such as sample size and patient profile, may have influenced the results of this study.
Keywords: COVID-19, Acute Post-COVID-19 Syndrome, Urinary incontinence

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: Not applicable.
Ethics committee approval: The study was approved by the Research Ethics Committee of the Municipal Secretariat of Porto Alegre, under registration number 4.858.291.

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COMPARISON OF BALANCE AND MUSCLE STRENGTH IN COMMUNITY-DWELLING OLDER ADULTS CLASSIFIED BY THE PHYSICAL FRAILTY PHENOTYPE: PRELIMINARY RESULTS

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Background: Frailty is a clinical condition that results in increased vulnerability to adverse health outcomes in older adults, such as falls, hospitalization, disability, and mortality. Thus, great efforts have been made to prevent the transition from the robust elderly to the frail state. We know that balance and muscle strength are often addressed to prevent these negative outcomes, however, it is unclear if there are differences between groups classified by physical frailty.
Objectives: To compare balance (One-leg standing, postural stability in gait, sensory interaction in balance, chair sit-up) and muscle strength (trunk extensors-TE, hip extensors-HE, hip abductors-HA, knee extensors-KE, and plantar flexors-PF) in community-dwelling older adults classified as robust (non-frail) and vulnerable (pre-frail or frail)).
Methods: Cross-sectional observational study with community-dwelling older adults (60 years or older) of both sexes, with independent gait and recruited by convenience. One-leg standing balance (30 seconds), postural stability in gait (Functional Gait Assessment), sensory interaction in balance (Modified Clinical Test of Sensory Interaction and Balance), sit-up from a chair five times, and muscle strength (maximal isometric contraction) of TE, HE, HA, KE, and PF, expressed by torque and normalized by body weight (microFET2 hand dynamometer) were assessed. The robust and vulnerable elderly were classified by physical frailty phenotype. Mann-Whitney analysis was used to compare the variables between groups. The significance level was set at 5%.
Results: 118 older adults were evaluated, of these 35 were robust and 85 were vulnerable. Descriptive and comparison data were expressed as mean ± standard deviation for the robust and vulnerable groups, respectively: one-leg standing balance (18.17 seconds ± 2.09; ± 10.73 seconds ± 1.16; p=0.005), postural stability in gait (23.80 ± 0.73; 21.41 ± 0.55; p = 0.014), sensory interaction in balance (113.83 seconds ± 1.98; 102.98 seconds ± 2.30; p=0.001), chair sit-up (10.78 seconds ± 0.30; 13.77 ± 0.61; p = 0.001), TE muscle strength (1.17 ± 0.081; 0.98 ± 0.04; p = 0.069), HE (0.47 ± 0.46; 0.42 ± 0.02; p = 0.463), HA (1.01 ± 0.05; 0.88 ± 0.03; p = 0.068), KE (1.23 ± 0.09; 1.04 ± 0.04; p= 0.111), PF (1.59 ±1.10; 0.82 ± 0.41; p = 0.059). According to the results only the balance variables showed difference between the groups.
Conclusion: The older adults vulnerable to physical fragility had worse one-leg standing balance, less postural stability during gait, less sensory interaction on balance and spent more time to get up from a chair when compared to the robust elderly. Parameters of muscle strength showed no differences between the groups. Continuation of the study with increased sample size is necessary for confirmation of the results. Support from CAPES, FAPEMIG, CNPq.
Implications: From the findings found, it highlights the importance of evaluating balance in several perspectives in older adults' people vulnerable to physical frailty. Further studies may address whether interventions directed at these variables can modify frailty status.
Keywords: Frailty, Balance, Muscle strength

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EFFECT OF SARCOPENIA ON SURVIVAL, HOSPITALIZATION, AND FUNCTIONAL CAPACITY OF ADULTS AND ELDERLY WITH LUNG CANCER

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Background: Lung cancer is associated with numerous metabolic abnormalities that can cause changes in body composition and neuromuscular capacity. Sarcopenia refers to the progressive loss of strength, muscle mass, and performance, being an independent predictor of poor prognosis in patients with lung cancer, in addition to being considered a risk factor for increased chemotoxicity.
Objective: To evaluate the effect of sarcopenia on survival, length of hospital stays and functional capacity of patients with lung cancer.
Methods: This is a systematic review developed according to the Cochrane manual for systematic reviews with the following eligibility criteria: (P) patients with lung cancer; (E) sarcopenia; (C) absence of sarcopenia; and (O) survival, length of hospital stay and functional capacity. Searches were conducted in the databases: CINAHL, Cochrane Library, EMBASE, IBECS, LILACS, Livivo, PEDro, PubMed/MEDLINE, SciELO, Scopus and Web of Science. Study screening was performed on the Rayyan platform by two independent reviewers. Potentially eligible studies were read in full for final decision. Disagreements were resolved in consultation with the senior reviewer. Methodological quality was observed using a Newcastle Ottawa scale for cohort studies. Data were organized and analyzed in an electronic spreadsheet. The research protocol is registered in the PROSPERO database (CRD42022355782).
Results: The initial search retrieved 3,542 titles. The final selection resulted in 14 studies included for the qualitative synthesis. The included studies are observational, predominantly with a retrospective cohort design, and have good methodological quality (7 to 8 points). The final sample consisted of 4,062 patients with lung cancer (age 66.3 ± 5.4 years), of which: 1,343 were sarcopenic and

