

A Call to Prevention

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Speaking about kidney disease prevention is not something new, but after about a decade of efforts to raise awareness over the topic, are recently graduated physicians and young nephrologists cognizant of the order of magnitude of the problem?

Since 2002, with the proposition of a new definition for chronic kidney disease (CKD)¹ based principally on changes to the glomerular filtration rate estimated from blood creatinine levels and urinary protein (albumin in the case of diabetic individuals), it became evident that the disease occurred more frequently than once thought, to the point of being considered “the new epidemics of the 21st century.” Studies carried out in different countries have since revealed that approximately 11% of the adult population suffers from CKD in one of its five stages.²

Brazil still lacks a national coverage study on the prevalence of CKD. However, considering that hypertension, *diabetes mellitus* (DM), and glomerulonephritis are the main diseases associated with dialysis and renal transplantation in the country’s renal replacement therapy centers, and that Brazilian patients present the same risk factors (obesity, hyperlipidemia, smoking etc.) observed in patients from countries in which the disease has been more thoroughly studied, it is reasonable to assume that some 13 million Brazilians have CKD of any stage.

A significant challenge in the management of CKD is that the disease progresses for years without symptoms. Unfortunately, still today a huge number of patients seek help only by the time they need dialysis, without ever having seen a nephrologist or been offered specialized care. Although renal replacement therapy is then prescribed as a life-saving procedure, these patients never had the time to prepare physically and mentally to cope with a disease from which they will not recover.

The less informed might wonder and ask: “If patients with CKD are offered dialysis and/or transplantation when their kidneys cease to function anyway, would it not be better to focus our efforts on the treatment of baseline conditions (such as hypertension and DM) and worry less with CKD prevention?” In this context, less experienced physicians should know that CKD is the greatest risk factor for cardiovascular disease, notably ischemic heart disease, and a predisposing factor for early death. Patients on stage 4 CKD have twice the likelihood of dying than starting dialysis.³ Thus, it is evident for nephrologists that the best option for CKD is prevention, achieved by early diagnosis and preservation of renal function. The recommendations concerning diagnosis apply to everyone, but more specifically to individuals at greater risk (subjects

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with diabetes, hypertension, families of persons with CKD, the elderly, patients with cardiovascular disease). This particular group should undergo periodic examination for CKD through simple urine tests (looking for urine protein levels in particular and, in the case of individuals with diabetes, microalbuminuria) and serum creatinine at first.⁴

In November of 2003, the Brazilian Society of Nephrology started an ongoing prevention campaign to raise the awareness of the population, health care workers, and authorities over the importance of early kidney disease diagnosis and to provide advice on preventive measures against CKD and the associated diseases mentioned above.⁵ The World Kidney Day, started in 2006, congregates the efforts of many countries in building awareness over CKD. This international initiative shares the prevention goals cited above and discusses a different specific theme every year. This year's message is that health should be available for all, with particular emphasis on renal care ("Kidney Health for All").

Considering the matters discussed in this article, one might wonder whether medical students, young physicians, and health care workers in general really know how severe and common CKD is, or that patient with CKD are at significant risk of developing cardiovascular disease and die of it, or that CKD is a relevant complication of cardiovascular disease; and whether they were taught that simple, readily available inexpensive tests such as urinalysis and serum creatinine may be used in the early diagnosis of the condition and how often

physicians from other areas order these tests in their daily practices while running patient check-ups; and whether physicians can interpret the estimated glomerular filtration rate printed in the lab report; and why the cost-effectiveness of preventing a disease with such impacting prognosis is still challenged, despite the prohibitive cost of renal replacement therapy in many countries and the irreparable involvement of one's quality of life and shortening of life caused by CKD.

The time has come to rekindle the message on the importance of prevention, a topic currently overshadowed by the pressing need to treat those for whom renal replacement therapy is the only and last hope.

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