

Conclusion: The study identified a lower knee agonist-antagonist ratio in hypertensive older adults when compared to normotensive patients. Our findings are linked to changes in muscle functioning that reflect uncoordinated activation of knee agonists and antagonists, although such changes cannot be fully explained by a significant reduction in strength.

Implications: The understanding of hypertension and its impacts on muscle health contributes to a better understanding of the factors that cause and worsen the decline of muscle function in the older adults, in addition to being a potential contributor to the planning of health care strategies for the older people with a focus on the prevention and correct prescription of physical exercises.

Keywords: Aged, Hypertension, Muscle Strength

Conflict of interest: The authors declare no conflict of interest.

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SLEEP QUALITY NEGATIVELY IMPACTS THE BALANCE OF ELDERLY PEOPLE WITH PARKINSON'S DISEASE

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Background: Parkinson's disease (PD) is a progressive neurodegenerative disorder that affects more than 1% of people over 55 years of age. It is characterized by motor symptoms such as postural instability and increased risk of falls, and non-motor symptoms such as sleep disorders. Consequently, detailed evaluation and adequate management of these symptoms in this population, which is often underestimated, is extremely important.

Objective: To correlate sleep quality with balance and risk of falls in elderly with PD.

Method: Cross-sectional study composed by 22 elderly individuals with PD. To assess sleep quality, the Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale (ESS) was used. To assess the risk of falls, FES-I was used. Postural control was assessed using the force platform (also associated with the dual task using the Strop test). To analyze the correlations between the variables, the Spearman correlation test was performed, considering $p < 0,05$.

Results: In the evaluation of sleep quality (PSQI) vs balance, correlations were observed between the domains: sleep duration, sleep quality and medication use. Regarding the sleep duration domain, there was a significant negative correlation in the tandem open eyes (OE) positions in the variables: COP area ($r = -.468$ $P = .028$), AP amplitude ($r = -.738$ $P = .000$), ML amplitude ($r = -.527$ $P = .012$), AP velocity ($r = -.588$ $P = .004$) and ML speed ($r = -.444$ $P = .039$), tandem closed eyes (CE) in the variable: AP amplitude ($r = -.545$ $P = .009$) and tandem of the variable: AP amplitude ($r = -.645$ $P = .001$) and ML velocity ($r = -.453$ $P = .034$). Compelling negative correlation was found in the tandem OE and tandem CE postures in the ML velocity variable, ($r = -.514$ $P = .014$ and $r = -.543$ $P = .009$) respectively. In the evaluation of excessive daytime sleepiness vs balance

there was a significant negative correlation in tandem OE and tandem CE, in the velocity variable ML, ($r = -.514$ $P = .014$ and $r = -.543$ $P = .009$) respectively.

Conclusion: Sleep quality and excessive daytime sleepiness are negatively correlated with balance in elderly people with PD, since the performance of these individuals in the applied tests were worse. There was no significant correlation between the risk of falls and balance in these individuals.

Implications: This study contributed to the understanding of the relationship between sleep and balance, thus a holistic preventive evaluation and effective therapeutic measures continue to be extremely decisive when managing these symptoms, for improvement in the functional autonomy and social participation of this population.

Keywords: Parkinson's Disease, Sleep, Balance

Conflict of interest: The authors declare no conflict of interest.

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EVALUATOR TRAINING DOES NOT INFLUENCE THE REPRODUCIBILITY OF OBSERVATIONAL METHODS FOR ANALYZING BIOMECHANICAL EXPOSURE

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Background: The application of observational methods is evaluator dependent, and it is common for professionals working in the field of Occupational Health to apply them without any previous training. This can compromise or invalidate the evaluation results, as professionals can make serious mistakes when applying them without prior training.

Objectives: to assess whether the reproducibility of the QEC, REBA, RULA and SI methods is influenced by the evaluator's experience and training and to identify whether the evaluator's training modifies the reproducibility of the methods; and to evaluate the evaluators' perception about the use of observational methods in pre and post training.

Methods: This is a study of measurement properties. The study population consisted of analyzing 50 workers with different occupations whose work tasks were filmed for analysis by 11 evaluators, with different levels of experience in using the observational methods of the QEC, REBA, RULA, and SI methods used for analysis in the pre- and post-training. The training of evaluators for the application of observational methods was carried out in 4 modules. The total duration of the training including the modules and practical activities was 30 hours.

Results: There was moderate inter-rater reproducibility, both pre- and post-training, regardless of knowledge of the methods. The training effect was low. The impression about the use of the methods when evaluating working conditions showed that, in general, the QEC and RULA method was considered the easiest to understand, interpret and use with only the instructions for use, by the