Weight-Based Discrimination and Medication Adherence Among Low-Income African Americans with Hypertension: How Much of the Association Is Mediated by Self-Efficacy?

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**Objectives:** Much of the excessive morbidity and mortality from cardiovascular disease among African Americans results from low adherence to anti-hypertensive medications. Therefore, we examined the association between weight-based discrimination and medication adherence.

**Methods:** We used cross-sectional data from low-income African Americans with hypertension. Ordinal logistic regression estimated the odds of medication non-adherence in relation to weight-based discrimination adjusted for age, sex, education, income, and weight.

**Results:** Of all participants (n=780), the mean (SD) age was 53.7 (9.9) years and the mean (SD) weight was 210.1 (52.8) lbs. Reports of weight-based discrimination were frequent (28.2%). Weight-based discrimination (but not weight itself) was associated with medication non-adherence (OR: 1.94; 95% CI: 1.41–2.67). A substantial portion 38.9% (95% CI: 19.0%–79.0%) of the association between weight-based discrimination and medication non-adherence was mediated by medication self-efficacy.

**Conclusion:** Self-efficacy is a potential explanatory factor for the association between reported weight-based discrimination and medication non-adherence. Future research should develop and test interventions to prevent weight-based discrimination at the societal, provider, and institutional levels.

**Key Words:** Health Disparities, Cardiovascular Disease, Obesity, Discrimination, African American

**INTRODUCTION**

African Americans are three times as likely as Whites to develop cardiovascular disease and twice as likely to die from it.1 This disparity is partially driven by differences in rates of control for hypertension, a major risk factor for cardiovascular disease. Compared to Whites, African Americans are more likely to have hypertension, less likely to achieve adequate blood pressure control, and more likely to suffer end-organ damage such as myocardial infarction, heart failure, stroke, and end-stage kidney disease.2 Lack of medication adherence has been cited as an important cause of uncontrolled hypertension,3 and given the burden of suffering attributable to the downstream consequences of uncontrolled hypertension in the African American population, new approaches are needed to promote medication adherence. The African American Study of Kidney Disease and Hypertension demonstrated that in the clinical trial setting it is possible to achieve high levels of adherence to hypertension treatment with medication and life style changes.4 However, our incomplete understanding of the root causes of poor medication adherence hampers the ability to develop effective, real-world interventions.

Although the literature documents many specific barriers to medication adherence, such as economic difficulty, cultural beliefs, and lack of trust in the medical system,5 the stigma and psychological sequelae of obesity have not received proper attention as a potential root cause of medication non-adherence. Over the past 10 years, the prevalence of obesity in the United States has dramatically increased, and currently more than 50% of African American adults are obese.6 Parallel to the increasing rates of obesity in the United States, self-reported height or weight discrimination has increased from 7.3% in 1995–1996 to 12.2% in 2004–2006,7 with the prevalence of weight-based discrimination comparable to reported racial discrimination among women.8 Weight-based discrimination has been linked with adverse physical and mental health outcomes, such as increased risk of psychiatric disorders,9 lower self-acceptance,10 and decreased glycemic control among patients with diabetes.11 Weight-based discrimination may come from the workplace, school systems, the media, and from various interpersonal relationships, including peers and family members.12,13 Health care professionals are not exempt, with physicians being one of the most frequently reported sources of interpersonal weight-based stigma, second only to family members.12,14

Experiences of other types of discrimination, such as discrimination based on race/ethnicity and mental health status, have been associated with lower self-efficacy for medication adherence.15 Previous studies indicate that