

## Data pooling efforts in Africa and Latin America

In August, 2016, the Global Body-Mass Index (BMI) Mortality Collaboration<sup>1</sup> published their work on BMI as a predictor of all-cause mortality. The investigators pooled individual participant data from 239 prospective studies, with none originating from Latin America or Africa.<sup>1</sup> About two years ago, the Global Burden of Metabolic Risk Factors for Chronic Diseases Collaboration<sup>2</sup> investigated the metabolic mediators of the effect of BMI on cardiovascular diseases using individual participant data from 97 prospective cohorts, including one cohort from Latin America. Despite these low numbers for Latin America and Africa, the NCD Risk Factors Collaboration<sup>3</sup> reported the trend in adult BMI between 1975 and 2014 pooling individual participant data from 1698 population-based cross-sectional studies, including several from Latin America and Africa.

The aforementioned studies are remarkable examples of ongoing global efforts to pool data to support more robust studies and to address globally relevant research questions. However, Latin America and Africa seem less accounted for in these efforts, so the resulting findings, particularly those from prospective studies, are less representative of the situation in these parts of the world.<sup>4</sup> This Letter aims to make a global call to investigators in Latin America and Africa who have done or are doing population-based prospective studies, as well as cross-sectional studies, to join the efforts in individual participant data pooling. The resulting big data would provide much valuable information at the regional level and expand the current global knowledge. This effort should not apply only to BMI or non-communicable disease, but should also extend to all other medical research fields.

Although there could be a wide range of constraints (eg, authorship

issues and data sharing, legal, ethical, and funding restrictions), Latin America and African investigators should take the first steps: talk, coordinate, and think global. It is not only about data sharing, but also about developing the culture of cooperation, overcoming language and other barriers, setting local (within Latin America or Africa) and global partnerships (eg, further participation in the Global BMI Mortality Collaboration).

Latin America and Africa need to embrace the data sharing culture, mindful of the fact that data generated ages fast and can quickly become useless. Participation in global or regional data pooling efforts does not undermine the contribution and originality of each study, but rather contributes to broader synergistic scientific efforts. We urge researchers in Latin America and Africa to carefully consider data pooling efforts as the norm, rather than an exception.

RMC-L and JJM, as well as the CRONICAS Center of Excellence in Chronic Diseases, have been funded in whole with Federal funds from the US National Heart, Lung and Blood Institute, National Institutes of Health, and Department of Health and Human Services. APK declares no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY license.

Rodrigo M Carrillo-Larco,  
\*Jaime Miranda, Andre P Kengne  
[jaime.miranda@upch.pe](mailto:jaime.miranda@upch.pe)

CRONICAS Center of Excellence in Chronic Diseases, Universidad Peruana Cayetano Heredia, Miraflores, Lima 18, Peru (RMC-L, JJM); Department of Medicine, School of Medicine, Universidad Peruana Cayetano Heredia, Lima, Peru (JJM); Non-Communicable Diseases Research Unit, South African Medical Research Council, Cape Town, South Africa (APK); and Department of Medicine, University of Cape Town, Cape Town, South Africa (APK)

- 1 Global BMI Mortality Collaboration. Body-mass index and all-cause mortality: individual-participant-data meta-analysis of 239 prospective studies in four continents. *Lancet* 2016; **388**: 776–86.
- 2 Lu Y, Hajifathalian K, Ezzati M, Woodward M, Rimm EB, Danaei G, for the Global Burden of Metabolic Risk Factors for Chronic Diseases Collaboration (BMI Mediated Effects). Metabolic mediators of the effects of body-mass index, overweight, and obesity on coronary heart disease and stroke: a pooled analysis of 97 prospective cohorts with 1.8 million participants. *Lancet* 2014; **383**: 970–83.

- 3 NCD Risk Factor Collaboration (NCD-RisC). Trends in adult body-mass index in 200 countries from 1975 to 2014: a pooled analysis of 1698 population-based measurement studies with 19.2 million participants. *Lancet* 2016; **387**: 1377–96.
- 4 Kengne AP, Ntyintyane LM, Mayosi BM. A systematic overview of prospective cohort studies of cardiovascular disease in sub-Saharan Africa. *Cardiovasc J Afr* 2012; **23**: 103–12.

