Research, Translation, and Evaluation

The objective of this study was to examine regional and racial variations in the prevalence of metabolic syndrome (MetS) in Fulton, Bulloch, Candler, Evans, and Jenkins counties of Georgia.

Random-digit–dialing data followed by examination data were obtained from 319 African American and white men and women aged 19 years and older from 2002 through 2003. MetS was defined by Adult Treatment Panel III criteria. Correlates included race (African American vs non-Hispanic white), sex, education level, age, and region (urban vs rural). Univariate and multiple regression models were used to assess the interaction between region and race, and the association with correlates setting nominal *P* value at .05 for main effect and .10 for interaction. SUDAAN (Research Triangle Institute, Triangle Park, NC) was used to account for the complex design and to obtain correct variance and county-representative estimates.

The MetS overall prevalence was 21.2%. Unadjusted prevalence of MetS was significantly higher ($P < .001$) in urban areas (21.4%) vs rural areas (19.6%) among African Americans (31.1%) vs non-Hispanic whites (9.6%) and among women (22.2%) vs men (19.9%). There was a significant interaction between region and race ($P < .001$), so separate models were estimated for African Americans and non-Hispanic whites. For African Americans, MetS was 2.47 (95% Confidence Interval [CI], 2.23–2.73) times more prevalent among those living in urban vs rural areas and 0.48 (CI, 0.46–0.50) times less prevalent among men vs women. Prevalence of MetS was also 1.48 (CI, 1.40–1.56) times higher among those with less than 12 years of education and 0.68 (CI, 0.65–0.72) times lower among those with 12 years of education vs those with more than 12 years. Among non-Hispanic whites, MetS was 0.34 (CI, 0.32–0.37) times less prevalent among those living in the urban area, 6.13 (CI, 5.60-6.71) times more prevalent among men, 7.9 (CI, 7.12–8.68) times more prevalent among those with 12 years of education, and 4.6 (CI, 3.82–5.66) times more prevalent among those with less than 12 years of education.

The study suggests that African Americans living in the urban area of Georgia have a higher prevalence of MetS than their white counterparts. National prevalence rate estimates for MetS suggest that whites in general have a higher prevalence of MetS. A more comprehensive database is needed to further explore this interaction between race and region to target more specific groups for intervention.

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