

data. To assess kinesiophobia, the Brief Fear of Movement Scale, a reduced version of the Tampa Kinesiophobia Scale, was administered. This scale consists of 6 statements which relate symptom intensity to fear of movement. Subsequently, a kinematic assessment of the lower limb was performed during the sit-to-stand test. The images were processed using Kinovea® software. For statistical analysis, Pearson correlation test was applied, considering a significance level of $p < 0.05$.

Results: Knee flexion ($p=0.005$, $r=0.776$) and knee valgus ($p=0.006$, $r=-0.303$) angles during the sit-to-stand movement are associated with the level of kinesiophobia in women with KOA.

Conclusion: Women with KOA may alter their movement patterns when performing daily tasks as an attempt to avoid pain, due to fear of movement.

Implications: Kinesiophobia is a cognitive-behavioral factor that significantly affects the functionality of women with KOA, leading to kinematic alterations as an attempt to avoid pain. Given the high prevalence of kinesiophobia among older adults with musculoskeletal conditions, understanding the relationship between kinesiophobia and lower limb kinematics during functional movements highlights the importance of biopsychosocial approach in the physiotherapeutic treatment of individuals with KOA. To make treatment more personalized for this population, it is essential to provide education on the factors related to KOA and to progressively introduce individualized functional goals for each individual.

Keywords: Arthritis, Biomechanical Phenomena, Fear of Movement

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AGE AND ANXIETY WERE ASSOCIATED WITH INEFFICIENT PAIN MODULATION IN PATIENTS WITH MUSCULOSKELETAL PAIN

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Background: Conditioned pain modulation is a crucial physiological mechanism for regulating pain perception. Age, body mass index, and psychosocial status (i.e., symptoms of anxiety, social isolation, perceived stress, catastrophizing, kinesiophobia, and symptoms of depression) may influence the efficiency of this mechanism. However, these elements are commonly investigated separately.

Objectives: The current study evaluated the relationship between demographic features and psychosocial status and the efficiency of conditioned pain modulation in participants with and without musculoskeletal pain. We also investigated the same relationship stratifying by health condition (participants with musculoskeletal pain and asymptomatic individuals).

Methods: A cross-sectional study was conducted with 100 patients with musculoskeletal pain and 100 asymptomatic individuals. Participants answered questionnaires about sociodemographic characteristics and psychosocial status (Brief Screening Questions and Brief Psychological Screening Questions). The cold pressor test was the

psychophysical method used to assess conditioned pain modulation. The difference between pre-and post-test pressure pain threshold values calculated conditioned pain modulation efficiency. Negative values indicated conditioned pain modulation inefficiency, while null or positive values were considered a typical conditioned pain modulation response. A logistic regression model was fitted to examine the relationship between independent variables (demographic features and psychosocial status) and the conditioned pain modulation efficiency.

Results: The mean age of the sample was 33.17 (± 16.78) years, and the mean body mass index was 25.75 (± 5.46) kg/m². The symptomatic group had significantly higher age [symptomatic = 40.53 $\pm$ 19.51, asymptomatic = 25.74 $\pm$ 8.58; $p < 0.001$] and body mass index [symptomatic = 26.56 $\pm$ 5.81, asymptomatic = 24.93 $\pm$ 4.98; $p = 0.035$] than the asymptomatic group. Conditioned pain modulation was inefficient in 43 (21.50%) of the sample. Age (OR = 1.03; 95% CI: 1.01–1.05) was the only variable associated with inefficient pain modulation, considering the total group. Symptoms of anxiety (OR = 3.99; 95% CI: 1.05–15.1) and age (OR = 1.03; 95% CI: 1.00–1.06) were associated with inefficient pain modulation among the symptomatic group.

Conclusion: Increasing age and greater levels of anxiety higher the likelihood of presenting inefficient pain modulation in participants with musculoskeletal pain. The findings suggest that symptoms of anxiety are the strongest psychosocial predictor of pain response.

Implications: Psychosocial status should be incorporated into pain management in clinical practice, allowing for more individualised approaches. In addition, addressing symptoms of anxiety may be crucial for contributing to regulating pain perception.

Keywords: Diffuse Noxious Inhibitory Control, Musculoskeletal Pain, Observational Study

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

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IMPACT OF AURICULOTHERAPY WITH LASER BIOPHOTOMODULATION ON THE GENERAL HEALTH OF PATIENTS WITH TEMPOROMANDIBULAR DYSFUNCTION

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Background: The auriculotherapy with laser biophotomodulation is a technique used to promote the body's balance and treat several conditions. Individuals with Temporomandibular Disorder (TMD) often have compromised general health. The impact of this therapy on the health of these patients is not yet fully understood.

Objectives: Evaluating the effects of auriculotherapy with LASER biophotomodulation on the general health of individuals with TMD.

Methods: A randomized crossover clinical trial was conducted with 25 participants, divided into a Placebo Group (PG, $n = 14$) and an Experimental Group (EG, $n = 11$). The groups were assessed using the Patient Health Questionnaire (PHQ) before and after the intervention. The EG received treatment with LASER (100 mW, 602 nm, 5