

biofeedback of laser (BFlaser), consisting of pointing a laser as close as possible to the same target used before from the right wrist. The CP position was measured using the force platform for 60 seconds and the CP sway area was computed using the whole trial data in each experimental task. Scales for the assessment of balance confidence and anxiety, consisting of visual scales ranging from 0 to 100, were applied at the end of each task. On the confidence scale, “0”, “50” and “100” mean “no confidence”, “moderate confidence” and “complete confidence”, respectively. On the anxiety scale, “0”, “50” and “100” denote “no anxiety”, “moderate anxiety”, and “complete anxiety”. A one-way analysis of variance (ANOVA) for repeated measures was used to compare the emotional scores and CP sway area among postural tasks, and post hoc comparisons were made with the Tukey HSD test (significance level of 5%).

Results: ANOVA ($F=6.19$, $p<0.01$) revealed a smaller balance confidence in BFcp (média±desvio padrão; 72.88 ± 22.41) than EO (86.15 ± 22.05), while no differences were observed between BFlaser (81.34 ± 19.82) and the other tasks. For anxiety, ANOVA did not show differences among EO (20.76 ± 33.21), BFcp (27.88 ± 25.42), and BFlaser (24.23 ± 29.78). Moreover, the CP sway area ($F=33.11$, $p<0.01$) was significantly smaller in the BFcp (2.27 ± 1.27 cm²) than EO (3.54 ± 2.08 cm²) and BFlaser (5.51 ± 2.87 cm²), and in the EO compared to BFlaser ($p<0.01$ in all cases).

Conclusion: Balance confidence alterations were identified with BFcp in relation to the other postural tasks. These findings seem to suggest that psychological factors could contribute to explain, even if partially, alterations in the postural stability during the biofeedback; a smaller CP sway area was found in BFcp than EO.

Implications: These aspects seem to be little exploited in the clinical environment, in which the knowledge of factors associated with postural stability during biofeedback could assist in improving the evaluation and rehabilitation protocols of postural control.

Keywords: Postural balance, Biofeedback, Balance confidence

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

Acknowledgment: This study was supported by the FAPERJ (No. E-26/211.104/2021) and CAPES (Finance Code 001; No. 88881.708719/2022-01, and No. 88887.708718/2022-00).

Ethics committee approval: Clementino Fraga Filho University Hospital (HUCFF, EC number: 093/03).

<https://doi.org/10.1016/j.bjpt.2024.100978>

393

PROGNOSTIC MODELS FOR PEOPLE WITH LOW BACK DISORDERS RECEIVING CONSERVATIVE TREATMENT: A SYSTEMATIC REVIEW

Rubens VC. Vidal¹, Margreth Grotle², Marianne Bakke Johnsen³, Guilherme H.D. Grande¹, Louis Yvernay², Crystian B Oliveira¹

¹ University of West Paulista (UNOESTE), Presidente Prudente, São Paulo, Brazil

² Division of Clinical Neuroscience, Department of Research, Innovation and Education, Oslo University Hospital, Oslo, Norway

³ Department of Rehabilitation Science and Health Technology, Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway

Background: Low back pain is a musculoskeletal condition that affects many people worldwide and although there are several types of conservative treatments, either physiotherapy and/or pharmacological, the patient does not always obtain satisfactory results after treatment. To improve this situation, many prognostic models have been studied, developed, and validated. However, it is uncertain the available evidence about the prognostic models for predicting

the success or failure of patients with low back pain after a conservative treatment.

Objectives: Identify and evaluate prognostic models' ability to predict success or failure in patients with low back pain after receiving conservative treatments.

Methods: Literature searches were conducted in three different electronic databases (MEDLINE, EMBASE and CINHAL). Prognostic models predicting the success or failure of conservative treatment in adults with low back pain were considered eligible. Studies investigating low back pain related to a severe pathology were excluded. Two independent reviewers performed the study selection and data extraction. The individual performances of the prognostic models were performed descriptively.

Results: Searches initially retrieved 13,013 studies. After analysis considering inclusion criteria, 81 studies were included in this systematic review. Of these, 78 (96.3%) developed and internally validated the prognostic models, and only 4 (3.7%) developed and externally validated the models. Regarding the discrimination of the models studied, the c-statistics or area under the curve (AUC) ranged from 0.44 to 0.96. Regarding the calibration, the calibration slope and intercept ranged from 0.74 to 1.06 and from -0.01 to 0.34, respectively. Regarding the sensitivity and specificity of the prognostic models, there was a variation between 31.0% and 94.5% and from 14.9% to 93.7%, respectively.

Conclusion: Although prognostic models have been developed, discrimination and calibration, as well as specificity and sensitivity, varied significantly among them. In addition, there were few studies investigating the external validation of these models.

Implications: Although some prognostic models have been developed, validated, and are able to predict success or failure in patients with low back pain undergoing conservative treatment, necessary to implement such models in clinical practice due to the lack of evidence regarding external validation.

Keywords: Low back pain, Prognostic models, Conservative treatment

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

Acknowledgment: Not applicable.

Ethics committee approval: Not applicable.

<https://doi.org/10.1016/j.bjpt.2024.100979>

394

PREVALENCE OF SARCOPENIA IN BRAZILIAN ELDERLY: AN UPDATE AND SYSTEMATIC REVIEW

Sabrina Paula Costa¹, Leonardo Augusto da Costa Teixeira¹, Amanda Aparecida Oliveira Leopoldino¹, Vinícius Cunha de Oliveira¹, Vanessa Amaral Mendonça¹, Ana Cristina Rodrigues Lacerda¹

¹ Programa de Pós-Graduação em Reabilitação e Desempenho Funcional (PPGReab), Universidade Federal dos Vales do Jequitinhonha e Mucuri, Diamantina, Minas Gerais, Brasil

Background: The sarcopenia associated with aging is characterized by loss of muscle mass and strength, decline in functionality, independence, and quality of life. With increasing life expectancy in Brazil, the number of elderly is growing, and with this, attention must be paid to changes in sarcopenia prevalence rates over the years.

Objective: This systematic review aims to estimate and update data on the prevalence of sarcopenia in Brazilian elderly.

Methods: Electronic and manual searches of databases, relevant journals and reference lists with no language restriction were performed. English descriptors (mentioned in a previous study¹) were