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Race, Social Class, and CKD: The Way Forward

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The role of social inequality has taken center stage in the nephrology community in recent months with the debate over the use of race in equations estimating kidney function. Race is a sociopolitical construct initially estab-

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lished to legally justify unequal access to economic and social resources essential to health and well-being.¹ Pernicious forms of racial and economic inequality are embedded in societal structures and its institutions, and the burden of conditions like chronic kidney disease (CKD) in the United States continues to disproportionately impact African Americans and other marginalized minority groups.²⁻⁵ Race and class inequality are often conflated as racial health disparities have been linked to socioeconomic factors, including access to health care.^{4,6} The primary approach to addressing racial and ethnic health disparities in the United States has been to push for better access to quality care in lieu of a focus on the structural and institutional drivers of health.

The sufficiency of this approach is addressed in a study by Norton and colleagues⁷ in this issue of Kidney Medicine. The authors present analyses of adults aged 18-64 years in the Military Health System designed to assess the degree to which race and socioeconomic factors were associated with CKD prevalence in the context of one of the largest universal forms of health care in the United States. The study had extraordinary power as the Military Health System database contained data from well over 3.3 million beneficiaries, and the authors were able to explore several different domains in which disparities might manifest, including race, military rank, median household income by zip code, and marital status. They defined CKD prevalence by International Classification of Diseases, Tenth Revision codes and/or by validated, laboratory value-based electronic phenotype. They found African American/Black race, lower military rank, lower median household income by zip code, and being married were associated with higher adjusted prevalence of CKD.

This study is significant because of its rigorous analysis of unique data containing multiple economic factors. The authors described their meticulous analytic strategy that included a Hosmer-Lemeshow test and logistic regression covariate pattern diagnostics on a random subsample of 10,000 individuals to confirm the goodness-of-fit. The authors also conducted sensitivity analyses on individuals who did not have complete data to verify the validity of their results. There is no doubt that the results from this study were thoroughly assessed, and the authors are to be commended for their thoughtful and comprehensive analysis.



The primary contribution of this study is that it demonstrates that health care coverage alone is not sufficient to mitigate health disparities. African American/Black race and low median household income by zip code have consistently been shown to be associated with a higher prevalence of poor CKD-related outcomes, but the finding of lower military rank and CKD prevalence is novel and quite informative. Military rank may act as a proxy for both socioeconomic status and social class and in a sense relative hierarchy in a military caste system. This is not unlike African American/Black race, which is assigned the lowest position in the racial and ethnic caste system in the United States and often associated with poor health, due in part to greater likelihood of also having low median household income (individual and by zip code) but also many other factors. The findings of Norton et al⁷ reinforce the impact that social drivers of health may have on racial and socioeconomic disparities in diseases such as CKD despite access to universal health care. To achieve greater degrees of health equity, we need to address not only access to quality health care but also equity in social resources and opportunities that affect health. Unfortunately, our nation continues to struggle to do either.

The Way Forward

There are several key steps that are needed to truly have the impact to reduce racial and ethnic disparities in CKD development and progression in the United States. Foremost is to address the root causes. It is a large task. Despite the elevated stature and the immense degree of privilege and power wielded by the health care profession, we have consciously or unconsciously chosen as a collective to deny and/or not address the root causes of health disparities and to work around the margins of inequity by focusing on special limited initiatives designed to operate within the abyss of inequity. Here, we will consider 3 broad approaches in order of ability to implement a more equitable CKD landscape.

The first and most immediate step is to adopt the recommendations from a recent KDIGO (Kidney Disease: Improving Global Outcomes) controversies conference that included the immediate implementation of CKD screening, including risk stratification and the initiation of treatment for persons at high risk for CKD progression and/or complications, if feasible, in a primary or community care setting.⁸ Early identification of both traditional and novel CKD development and progression factors may facilitate high value clinical care, a major aim for the nephrology and primary care communities.

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Second is the promotion of greater access to quality care and, ideally, uniform care as noted by Norton et al⁷ as more universal, and uniform systems of care are consistently able to provide more equitable care. The Affordable Care Act was a critical policy designed to move the United States toward more uniform care by increasing insurance coverage eligibility and promoting more structured medical care systems, which together can help to improve health outcomes. However, there are still barriers to the potential benefits of and access to care through the Affordable Care Act, including lack of coverage, limited access to quality benefits for persons with low income or limited health literacy (disproportionately members of racial and ethnic minority communities in the United States), and more, all of which must be addressed to ensure that the vision of more uniform adequate and affordable care through the Affordable Care Act can effectively reach all Americans.¹⁰

Last and most difficult is the dismantling of structural racism at a societal level and across multiple sectors to advance equity in health care and more. A quote often attributed to Dr Don Berwick, the former director for the Center for Medicare and Medicaid Services, is "Every system is perfectly designed to achieve the results it gets." Our system is not broken; rather, we are misguided in believing that our systems were designed with the aspirational vision of the nation's founders of meritocracy, when, in reality, they were designed by the founding laws, policies, and practices designed to promote and maintain inequity and worse-the oppression and genocide of Indigenous Americans, the enslavement of Africans, and the oppression of women. Thus, a major step within that broad challenge to create new systems necessitates the creation of a new generation of health care providers who are aware of, sensitive to, and committed to address the many structural inequities in the allocation of resources that collude to maintain health disparities, also known as dismantling structural racism.

