Memory-Focused Interventions for People with Cognitive Disorders: A Meta-analysis of Randomized Controlled Studies

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1. Background
Cognitive disorder is a crucial global issue. Memory impairment is often considered an early and crucial clinical manifestation of cognitive disorder. Previous studies have shown that memory-focused interventions can effectively mitigate memory function decline. However, in previous studies, the research targets were mostly healthy older adults; few meta-analyses on patients with cognitive disorders have been performed. The purpose of the present study was to assess the effect of memory-focused interventions on cognitive disorder through conducting a meta-analysis.

2. Methods
① According to a systematic literature search strategy, using keywords and the MeSH terms to identify studies related to memory-focused interventions and cognitive disorders.
② The online electronic databases used in this study were PubMed, the Cochrane Library, OVID-Medline, CINHAL, PsycINFO, and Embase.
③ The primary indicators were objective memory performance and subjective memory performance; the secondary indicators were immediate recall, delayed recall, global cognitive functions, and depression.

3. Results
① The results showed that memory-focused interventions had a medium-large effect on the objective and subjective memory performance of patients with cognitive disorders, a small-medium effect on delayed recall and global cognitive function, and a small effect on immediate recall (all p < .05).
② A subgroup analysis on objective memory performance that featured medium heterogeneity showed that the number of treatment weeks (≤5 weeks) could be adopted as a moderator variable for the effect of memory-focused interventions on objective memory performance. A meta-regression analysis showed that various continuous variables were nonsignificantly correlated with effect size.

4. Conclusion
In this study, the meta-analysis results showed that memory-focused interventions effectively improved the objective and subjective memory performance of patients with cognitive disorders. Objective memory performance can serve as a reference for diagnosing cognitive disorders; the meaning of subjective memory performance and related factors is crucial for rapidly aging societies. We hope that memory-focused interventions can improve memory function and assist patients in overcoming their self-care problems resulting from memory impairment.