

## Level of cognitive function and associated factors among community-dwelling older adults in a semi-urban area in Colombo District, Sri Lanka

H. W. I. Kavindya<sup>1</sup>, D. G. I. Chathumini<sup>1</sup>, K. Nithusha<sup>1</sup>, G. T. M. Gunarathna<sup>1</sup>,  
K. K. P. M. Samaranyaka<sup>1</sup>, M. T. S. D. Weerathunga<sup>1</sup>, U. L. P. S. Kalpani<sup>1</sup>,  
U. G. N. Priyadarshani<sup>2</sup>, S. S. P. Warnakulasuriya<sup>2</sup>

<sup>1</sup>*Faculty of Nursing, University of Colombo, Sri Lanka*

<sup>2</sup>*Department of Clinical Nursing, Faculty of Nursing, University of Colombo, Sri Lanka*

Older adults face various health challenges, including cognitive decline, which significantly affects memory, decision-making abilities, and overall quality of life. Despite the significance of research in this area, limited studies have been conducted in Sri Lanka to identify the level of cognitive function and associated factors. This study aimed to identify the level of cognitive function and the associated factors among community-dwelling older adults in the Homagama Divisional Secretariat area. A descriptive cross-sectional study was conducted among 420 community-dwelling older adults aged  $\geq 60$  years. The cluster sampling technique was used to achieve the required study sample. Data were collected by administering the Montreal Cognitive Assessment (MoCA) tool, which has been validated for the Sri Lankan context. The maximum score is 30 points and the cut-off value for mild cognitive impairment is  $< 26$  points. Data analysis was performed using Statistical Package of Social Sciences (version 27.0). Descriptive statistics, chi-Square test and Pearson's correlation test were performed to assess significant associations. The level of significance was set as  $p < 0.05$ . Mean age of the study sample was  $69 \pm 6.83$  years. The majority (282, 67.1%) of the participants were females. Mean score for MoCA was  $19.30 \pm 4.16$ . The prevalence of cognitive impairment in the study sample was 93.6%. Cognitive function was significantly associated with hypertension ( $p = 0.013$ ), sleep problems ( $p < 0.001$ ), use of antihypertensive drugs ( $p = 0.002$ ), antihyperglycemic drugs ( $p = 0.042$ ), lipid lowering drugs ( $p = 0.009$ ), monthly income ( $p < 0.001$ ), employment status ( $p = 0.002$ ). There was a significant negative correlation between age and cognitive function ( $r = -0.285$ ,  $p < 0.001$ ). The prevalence of cognitive impairment among older adults in this sample was high. Cognitive function was significantly associated with age, health conditions, medication use and socioeconomic factors. These findings highlight the need for regular cognitive assessments and targeted interventions to promote healthy aging among older Sri Lankan adults.

**Keywords:** *Level of cognitive function, Associated factors, Community-dwelling older adults, Semi-urban area*