At present, the awareness of structural racism, sexism, and more is modest at best, and the commitment to act to address these problems remains limited to an even smaller minority of health care professionals. A large percentage of health care professionals (consciously or unconsciously) favor policies that perpetuate structural racism and either create greater inequity or at best are agnostic to equity, leading to perpetuation of existing inequities. Health care providers can help eliminate the health disparities gap by recognizing and working to reduce the deeply embedded race-based implicit biases many clinicians have, as well as by leveraging their privilege to combat the institutionalized racism, which is enmeshed in our society, beginning with social injustice and human indifference.^{3,4,11} A transformation of the health care professions community to one of equity-mindedness would be an important step toward creating a nation truly grounded in equity and is a key way that health care professionals can restore patient trust and improve patient outcomes.¹²

Solutions will need to involve a diverse set of stakeholders who should work strategically to address financial and public policy issues so that appropriate clinical care is given to marginalized patient populations, especially in light of increasing inequities in wealth and many of the other social determinants of health.^{13,14}

However, none of these structures and systems can be fundamentally changed with the same mindset and hearts that have created and perpetuated these systems. We cannot stay the same as individuals and change society. Society is merely a mirror of our collective energy, and we must be the change for society to change. In the words of the poet Rumi, "Yesterday I was clever, so I wanted to change the world. Today I am wise, so I want to change myself."

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REFERENCES

- Thorpe RJ Jr, Norris KC, Beech BM, Bruce MA. Racism: evidence and tools for public health professionals. In: Ford CL, Griffith DM, Bruce MA, Gilbert K, eds. *Racism, Aging and Health.* American Public Health Association; 2019.
- Beech BM, Ford C, Thorpe RJ, Bruce MA, Norris KC. Poverty, racism, and the public health crisis in America. *Front Public Health.* 2021;9:699049. doi:10.3389/fpubh.2021. 699049
- Bruce MA, Beech BM, Sims M, et al. Social environmental stressors, psychological factors, and kidney disease. J Investig Med. 2009;57(4):583-589
- Norris K, Nissenson A. Racial disparities in chronic kidney disease: tragedy, opportunity, or both? *Clin J Am Soc Nephrol.* 2008;3(2):314-316. doi:10.2215/CJN.00370108
- 5. Zeng X, Liu J, Tao S, Hong HG, Li Y, Fu P. Associations between socioeconomic status and chronic kidney disease: a

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meta-analysis. J Epidemiol Community Health. 2018;72(4): 270-279. doi:10.1136/jech-2017-209815

- Norton JM, Moxey-Mims MM, Eggers PW, et al. Social determinants of racial disparities in CKD. J Am Soc Nephrol. 2016;27(9):2576-2595. doi:10.1681/ASN.2016010027
- Norton JM, Grunwald L, Banaag A, et al. Racial and socioeconomic disparities in CKD in the context of universal health care provided by the Military Health System. *Kidney Med.* 2022;4(1):100381. doi:10.1016/j.xkme.2021.08.015
- Shlipak MG, Tummalapalli SL, Boulware LE, et al. The case for early identification and intervention of chronic kidney disease: conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference. *Kidney Int.* 2021;99(1):34-47. doi:10.1016/j.kint.2020.10.012
- Powe NR. Let's get serious about racial and ethnic disparities. J Am Soc Nephrol. 2008;19(7):1271-1275. doi:10.1681/ASN. 2008040358

- Barcellos SH, Wuppermann AC, Carman KG, et al. Preparedness of Americans for the Affordable Care Act. *Proc Natl Acad Sci U S A.* 2014;111(15):5497-5502. doi:10.1073/ pnas.1320488111
- Sabin J, Nosek BA, Greenwald A, Rivara FP. Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender. J Health Care Poor Underserved. 2009;20(3):896-913. doi:10.1353/hpu.0.0185
- Mohottige D, Diamantidis CJ, Norris KC, Boulware LE. Racism and kidney health: turning equity into a reality. *Am J Kidney Dis.* 2021;77(6):951-962. doi:10.1053/j.ajkd.2021.01.010
- National Academies of Sciences. Engineering, and Medicine. Communities in Action: Pathways to Health Equity. National Academies Press; 2017.
- Weinstein AM, Kimmel PL. Social determinants of health in people with kidney disease: an introduction. *Clin J Am Soc Nephrol.* 2021;16(5):803-805. doi:10.2215/CJN.12600720