more than 6 years. Among individuals who know the ICF, there was no significant difference regarding the feasibility of using it, in a comparison between those who used it and those who never used the ICF in the hospital environment. Of those who have never used it in the hospital environment, most have never been trained to apply it and do not use the core sets.
Implications: Knowledge about the profile and opinion of health professionals on the use of the ICF in the hospital environment.
Keywords: International Classification of Functioning, Disability and Health, Health professionals, Health assessment

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: To all the researchers responsible for the study, to the professionals who answered the survey and to CAPES.
Ethics committee approval: Approved by the Ethics Committee for Research with Human Beings (CEPSH) of UFSC, CAAE n° 40382520.5.0000.0121.

https://doi.org/10.1016/j.bjpt.2024.100952

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ASSOCIATION BETWEEN CLINICAL PARAMETERS OF SARCOPENIA AND COGNITIVE IMPAIRMENT IN OLDER PEOPLE: CROSS-SECTIONAL STUDY

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Background: Sarcopenia and cognitive impairment are worrisome age and public health-related problems due to the high risk of functional decline, hospitalization and death. Sarcopenia is a muscle disease identified by clinical parameters of low muscle strength and muscle mass which, when added to poor physical performance, characterize severe sarcopenia. Cognitive impairment is the decline in normal functioning of one or more brain functions, affecting the activities of daily living (ADLs) of individuals, and may present as a mild or major cognitive disorder.
Objectives: To investigate the association of clinical parameters of sarcopenia with cognitive impairment in elderly people.
Methods: Cross-sectional study, with 263 elderly people (≥60 years old) users of a public specialized care service. Sociodemographic and clinical variables characterized the sample, and the clinical parameters of sarcopenia (strength, muscle mass and physical performance) were evaluated, respectively, using Handgrip Strength (HGS), calf circumference (CC) and the *Timed Up and Go* (TUG). The Mini Mental State Examination (MMSE) was used to assess cognitive status. Associations were investigated by simple and multiple linear and logistic regressions considering clinical parameters of sarcopenia (independent variables) and cognitive status (dependent variable), adjusted for age, gender, years of schooling, number of medications, nutritional status and functional capacity.
Results: Of the participants with cognitive impairment, 59.6% had low muscle strength. Cognitive status was explained by muscle strength in 21.5%, muscle mass in 12.3% and physical performance in 7.6% in simple linear regression analyses, maintaining strength and muscle mass as explanatory variables of the cognitive state in unadjusted multiple analyzes and only muscle strength when adjusted (OR=0,846; [95%CI: 0,774 – 0,924] $p<0,001$). Only strength remained significantly associated with cognitive status in the adjusted multiple logistic regression (OR=0.846; [95% CI: 0.774 – 0.924]; $p<0.001$).
Conclusion: Low muscle strength was the sarcopenia parameter independently associated with cognitive impairment.
Implications: This information is useful to pay attention to the probability of cognitive impairment when low muscle strength is identified in older people.
Keywords: Aged, Sarcopenia, Cognitive Impairment

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: Not applicable.
Ethics committee approval: Research Ethics Committee of the Faculty of Ceilândia of the University of Brasília (UnB) – CEP/FCE (Opinion 3.650.491).

https://doi.org/10.1016/j.bjpt.2024.100953

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COMPARISON OF GAIT SPEED, ISOKINETIC MUSCLE FUNCTION AND MUSCLE MASS AMONG NORMOTENSIVE AND HYPERTENSIVE OLDER ADULTS

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Background: Many studies have investigated the relationship between hypertension and its association with muscle health, showing controversial results on the subject. It is believed that high blood pressure can reduce the blood supply and cause damage to the arteries that supply areas of the motor cortex, responsible for muscle contraction and mobility, leading to a decay of functionality and reduced oxygen consumption and muscle strength. However, during aging there is a natural decrease in muscle mass, strength and quality, associated with the process of sarcopenia, although there are still difficulties identifying which factors are responsible for causing and worsening this process. In this context, it is believed that hypertension may play an important role in understanding this issue.
Objectives: compare isokinetic muscle function, muscle mass and gait speed among normotensive and hypertensive older adults.
Methods: A cross-sectional observational study was conducted with 81 community-dwelling older adults selected by convenience. Participants were older people capable of walking without assistance and without cognitive alterations detectable by the Mini-Mental State Examination (MMSE). The diagnosis of arterial hypertension (independent variable) was made through the self-report of the participant's previous medical diagnosis of arterial hypertension, validated by the record of using antihypertensive medication. The dependent variables of the study were: peak torque, muscle power, work by body weight and agonist-antagonist ratio of hip, knee and ankle (isokinetic dynamometry), handgrip strength (handgrip dynamometry), muscle mass (calf circumference) and usual gait speed at 10 meters. The dependent variables were compared between the groups of normotensive and hypertensive older adults by means of simple analyses and covariance adjusted for sex.
Results: most participants were female (51.9%), active (53.1%) and hypertensive (74%). In the simple analyses, it was observed that the hypertensive older group presented lower handgrip strength, lower mean peak torque of hip extensors and knee flexors, lower muscle power of knee flexors and extensors, lower work by body weight of hip flexors and knee extensors and lower knee agonist-antagonist ratio. However, in the analysis of covariance adjusted for sex, only in the knee agonist-antagonist ratio was found a statistically significant difference between the groups (40.64±9.01 vs 45.78±7.34; p=0.040).

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.
Acknowledgment: The authors thank the support of the University of Brasília - Faculty of Ceilândia -, FAPDF and the permission of all participants.
Ethics committee approval: Research Ethics Committee of the Federal University of Minas Gerais — CEP/UFMG (Opinion 492/07).

https://doi.org/10.1016/j.bjpt.2024.100954

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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.
Acknowledgment: Neurofunctional Physiotherapy Research Group (GPFIN) and the support of the Coordination for the Improvement of Higher Education Personnel - (CAPES).
Ethics committee approval: Research Ethics Committee of the State University of Londrina (UEL), under approval opinion CEP-UEL n° 2.289.247.

https://doi.org/10.1016/j.bjpt.2024.100955

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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