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RELATIONSHIP BETWEEN SOCIAL SUPPORT AND PHYSICAL ACTIVITY LEVEL IN INDIVIDUALS WITH CHRONIC LOW BACK PAIN: A CROSS-SECTIONAL STUDY

Ellen Mariane Souza de Oliveira, Luana De Carvalho Pinheiro, Lívia Kézia Barroso De Sousa, Ana Caroline Silva Dantas, Ana Carla Lima Nunes, Fabianna Resende de Jesus Moraleida
Master Program in Physiotherapy and Functioning, Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

Background: Chronic low back pain (CLBP) is disabling and often associated with modifiable socioeconomic and lifestyle factors, such as physical activity level, the latter being a key treatment component. Evidence suggests that social support (SS) may be a crucial health determinant in encouraging exercise and improving pain management, highlighting the importance of investigating this relationship in those with CLBP.

Objectives: To analyze the association between social support and physical activity level in adults with primary CLBP.

Methods: This cross-sectional study was conducted between August and December 2024 with volunteers recruited from a Primary Care Unit through active search or referred by health agents. Adults aged 18 to 60 years with primary CLBP lasting more than three months answered the following questionnaires: Sociodemographic form, Numerical Pain Scale (NPS), Medical Outcomes Study-Social Support Survey (MOS-SSS), and International Physical Activity Questionnaire (IPAQ-SF), with the aid of illustrated response cards. Data were analyzed using JAMOVI software for descriptive analysis and to assess the correlation between social support and physical activity.

Results: We included 54 participants (77.7% female), with a mean age of $48.9 \text{ years} \pm 9.26$. The mean pain intensity was 6.81 ± 2.25 , and the mean weekly physical activity was $4,153 \pm 3,476 \text{ METs}$, with most participants reporting moderate to high physical activity levels. The mean perceived SS score was $72.2 \pm (\text{standard deviation} = 23)$, indicating a moderate level of social support perception. SS and physical activity levels were weakly and positively correlated ($\rho = 0.3$; $p < 0.03$).

Conclusion: There was a positive, albeit modest, relationship between SS and physical activity levels, suggesting that SS may contribute to physical activity status. However, the magnitude of the correlation highlights the need to consider other contextual factors, such as gender, financial barriers, workload, and health perception in individuals with primary CLBP. Although relevant, SS does not appear to be the main determinant of physical activity. This study reinforces the importance of future research, specifically on the role of general social support and its interactions with contextual factors affecting physical activity levels in this population.

Implications: The study points to the relationship between SS and physical activity level in adults with CLBP, highlighting the importance of investigating social support as a facilitator in promoting a more active lifestyle in individuals with CLBP.

Keywords: Chronic low back pain, social support, physical activity

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IMPACT OF DIFFERENT MANUAL THERAPY TECHNIQUES ON ANKLE DORSIFLEXION RANGE OF MOTION: PRELIMINARY DATA FOR SYSTEMATIC REVIEW WITH META-ANALYSIS

Alice de Paula, Rayane Quintão Castro, Heloisa da Costa Souza, Bruna de Castro Moreira, Isabella Cristina Moreira Baião, Cyntia Pace Schmitz Corrêa, Diogo Carvalho Felício, Diogo Simões Fonseca
Programa de pós-graduação em Ciências da Reabilitação e Desempenho Físico Funcional, Faculdade de Fisioterapia, Universidade Federal do Juiz de Fora (UFJF), Juiz de Fora, MG, Brazil

Background: Reduced ankle dorsiflexion range of motion is associated with biomechanical and functional changes, impacting daily activities such as walking. Assessing and addressing this limitation is clinically relevant, highlighting the need to investigate the outcomes used in populations with this condition.

Objectives: This study aims to conduct systematic review and meta-analysis to evaluate and synthesize published randomized controlled trials (RCTs), providing conclusions on the short- and long-term efficacy of different manual therapy techniques on ankle dorsiflexion range of motion.

Methods: This systematic review and meta-analysis follow the PRISMA guidelines. Data were extracted from RCTs without language restrictions, identified through systematic searches in the following databases: MEDLINE/PubMed (via National Library of Medicine), Scopus (Elsevier), CINAHL (EBSCO), LILACS, EMBASE (Elsevier), and Web of Science (Clarivate Analytics). Statistical analysis will be conducted using R software. Random effects models with a 95% confidence interval (CI) will be estimated to analyze the study's outcome. Heterogeneity will be assessed using the I^2 index, and sensitivity analyses will be performed, whenever possible, in the presence of high heterogeneity ($I^2 > 40\%$). All statistical comparisons assume a significance level of $\alpha = 0.05$. Preliminary

Results: A total of 194 studies were identified through database searches, with no additional studies found from other sources. After removing duplicates, 114 articles remained. Following title and abstract screening, 102 studies were excluded. The 12 remaining studies were assessed for full-text review, and eight studies were excluded. Thus, four studies were included and are currently undergoing qualitative synthesis and meta-analysis, totaling 191 participants (M: 104 / H: 87), of whom 107 underwent the intervention and 84 were in the control group. The participants' mean age ranged from 22.3 to 72.6 years, and their mean body mass index varied between 22.46 and 28.47 kg/m^2 . Inclusion criteria included adults over 60 years old with dorsiflexion limitation below 35° measured by the weight-bearing lunge test, adults over 18 years old, with or without ankle injury, and those with asymmetric dorsiflexion stiffness during the weight-bearing lunge test; as well as students aged 18 to 35 years in good health. Exclusion criteria included neurological diseases, musculoskeletal conditions in the lower limb, musculoskeletal injury in the last three months, vestibular pathology, vascular disease, or a history of previous surgery in any lower extremity. Two clinical trials applied manual therapy to the ankle joint, while two used Mulligan mobilization with movement, with one of them associating a tibiofibular tape. The primary outcome assessed was the increase in dorsiflexion during the weight-bearing lunge test.