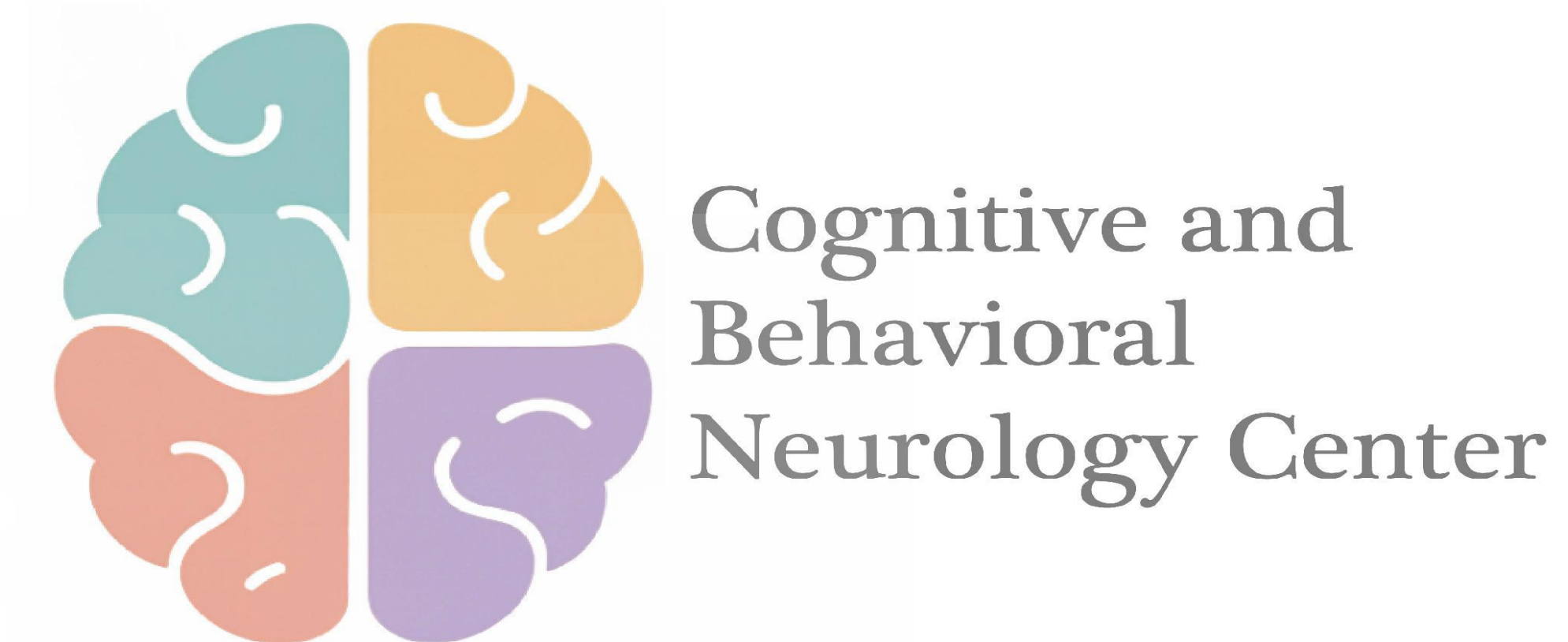


Brazilian Portuguese translation and application of the Cohen–Mansfield Agitation Inventory in a tertiary hospital.

Authors: Fabiana Gabe Beltrami¹, Raphael Machado Castilhos^{2,3}



¹ Programa de Pós-Graduação em Medicina: Ciências Médicas, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brasil.

² Serviço de Neurologia, Hospital de Clínicas de Porto Alegre, Porto Alegre, Brasil.

³ Departamento de Medicina Interna, Universidade Federal do Rio Grande do Sul

Background: Agitation in patients with dementia are very common and represent a major challenge in the management. The use of scales designed to measure agitation, such as the Cohen-Mansfield Agitation Inventory (CMAI), helps standardize the assessment of these symptoms. Our aims are 1) to validate and translate the CMAI scale into Brazilian Portuguese, and 2) assess the frequency of agitation in a dementia outpatient clinic at a tertiary hospital and the factors associated with its occurrence.

Methods: This is a cross-sectional study conducted at the Hospital de Clínicas de Porto Alegre. Two independent translations of the CMAI were performed by Brazilians fluent in English. After harmonization, the resulting translation was independently back-translated by two native English speakers. Cronbach's alpha coefficient was used to assess internal consistency. Demographic data, dementia etiology, comorbidities, and medication use were collected. Cognitive and functional status were assessed using the Mini-Mental State Examination and the Clinical Dementia Rating. Behavioral symptoms were evaluated using the CMAI and the Neuropsychiatric Inventory (NPI).

Results: Eighty-one patients with dementia or mild cognitive impairment (MCI) (median age 76, 52% female) were included. Alzheimer's disease was the most common diagnosis (28%), followed by vascular (19%) and mixed dementia (16%). Greater agitation was associated with lower cognitive performance ($\rho = -0.40$; $p < 0.001$). CMAI showed a strong positive correlation with the NPI ($\rho \geq 0.77$; $p < 0.001$), supporting its external validity. The internal consistency of the scale was high (Cronbach's $\alpha = 0.94$, 95% CI 0.92–0.96), indicating a high degree of homogeneity among items.

Conclusion: This study translated, adapted, and validated the CMAI for Brazilian Portuguese, confirming its reliability and clinical relevance in assessing agitation among patients with dementia.