

Association of Perceived Stress and Discrimination on Medication Adherence among Diverse Patients with Uncontrolled Hypertension

The following is a synopsis of “Association of Perceived Stress and Discrimination on Medication Adherence among Diverse Patients with Uncontrolled Hypertension,” published in Winter 2021 in the *Ethnicity and Disease Journal*.



What is already known on this topic?

Uncontrolled high blood pressure (e.g., blood pressure reading of 130/80 mm Hg or higher)¹ is a risk factor for cardiovascular disease and mortality. Recent statistics suggest that approximately 3 in 4 U.S. adults with hypertension don't have it controlled.^{1,2} Among those with hypertension, Hispanic and Black adults are more likely to experience uncontrolled hypertension compared to their White counterparts (85.6% Hispanic adults and 81.9% Black adults vs. 77.8% White adults).¹

Research has sought to understand the factors that contribute to this racial disparity in uncontrolled hypertension. Identified factors have included socioeconomic status, health literacy, patient demographics, and patient-provider relationship characteristics.³ Additionally, research has indicated that lower medication adherence to hypertensive medications may be contributing to the disparities.⁴ A greater understanding of the root causes of antihypertensive medication nonadherence might improve hypertension control.²

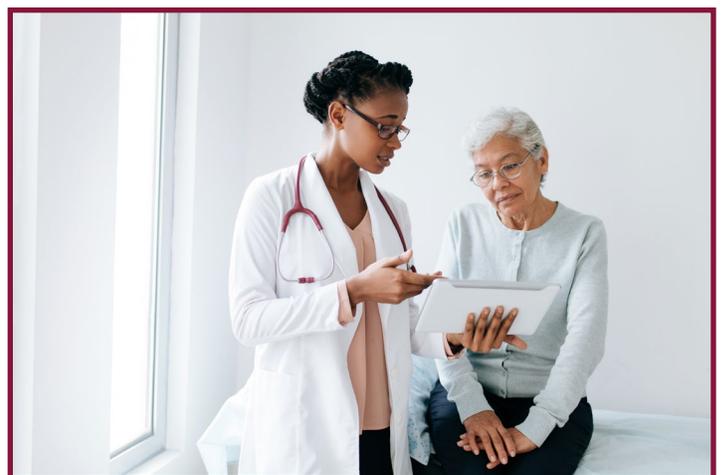
The social determinants of health (SDoH) framework could be a helpful guide for considering the non-medical factors that can influence medication adherence; these include factors such as economic stability, neighborhood and physical environment, education, community,

and social contexts.⁵ SDoH broadens the framework for explaining health behaviors and health outcomes as it includes a deeper examination of the conditions in which people live, learn, work, and play. These factors may help to better understand the full context of health behaviors of diverse patient populations experiencing uncontrolled high blood pressure.

What is added by this article?

This article examines antihypertension medication adherence and its association with community and social stressors. The individual and community-related stressor constructs are defined as perceived stress, experiences of everyday discrimination, experiences of victimization, and neighborhood violence and disorder. The authors assessed patient stressors using 5-point Likert scales. Items in these scales addressed patients' experience of not having control over circumstances in their lives, experiences of being threatened or being treated with less respect than other people, and experiences of neighborhood violence and disorder.

Similar to other recent research, the study found that Black and Hispanic patients have significantly lower odds of medication adherence when compared to White patients.^{6,7} Among Black patients, greater





perceived stress and everyday discrimination were negatively associated with medication adherence. Among Hispanic patients, greater report of everyday discrimination was associated with lower odds of medication adherence. Among White patients, the negative relationship between perceived stress and medication adherence was reduced by emotional support. However, the negative relationship between perceived stress, everyday discrimination, and medication adherence remained even after adjusting for emotional support among Black and Hispanic patients. The findings from this study demonstrated a negative association between perceived stress and everyday discrimination and medication adherence, which varied by race and Hispanic ethnicity.

Previous research suggests that community stressors may have more of an indirect impact on medication adherence.⁸ Since Black and Hispanic adults report living in more stressful neighborhoods, community-related stress is a relevant determinant of medication adherence.

Prior studies have demonstrated that aspects of the patient experience, including patient engagement and patient-provider communication in which the providers discuss the patients' social needs, were positively associated with medication adherence.⁶ For racial and ethnic minority patients, psychosocial components, including trust in physicians and respectful treatment by physicians, were noted to be of value during health care encounters. It is important to include the patient's lifestyle, coping

strategies, cultural beliefs, and treatment concerns during the patient's medical history review to achieve mutual respect between the provider and the patient in clinical encounters. Several studies identified that trust in one's physician is a mediator of the relationship between the patient and medication adherence among racial and ethnic minority groups.⁷

What are the implications of these findings?

Results of the study further support taking action to address social stressors among Black and Hispanic patients with uncontrolled hypertension. Greater understanding of the diverse barriers to and factors associated with antihypertensive non-adherence may aid in identifying effective interventions and enhancing patient care.

Health care providers should consider social stressors when providing care to racial or ethnic minority patients, especially those who report non-adherence to medications. Consideration of these factors may lead to enhanced patient engagement in their treatment.

Resources

Million Hearts Initiative:

[Improving Hypertension Medication Adherence | Million Hearts® \(hhs.gov\)](https://www.hhs.gov/million-hearts/)

Hypertension Resources for Health Professionals:

[Hypertension Resources for Health Professionals | cdc.gov](https://www.cdc.gov/hypertension/resources-for-health-professionals/)

National Hypertension Control Roundtable:

[National Hypertension Control Roundtable | cdc.gov](https://www.cdc.gov/national-hypertension-control-roundtable/)

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