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Health Disparities and the Kidney: Introduction

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Health disparities are differences in health-related outcomes by race, gender, socioeconomic status, or some other relevant subgrouping. The four-fold higher prevalence of end stage renal disease among blacks compared to whites is an example of a racial disparity.¹ Similarly, the 50% higher rate of kidney transplantation among men with permanent kidney failure compared to women is an example of a gender disparity.²

Health disparities have been the focus of intense scholarly interest over the last decade, with about 2000 articles and 150 books devoted to this subject. To help make sense of this burgeoning literature, it is useful to categorize work in health disparities into three sequential phases. First, in the descriptive phase, we identify the presence of a disparity by race, gender, socioeconomic status, type of health insurance, or some other relevant grouping. Second, in the mechanistic phase, we determine the reasons for the disparity. Third, in the interventional phase, we utilize our descriptive and mechanistic findings to develop and test an intervention to reduce or eliminate the disparity.³ In this issue of *Seminars in Nephrology*, a panel of international experts use this three phase framework to review current knowledge about renal health disparities.

Chronic kidney disease and its disproportionate impact on vulnerable and disadvantaged populations represents a serious public health problem worldwide. Garcia-Garcia and colleagues review the renal care needs in the state of Jalisco in western Mexico and describe efforts to screen for early detection of chronic kidney disease, train nephrology providers, and fund renal replacement therapy from a combination of government, patient, industry, and charitable sources. Randhawa describes the disproportionate impact of diabetes and end stage renal disease among South Asian and African-Caribbean populations in the United Kingdom and provides recommendations for needed services and further research. Yeates reviews renal disparities among minorities and women in Canada as well as efforts to improve management of hypertension and diabetes. Narva and Sequist present information on the burden of diabetic nephropathy among Native Americans and the patient, provider, and system factors contributing to disparate outcomes. They also list lessons learned from the Indian Health Service's initiatives to improve renal outcomes. Minnick and colleagues describe race and gender differences in the prevalence and quality of treatment of renal disease among children in the United States as well as socioeconomic and sociocultural factors that may account for such disparities.

A number of barriers to improved renal outcomes have been identified. McClellan and colleagues review pathways by which low socioeconomic status contributes to chronic kidney disease as well as existing and planned interventions to reduce associated disparities. Patel elucidates the links between exposure to adverse environmental factors during gestation and subsequent development of kidney-related disorders as well as how these pathways may vary

by race. Navaneethan and colleagues present information on the pathogenesis of metabolic syndrome among minority groups and its impact on chronic kidney disease. Kutner reviews barriers to rehabilitation among renal patients, including programs involving inpatient rehabilitation, exercise and physical conditioning, and psychosocial interventions.

Both community-level and provider-level interventions may be promising ways to address renal health disparities. Vassalotti and colleagues review the design and initial outcomes of the Kidney Early Evaluation Program, a community-based program to screen for kidney disease and promote follow-up with clinicians. Mani describes the striking success of efforts to screen and slow the progression of kidney disease among poor villagers in India. Gordon and colleagues review the need for interventions to improve access to care, enhance funding for renal medications, and implement culturally sensitive approaches to care. Waterman and colleagues review research and interventions to promote living donor kidney transplantation, including improving education, utilizing kidneys more efficiently, and reducing surgical and financial barriers.

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References

1. US Renal Data System. USRDS 2008 Annual Data Report. Bethesda, MD: National Institutes of Health National Institute of Diabetes and Digestive and Kidney Diseases; 2008.
2. Alexander G, Sehgal AR. Barriers to cadaveric renal transplantation among blacks, women, and the poor. *JAMA* 1998;280:1148–1152. [PubMed: 9777814]
3. Sehgal AR. Universal health care as a health disparity intervention. *Ann Intern Med*. 2009 In press.