

analyzed by the western blot were BAX, CASPASE-3, CASPASE-9, ANEXIN-V, P-ASK, MTOR, BECLIN-1, P62, LC3-I, LC3-II, NRF2 and P-AKT.

Results: The apoptosis proteins BAX ($p=0.13$), CASPASE-3 ($p=0.62$), CASPASE-9 ($p=0.20$), ANEXIN-V ($p=0.85$), and P-ASK ($p=0.71$), as well as autophagy proteins - MTOR ($p=0.71$), BECLIN-1 ($p=0.58$), P62 ($p=0.70$) and LC3-II ($p=0.16$) did not show statistical significance among groups. EX+HF+D+P group expressed increased NRF2 ($p=0.04$), p-AKT ($p=0.03$), and LC3I ($p=0.005$) expression compared to the CT- group.

Conclusion: We demonstrated the positive effects of physical exercise associated with photobiomodulation, increasing the expression of proteins related to myocyte survival.

Implications: In this study, we observed an increase in Nrf2 levels in animals that performed physical exercise related to photobiomodulation, demonstrating a protective effect of the association of these two protocols on the gastrocnemius of animals with HF and DM. These results are relevant since there is a lack of therapeutic agents that may mitigate the muscle damage related to the association of DM and HF. Therefore, we suggest that the association between therapies can revert possible changes involving cell death.

Keywords: Photobiomodulation, Heart failure, Diabetes mellitus type II

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

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PRELIMINARY CONTENT VALIDITY OF THE BRAZILIAN VERSION OF THE PEDIATRIC RATING OF CHRONIC ILLNESS SELF-EFFICACY (PRCISE)

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Background: Content validity is the degree to which the content of an instrument is an adequate reflection of the construct to be measured. It can be assessed by patients or specialists during the development or cross-cultural adaptation (CTA) of measurement instruments. In this sense, the Pediatric Rating of Chronic Illness Self-Efficacy (PRCISE) is a self-efficacy questionnaire for pediatric patients with chronic conditions, which is being adapted and validated in Brazil, but its content validity has not yet been evaluated.

Objectives: To assess the preliminary content validity of the Brazilian version of the PRCISE in children and adolescents with chronic respiratory conditions.

Methods: Exploratory methodological study in which the TCA protocol was elaborated according to internationally established recommendations, involving translation, back-translation, expert committee and pre-test procedures. The pre-test of the Brazilian version of the PRCISE was performed on a sample of 30 children and adolescents of both sexes, aged 7 to 18 years, and diagnosed with isolated asthma, cystic fibrosis, or other chronic respiratory

conditions. To determine content validity, subjects participated in virtual interviews using Google Meet and evaluated the questionnaire for item clarity, comprehensibility, relevance, and comprehensiveness. In the data analysis, the Content Validity Index (CVI) was used, adopting values ≥ 0.78 for each item as a reference.

Results: The sample consisted of 15 individuals with asthma and 15 individuals with cystic fibrosis, with a mean age of 12.3 ± 2.8 years, 53.3% male, 66.7% elementary school students, and 56.7% from the Northeast region of Brazil. In the assessment of the questionnaire, all 15 items had a CVI ≥ 0.78 , with values ranging from 0.93 to 1.00, and 60% of the items had CVI = 0.96, demonstrating good content validity. Items 2 and 15, related respectively to the domains of obtaining and humor, were more difficult for the participants to understand (CVI = 0.93). The illness management domain obtained CVI = 0.63 and, therefore, will be modified according to the participants' suggestions and assessed in a new evaluation round.

Conclusion: The Brazilian version of the PRCISE presented good preliminary content validity by assessing children and adolescents with chronic respiratory conditions. The illness management domain did not reach the recommended value and will be modified and reassessed by participants.

Implications: Based on these results, we have the basis for further establishing the content validity of the Brazilian version of the PRCISE for children and adolescents with chronic respiratory conditions. Furthermore, this is the first step to analyzing the psychometric properties of this instrument and to determine if it provides valid and reliable measures before being used in clinical practice.

Keywords: Respiratory diseases, Self-efficacy, Validation study

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

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PHYSICAL THERAPY EXERCISE IN EARLY AND LATE POST-OPERATIVE PERIOD OF TOTAL KNEE ARTHROPLASTY: SYSTEMATIC REVIEW WITH META-ANALYSIS

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Background: Objective: To analyze the effects of exercise-based rehabilitation on the functionality of individuals with Total Knee Arthroplasty (TKA) in the early and late postoperative period.

Methods: Systematic review of which studies were selected through six databases (Pubmed, PEDro, LILACS, EMBASE, CINAHL, and Cochrane Library) from January 2010 to August 2020. Only randomized clinical trials of primary unilateral TKA in the early or late postoperative period were included. All meta-analyses were conducted using Review Manager – RevMan software described as standardized mean differences with 95% confidence intervals (CI). Outcome data, including the final mean, standard deviation, and sample size values, were extracted by two reviewers. The data extraction process was performed using a standardized form and disagreements were resolved by a more experienced third author. PROSPERO Register: CRD42020200375.

Results: Five studies were chosen for full-text review. The main findings of this study demonstrated that physical therapy exercise,