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## Examining Race Differences in Blood Pressure Control among People with Chronic Kidney Disease

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# Examining Race Differences in Blood Pressure Control among People with Chronic Kidney Disease\*

Jayne Savoy and Roland J. Thorpe, Jr., PhD

## Abstract

Of Chronic Kidney Disease (CKD) patients, 20% of them also have hypertension (HTN). African Americans (AA) are known to be more at risk of CKD development and poor HTN control compared to Whites, largely due to their higher prevalence of diabetes and HTN. While those health conditions are a known risk factor to CKD, it is less clear if there is a race difference in HTN control among CKD patients.

Using a combined 1999-2014 data set from The National Health and Nutrition Examination Survey (NHANES), we sought to determine if there is an association between race and HTN control among CKD patients. A smaller portion of AA CKD patients (58.2% vs 71.6%;  $p < 0.001$ ) had controlled hypertension than White CKD patients. After adjusting for age, AA had a lower odds of having their hypertension controlled (odds ratio (OR) = 0.58; 95% confidence interval (CI): 0.37-0.92) relative to whites. When adjusting for social factors and medical conditions, we observed that hypertensive African Americans with CKD had similar odds of having their hypertension controlled (OR=0.55; 95% CI= 0.25-1.23) relative their White peers.

Social factors and medical conditions account for the race difference in hypertension control among CKD patients. Strategies to control hypertension among AA patients with CKD must include not only efforts for proper health care to treat and control medical conditions, such as diabetes and stroke, but to address social factors. The results highlight the importance of creating interventions specifically focused on chronic disease prevention and management for African American adults to attempt to delay the onset or impede the progression of CKD.

**KEYWORDS:** Chronic Kidney Disease; Hypertension control; African Americans; Disparities

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### **ABSTRACT**

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