

## Time to ascertain the extent of chronic kidney disease in Brazil

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Dutra *et al.*<sup>1</sup> reported a 13.6% prevalence of chronic kidney disease (CKD), defined as an estimated glomerular filtration rate (GFR) lower than 60 ml/min/1.73 m<sup>2</sup>. Their study brought about a huge contribution to quantify and identify a large number of individuals with CKD in the more susceptible population - the elderly. The results achieved may help local managers plan and execute programs to prevent CKD and properly care for patients with it, especially considering the high coverage of the family healthcare program from the public health care system in that city.

However, this analysis is only applied to the region where the study was carried out and, therefore, we should not simply extrapolate these results and estimate figures for the rest of the country based on this series. The population investigated, reflecting the ethnical population of the state of Santa Catarina, which is significantly different from that of the rest of the country, because of the strong predominance of Caucasians. The higher risk of renal failure and the need for substitute renal therapy is well known among African descendants, at least in the USA.<sup>2</sup> Thus, it is acceptable to assume that CKD prevalence may be even higher in regions of the country with a larger population of African descent. Other local factors may also influence CKD prevalence, such as the level of coverage of programs geared towards the treatment of diabetes and hypertension. In the case of the city where this study was carried out, more than 90% of the elderly population was enlisted in the Family healthcare program. In the cities with low coverage, we can expect to see a higher prevalence of late

complications of diabetes and hypertension, including CKD.

Further epidemiological studies involving CKD, both regional and national, are very much welcome. It is not reasonable that we should use statistics from other countries with different populations and healthcare systems. Understanding the true prevalence of CKD in Brazil must include not only a classification per stage according to the GFR, but also go more in depth in stratifying the risk of kidney disease progression, combining GFR estimates with albuminuria presence and magnitude.<sup>3</sup>

Finally, it is worth stressing that the elderly have a higher prevalence of CKD - that is why it was appropriate to involve this population stratum in our study. Nonetheless, since many elderly have a moderate GFR reduction, in the 3a (45-59 ml/min) stage for instance, and usually have a slow progression of their CKD, most will die of other causes before they develop kidney failure.<sup>4</sup> On the other hand, hypertension and diabetes are still the main causes of CKD, causing kidney failure and the need for kidney replacement therapy in Brazil, bringing a huge burden to our healthcare system. The mean age of patients who start dialysis in Brazil is only 52 years.<sup>5</sup> Thus, it seems proper that epidemiological studies like this must include younger diabetic and hypertensive patients when the goal is to find individuals who can still benefit from actions to delay CKD progression.

In conclusion, for a proper CKD approach in terms of healthcare public policies in Brazil we need to progress

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further in understanding the impact of CKD in our country. This study carried out with the elderly population from the city of Tubarão - SC brings its contribution, but we need more studies similar to this one, involving populations from other regions and other groups - besides the elderly - with high risk for developing CKD, such as hypertensive and diabetic patients. A true understanding of the real problem in our country will only be achieved when we employ strategies of population studies, similarly to what is used in developed countries.<sup>6</sup>

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