Implications: Although the study design used here i.e., prospective cohort, is not the most recommended for investigating the effects of interventions, FT seems to be an effective strategy for improving the functional capacity of individuals with SCI, and therefore can be incorporated into the rehabilitation of this group.
Keywords: Spinal cord injury, Functional training, Functional capacity

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CAN THE BEDDING BRIDGE TEST IN HOSPITALIZED PATIENTS PREDICT OUTCOMES AFTER 6 MONTHS OF FOLLOW-UP?

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Background: Early detection of functional limitations remains an important goal to prevent disability in individuals who have been hospitalized.
Objectives: To examine the association between versions of the bed bridge test (BBT), a new functional test to assess hospitalized patients, and post-hospitalization outcomes such as return to work, death, readmission and falls in individuals after six months of discharge.
Methods: This is a longitudinal, observational, prospective study, in which 92 hospitalized patients eligible for the study performed in random order o BBT: 5 repetitions (BBT5R) and 10 repetitions (BBT10R), 30 seconds (BBT30sec) and 60 seconds (BBT60sec). Sociodemographic data, diagnosis, comorbidities, and length of stay were recorded. Six months after hospital discharge, telephone contact was made and information was obtained on return to usual/work activities, rehospitalization, falls, functional independence, and the patient's vital status. Bivariate correlation analysis was performed. The independent variables were gender, age, comorbidities, length of stay, and performance on the BBT versions. The dependent variables were usual/work activities, rehospitalization, falls, functional independence, and death. Linear regression models were used to determine whether the BBT versions and sociodemographic variables predict return to usual/work activities, rehospitalization, falls, functional independence, and death.
Results: The participants (50.9±17.2 years old, 60% women) included in the study were composed of 66% with clinical condition and 34% with surgical condition. All versions of the BTT were associated with age and FSS comorbidity (rs=-0.50 to -0.20 and 0.28 to 0.43; $p<0.05$ for all). Only BBT30s (rs=0.28) and BBT60s (rs=0.37) were directly associated with returning to usual/work activities. There was no association between the BBT versions and the other dependent variables. Patients who resumed their usual/work activities performed better in BBT30s and BBT60s when compared to those who did not resume their activities (BBT30s = 19 ± 6 vs 15 ± 3.5 repetitions, $p = 0.007$; and BBT60s = 35 ± 11 vs 30 ± 5.4; p=0.015). Lower comorbidity score, female gender, and better performance on the BBT60s were independent predictors of higher return to work, explaining 40% of the variation.
Conclusion: This study demonstrated a modest association between return to work 6 months after discharge and better performance on the BBT60s during hospitalization, including lower scores for comorbidities and female sex. This relationship should be interpreted with caution and confirmed in future studies. The BBT60s is a simple, quick, and useful way to include hospitalized people in the follow-up.
Implications: This study allows us to present suggestions for future studies. Thus, it is suggested to continue investigating whether the BBT can be used as a predictor of other outcomes.
Keywords: Hospitalization, Patient outcome assessment, Mobility Limitation

Conflict of interest: The authors declare no conflict of interest.
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CLINIMETRIC PROPERTIES OF THE BRIDGE TEST IN BED FOR HOSPITALIZED PATIENTS

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Background: Functional performance tests are often not applicable to bedridden patients. The proposal to perform a physical test that requires little equipment, minimal training and simple execution in bed, expands the opportunity for evaluation and rehabilitation strategies for a variety of hospitalized patients, from bedridden to independent ones. Thus, the bed bridge test (BBT), and its time-limited and repetition-limited versions, may constitute a new functional test.
Objectives: To test the clinimetric properties of BBT reliability and validity: 5 repetitions (BBT 5R) and 10 repetitions (BBT 10R), 30 seconds (BBT 30sec) and 60 seconds (BBT 60sec), in hospitalized patients.
Methods: Were included 92 patients eligible for the study performed in random order the BBT5rep, BBT 10rep, BBT 30sec and BBT 60sec repeated on two days with an interval of 48 hours. Validity was tested by correlation analysis between the Functional Status Score (FSS) scale, the sit-to-stand test (BBT) and the Short-Physical Performance Battery test (SPPB). With data from day 2, reproducibility was analyzed with the intraclass correlation coefficient (ICC), standard error of measurement (SME) and minimum detectable difference (DMD). Effect floor and ceiling were also tested.
Results: Participants were 50.9±17.2 years old, 60% women and 66% with clinical condition. The test-retest ICC (95%) was good to excellent (BBT 5R CCI:0.89, 95%CI 0.84-0.93; BBT 10R CCI:0.92, 95%CI 0.88-0.95; BBT 30sec CCI:0.87, 95%CI0.80-0.91; and BBT 60sec CCI:0.88, 95%CI0.83-0.92). The concordances observed for the BBT 5R were EPM: 1.2 and DMD: 3.4; for BBT 10R EPM: 1.8 and DMD: 5.0, for TPL30sec EPM: 1.6 and DMD: 4.4; and for BBT 60sec EPM: 2.8 and DMD: 7.6. There were appropriate ceiling and floor effects for all versions. Content validity was observed by the weak association between the performance of the BBT versions and the

