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COMMENTARY

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Reexamining medication adherence in black patients with hypertension through the lens of the social determinants of health

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Despite the prominent place of health disparities on the national research agenda over the past 2 decades,[1] marked racial and ethnic disparities in hypertension between blacks and whites still persist.[2] Approximately 41% of black persons have hypertension, as compared with 28% of whites, making the prevalence in blacks among the highest in the world.[2] Poor adherence to prescribed antihypertensive medications has been indicated as a major contributor to poor hypertension control in black patients and may explain the racial disparities in health outcomes.[3]

An extensive body of research has been dedicated to understanding the reasons for nonadherence to prescribed antihypertensive medications among patients with hypertension.[4,5] The evidence from all previous research to date indicates that the barriers to adherence are multifactorial and interventions must move beyond a "single bullet approach" to address the growing burden of medication nonadherence on the healthcare system.[6] However, despite the millions of dollars spent on interventions targeted at medication adherence each year, the rates are still abysmally low, especially among black persons.[7]

The article by Ferdinand and colleagues[8] in this issue of the Journal aptly argues for broadening our understanding of the factors that contribute to medication nonadherence in blacks to include an examination of the social determinants of health. The World Health Organization defines the social determinants of health as "the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life."[9] These nonclinical social factors (eg, income, educational attainment, neighborhood quality, and discrimination) are potent predictors of morbidity and mortality that exert disproportionate effects on vulnerable populations (ie, racial/ethnic minorities and members of lower socioeconomic status [SES]).[10,11] In their article, the authors conducted a narrative review of the recent (2014–2016) peer-reviewed literature to identify the social determinants that drive the high rates of poor medication adherence in blacks with hypertension.[8] Based on their review, differences in the quality of patient-provider communication and patient socioeconomic status emerged as key social determinants that contribute to the racial disparities in medication adherence. These findings are not surprising. Evidence-based care of patients with uncontrolled hypertension requires collaboration of healthcare providers, patients, and the healthcare system within which the care occurs for patients to achieve a full understanding of their disease and to be adherent to medications.[12] Unfortunately, patient populations at the highest risk for poor health outcomes, such as minority patients and those of lower socioeconomic status, are least likely to engage in a collaborative relationship with their provider.[13] Moreover, access to affordable health insurance coverage helps to reduce some of the financial burdens associated with obtaining prescribed medications. Recent data show that the expansion of Medicaid provided by the Affordable Care Act was associated with a significant improvement in access to medications in low-income patients (incomes below 138% of the poverty level).[14] However, these gains have not been universally experienced by all segments of the population (eg, adherence disparities worsened in elderly black men), attesting to the multifactorial nature of medication adherence.

Perhaps the greater contribution in the paper by Ferdinand and colleagues is a review of new and emerging solutions to address nonadherence and their suitability for racial/ethnic minorities. These strategies include: (1) patient engagement strategies; (2) consumer-directed health care; (3) patient portals; (4) smart apps and text messages; (5) digital pillboxes; (6) pharmacist-led engagement; (7) cardiac rehabilitation; and (8) cognitive-based behavior.[8] While several of these strategies have demonstrated beneficial effects on medication adherence, findings from the review highlight the dearth of data in racial/ethnic minorities. If these strategies are going to make a

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measurable impact on reducing/eliminating disparities in medication adherence, they will need to meet the unique and complex needs of vulnerable populations who often face competing priorities and numerous logistical, structural, and social barriers (eg, inconsistent telephone access, lack of transportation, and unemployment) to engaging in healthy behaviors.[15]

The findings discussed in this review, along with the robust findings documenting the impact of social determinants on health and longevity provides the impetus for systematically addressing the nonclinical social factors that greatly inhibit patient behavior.[16] This will require a multifaceted approach that links community- and practice-based settings to support efforts to identify and intervene upon patients' social needs. For example, in practice-based settings, electronic health records can be configured to allow for routine screening of social factors, providing healthcare providers with a more comprehensive view of patients' psychosocial, economic, and physiological health, and to help facilitate referrals to community resources.[17] Trained community health workers can serve as the conduits through which the practice- and community-based interventions interact to affect outcomes. Community health workers are especially valuable in underserved communities because they can help patients overcome distrust of the medical and research communities.[18] Because of their skills, community health workers can also provide much needed support to the healthcare team by linking patients to social and tangible support services in the community, once a need is identified.[19] As they perform this role, community health workers also act as "reinforcing factors" for the adoption of healthy behaviors such as medication adherence and are able to encourage others to become actively engaged in community advocacy initiatives that address the broader social determinants of health (eg, neighborhood quality).[20]

Several innovative efforts to address the social determinants of health are already underway. These include community-clinic linkage programs such as Health Leads[21] and Kaiser Permanente's Total Health[22]; the development of electronic screening and referral tools such as HelpSteps[23] and Healthify[24]; and community bridge organizations supported by the Centers for Medicare & Medicaid Accountable Health Communities.[25] Rigorous evaluation of these initiatives will provide important insights into whether linking community and practice-based settings to focus on the social determinants of health can address the marked racial/ethnic disparities in hypertension caused by medication nonadherence.

CONFLICT OF INTEREST

There are no competing or financial relationships that may lead to a conflict of interest.

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