Is the Ethnic Disparity in CKD a Symptom of Dysfunctional Primary Care in the US?

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Two articles in this issue of JASN challenge the US medical community to address seriously ethnic and racial (“ethnic” is hereafter used for both) disparities in the incidence of stage 5 chronic kidney disease (CKD), previously referred to as ESRD.1,2 We in the medical community clearly have a moral obligation to work to eradicate these shameful disparities, and the social justice aspect of our professionalism compels us to do so.3 In addition, disproportionately high health care expenditures incurred by patients with stage 5 CKD4 makes an economic argument for our eliminating the excess stage 5 CKD incidence in ethnic minorities in the United States compared with white patients5 to help slow soaring health care costs. Although the nephrology community (hereafter referred to as the “kidney community”) alone cannot tackle the problem of ethnic disparities in patients with stage 5 CKD, our intimate familiarity with the problem as clinicians, investigators, and educators positions us to take the lead in seeking corrective actions. The authors of both articles challenge the kidney community to seize the mantle of this leadership. We must contribute our efforts on all effective fronts to eliminate these disparities, including improving US primary care delivery, as I emphasize. I add my voice to the challenge directed by these authors and say that history will judge us harshly if we do not take up this leadership mantle now.

Once the kidney community commits to eliminating ethnic disparities in patients with stage 5 CKD, we must consider a plan of action. As described by both authors, these disparities have been documented for at least two decades,1,2 but it is appropriate that we begin by asking why we have them at all. Health disparities likely derive from societal factors such as poverty,6 unequal education,7 unhealthy community environments,8 health care policies that limit health care access,9 low insurance rates among ethnic minorities,10 and persistent de facto segregation in the US health care system.11 Although we clinicians, scientists, and educators might consider these “societal” issues beyond our purview, both articles challenge this “let’s stick to our knitting” notion and urge us to engage with policy makers to help them do the right thing.

Despite many advances made in elucidating the reasons for these ethnic disparities in patients with stage 5 CKD, much more science is needed. Although poverty is associated with increased incidence of stage 5 CKD in both black and white individuals, increasing poverty is associated with a greater ESRD risk for black than white individuals.12 In addition, there may be genetic susceptibility to stage 5 CKD in some ethnic minorities compared with white individuals.13 These and other important scientific issues require continued investigative pursuit.

Information just a few years ago indicates that an improvement in our US system for delivering primary care can help reduce ethnic disparities in patients with stage 5 CKD. In support of the importance of poor primary care contributing to these disparities, black and white individuals have similar incidences of CKD, but black individuals progress much faster to stage 5 CKD.14 Although hypertension-associated stage 5 CKD is the single most common cause of stage 5 CKD in US black individuals,4 incident rates of hypertension did not differ among middle-class black and white individuals who had similar levels of baseline BP and basal metabolic indices and were followed for 7 yr.15 The kidney community already recognizes the critical importance of good primary care in preventing or slowing progression of early CKD to stage 5 CKD,16 yet this care is suboptimal in ethnic minorities. For example, good BP control is important in CKD management, yet BP control is suboptimal for US patients with hypertension in general,17 more so in ethnic minorities,18 and poor for patients with CKD.19 Supporting that equivalent primary care given to black and white patients with CKD might yield equivalent and desirable outcomes, provider compliance with selected CKD targets were similar for black and white patients in Department of Defense beneficiaries for whom insurance status and access to a primary care provider were not barriers to care.20 That is to say, when major barriers are eliminated for health insurance10 and access8 that ethnic minorities face for primary care, process measures are similar between black and white patients. Further studies will be needed to determine whether this proper implementation of process measures for black and white patients will yield similar and desirable outcomes. At present, however, ethnic minorities less often have a usual source of care.21 Examination of international health care systems shows that strong performers have strong primary care.22 By com-
parison, our system of primary care in the United States is dysfunctional and in need of innovative strategies. Overall, primary care patients in the United States receive only 55% of recommended care, and primary care physicians treating a large proportion of minority patients report even greater difficulty in providing “high-quality care” than their counterparts who treat small proportions of minority patients. Physicians disproportionately treating large numbers of minority patients depend on the comparatively low Medicaid reimbursements to support their practices, limiting resources that might be invested to improve their practices to deliver more ably this high-quality care. Physicians treating large proportions of minority patients are also less likely to be board-certified. Board certification is associated with better performance on some quality measures, and board-certified physicians who are engaged in the maintenance of certification and demonstrate better cognitive skills have higher rates of processes of care for Medicare patients. These data suggest that primary care physicians treating large proportions of minority patients are less likely than those with a low proportion of ethnic minorities in their practices to implement process measures indicative of high-quality primary care.

