

Title:

Factors Associated With Self-Management in African Americans With Hypertension

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Session Title:

Rising Stars of Research and Scholarship Invited Student Posters

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African Americans, Hypertension and Self-management

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Abstract Summary:

African Americans have a higher prevalence of hypertension and poorer health outcomes. Effective management of hypertension requires pharmacology therapy, a low sodium diet, and increased physical activity. The aim of this study was to examine the influence of multifaceted factors on self-management behaviors related to hypertension in African Americans.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner participant will be able to describe AA men and women with the diagnosis of HTN who demonstrate self-management behaviors and those who do not demonstrate these behaviors based on this specific study.	Through a presentation of the significance/background, review of the literature, and methods sections, findings will be discussed using descriptive statistics. The conceptual framework was based on the "Individual and Family Self-Management Theory."
The learner participant will be able to describe the relationship between condition specific factors, individual factors, self-regulation,	A cross-sectional descriptive correlation design was used to examine African Americans with hypertension and their self-

social facilitation, and self-management factors, based on the Individual and Family Self-Management Theory in AA men and women with HTN in this study.

management behaviors - in terms of adherence to physical activity and to a low salt diet. Physiological and psycho-social variables were analyzed, along with Locus of Control and PHQ-9 as a depression index. Correlation and multiple regression statistics were used to analyze data.

Abstract Text:

African Americans (AAs) have a higher prevalence of hypertension (HTN) and poorer health outcomes. Effective management of HTN requires pharmacology, low sodium diet (DIET), and increased physical activity (PA). Little is known about self-management of DIET and PA in AAs with HTN. The aim of this study was to examine the influence of factors (systolic blood pressure, co-morbidities, serum potassium and creatinine, education, depression, locus of control (LOC), and social support) on self-management behaviors (adherence to physical activity, adherence to a low salt diet).

Using a subset of participants who recently completed a larger clinical trial, this study compared adherence to physical activity (PA) in a sample of 77 African American (AA) adults, aged 55 to 84, with hypertension. The influence of health measures, physiological measures, depression, and locus of control (LOC) on adherence to PA and a low salt diet were examined.

A cross-sectional descriptive correlation design was employed. AA adults completed a demographic and health tool that included identification of a support person, the amount of perceived support from that person; self-reported adherence to PA on a visual analog scale; the Multidimensional Health Locus of Control Scale; and the Patient Health Question-9 (PHQ-9) Depression Instrument. Physiological data were also collected from the larger clinical trial and included blood pressure (BP); creatinine and potassium serum levels; co-morbidities including diabetes, arthritis, chronic respiratory and chronic kidney disease.

Most of those (63%) with lower PA were less than age 65 and were obese (74%). The only significant univariable relationship with adherence to PA was the PHQ-9 with a moderate negative correlation ($r = -.378$; $p < .001$). Using multiple regression, the variables with external LOC explained 26% variance of the adherence to PA ($F = 3.378$ [8, 68]; $p = .003$), with creatinine ($p < .05$), depression ($p < .01$), and social support for PA ($p < .05$) significantly influencing the model. Using internal LOC, the model also explained 28% of the variance ($F = 3.361$ [8, 68]; $p = .003$). Creatinine level ($p < .05$), depression ($p < .01$) and social support for PA ($p < .05$) significantly contributed to this model as well.

Most of those with lower adherence to a low salt diet were female ($n = 27$; 73%). The only significant univariable association with low salt diet adherence was the PHQ-9 with a moderate negative correlation ($r = -.294$; $p < .01$). Both multiple regression models significantly influenced adherence to low salt diet, with model 1 depicting Internal LOC explaining 23% of the variance in adherence ($F = 2.599$ [8, 68]; $p = .015$), and model 2 explaining 24% of the variance in adherence ($F = 2.667$ [8, 68]; $p = .013$). Serum potassium level ($p < .01$) and social support ($p < .01$) significantly contributed to both internal and external LOC models.

This study identified factors important in PA adherence. Further exploration of serum creatinine levels, depression, and perception of social support as a facilitator of PA adherence warrants further study to gain more understanding about self-management and AAs living with HTN. Further exploration of low salt diet adherence issues with serum potassium levels, social support, and depression warrants further research in the self-management of HTN with the goal of slowing the progression of this silent disease.

