

**Results:** Six hundred and fifty women (n= 400 SDR; n= 250 CDR) participated in the study. The group with rheumatic diseases had worse results in fatigue and mental health outcomes (anxiety, depression and associated anxiety and depression) when compared to the group without this condition ( $p<0.01$ ). Among the group of women with rheumatic diseases, fibromyalgia was the disease that presented the worst results for the outcomes of mental health aspects ( $p<0.01$ ).

**Conclusion:** During the COVID-19 pandemic in Brazil, women with rheumatic diseases experienced symptoms of fatigue and compromised aspects of mental health when compared to women without this condition. Among those who had some disease, women with fibromyalgia were the most affected in the period evaluated.

**Implications:** The study demonstrates the need for intervention programs focused on biopsychosocial aspects and the search for self-management strategies in the CDR population. These strategies could aim to minimize the impacts arising from future emergency public health situations, causing managers to promote public policies of comprehensive health care, including the physiotherapy professional to integrate more multidisciplinary teams with a focus on multiple health areas of individuals with chronic illnesses.

**Keywords:** Rheumatology, Public health, Women's health

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

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### FEASIBILITY STUDY OF THE ASSOCIATION OF PHOTOBIOMODULATION THERAPY WITH EXERCISE IN INDIVIDUALS WITH CHRONIC AND NON-SPECIFIC LOW BACK PAIN

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**Background:** Chronic Non-specific Low Back Pain (CNSLBP) is considered an unknown-origin pain or discomfort in the lower back, persistent for a period equal or higher than 12 weeks. Although it is commonly prescribed, exercises alone seem to be less effective than associated with other modalities for the CNSLBP treatment. Thus, guidelines recommend a combination of interventions. Photobiomodulation Therapy (PBMT) is an effective method for alleviating CNSLBP. Thought, the scientific evidence about the effectiveness of laser PBMT combined with exercise is scarce and contradictory.

**Objective:** to evaluate the feasibility of carrying out a study of PBMT combined with exercise in individuals with CNSLBP.

**Methods:** 36 participants with CNSLBP aged between 18 to 65 years old were selected. Participants were randomly allocated in (1) a six-week exercise program matched with active PBMT (n = 18) and (2) a six-week exercise program matched with placebo PBMT (n = 18). The clinical outcomes were measured at baseline, as well as 8 and 20 weeks after randomization. The primary outcomes were the feasibility of blinding patient, measuring patient's treatment satisfaction, the patient's difficulty in understanding past information, the occurrence of adverse effects, and patient adherence to treatment, evaluated using an adapted model of MedRisk Instrument

for Measuring Patient Satisfaction with Physical Therapy Care Questionnaire.

**Results:** blinding of the patients was possible, since 75% believe they used the active PBMT and 25% the placebo PBMT. Adherence to all meetings was 76.92%, requiring monitoring of the procedures. 87.5% of the patients are totally satisfied with the treatment received. 54.2% of the patients reported that was very easy to understand the given commands and 41.7% stated that was easy and 4.1% that was neither, nor easy or difficult to understand and no patient reported the occurrence of adverse effects during the interventions.

**Conclusion:** based on the results, it is possible to conclude that is feasible to carry out a treatment protocol using PBMT associated with exercise in individuals with CNSLBP.

**Implications:** the findings will help to determine the additional effect of PBMT to an exercise protocol on CNSLBP, potentially guiding clinical practice by providing an alternative method of therapy.

**Keywords:** Exercise, Backache, Photobiomodulation

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

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### CARDIOVASCULAR FITNESS IS CORRELATED WITH SPATIAL WORKING MEMORY IN OLDER ADULTS

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**Background:** Age-related cognitive decline in spatial working memory occurs on aging. Working memory requires manipulation and retention of visuospatial information (Spatial Working Memory - SWM) and it has been shown that higher levels of cardiorespiratory fitness are associated with more accurate and faster spatial memory responses in older people. Walked distance in the 6-minute walk test (6MWT) is considered an adequate indirect measure of the physical and cardiorespiratory capacity of older adults, both in clinical and academic environments. Considering that higher levels of cardiorespiratory fitness may be associated with better cognitive performance, we investigated the relationship between this construct and the working memory of older adults.

**Objectives:** To analyze whether cardiovascular fitness is correlated to spatial working memory performance in a sample of older adults.

**Methods:** Participants over 60 years old were invited to the study. All participants performed an indirect assessment of cardiovascular fitness (6MWT), considering the distance walked and the average speed during the test. The cognitive assessment included the Mini-Mental State Examination (MMSE) and working memory through the measurement of total errors (SWM TE) by automated testing of the Cambridge Battery of Automated Neuropsychological Tests (CANTAB). After searching for and removing outliers values and analyzing