

Does Concurrent Pharmacotherapy Enhance Behavioral Interventions for Mild Cognitive Impairment? Evidence from the HABIT Program

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- ❖ At baseline, participants receiving concurrent pharmacotherapy and behavioral interventions exhibited more severe cognitive impairment (both clinician-assessed and self-reported) and lower use of rehabilitation strategies compared with those receiving behavioral interventions alone.
- ❖ Both groups demonstrated statistically significant improvements across all measured outcomes immediately post-intervention.
- ❖ During follow-up, participants using pharmacotherapy showed greater increases in HABIT program adherence at both 6 and 12 months.

INTRODUCTION	METHODS	RESULTS	CONCLUSIONS	HABIT ® Program
▪ Emerging evidence suggests that memory-enhancing therapies (acetylcholinesterase inhibitors and memantine) provide modest benefits in stabilizing or slowing cognitive decline and improving global clinical status among patients with Alzheimer’s disease dementia. ▪ Although pharmacologic and behavioral interventions are frequently delivered in parallel, limited research has examined their combined effects. ▪ In particular, it remains unclear whether pharmacotherapy facilitates greater engagement with, or improves responsiveness to, structured multicomponent behavioral interventions.	▪ The sample included people with mild cognitive impairment (pwMCI) of any etiology who completed the HABIT Healthy Action to Benefit Independence & Thinking® program. ▪ Baseline pharmacotherapy (acetylcholinesterase inhibitor and/or glutamate regulators) use was dichotomized (yes/no). ▪ Multivariate linear mixed-effects models examined changes from baseline in care partner-reported everyday functional skills, quality of life, self-efficacy, anxiety, depression, and HABIT compliance at post-intervention, 6 months, and 12 months, adjusting for baseline cognitive impairment severity and relevant demographic covariates.	▪ Among 1,074 pwMCI, 413 (38.5%) were receiving pharmacotherapy at baseline. Pharmacotherapy use was more prevalent among White than non-White participants (39.4% vs. 23.3%, p = 0.01). ▪ During follow-up (mean score change compared to baseline), pharmacotherapy users showed greater increases in HABIT compliance at 6 months (3.2 vs. 2.0) and 12 months (2.1 vs. 1.4). In contrast, by 12 months, pharmacotherapy users experienced greater worsening of everyday functional skills related to memory (-2.1 vs. -1.3) and executive function (-5.8 vs. -3.7).	▪ pwMCI using memory-enhancing pharmacotherapy entered the HABIT program with more advanced cognitive impairment. ▪ Although pharmacotherapy was associated with more sustained program compliance, it was not associated with greater intervention-related benefit or attenuation of longer-term functional decline. ▪ These findings could suggest that higher sustained HABIT® program compliance may reflect greater patient and/or care-partner involvement among participants simultaneously using pharmacotherapy.	HABIT ® program is designed specifically for persons with amnesic MCI and their care partners. The HABIT ® program delivers a 10-day intervention encompassing five core components: physical exercise (yoga), computerized cognitive training, wellness education, support groups, and memory support system training. CONTACT For The Study: Zhigang Xie, Ph.D. Assistant Professor University of Florida    For HABIT ® Program: Melanie J. Chandler, Ph.D. Associate Professor Mayo Clinic 