

Validation of a short telephone test (COGTEL) for the diagnosis of symptomatic Alzheimer's disease (AD)

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Abstract

The identification of cognitive impairment in general practice requires short but accurate tests. For epidemiologic surveys and genetic family studies cognitive tests are desirable which can be administered over the telephone. We assessed the ability of the Greek version of the Cognitive Telephone Screening Instrument (COGTEL) to identify patients with symptomatic Alzheimer's disease (AD) and compared it with the diagnostic accuracy of the conventional modified Mini Mental State Examination (3MS). The study refers to 15 patients of the outpatient clinic for cognitive disorders of the University Hospital of Patras who suffered from symptomatic Alzheimer's disease (ten with mild dementia and five with mild cognitive impairment). The study also included 17 cognitively unimpaired age-matched individuals. The COGTEL and 3MS were validated against an expert diagnosis based on a comprehensive diagnostic workup which included the Montreal Cognitive Assessment (MoCA). Statistical analysis was performed using the Receiver-Operator-Characteristics (ROC) method. The COGTEL outperformed the 3MS in the distinction between symptomatic AD and cognitively unimpaired individuals (Area under the curve, AUC: 0.92 vs. 0.89, respectively). The COGTEL is a short and practical but accurate telephone test for the identification of symptomatic AD for use in epidemiological surveys and genetic family studies. The interview achieves higher diagnostic precision than the 3MS and contributes to a valid assessment of cognitive performance.

Biography

Maria Skondra is a PhD candidate of the Medical Faculty of Medicine (University of Patras) and graduate of the Department of Nursing (Western Greece University of Applied Sciences). Her scientific activity is focused on early diagnosis of cognitive impairment in neurodegenerative neurocognitive disorders. She is a graduate of the Hellenic Red Cross Nursing School as well as of the Department of Sociology (Panteion University of Athens). She completed postgraduate studies at the Department of Social and Educational Policy of the University of Peloponnese with specialization in the field of "Health Institutions and Policies". She has been working as a nurse in the Greek Red Cross since 2001 and as scientific scholar of the Department of Nursing (Western Greece University of Applied Sciences) since 2016.