

Title Cognitive rehabilitation in patients with mild cognitive impairment

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Target Population older adults with mild cognitive impairment

Key Words mild cognitive impairment (MCI), cognitive rehabilitation, activities of daily living

Brief Description

A 4-week cognitive rehabilitation program demonstrated effectiveness in improving outcomes related to mood, cognitive function, and activities of daily living (ADLs) in people with mild cognitive impairment. These improvements were not demonstrated in patients with dementia.

Article Summary

Mild cognitive impairment (MCI) affects 10% of individuals over the age of 65 years. MCI can negatively affect memory and mood, and make everyday activities more complicated. Research shows that, within a year, 16 – 41% of MCI patients develop dementia. Currently, there is no medication to treat MCI, but there is evidence that cognitive training improves psychological and emotional well-being.

This study, published in the *International Journal of Geriatric Psychiatry*, examined the effects of a 4-week cognitive rehabilitation program for patients with MCI on activities of daily living (ADLs), mood, and cognitive function. The intervention was delivered in a day clinic setting. Forty participants, 30 with MCI and 10 with mild dementia, enrolled in the intervention. To avoid treatment delay and to accommodate a limit of 10 participants per intervention group, participants were either assigned immediately into the intervention in mixed groups (MCI and dementia) or to a waiting list of participants with MCI who received the intervention later.

Kurz and colleagues used several assessment instruments to measure episodic verbal memory, episodic non-verbal memory, ADLs, and mood. The Mini Mental Status Examination and MWT-B were used to examine cognitive performance and premorbid intelligence, respectively. Additionally, the researchers administered the Bayer-ADL to measure basic and instrumental ADLs, the Beck Depression Inventory to assess depressive symptoms, the California Verbal Learning Test to assess verbal and episodic memory, and the delayed recall of the Rey complex figure to assess episodic non-verbal memory.

The intervention was delivered via a structured group program that met for 22 hours per week. It aimed to improve participants' abilities by engaging them in training for problem solving, self-assertiveness, stress management, improved motor movements, relaxation practices to cope with nervousness, and cognitive training. Components of the program aimed at teaching participants skills such as how to discriminate between important and unimportant information, how to use mnemonics to improve memory, using planners, and structuring their day. A caregiver information group also met

once weekly to provide the patients' family and friends with support and information for solving practical problems related to MCI.

The researchers analyzed the results by comparing scores for participants with MCI, participants with mild dementia, and the wait list group. Participants with MCI showed statistically significant increases in all four outcomes (i.e., episodic verbal memory, episodic non-verbal memory, activities of daily living, and mood). Participants in the waitlist group showed a significant effect for episodic verbal memory, but no change in performance of ADLs, and an increase in depressive symptoms. Participants with dementia showed a non-significant improvement on verbal episodic memory and a slightly reduced depression score, but no change on ADL performance.

The researchers conclude that cognitive training can improve mood, cognitive ability (both episodic verbal memory and episodic non-verbal memory), and activities of daily living in people with MCI. However, people with mild dementia may not benefit in the same way from cognitive training. While the results are promising, limitations of this study included a small sample size, lack of a control group, the inability to identify which intervention components were most useful, and lack of follow-up assessment to understand long-term impacts of the intervention.

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