24 Classification of Alzheimer Disease and Mild Cognitive Impartment Patient's Activities of Daily Living

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Objective: Research has shown significant deficits in cognitive domains and a decline in activities of daily living (ADL) in patients with Alzheimer disease (AD). Patients with Mild Cognitive Impairment (MCI) also experience struggles with ADL; moreover, research documents that many MCI patients' symptoms gradually worsen such that their diagnosis eventually converts to AD. Different cognitive domains (i.e., memory, executive function, attention etc.) impact ADL performance. Commonly used instruments for assessing ADL are subjective measures filled by primary caregivers. Subjective measures are not able to assess actual ADL performance. Thus, performance-based tests, such as the Direct Assessment of Functional Status (DAFS), tests of ADLs are more informative. The purpose of this study is to analyze classification accuracy rates for AD and MCI patients with use of five ADL subscales and overall performance a performance-based ADL test.
Participants and Methods: As part of a larger study, 61 patients diagnosed with AD and 54 age- and education matched patients diagnosed with MCI were administered the DAFS. All patients were administered the Direct Assessment of Functional Status test. This test assesses orientation to time, communication skills, knowledge of transportation rules, financial abilities, and ability to shop for groceries, as well as basic daily skills such as grooming and eating skills. For the purpose of this study, grooming and eating abilities were not used in the analysis.
Results: Discriminant functional analysis was performed to assess the classification accuracy rates for AD and MCI patients using their ability to perform various types of ADL tasks on the DAFS. The analysis revealed total DAFS scores and all five subscales significantly classified AD and MCI patients performance (all p values < .01). While performance across the DAFS subscale scores accurately classified MCI at rates ranging from 67% - 90%, the rates of accurate classification was much lower for AD patients (29.5% - 62.3%). Of the subscales, the DAFS Shopping task best discriminated and classified the performance of AD at 62% and MCI at 67%.
Conclusions: These results indicates that a performance-based ADL test can aid in classification of AD and MCI. The fact that the DAFS shopping subscale which requires learning and memory abilities had the best accuracy rates, is consistent with profound memory deficits found in AD patients. This study further highlights the importance of using observational-based measures to assess ADL in MCI and AD patients.

Categories: Dementia (Alzheimer's Disease)
Keyword 1: activities of daily living
Keyword 2: mild cognitive impairment
Keyword 3: dementia - Alzheimer's disease
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25 Update to: The Predictive Utility of Various Subjective Cognitive Complaints Using Item Level Data from the Everyday Cognition (ECog) Scales

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Objective: Early identification of individuals at risk for dementia provides an opportunity for risk reduction strategies. Many older adults (30-60%) report specific subjective cognitive complaints, which has also been shown to increase risk for dementia. The purpose of this study is to identify whether there are particular types of complaints that are associated with future: 1) progression from a clinical diagnosis of normal to impairment (either Mild Cognitive impairment or dementia) and 2) longitudinal cognitive decline.
Participants and Methods: 415 cognitively normal older adults were monitored annually for an average of 5 years. Subjective cognitive complaints were measured using the Everyday Cognition Scales (ECog) across multiple

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