performance on the FSS (r s =-0.27 to -0.37 and 0.29 to 0.36, p<0.05 for all). Construct validity was observed by the moderate association between the four versions of the BBT and the SPPB (r s =-0.63 to -0.58 and 0.43 to 0.53, p<0.05, for all). Criterion validity was observed by the moderate association between the four versions of the BBT and the BBT (r s =-0.48 to -0.58 and 0.64, p<0.05) for all.
Conclusion: All versions of the BBT showed good reproducibility, measurement error and validity measurement, with no ceiling or floor effect in hospitalized patients. The BBT versions can be a good alternative for the functional assessment of bedridden patients.
Implications: This study allows us to present suggestions for future studies. Thus, it is suggested to continue investigating whether the BBT can be used as a predictor of other outcomes.
Keywords: Hospitalization, Patient Outcome Assessment, Mobility Limitation

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TRANSLATION, TRANSCULTURAL ADAPTATION AND CONSTRUCTION VALIDITY OF THE PITTSBURGH FATIGABILITY SCALE INTO BRAZILIAN PORTUGUESE

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Background: Fatigue is a symptom associated with the weakening or depletion of an individual's physical and/or mental resources. The term fatigability comprises the subjective perception of fatigue in face of activities of specific intensity and duration. The Pittsburg Fatigability Scale (PFS), originally published in English, is the only validated scale to measure perceived fatigability in older adults. Considering the importance of specific assessment in the aging population for the prevention of conditions and for the rehabilitation, it is necessary to translate and adapt it cross-culturally to the specificities of the Brazilian context.
Objectives: To translate and cross-culturally adapt the Pittsburgh Fatigability Scale into Brazilian Portuguese to assess fatigability in the Brazilian older adult's population.
Methods: Based on Beaton et al. (2000) we carried out the translation and cross-cultural adaptation to generate the PFS version in Brazilian Portuguese (PFS-Brasil), following the steps: translation from the source language (English), comparison and synthesis of translated versions, blind back-translation, comparison of back-translations and assessment of instrument clarity by the expert committee. Older adults who met the inclusion and exclusion criteria were invited to participate voluntarily. Each participant provided demographic data, responded to the PFS-Brasil and reported their understanding, difficulty in responding and suggestions about each item on the scale. All assessments were performed in environments with noise, temperature, and lighting control to ensure privacy and comfort conditions for the proper performance of the tests. The R software was used to analyze the evidence of construct validity and instrument precision based on Confirmatory Factor Analysis (CFA), Cronbach's α, McDonald's ω and composite reliability.
Results: The Brazilian version of the PFS (PFS-Brasil) was developed. The pilot test referring to the last phase of the cross-cultural adaptation included the assessment of 103 participants. Confirmatory factor analyzes carried out point to the adequacy of bifactorial models for both subscales, with satisfactory and excellent internal consistency for the physical and mental subscales, respectively.
Conclusion: The present study demonstrated that the Brazilian version of the Pittsburgh Fatigability Scale has adequate construct validity for assessing perceived fatigability in older adults, both in its physical and mental subscales.
Implications: To have an assessment tool that is easy to use, brief, easy to understand and validated for our culture is essential for proper clinical assessment. The PFS-Brasil scale analyzes the degree of perceived physical and mental fatigability in the older adult and the scale will allow health professionals to assess health conditions in a comprehensive and precise way, defining rehabilitation procedures and its follow-up for the integral health care of the aging populations. To analyses other validation parameters are needed and are being performed as part of a second study.
Keywords: Validation Study, Patient-Reported Outcomes Measure, Functional Physical Performance

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EFFECTIVENESS OF CUPPING THERAPY ON MUSCLE PAIN IN RECREATIONAL RUNNERS: RANDOMIZED CLINICAL TRIAL

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Background: It is recommended that physical activity be a routine for people throughout their lives. The WHO recommends that adults get an average of 300 minutes of moderate activity or at least 75 minutes of high intensity activity per week. Among the sports, street running attracts more and more fans. It is an inclusive modality as it enables several people of different ages to practice it on a daily basis. It is associated with easy access, low cost, and low technical level. The incidence of running-related injuries is between 2.5 to 33 injuries per 1000 hours of running, and the variation occurs due to the type of runner, operationalization of the term injury, and duration of follow-up. To reduce the deleterious effects of muscle damage it is important for athletes to utilize recovery strategies to reduce pain, fatigue, prevent future injury, and enable a faster and more efficient return to training. It is believed that ventosaterapy is a recovery technique that performs drainage and increases blood circulation, facilitating the release of toxins that are associated with pain processes. The application time varies between 5 to 10 minutes with a negative pressure of 300 millibars being sufficient to generate changes in musculoskeletal pain. However, there are several modes of application. Therefore, the development of studies is important to prove the effectiveness of the technique.