2,719 were non-sarcopenic. The survival rate of patients with lung cancer and sarcopenia was lower than that of patients with lung cancer and non-sarcopenia after 5 years of follow-up (19.4% vs 28.9%, $p < 0.001$). Functional performance, assessed by the distance covered in the six-minute walk test, was lower in the sarcopenic group compared to the non-sarcopenic group (516 $\pm$ 75m vs 526 $\pm$ 74m, $p < 0.001$). There was no difference in length of stay (11 vs 11 days, $p = 1.000$).
Conclusion: Sarcopenia reduces survival in patients with lung cancer and results in lower functional capacity, with no influence on the length of hospital stay.
Implications: We emphasize the importance of synthesizing information about the effect of sarcopenia associated with lung cancer to contribute to the clinical decision-making of professionals who work in this health condition and population, helping professionals to base their interventions on evidence.
Keywords: Sarcopenia, Lung cancer, Survival

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Ethics committee approval: Not applicable.

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CARDIAC TELEREHABILITATION ON FUNCTIONAL AEROBIC CAPACITY AND CLINICAL VARIABLES IN PEOPLE WITH HEART FAILURE

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Background: Heart failure causes the highest rate of mortality and disability among people with some type of cardiovascular disease. As a non-pharmacological intervention, people are referred to cardiac rehabilitation programs in order to improve clinical outcomes; telerehabilitation is an alternative for those people with less adherence and limited travel to health centers.
Objectives: The objective of this study was to determine the effect of cardiac telerehabilitation on functional aerobic capacity and clinical variables in people with heart failure.
Methods: Randomized controlled clinical trial for 12 weeks in people with heart failure previously diagnosed by a cardiologist, with hemodynamic stability who entered a cardiac rehabilitation program for the first time at a clinic in Cali, Colombia. Institutional ethics endorsement (#17.115) was obtained, and all subjects signed informed consent. Through random sampling, people were divided into two groups: conventional cardiac rehabilitation (CR) and cardiac telerehabilitation (CTR) who received virtual technology assistance through "Google Meet". The primary variable was the distance covered in the 6-minute walk test and the secondary variables: some clinical variables (risk factors, symptoms, left ventricular ejection fraction (LVEF), weight, BMI, abdominal circumference, Sit to Stand, Total Cholesterol, HDL, LDL and Triglycerides). Subjects performed 20 minutes of upper and lower limb muscle strengthening, continuous aerobic exercise with 50-70% of HRmax reserve or perceived exertion less than 13/20 on the Borg scale. The t test for intragroup paired samples and the t test for intergroup independent samples were performed at the beginning and end of the intervention. There was significance of 95%.
Results: 31 people with heart failure were included, 14 in the CR group and 17 in the CTR group, 71.4% and 64.7% of them men, respectively p-value=0.690. The mean age for CR was 60.86$\pm$11.12 and CTR 60.18$\pm$11.54 p-value=0.870. The most frequent symptom for CR was lower limb fatigue (71.4%) and for CTR dyspnea (70.6%) p-value=$>$0.05. The most frequent risk factor for the CR group was sedentary lifestyle (92.9%), for the CTR group it was arterial hypertension (88.2%) p-value=$>$0.05. There were significant changes at the beginning and end of the study in the variables covered distance CR pre-251.53$\pm$38.49, CR post 360.59$\pm$58.47, CTR pre-245.68$\pm$ 60.16, CTR post 342.85$\pm$ 72.70 and Vo2e CR pre 7.71$\pm$1.18, CR post 10.09$\pm$ 1.63, pre CTR 7.54$\pm$1.8, post CTR 9.61$\pm$2.03 showing p-value$<$0.05. Variables such as sit-to-stand repetitions, waist circumference, HDL showed significant changes for both groups p-value $<$0.05. LVEF showed significant changes only in the CR group.
Conclusion: Cardiac rehabilitation and telerehabilitation in people with heart failure cause significant changes in functional aerobic capacity, waist circumference, and HDL; Additionally, conventional cardiac rehabilitation presented significant improvements in LVEF.
Implications: Cardiac telerehabilitation causes changes similar to conventional rehabilitation in people with heart failure and can be used as a tool that allows a higher percentage of participation and adherence in people with difficult access to rehabilitation centers.
Keywords: Hearth Failure, Telerehabilitation, Cardiac Rehabilitation

Conflict of interest: The authors declare no conflict of interest.
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Ethics committee approval: Ethics Committee of the Escuela Nacional del Deporte (#17.115).

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THE EFFECT OF DIFFERENT TYPES OF BIOFEEDBACK ON THE LEVEL OF MUSCLE ACTIVITY DURING STANDING BALANCE

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Background: Biofeedback allows the individual to gain awareness and directly control a biomechanical or biological variable of interest. The biofeedback of postural performance has aroused a great interest of Rehabilitation Sciences due to its potential impact on the control of postural stability. While it is well established that biofeedback seems to limit body movements in orthostatism, it is not clear whether such a postural strategy occurs at the cost of increasing the level of muscle activity and whether it differs between different biofeedback techniques applied to postural control.
Objectives: This study is aimed at investigating the effect of different types of biofeedback techniques on the level of muscle activity postural sway during standing.
Methods: Three adults were tested in three standing conditions: (1) eyes open (EO); (2) biofeedback of acceleration (BFac), consisting of reducing the linear acceleration of the trunk in the anteroposterior (AP) direction; (3) biofeedback of laser (BFlaser), consisting of pointing a laser as close as possible to a target from the right wrist. The acceleration components were collected through a triaxial