Annals of General Psychiatry



Poster presentation

Open Access

Christos Mouzakidis*¹, Yannis Theodorakis¹, Magda Tsolaki² and Evdoxia Efraimidou³

Address: ¹Department of Physical Education and Sports Science, University of Thessaly, Greece, ²3rd Department of Neurology, Aristotle University, Greece and ³Department of Cognitive Psychology, Aristotle University, Greece

* Corresponding author

from International Society on Brain and Behaviour: 2nd International Congress on Brain and Behaviour Thessaloniki, Greece. 17–20 November 2005

Published: 28 February 2006

Annals of General Psychiatry 2006, 5(Suppl 1):S92 doi:10.1186/1744-859X-5-S1-S92

Background

Alzheimer's disease is the most common dementia (50–65%). It affects, mainly, people aged 65 and over. It attacks the brain resulting in a decline or loss of intellectual functions, such as remembering, thinking, speaking. Physical exercise improves physical, cognitive and functional abilities of the elderly, and contributes to better psychological function. Regular physical exercise appears to have a positive effect on Alzheimer's disease patients' cognitive abilities. The Aim of this project was the investigation of the hypothesis that a multifarious exercise programme may help Alzheimer's disease patients to maintain or enhance their cognitive abilities.

Materials and methods

Twenty four (24) patients with Alzheimer's disease (according to NICDS-ADRDA and DSM IV criteria for Alzheimer's disese) consisted the experimental (12 patients, 8 men and 4 women, mean age 65.70 years, and 9.33 years of education) and the control group (12 patients, 8 men and 4 women, mean age 68.50 years, and 8.92 years of education). The xperimental procedure lasted 36 weeks. The patients were all evaluated for their cognitive (MMSE) status, two weeks before and after the experimental manipulation.

Results

Paired Samples t-tests revealed that the patients of the experimental group managed to maintain their cognitive abilities (t(11) = 0.692, p = 0.504), while the patients of the control group deteriorated (t(11) = 3.570, p = 0.004).

Discussion

The implementation of a multifarious exercise programme designed to deal with the deficits and needs an Alzheimer's disease patient faces, may contribute in delay-

ing the progress of the disease by preserving his/her cognitive abilities.

References

- Lindenmuth G, Moose B: Improving cognitive abilities of elderly Alzheimer's patients with intense exercise therapy. The American Journal of Alzheimer's Care and Related Disorders and Research 1990, 5:31-33.
- Mouzakidis C, Tsolaki M, Theodorakis Y, Efremidou E, Kambitsis C: Exercise program in patients with Alzheimer's disease. Alzheimer's disease and related disorders 1999:781-786.
- Lytle ME, Vander Bilt J, Pandav RS, Dodge HH, Ganguli M: Exercise level and cognitive decline. The MoVIES project. Alzheimer Disease and Associated Disorders 2005, 18:57-64.
- Voelkl JE, Galecki AT, Fries BE: Nursing home residents with severe cognitive impairements: Predictors of participation in activity groups. Therapeutic Recreation Journal 1996:27-40.