

GLOBAL APPROACHES FOR UNDERSTANDING THE DISPROPORTIONATE BURDEN OF CHRONIC KIDNEY DISEASE

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Chronic kidney disease (CKD) is now recognized as a global public health problem.^{1–3} While the magnitude of CKD has been better defined in developed countries, increasing evidence indicates that the burden of CKD is as great or even greater in developing countries. Chronic kidney disease and, to a greater extent end-stage renal disease (ESRD), contribute substantially to the disparate burden of illness, disability and premature death across sex, age, race/ethnicity, socioeconomic status, and geographic boundaries.^{4,5} Disadvantaged communities, ie, those from low resource, racial and ethnic minority and/or indigenous backgrounds, suffer from marked increases in the incidence, prevalence and/or complications of CKD.^{4,5} These communities also frequently exhibit increases in key risk factors for the development of CKD. In spite of the unprecedented scientific advances in biomedical research and improved public health in developed countries over the past several decades, many under-served communities in developed countries and most of the population in developing countries have not benefited equally. Kidney disease is but one of the serious health conditions that disproportionately afflicts these communities, and the health systems and financial infrastructures of these under-resourced communities/countries are almost always limited in their ability to support the management of CKD, especially ESRD. The fact that even in more developed countries racial and ethnic minorities and persons of lower socioeconomic status bear a disproportionate burden of the disease suggests there is much to learn beyond the traditional

risk factors contributing to CKD-associated complications.^{4–8} Understanding these associations may enhance our ability to implement more effective health practices and policies, and ultimately enhance the health and well-being of the global community.

Dr. Steven Schroeder, former president of the Robert Wood Johnson Foundation, presents a compelling case for concentrating strategies on the less fortunate to improve the overall health of a society. He notes that “since all the actionable determinants of health personal behavior, social factors, health care, and the environment disproportionately affect the poor, strategies to improve health must focus on this population.”⁹ In this context, one challenge for the nephrology community is to rethink how we might improve each element, including the many social determinants of health that conspire to constrain quality health outcomes.¹⁰ This approach was the focus for the 6th meeting on Renal Disease in Minority Population and Developing Nations, which was held on April 25–27, 2007 in Petropolis, RJ, Brazil and was organized by the Committee for Kidney Health in Disadvantaged Populations (CKHDP). The CKHDP is dedicated to bringing greater awareness of CKD and CKD risk factors, sharing cost-effective prevention and early intervention strategies, and furthering the understanding of key social and environmental factors that contribute to CKD across diverse settings. In this spirit, the satellite meeting in Petropolis, Brazil emphasized the spectrum and impact of kidney disease in racial and ethnic minorities and the indigenous populations across the globe. One hundred and thirty-eight participants from 33 different countries attended the meeting. Forty scholarships were awarded to delegates from developing countries and 52 papers were presented at the poster session. The best abstract from a developing nation was awarded to Hector R. Martínez Ramírez and colleagues from Guadalajara, Mexico for his paper “Effect of an Educational Intervention on the Clinical Aptitude of Family Doctors Managing Type 2 Diabetes Mellitus Patients,” and the best abstract from a developed nation went to Bridgette Joy McNamara and colleagues from Victoria, Australia for their work “Nephron Number and Glomerular Volume in Senegalese Africans and African Americans.” The summaries of the

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invited presentations are highlighted in the manuscripts that follow. These covered a wide spectrum of domains from the global epidemiology of ESRD, risk factors for progression of CKD, acute renal failure as a contributor to CKD in developing nations, complications and co-morbidities of CKD, modifiers of CKD progression, novel strategies for the prevention and recognition of CKD, and emerging cost-effective renal replacement therapies. The articles highlight the complex interactions of genetic, biologic, and cultural and socioeconomic factors such as the environment and specific health behaviors that seem to be responsible for a significant proportion of the health disparities in these communities.^{4,11,12} The organizing committee hopes that these manuscripts will continue to define the magnitude of the issues and serve as a foundation for developing cost-effective and locally relevant education and research programs, treatment algorithms and social and economic policies.

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