PSYCHOMETRIC AND CLINOMETRIC PROPERTIES OF THE MONTREAL COGNITIVE ASSESSMENT (MOCA) IN A GREEK SAMPLE

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Introduction: The Montreal Cognitive Assessment(MoCA) is a psychometric tool measuring cognitive function that detects Mild Cognitive Impairment(MGI), a clinical condition which often results in dementia.

Objectives: To measure the psychometric properties of the assessment.

Aims: To explore the discriminant validity and internal consistency of the assessment.

Methods: The study included 132 patients, 56(42.2%)men and 76(57.6%)women. Of them, 12(9.1%) had dementia, 54(40.9%)psychiatric diseases, 7(5.3%)vascular strokes, 3(2.3%)organic psychosyndrome, 17(12.9 %) cases were to be investigated and 36(27.3 %) were patients without psychiatric illness, who were evaluated under Liaison Psychiatry. The psychometric properties of MoCA were evaluated in comparison to the Mini-Mental-State-Examination(MMSE) and Golden Standard, which was the diagnosis of the treating physician. Statistical analysis was performed with SPSS21.

Results: The total scale of MoCA had a coefficient alpha of .885 and all the subscales between .878-893. MoCA had a significant high correlation with MMSE(r=-.544 p =.001) and with age(r =-.544 p =.001). No significant differences were found between men and women (t=-.707 p>.05). There was a statistically significant difference between the assessments in moderate and severe cognitive impairment, where MoCA was more sensitive (99%) than MMSE (likelihood ratio=115.3 p =.001) in all diagnostic categories. The specicifity of MoCA was 93% due to fact that it was reduced in patients with organic psychosyndrome when the golden standard found no cognitive impairment.

Conclusions: MoCA is a brief screening tool of cognitive decline with higher specificity and sensitivity in detection of mild cognitive impairment in patients who scores in normal levels of MMSE.