



ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ

ΣΧΟΛΗ ΕΠΙΣΤΗΜΩΝ ΥΓΕΙΑΣ ΚΑΙ ΠΡΟΝΟΙΑΣ

Τμήμα Φυσικοθεραπείας

PhD THESIS SUMMARY

TITLE

Comparative study of different protocols of aerobic and resistance exercise in the context of physiotherapy intervention in the cognitive function and functionality of patients with mild dementia in the community.

PhD candidate

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Advisory Committee:

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Dementia is a clinical syndrome characterized by impaired cognition functions and gradual deterioration of physical function.

The objective of this study is to investigate the effect of exercise on cognitive and physical function in patients with Alzheimer's disease and provide information on the appropriate types of exercise and its parameters to maintain and improve cognitive and physical function.

The main study hypothesis is that exercise has an effect on cognition and physical function of patients and that different exercise protocols have different effect size on cognition functions and functionality. It is a randomized controlled trial.

The intervention will include aerobic exercise and resistance exercise and three groups of patients: two intervention groups and one control group. The first intervention group will follow a combined aerobic and resistance exercise program and the second group resistance exercise only. Participants in the control group will continue their usual routine.

The evaluation and measurements of cognitive function and functionality based on tests and questionnaires will be performed twice by an independent, research-related neuropsychologist or psychologist and physiotherapist respectively. The first measurements will be made at the initial assessment of the patient before the intervention, the second immediately after the completion of the intervention.

The results are expected to further facilitate the design of individualized exercise programs for elderly with dementia in the community aiming at functionality improvement.

Ethics Committee approval: 96645 - 25/11/2020