EDITORIAL

The Challenge of Breaking the Status Quo in Hypertension

El desafío de romper el statu quo en hipertensión arterial

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Hypertension is one of the diseases with highest prevalence worldwide, with some disparities depending on the economic development and the demographic composition of the countries. (1) In addition to its high prevalence, its strong impact on the development of cardiovascular disease, renal disease and mortality is well recognized. (2, 3) The influence of hypertension and its consequences on the productive capacity of subjects and the disability-adjusted life-years are reflected worldwide. (3) In some reports, the region of the Rio de la Plata has the highest prevalence and greatest cardiovascular mortality in Latin America. (4, 5)

In this issue of the Journal, Delucchi et al. present the results of the RENATA-2 study. (6) This study uses a randomized sample strategy in 25 districts of 18 provinces of Argentina, exceeding more than three times the number of cities surveyed in the first RENATA study published in 2012. (7) In addition, the methodological virtues of the study include direct measurement of blood pressure, with adequate technique and equipment, and the use of specific questionnaires to evaluate adherence to treatment. The RENATA-2 study stands out in many aspects. It is a national study, conducted by a scientific society that assembles professionals committed with this disease, and is independent of the participation of government authorities. These characteristics make the RENATA-2 a pioneer study in Latin America. In this study, the prevalence of hypertension has a slight upward trend compared with the one measured in 2012: 36.3% (95% CI, 35.1-37.6%) in 2017 versus 33.5% (95% CI, 31.9-34.9) in 2012. Perhaps this information should not be alarming if it is analyzed together with the change in the demographic structure due to population growth and aging. (8) However, other data derived from the RENATA-2 study should be matter of concern, including the crude prevalence of subjects unaware of their hypertensive condition (~40%), and those who are receiving antihypertensive treatment (~50%) and effectively control their disease (~25%). Even more, although the RENATA-2 study does not report age-standardized and sex-standardized prevalence, it provides sex-specific and age-specific information that shows very poor performance in the diagnosis, treatment and control of the disease in men compared with women and in young subjects compared with older ones. This information differs minimally from the one reported in 2012 and from regional and international publications. (7, 9, 10) Finally, the results of the RENATA-2 study are based on office blood pressure measured on a single day. We know that casual blood pressure measurement with a single blood pressure reading is subject to errors, and that 24-hour ambulatory blood pressure monitoring is the gold standard for the diagnosis of hypertension. This suggests that the real prevalence of hypertension could be even higher if we consider that the proportion of subjects with hidden hypertension in population-based samples ranges between 15% and 20%. (11) Yet, the average prevalence of conventional and ambulatory hypertension is similar. (12)

The RENATA-2 study and the other publications mentioned before reflect that the epidemiological reality of hypertension has not changed or has even worsened, indicating that the health care policies implemented over the past years have failed. This reality goes beyond blood pressure control and also involves other noncommunicable diseases (NCDs) as diabetes and obesity. (8, 13, 14) Only tobacco control has shown partial improvements in some countries. (15, 16) However, over the past years, the Kaiser Permanente Experience restores some hope of improving this disheartening perspective. (17, 18) This experience has demonstrated that breaking some paradigms of the health care system, currently dominated by structures designed to take care of acute diseases and to treat the complications of chronic diseases, can yield positive results. One of the keys of this strategy was to design dynamic strategies according to the possibilities of the system, considering the lowest cost possible, incorporating the actors in the search for solutions and with an almost permanent monitoring of the results obtained with the changes introduced.

Argentina has made substantial contributions to the awareness and treatment of hypertension that are

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recognized worldwide. (19) In the current context of knowledge, the great challenge is to contribute improving diagnostic strategies, particularly the efficient treatment for blood pressure control. Surely, this challenge implies breaking down some current status quo paradigms, from medical education to the design of health care policies adjusted by regional realities and a dynamic performance allowing rapid adjustments. Argentina is capable of academic and scientific development in hypertension to face this challenge, and we hope that this will be reflected in the future evaluations of the RENATA study.

Conflicts of interest

None declared.

(See authors' conflicts of interest forms on the website/Supplementary material).

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