

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.

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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. Socio-demographic 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 analyses 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).

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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 participants' 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 ; $p=0.040$).