Implications of Psychosocial and Sociocultural Factors on Obesity Prevalence in African American Women

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Abstract

Purpose. To determine associations between African American female obesity and socioecological model (SEM) variables;   how certain biological, cultural, and psychosocial variables are associated with an increased prevalence in obesity of African American women.

Design. Design was a secondary data analysis of cross-sectional data.
Setting. Original data collection was conducted nationally in the United States.
Subjects. Study subjects were 2100 African American women with a mean age of 42.7 and a mean BMI of 29.7.

Measures. Study data were obtained from the National Survey of American Life Self-Administered Questionnaire (NSAL-SAQ), a 2001–2003 nationally representative cross-sectional survey. The NSAL-SAQ is a 368-page questionnaire consisting of 1029 questions. The development of measures for this study focused on established influencers of African American female obesity.

Analysis. Data were analyzed using IBM SPSS Statistics software for Windows version 20.0. Data was first analyzed investigating descriptive medians, frequencies, and percentages of demographic and behavioral characteristics of all African American females in the NSAL dataset. Measures for SEM were analyzed using a regression model to examine the relationship between the SEM variables and BMI. Two models were developed from several measures that related to the SEM spheres of influence.

Results. Intrapersonal and community/institutional levels were found to be significantly associated with BMI. Household income was a significant predictor and findings were similar to other studies, reporting a negative association with income and BMI. Conversely, the interpersonal sphere was not significantly associated with BMI. Two multiple regression analyses models were developed to determine predictive capabilities. Model 1 was found to be more predictive than model 2, but both had a low level of predictive capability for BMI.

Conclusion. The inability to adequately account for variation in the model indicates that other measures are missing from the model or the current measures are poor proxies of the SEM concepts. The concept of culture was of particular interest, due to race/ethnicity garnering more attention in health research. Further research is warranted to examine the SEM in the context of culture and race, as these two concepts are complex and can be difficult to operationalize.