The Effects of Home-based Physical Exercise and Cognitive Training to Reduce the Risk of Dementia among Elderly with Mild Cognitive Impairment

Malaysian Journal of Medicine and Health Sciences • Article • 2025 • DOI: 10.47836/mjmhs.21.s6.16

Zahidin, Zurratul Aina Mohd [a]; Rashid, Norlinda Abd [b]; Shalihin, Mohd Shaiful Ehsan [c]; Shariff, Nurasikin Mohamad [d]; Basha, Muzaitul Akma Mustapa Kamal [d]

[a] Kulliyyah of Nursing, International Islamic University Malaysia, Pahang, Kuantan, 25200, Malaysia

Show all information

Full text Export Save to list

Document Impact Cited by (0) References (35) Similar documents

Abstract

Introduction: Mild Cognitive Impairment (MCI) signifies the transitional stage between healthy aging and dementia. While prior studies have showcased the effectiveness of physical exercise and cognitive training in enhancing cognitive performance among older adults with MCI, issues like lack of transportation have emphasised the need for remote interventions, particularly in rural areas. This study aims to investigate whether a home-based approach involving physical exercise and cognitive training can improve cognitive performance in older adults with MCI. Materials and Methods: A total of 87 participants were assigned to either the experimental group (n = 43) receiving home-based physical exercise and cognitive training or the control group (n = 44) with no intervention. Cognitive performance was assessed using the Mini-Cog test, which was measured at baseline, week 4, and week 12 post-intervention. The generalised estimating equation test was performed to analyse the intervention's impact. Results: This study found a significant difference in memory test scores between both groups at week 12 post-intervention, whereby the experimental group showed better results (RR = 2.322, 95%; CI: 1.057–5.101; p = 0.036). The experimental group also had better improvement in clock drawing test scores compared to the control group (RR = 2.360, 95%; CI: 1.037–5.372; p = 0.041). Conclusion: The proposed home-based intervention which combined physical exercise and cognitive training positively impacted cognitive performance in

Abstract
Author keywords
Funding details
Corresponding auth

Detailed information

Bibliographic information

Document type	Article
DOI	10.47836/mjmhs.21.s6.16
EID	2-s2.0-105022127668
Original language	English
Publication date	July 2025
PubMed ID	
Source type	Journal
ISSN	16758544
Publisher	Universiti Putra Malaysia Press
Publication year	2025
Source title	Malaysian Journal of Medicine and Health Sciences
Volume	21
Pages	96 - 102

Authors (5)

Zahidin, Zurratul Aina Mohd [a]

Rashid, Norlinda Abd [b]

Shalihin, Mohd Shaiful Ehsan [c]

Shariff, Nurasikin Mohamad [d]

Basha, Muzaitul Akma Mustapa Kamal [d]