Most of the strategies shown to slow or prevent progression of early CKD to stage 5 CKD are implemented by primary care physicians. Sadly, many primary care physicians know little of these important measures, and this lack of knowledge also contributes to the suboptimal implementation of important preventive strategies. Early nephrology referral improves CKD outcomes, yet rates of early referral from primary care physicians are disturbingly low and are even more so for black than for white patients. These low referral rates might relate in part to low awareness of the importance of these referrals among primary care physicians, the difficulties faced by physicians treating large numbers of minority patients in gaining access to subspecialty physicians, and possibly to less knowledge of or less ability to implement effective interventions among primary care physicians who treat large proportions of minority patients. The kidney community must lend its voice and efforts to improve the delivery of primary care in the United States and to ethnic minorities, in particular, to address these stage 5 CKD disparities.

Fewer studies have explored specific interventions to improve the primary care delivered to ethnic minorities. Cultural competence interventions have measurable benefits in terms of patient satisfaction but alone have not been shown to improve therapy adherence, health outcomes, or equity of services. Although some uniform approaches show promise to improve primary care delivery in general, initial studies suggest that uniform, “one size fits all” approaches to quality improvement are not as effective in minority populations. Nurse-led interventions also show promise, and the combination with community health care workers is superior to nurse-led interventions alone. These promising “system” interventions must continue to be explored, but there remains in our health care system, just as in our society as a whole, a legacy of prejudice and discrimination that influences health care received by ethnic minorities. Health care providers associate ethnicity with patient intelligence, education, and feelings of affiliation and beliefs about risk behavior. Their communication and the nature of their interactions, such as the extent to which they involve patients in decisions, also vary with the ethnicity of their patients.

Concordance of patient and physician characteristics leads to greater shared decision-making and patient satisfaction. These sensitive yet persistent and potentially destructive issues must be acknowledged and addressed by, among other interventions, strategies to include greater presence and input of physicians from underrepresented minorities, including nephrologists, in the physician workforce. This does not mean that we must achieve ethnic concordance between physicians and patients in most or every encounter. It does mean, however, that underrepresented minority physicians can help direct efforts to ensure that physicians and political leaders eliminate discriminatory behavior from our health care system.

Like CKD in the general US population, ethnic disparities in patients with stage 5 CKD are common, harmful, and likely preventable. We the kidney community must commit to eradicating these disparities by leading the overall medical community to engage in public policy, continue scientific pursuits toward effective interventions, and lend our efforts to improve US primary care delivery so these effective interventions improve the health and lives of all patients with CKD. It is way past time that we do so.

**DISCLOSURES**

None.

**REFERENCES**


**Glucocorticoid-Mediated Hypertension: Does the Vascular Smooth Muscle Hold All the Answers?**

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Patients treated with glucocorticoids for a variety of diverse diseases and those with Cushing syndrome often manifest hypertension. Despite the importance of this clinically relevant problem, the mechanism whereby glucocorticoids increase BP remains an enigma. Although it may be logical to reason that glucocorticoids increase renal salt absorption, resulting in an expansion of the extracellular fluid volume and hypertension, this rationale is not supported by data. Glucocorticoids do not affect serum potassium levels and urinary sodium, and potas-