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Reducing Disparities in Cardiovascular Health: Social Determinants Matter

Laura L. Hayman, PhD, RN, FAAN, FAHA and

Associate Vice Provost for Research and Graduate Studies, Professor of Nursing, University of Massachusetts Boston

Jane Nelson Worel, MSN, APRN-BC, APNP, FAHA

Nurse Practitioner, Phases, Primary HealthCare for Women, Madison, WI

Mortality from cardiovascular disease (CVD) has decreased substantially in the United States (U.S.) over the past five decades.¹ Advances in both prevention and treatment have been credited for this positive trend. Important to note, however, is that the burden of CVD remains high, particularly in marginalized sub-groups of the population, and the prevalence is projected to increase approximately 10% between 2010 and 2030.² Several reasons have been offered for these projections including the aging of the U.S. population and the substantial increases in chronic conditions, particularly obesity.¹ Epidemiological and clinical studies have documented an excess burden of obesity, its comorbidities, and adverse behavioral-lifestyle patterns in sub-groups of the U.S. population including racial/ethnic minorities and those from lower socioeconomic strata.¹ Viewed from a socio-ecological perspective, considerable research attention has focused on factors that operate beyond the individual level to alter life course trajectories that result in excess risk and burden of CVD. Based on accumulated evidence, the American Heart Association (AHA) recently issued a scientific statement that highlights the importance of the social correlates and determinants of both risk and outcomes for CVD.³

The World Health Organization (WHO) has defined the social determinants of health broadly as “the circumstances in which people are born, grow, live, work and age and the systems put in place to deal with illness.”⁴ Consistent with life course socio-ecological perspectives, this WHO definition was operationalized in the AHA statement with evidence indicating social economic position (SEP), race/ethnicity, social support, culture and language, access to care, and residential environment as social determinants of health.³ Recent research and systematic reviews strongly suggest that socioeconomic conditions early in life contribute to risk for CVD in adulthood, particularly when early-life factors influence the developmental trajectories of conventional risk factors such as blood pressure, lipid levels, body-mass index (BMI) and health behaviors.⁵ Harper and colleagues⁵ suggest that the interactions among early –life socioeconomic environments and risk factor trajectories influence both the development and maintenance of health behaviors and their

“cumulative biological sequelae” as part of a major life-course process linking SEP in early life to CVD in adulthood.

Racial/ethnic differences in the prevalence, treatment and outcomes of CVD have been investigated extensively and well-documented. As summarized by Havranek and colleagues in the AHA statement,³ numerous factors interact to influence the excess burden of CVD in racial/ethnic minority populations. Points of emphasis that are particularly relevant to health care providers include the concepts of implicit bias and stereotype threat that may be root causes of disparate care.³ While research has demonstrated that clinicians exhibit minimal explicit or intentional bias in clinical decision-making that influences care provided, implicit (unconscious, attitudinal) bias has been well documented.^{6–8} Several studies have demonstrated that implicit bias may result in lower-quality clinical interactions and communication between clinicians and minority patients.^{6–8} For example, in a study of primary care providers, Blair and colleagues⁶ observed implicit race bias predicted differences between black and white patients’ reports of their clinicians’ patient centeredness. Black patients in this study reported less interpersonal treatment and poorer communication reducing comfort and trust in clinicians who were previously categorized as having higher levels of implicit racial bias.⁶ Substantial research has focused on patients’ perceptions of discrimination and bias during health care encounters. One comprehensive review indicated that 52% of blacks, 13% of Latinos and 6% of non-Hispanic whites reported biased treatment based on their respective race or ethnicity.⁹ While results are not consistent across studies, perception of biased treatment has been associated with self-reports of poorer health status, self care, adherence to treatment regimens, and underutilization of available health services.^{3,9} Although less data are available on stereotype threat, the often unconscious fear of being judged negatively according to racial stereotypes, evidence suggests adverse effects on patient-provider communication and patient adherence.^{10–11}

Social support and its links with health and illness across the life course of individuals from diverse populations has been investigated extensively. While evidence indicates significant associations between low levels of social support and risk for and outcomes of CVD, lacking are effective interventions designed to increase social support.^{3,12} Relatedly, social networks have emerged as an important area of emphasis thought to influence health through social influence on behavior and through the material resources (social capital) available to respective members.¹³ Of note, as documented in a national survey by Marsden,¹⁴ whites have social networks of greater size and diversity compared with their Latino and black counterparts. Lacking, however, are data on the mechanisms by which social networks influence health and health care for individuals from diverse racial/ethnic populations.

Accumulated data and anecdotal clinical observations point to the importance of language differences and cultural beliefs and practices as important social determinants of health-seeking behaviors and access to and utilization of health care services. Results of several studies point to the promise and potential of community health workers (CHWs) as part of health care teams in reducing these barriers and improving both prevention and control of CVD.^{15–18} Often members of the target population with similar cultural and linguistic practices, CHWs assume numerous roles in facilitating access to health care services,

monitoring patient health status, improving patient-provider communication and adherence to treatment regimens.^{15–18}

Taken together and as summarized by Havranek and colleagues,³ additional research is needed to explicate the specific mechanisms through which these social determinants influence both risk and outcomes for CVD and to guide and inform effective and efficient multi-level interventions designed to attenuate adverse social influences and optimize cardiovascular health for all. Cognizant of the importance of social factors in both prevention and management of CVD, cardiovascular nurses are well-prepared and positioned to add to the existing knowledge base and to advocate for multilevel policies designed to mitigate adverse social influences.

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