

Natureza do trabalho: Resumo

TÍTULO

IMMEDIATE EFFECTS OF A REHABILITATION PROTOCOL WITH VIRTUAL REALITY ON THE POSTURAL STABILITY OF PACIENTES WITH PARKINSON'S DISEASE.

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RESUMO

Introduction: Parkinson's disease is a progressive chronic disorder, highly disabling that leads to significant declines in functionality and quality of patient's life. It is a common disease in middle-aged or elderly and can affect 1% of people over 55 years. **Objectives:** The aim of this study was to evaluate the immediate effects of a rehabilitation protocol with virtual reality on the postural stability of patients with Parkinson's disease. **Material and Methods:** The research was conducted in a clinical school in four weeks. Were selected for convenience 4 individuals, aged between 49 and 75 years, where all participants took part in the experimental group receiving exercise with the Nintendo Wii Fit. The subjects were classified by Hoehn and Yahr Disability Scale Stages (HY), then evaluated the signs and symptoms for the unified scale evaluation of Parkinson's disease (UPDRS) and finally postural stability by Mini BESTEST. After selection the participants went through an intervention with the Nintendo Wii Fit targeted to stimulate their balance. On the third moment the participants were reassessed, where we find that the treatment had positive influence on postural stability immediately after the intervention. **Results:** The participant that is most favored with the intervention was the number 3, however, everyone have obtained progress in at least one domain. Note that the task of turning on its own axis obtained improvement in 3 of the 4 participants, featuring a possible interference of the game in agility, sensory orientation and dynamic responses during gait. **Discussion and Conclusion:** With the results obtained in this study it is suggested that VR has a real role in the development of motor control, functionality, cognitive fitness and postural stability in patients with PD. The great advantage of this technology is the better adherence to the rehabilitation process, because through visual and auditory feedback provided by the game the therapy becomes attractive.

Acknowledgments

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