**Objective:** African American women continue to have the highest prevalence of obesity in the United States and in the state of Maryland they are disproportionately affected by overweight and obesity. There are many contributing factors including chronic stress and the use of health behaviors such as physical exercise that play a role in increased weight for African American women. We examined the relationship of stress to weight and the role of physical exercise in African American paraprofessional women.

**Design:** Cross-sectional study

**Setting:** African American paraprofessionals were asked about their perspectives regarding association with chronic stress and physical exercise.

**Results:** The three most salient stressors for the women were finances (33%), work (28%) and family/friends (19%). Ninety percent of the women were overweight or obese. Significant predictors of increased BMI were lack of physical exercise ($p = .004$) and health compared to others ($p = .006$). Ethnic discrimination was a form of chronic stress ($r = .319$) but was not correlated with BMI ($r = .095$). Decreased physical exercise ($p = .02$) mediated the relationship between chronic stress and BMI.

**Conclusion:** Findings regarding finance and work stress suggest the need for employers to consider the impact of job strain when implementing employee health programs to decrease stress and improve health. A focus on decreased physical exercise, unhealthy eating habits and misperceptions regarding increased risk for obesity related diseases with health status may be helpful to include in intervention strategies to decrease obesity for this population. (Ethn Dis. 2012;22(2):185–191)

**Key Words:** Chronic Stress, Physical Exercise, Weight, African American Women

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**INTRODUCTION**

Overweight and obesity have been increasing for over twenty years in the United States, with African American women having the highest prevalence of obesity (53%) that continues to rise. This increase in obesity affects health as well as health care costs for employers. As reported in the 2008 Maryland Behavior Risk Factor Surveillance Survey, adult females aged 18–34 and 35–49 years had the highest and second highest percent of increase in obesity (8.5% and 7.8%) when compared to other age groups in the state. African American women in Maryland are disproportionately affected in that 41% are overweight or obese.

Many factors may contribute to the higher prevalence of overweight/obesity for African American women. Associations between chronic stress and various psychological symptomatology and health behaviors have been identified. The role of perceived ethnic discrimination and/or ethnic related stress has been conceptualized as a chronic or recurrent condition that can impact health. Perceived chronic stress may lead to changes in behaviors such as eating habits that have an influence on weight. The effects of greater perceived stress have been associated with increased self-reported eating and body mass index (BMI), changes in meal choices and food patterns resulting in increased intake of snack food, decreased intake of fruits and vegetables, and an overall increase in caloric intake. Eating habits that include diets high in fats and sweets have also been associated with chronic stress.

Physical exercise can be a way to reduce stress, however, African American women have difficulty initiating and maintaining physical exercise programs due to occupational and/or personal stress, lack of social support and cultural perceptions of the acceptance of higher weight levels, among other barriers. Unhealthy eating habits due to stress were also associated with physical exercise in that African American women who increased their control over emotional eating were more likely to lose weight and those who lost weight increased their exercise activity level. These impediments to physical exercise are magnified for health care workers owing to changing work shifts. Consistent with this finding, African American hospital workers were found to have higher mean BMI and higher carbohydrate intake when compared to nonhospital workers with similar socioeconomic status (SES).

Although studies have examined stressors that negatively impact health and weight from psychological and psychosocial perspectives, African American women continue to have high percentages of overweight and obesity. So far, studies in the United States have not examined the unusual African American experience that includes the impact of chronic stress from a psychological and ethnic discrimination perspective coupled with the use of health behaviors (ie, physical exercise) on obesity.

We hypothesized that as perceived chronic stress increases, BMI levels increase, after controlling for SES factors, and that the association between chronic stress and BMI is mediated by...