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Dementia in Latin America and the Caribbean: An Overlooked Epidemic

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The prevalence and incidence of dementia have been thought to be lower in developing countries than in the developed world, mostly based on reports from Asia and Africa [1, 2]. Until recently, data from those countries have been used to estimate rates in Latin America and the Caribbean (LAC) region. However, recent epidemiological studies have revealed a hidden epidemic [3], and the report by Llibre-Rodriguez et al. [4] in this issue of *Neuroepidemiology* presents solid evidence that high rates of dementia in LAC are not a spurious finding. It might be argued that the high prevalence rate reported by Llibre-Rodriguez et al. is attributable to their definition of dementia. 10/66 dementia was defined as occurring in subjects who scored above a cutoff point, estimated from a logistic regression equation [5]. Certainly, longitudinal and neuropathological studies are required to assess the validity of this definition. However, even the prevalence rate of DSM-IV-defined dementia reported by Llibre-Rodriguez et al. contradicts the notion that dementia is a rare disease in LAC.

It is estimated that the population of LAC is 572 million, with a life expectancy at birth of 73.1 [6]. Assuming a prevalence of 6% in subjects over 60 years of age [4, 7], there are about 2 million people with Alzheimer's disease and related disorders in LAC – almost the same number as in the USA and Canada combined. Low levels of education, high rates of brain injury, poor diet, sedentary lifestyle, and high rates of cardiovascular risk factors and diseases are some of the factors that might be blamed for the high numbers. Furthermore, there are large family groups in the region that are afflicted with dementia, such as have been found in the Dominican Republic, Colombia, and Venezuela [3]. Because prevalence reflects a balance between incidence and duration of disease, it is difficult to use cross-sectional surveys to compare the disease burden across societies when neither of these components is known separately. Nevertheless, based on population dynamics, increasing life expectancy, and continued prevalence of cardiovascular risk factors and diabetes, the total number of cases of dementia in LAC can only be expected to rise.

More than a Matter of Numbers

LAC is probably the region of the world that is hardest hit by dementia, not only because the numbers are high, but also because the resources available for patients and their families are very limited. Dementia, rather than physical health problems or depres-

sion, was the main contributor to the need for care (population-attributable prevalence fraction = 64.6%) and to caregivers cutting back on work (population attributable prevalence fraction = 57.3%) in Cuba [4]. 10/66 dementia was also strongly associated with clinically significant caregiver psychological morbidity [4]. Because LAC encompasses an amalgam of cultures and populations, socioeconomic disparities, languages, and ethnic origins, the dementia epidemic is not geographically homogeneous, and it is hard to generalize among countries. However, there are common factors that characterize this region, which have prevented an effective response to the emerging dementia epidemic. These factors include widespread poverty; a general lack of knowledge of the causes, symptoms, and treatment of dementia; weak or nonexistent advocacy groups for dementia sufferers and their families; the view that dementia is a normal part of aging; the social stigma associated with mental disorders, and a dearth of dementia research and researchers in developing countries.

Current Research Priorities in Dementia in the LAC Region

Globalization of knowledge provides opportunities for improved prevention and treatment of dementia, but access to research results and knowledge transfer are still very poor in LAC. Research priorities in LAC must be responsive to regional needs. With limited resources, we must prioritize the development and implementation of interventions to increase the well-being of demented subjects and their caregivers. We need to discover how the existing infrastructure in each country, even if currently weak, can be improved and used to deliver the most cost-effective interventions in favor of the patient and the family.

What Resources Are Needed to Prevent and Treat the Demented in LAC?

Population-based prevention measures might be effective, such as promoting cerebrovascular disease prevention through lifestyle modifications without expensive health care infrastructure. Prevention strategies should also be targeted at individuals at high risk. Health interventions should be made geographically close to patients through community-based approaches. However, even if effective interventions are provided, the poorest subjects may fail to access them. There is a need for standardized indicators to evaluate pro-poor interventions and identify the best practices for preventing and treating dementia in deprived settings.

Important Role for Partnerships

Public-private partnerships may play a key role in developing dementia prevention and treatment in LAC. The challenge is to ensure that intellectual property rights and patents do not restrict the delivery of new tools to the poor. Partnerships between developed and developing countries may play a crucial role in the generation of knowledge, as demonstrated by the 10/66 initiative. Capacity building through research and training could accelerate the response to the dementia epidemics.

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