



FEASIBILITY AND EFFECT OF A SHORT TERM SUPERVISED GROUP-EXERCISE INTERVENTION FOR INDIVIDUALS WITH PARKINSON DISEASE (PD).

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Background

Parkinson's disease is a progressive nervous system disorder that affects both the motor and non-motor systems. PD is the second most common neurodegenerative disease, in Europe approximately 1,2 million people live with PD (Olesen 2012). People with parkinson's often experience impairments during transfers and gait related activities (Politis 2010). Exercise confers short-term physical performance benefits for individuals with Parkinson disease (PD). Previous studies mainly focused on the effects of medium to long term interventions (more than 12 weeks) or high to very high frequency exercise (4 or more sessions per week). This project examines the feasibility and effect of a short term and medium frequency exercise intervention.

Aim

The purpose of the project was to 1) Test the feasibility of a short term supervised group-exercise intervention. 2) Describe the results of the intervention.

Participants

The participants were 5 males with early stages of PD, aged on averaged 66,25 (2,17) years.

Measurements

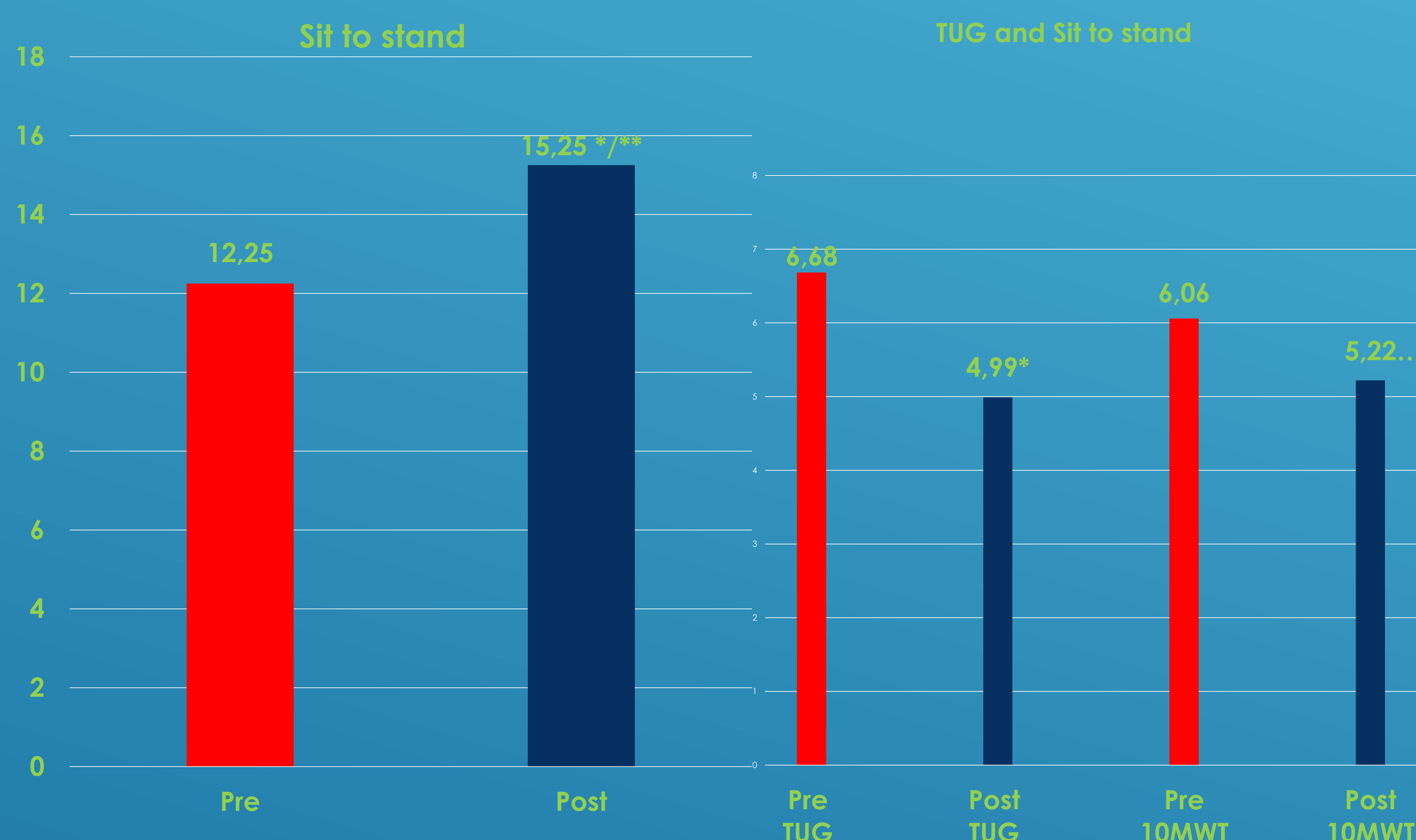
The primary outcome measure was overall physical function, measured using the timed up and go test (TUG). Secondary physical function measures were timed sit to stand and 10 meter walk test.

Intervention

2 supervised group-exercise sessions a week for 4 weeks. Consisting of stationary bike interval training, balance/functional training, strength training and advise for individual home exercises

Results

Of the 5 participants, 4 completed the intervention, attending on average 6,75 (0,83) group sessions. As a group the participants improved from pre to post intervention in all 3 outcome measures. TUG pre: 6,68 (1,05) seconds, TUG post: 4,99 (0,49) seconds. 10 meter walk test pre: 6,06 (1,11) seconds, 10 meter walk test post: 5,22 (0,24) seconds. Sit to stand pre: 12,25 (1,28) repetitions. Sit to stand post: 15,25 (2,17) repetitions. All changes were statistically significant and the changes in 10 meter walk test and Sit to stand had clinical significance.



Limitations

Absence of a non-exercise control group was a limitation in the study. Also No long term follow-up was conducted.

Conclusions

This project finds that the 83.33% of the participants who were able to complete the intervention, attended 84.38 % of the training sessions. The project also found that individuals with PD have significant physical performance benefits after 2 weekly sessions of a supervised group-exercise intervention for 4 weeks.

REFERENCES

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Politis M, Wu K, Molloy S, G Bain P, Chaudhuri KR, Piccini P. (2010) Mov Disord. 2010 Aug 15;25(11):1646-51. Parkinson's disease symptoms: the patient's perspective.