The Bambuí Cohort Study of Aging (1997-2008)

Population aging is a global phenomenon, as the consequence of an impressive decline in the fertility rate and gains in life expectancy, especially in the second half of the 20th century. In Brazil, the fertility rate declined from 6 children per woman in the early 1960s to 1.9 per woman in 2009. The rate is similar to that of high-income countries and below the population replacement rate, namely 2.1 children per woman. Life expectancy increased by nearly 17 years during the same period. The increase in life expectancy has resulted, at least in part, from successful public health interventions. This success has led to other public health challenges, such as the promotion of active aging and ensuring proper care for the elderly population, which experiences a disproportionately higher prevalence of chronic disease and disability.

The Epidemiology of Aging is a field still in construction. Population-based cohort studies of elderly people are still few and mostly conducted in high-income countries. This is due primarily to (i) the belated recognition of the impact of population aging for health systems and (ii) the inherent difficulties in conducting cohort studies, especially in middle-income countries. The Bambuí (Minas Gerais, Brazil) population-based cohort study of aging was established in 1997. Participants in this cohort study included all residents in the city of Bambuí age 60 years and over at the time of enrollment. They have been followed annually since then, with a very low attrition rate. At the time this Editorial was prepared, the Bambuí study had produced more than 70 scientific publications. The findings have led to a better understanding of the aging process in the context of poor socioeconomic conditions, besides providing new insights into the impact of the epidemiological transition on this process.

This Supplement celebrates a decade of follow-up in the Bambuí cohort. The study began as a joint initiative by the Oswaldo Cruz Foundation (Fiocruz) in Minas Gerais and the Federal University in Minas Gerais (UFMG). Over time, researchers from other institutions have joined the project. This special edition expresses such rich collaboration, with 14 articles by researchers from various Brazilian and foreign institutions. The first article describes the cohort's methodology and selected baseline characteristics of participants. The other articles are organized according to their methodological approaches. The first section includes four longitudinal studies, addressing the incidence and determinants of hospitalization, cognitive decline, hypertension, and mortality. Following that are two studies using anthropological approaches. The first examines the influence of socioeconomic conditions on the strategies for addressing health problems, particularly on the use of health services and medications. The second is an ethno-epidemiological study on correlates of adequate versus inadequate treatment and control of hypertension. Next come two crosssectional studies: one on the association between of satisfaction with the neighborhood and self-rated health and the other on energy expenditure through physical activity. The final section includes five articles on birth cohort differences in cardiovascular risk factors, anthropometric measures, adequate control of hypertension, use of medication, and activities of daily living and disability.

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