Objectives: Studies in PD have traditionally focused on motor features, however, interest in non-motor manifestations has increased resulting in improved knowledge regarding the prognosis of the disease. Although several studies have explored the incidence of dementia in PD cohorts, these studies have been conducted mainly in reference centers in high-income countries (HIC). In this study we aimed to analyze the prevalence of cognitive impairment in people with parkinsonism and PD and its association with incident dementia in a population- based study, of elderly from six Latin American countries.

Methods: This report consists of the analysis of data from a follow-up of 12,865 elderly people aged 65 years or older, carried out by 10/66 Dementia Research Group. Residents of urban and rural areas, from six low and middle-income countries (Cuba, Dominican Republic, Puerto Rico, Venezuela, Mexico and Peru). Exposures include parkinsonism and PD defined according to the UK Parkinson's Disease Society Brain Bank diagnostic criteria. Cognitive impairment was the main exposure and dementia was measured through the dementia diagnosis algorithm from 10/66 DRG.

Results: At baseline, the overall prevalence of cognitive impairment was 14% (n = 1,581), in people with parkinsonism and PD, it was of 30.0% and 26.2%, respectively. Parkinsonism and PD were individually associated with prevalent and incident dementia after controlling for age, sex, and education. The pooled odds ratios from a fixed-effects meta-analysis were 2.2 (95% CI: $1.9 - 2.6$) for parkinsonism and 1.9 (95% CI: $1.4 - 2.4$) for PD. Regarding incident dementia, the pooled sub-Hazard ratio estimated using a competing risk model was 1.5 (95% CI: $1.2 - 1.9$) for parkinsonism and 1.5 (95% CI: $1.0 - 2.2$) for PD.

Conclusions: Parkinsonism and PD were associated cross-sectionally with the presence of cognitive impairment, and prospectively with incident dementia in elderly people in the community population of Latin America studied. Systematic screening for cognitive impairment and dementia with valid tools in PD patients may help with earlier detection of those at highest risk for adverse outcomes. Identifying modifiable risk factors could potentially lead to efficient interventions even in advanced stages of PD.

Keywords: cognitive impairment, incident dementia, parkinsonism, parkinsonism plus dementia, Latin Americans

3 - Prevalence and impact of neuropsychiatric symptoms in normal aging and neurodegenerative syndromes: A population-based study from 6 Latin America centers. (Isaac Acosta)

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Objectives: Because of the continued transition to older populations, various strategies have been developed to estimate the social impact and burden of health care. Regarding mental health, a strategy in the elderly is the measurement of neuropsychiatric symptoms (NPS), these include a wide range of behavioral and psychological manifestations. These are more frequent in the presence of some diseases, such as neurodegenerative syndromes, among which dementias and Parkinson's disease (PD) stand out. The present study seeks to analyze the frequency of NPS, its relationship with the presence or absence of neurodegenerative syndromes and some characteristics of the elderly and caregivers.

Methods: This is an analysis of data from 12,865 elderly people evaluated within the protocols of the Dementia Research Group 10/66 in 6 Latin American countries (Cuba, Dominican Republic, Puerto Rico, Mexico, Venezuela and Peru). The presence or absence of parkinsonism, dementia and parkinsonism plus dementia (PDD) was identified through previously validated and published Methods. The NPS were assessed using the 12-symptom questionnaire version of the Neuropsychiatric Inventory. Other characteristics such as age, sex and education, in patients and caregivers; socioeconomic status, disability and comorbidities in the elderly; relationship with the elderly, needs and care-burden were assessed in careers.

Results: The most frequent symptoms were depression and sleep disorders in the four groups (without non-NDS neurodegenerative syndromes, parkinsonism, dementia and PDD, ranging from 23% to 49%. About a third of the elderly with parkinsonism, half of those with dementia, and 3 out of 5 of the elderly with PDD had 3 or more NPS. The odds ratios (OR) of each NPS measure by multivariate logistic regression models shown OR from 1.4 to 1.9 in the presence of parkinsonism; between 1.7 and 9.3 in the presence of dementia; and between 1.9 and 10.2 in the presence of PDD.

Conclusions: From a clinical and public mental health perspective, it is necessary to implement systematic Methods for NPS screening, as well as develop support strategies for families and caregivers, mainly of those with neurodegenerative syndromes.

Keywords: neuropsychiatric symptoms, dementias, parkinsonism, parkinsonism-dementia, Latin-American

4 - Dementia in Latin America – Social determinants of health and genetic ancestry. (Jorge J Llibre Guerra)

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