The Montreal Cognitive Assessment (MoCA-Ina) versus the Mini-Mental State Examination (MMSE-Ina) For Detecting Mild Cognitive Impairment among The Elderly

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Abstract.
Background: There are many neuropsychological instruments used for screening cognitive functions in adults, with or without health problems such asthe MMSE-Ina and MoCA-Ina. **Objectives:** This study was designed to test the correlations and differences between MMSE-Ina and MoCA-Ina for early detection of decreasing cognitive function in the elderly. **Methods:** A total of 278 subjects were randomly selected from the 17 sub dictricts of Surakarta Municipality, Central Java, Indonesia. Data collection was carried out in December 2018 and January 2019, with all subjects individually interviewed using two cognitive tests (which lasted 30 – 45 minutes) along with physical and neurological examinations. The MMSE-Ina and MoCA-Ina scores of each participant were correlated using the non-parametric Spearman rank test. Both scores were compared based on level of education and gender. **Results:** The MoCa-Ina detected using MCI was 215 (77.3%) while MMSE-Ina was 189 (68%), with 176 (63.3%) in severe 10 (3.5%). This study also showed a strong correlation between the MMSE-Ina and MoCA-Ina scores (r = 0.633 $p < 0.000$). The cut point in this study were 23/24 for the MMSE-Ina and 25/26 for the MoCA-Ina which was less than 23 and 25, indicated cognitive impairment. **Conclusion:** The MoCA-Ina is used to screen cognitive impairment in the elderly.
Keywords: Correlation, MMSE-Ina, MoCA-Ina, Elderly, Mild Cognitive Impairment.