

## The Americas: a region that ages with disparity



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Considerable progress has been made in the Region of the Americas with regard to the control of non-communicable diseases (NCDs). However, marked inequality exists between and within countries in the region. Specifically, cardiovascular disease mortality has declined, but a disparity exists between North America and Latin America. Since 2000, the incidence of coronary disease, hypertension, and stroke have been increasing in Latin America.<sup>1</sup> The high developmental indexes of North American countries (eg, Canada and the USA) contrast with the lower developmental indexes of most Latin American countries. Furthermore, inequalities in health expenditure exist across Latin America that are proportionate to the level of development in these countries. Thus, in less-developed countries, individuals have less control over cardiovascular risk factors and poor access to cardiac treatments, which leads to a higher number of fatal cardiovascular events.<sup>2</sup> Within Latin American countries, cardiovascular mortality is high in areas with low socioeconomic status, where individuals have limited access to optimal treatments and a higher level of exposure to risk factors.<sup>3</sup>

In *The Lancet Global Health*, Peter Lloyd-Sherlock and colleagues<sup>4</sup> extract and analyse data from the Pan American Health Organization regional mortality database for 36 countries from the WHO Region of the Americas for the period 2000–15. The authors found that people aged 70 years and older accounted for the majority of cardiovascular disease deaths in all countries. However, considerable cross-country variation was observed, with people aged 70 years and older accounting for 52% of cardiovascular disease deaths in the Bahamas and 82% of cardiovascular deaths in Martinique. Conversely, the proportion of cardiovascular disease-related deaths in individuals aged 30–49 years was highest in the Bahamas (15%) and the lowest in Canada (3%). The authors also calculated that among people aged 30–79 years, the number of regional cardiovascular disease deaths that could have hypothetically been averted in 2015 was 440 777, of which 211 365 (48%) occurred among people aged 70–79 years.<sup>4</sup>

The data provided by Lloyd-Sherlock and colleagues are of particular relevance, because they highlight another disparity in global health policies associated

with older age groups. The analysis shows that individuals aged 70 years and older account for the majority of cardiovascular deaths in the Region of the Americas. The largest reductions in mortality have also been observed for this age group, however, the Sustainable Development Goals global monitoring of NCD mortality (target 3.4) exclusively focuses on the 30–69 year age group.

The estimated life expectancy in North America for 2025–30 is 83·4 years for women and 79·5 years for men. In Latin America and the Caribbean, life expectancy is expected to increase to 80·7 years for women and 74·7 years for men.<sup>5</sup> These estimations show that the population of the Americas is living longer. One theory associated with ageing is that older individuals (aged  $\geq 70$  years) are dependent or represent a burden. Although dependence is hypothesized to increase with age, it is only after age 80 years that dependence increases abruptly (100% higher than between 70 and 80 years).<sup>6</sup>

Considering that life expectancy across the Americas is increasing, and ageing does not necessarily imply dependence, it would be valuable if cardiovascular health-care policies, epidemiological vigilance, and research were more focused on the ageing population. This notion is consistent with the conclusion of Lloyd-Sherlock and colleagues who advocate that the threshold for what is categorised as a premature death should be increased, perhaps to 80 years of age. This might represent the most important message of the Article, since a threshold of 70 years of age would imply that death after this age is expected, and thus efforts to prevent such deaths would be unwarranted.

In conclusion, cardiovascular disease is the principal contributor to the global disease burden, with a marked increase after age 30 years that affects the adult population in its productive age. The increase in life expectancy is a consequence of better control of transmissible diseases and a more effective and accessible therapeutic arsenal. These advances will make it necessary to monitor NCDs and particularly cardiovascular disease in every age group, since the increased availability of therapeutic options will improve control of these diseases. Additionally, this information will help to establish wider and non-discriminatory

public policies aimed at the whole population. If goals focus on only one specific age group, there is a risk that other age groups will be left unprotected, without effective interventions.

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We declare no competing interests.

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1 Lanas F, Serón P, Lanas A. Cardiovascular disease in Latin America: the growing epidemic. *Prog Cardiovasc Dis* 2014; **57**: 262–68.

- 2 Yusuf S, Rangarajan S, Teo K, et al. Cardiovascular risk and events in 17 low-, middle-, and high-income countries. *N Engl J Med* 2014; **371**: 818–27.
- 3 Fleischer NL, Diez Roux AV. Inequidades en enfermedades cardiovasculares en Latinoamérica. *Rev Peru Med Exp Salud Pública* 2013; **30**: 641–48 (in Spanish).
- 4 Lloyd-Sherlock P, Ebrahim S, Martinez R, McKee M, Ordunez P. Reducing the cardiovascular disease burden for people of all ages in the Americas Region: analysis of mortality data, 2000–15. *Lancet Glob Health* 2019; **7**: e604–12.
- 5 United Nations, Department of Economic and Social Affairs, Population Division. *World Population Prospects, Volume II: Demographic profiles*. 2017. [https://population.un.org/wpp/Publications/Files/WPP2017\\_Volume-II-Demographic-Profiles.pdf](https://population.un.org/wpp/Publications/Files/WPP2017_Volume-II-Demographic-Profiles.pdf) (accessed March 12, 2019).
- 6 Aranco N, Stampini M, Ibarrarán P, Medellín N. *Panorama de envejecimiento y dependencia en América Latina y el Caribe*. Banco Interamericano de Desarrollo 2018. <https://publications.iadb.org/en/panorama-de-envejecimiento-y-dependencia-en-america-latina-y-el-caribe> (accessed March 15, 2019; in Spanish).