



# Burden of dementia in Brazil

## Carga de demência no Brasil

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The paper by Melo et al.<sup>1</sup> is an important contribution to understanding the impact of dementia in Brazil and can help define guidelines for future research and public policies in this area. The authors of this investigation should be commended for their enormous effort in gathering data from the Global Burden of Disease, the Brazilian Institute of Geography and Statistics, the Brazilian Ministry of Health, and several Brazilian epidemiological studies on dementia. By carefully analyzing these data, the authors were able to produce important findings that have significant implications for health care and policymaking in Brazil.

The increase in life expectancy over recent decades has caused a rise in the prevalence of degenerative diseases, which are more common in older adults. Dementia is one of the most common of these conditions, and despite its massive impact on the health of individuals, it has been largely neglected in Brazil and other Latin American countries, not only by policymakers but also by the general public. Estimates indicate that the prevalence of dementia will increase four-fold between 2015 and 2050 in Latin America<sup>2</sup>. The population is aging rapidly in Brazil, making dementia a growing public health priority.

In a global context, the most recent figures show that Brazil has the second-highest age-standardized prevalence of Alzheimer's disease (AD) and other dementias, after Turkey<sup>3</sup>. In 2000, AD ranked as the third and fourth most common cause of death in women and men aged 70 years or older, respectively, but by 2016, it had become the second most common cause of death for both genders. Moreover, AD was the third main cause of disability in men and women aged 70 years or older in 2000, but by 2016, it had become the second leading cause of disability in men in this age group, while remaining the same for women<sup>1</sup>.

One of the most important points emerging from the study is that with the rapid aging of the population, dementia will significantly rise unless measures are taken now to curb this scenario. We must remember the role that dementia prevention can have for future generations<sup>4</sup>, especially in developing countries with low levels of education and a lack of adequate control of conditions such as hypertension, obesity, and diabetes. A recent study<sup>5</sup> suggested that 32.3% of dementia cases in Brazil could be related to seven potentially modifiable risk factors (diabetes, hypertension, obesity, sedentary lifestyle, depression, smoking, and low levels of education) and that reducing the prevalence of each of them by 20% per decade could, by 2050, potentially reduce the prevalence of dementia in the country by 16.2%.

Another point raised in the study by Melo et al. concerns the costs of dementia, which mostly fall on the family of dementia patients, particularly on young women, who have to leave their formal employment to work as untrained caregivers for a family member with dementia<sup>6</sup>.

A consideration of the limitations of the study can help guide recommendations for future studies to improve the accuracy of data across the country. The first was the paucity of epidemiological studies on dementia in Brazil, most of them concentrated in the Southeastern region of the country<sup>7</sup>. The lack of epidemiological studies on dementia from other regions makes it difficult to have an overview of the situation in regard to the disease throughout the whole country. The second issue is the lack of homogeneity of diagnostic criteria in the epidemiological studies that do exist<sup>7</sup>; this subject clearly needs to be addressed when planning future studies.

Regarding death certificates, the authors recommended using the diagnosis of the specific disease (AD, vascular dementia, frontotemporal dementia, Lewy body dementia, for example) and not simply dementia because these subtypes are associated with distinctive effects as to years lost due to disability (YLDs), age-standardized mortality, years of life lost (YLLs), and disability-adjusted life years (DALYs). However, we note that the use of death certificates to assess the prevalence of dementia and dementia subtypes as causes of death has proven challenging

in Brazil in the past. In a study conducted in Catanduva, São Paulo State, AD was mentioned only 4 times and senile dementia only once in 40 death certificates of individuals with dementia<sup>8</sup>. This study was published 15 years ago, and whether recording specific diseases on death certificates has become more frequent in Brazil remains to be seen.

Data from the study by Melo et al.<sup>1</sup> and other recent studies show that policymakers need to be aware of the urgency

and the scale of the problem of dealing with dementia in Brazil and the need for more funding to provide the means to develop a National Dementia Plan<sup>9</sup>. Such a plan could help guide policies on the prevention and treatment of the condition and establish care strategies and research priorities for dementia in Brazil, taking into account the well-being of the 1.5 million Brazilians estimated to have dementia in this paper, as well as their family and caregivers.

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