Results: 1,482 older adults were interviewed, with an average age of 70 years, most of them female (74%), inactive regarding their occupation (56.4%), who use up to 3 medications (48.9%), the most frequent diseases being Diabetes Mellitus and Systemic Arterial Hypertension. Among the active older (36.8%), 89.7% were aged between 60 and 75 years, 64.8% were women, white (62.9%); married (61.7%), with more than nine years of study (70.1%), retired/pensioner (66.8%), taking up to 3 medications (52.3%), who reported that they were not anxious (91.4%), did not feel pain (78.7%) and had no difficulty sleeping (39.3%). Regarding the time they sat down (inside and outside the house) and walked to exercise, 32.1% reported not walking for that purpose and that they sat for an average of 4 hours or less per day. No difference was identified between the profile of the groups (general population, active and inactive); however, for those who declared themselves to be active about their occupation, a slight difference was observed in the percentage of the variables: being retired/pensioners; more anxious; walking to exercise and for a time between 30 minutes and 1 hour and reported less pain.
Conclusion: When observing the general profile of the older, no major differences were identified between those who declared themselves active and those who were inactive about their occupation at the beginning of the COVID-19 Pandemic.
Implications: It is necessary to understand this older worker's profile and outline preventive measures to remain active at work and preserve his quality of life and ability to work.
Keywords: Elderly, Work, COVID-19

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IMMEDIATE EFFECTS OF SELF-MYOFASCIAL RELEASE ON NEUROMUSCULAR AND FUNCTIONAL PERFORMANCE OF PHYSICALLY ACTIVE HEALTHY ADULTS: A CROSSOVER STUDY

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Background: Myofascial self-release (SMR) has been investigated for its benefits such as increased range of motion, reduced myofascial pain, decreased post-exercise muscle fatigue pain, and improved physical performance. However, changes in neuromuscular activity, muscle strength, and range of motion after SMR remain poorly explored.
Objectives: To investigate the immediate effects of SMR compared to static stretching on the neuromuscular and functional responses of lower limbs in physically active adults.
Methods: Two-period randomized crossover clinical trial with a sample of 29 participants [mean (SD)] [42.8 [6.2] years, 21:4 female: male). Participants performed one session of SMR or static stretching on the vastus mediallis and biceps femoris, each lasting 60 s, depending on the randomization sequence of the study phase (washout period of 1 week). Participants were assessed before and after each intervention regarding myoelectric activity (surface electromyography), maximal isometric muscle strength (load cell), and range of motion (Wells' test).
Results: We observed statistical evidence of a difference in myoelectric activity (pre-post) between SMR and static stretching of vastus mediallis (difference [95%CI]: -0.076 [-0.143; -0.009]) and biceps femoris (-0.109 [-0.191; -0.027]). We observed statistical evidence of a difference in isometric strength between SMR and static stretching of the biceps femoris (5.284 [2.970; 7.598]) but not vastus mediallis (0.247 [-5.639; 6.132]). We observed no statistical evidence of a difference in the mean differences between static stretching and SMR for a range of motion (-0.112 [-1.000; 0.776]).
Conclusion: Both SMR and static stretching immediately increase the range of motion of the lower limbs. Simultaneously, static stretching seems to increase the myoelectric activity whereas SMR decreases it. Further studies are required to verify the effects on isometric muscle strength.
Implications: In resistance training centers, the implementation of static stretching and/or SMR can be reviewed in the pre-training of these exercises, as they are associated with muscle myoelectric improvement.
Keywords: Muscle strength, Flexibility, Surface electromyography

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SPINAL MANIPULATIVE THERAPY FOR SCIATICA: A SYSTEMATIC REVIEW WITH META-ANALYSIS

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Background: Spinal manipulative therapy has already been widely investigated in patients with low back pain and has been shown to be effective in chronic patients. Recommendations for the use of manipulative therapy in patients with sciatic pain are based on indirect evidence, relying on studies with chronic low back pain. The benefits and harms of spinal manipulative therapy are not widely studied in patients with sciatic pain.
Objectives: To systematically review the effects of spinal manipulation therapy (SMT) for patients with acute, subacute, and chronic sciatica for short-, medium-, and long-term pain and disability.
Methods: Systematic review of randomized controlled trials using manipulative therapy versus any comparator group. The search was carried out in the databases MEDLINE, EMBASE, PsycINFO, Global Health, CENTRAL, Web of Science, CINAHL, SPORTDiscus, PEDro, and WHO with the descriptors: Low back pain; Sciatica; Manual Therapy and Randomized Controlled Trial. Two reviewers extracted the data and analyzed the risk of bias using the PEDro Scale and the certainty of evidence with the GRADE approach. The primary outcomes were pain and disability.
Results: Sixteen randomized controlled trials were included in this review (n = 1385). Seventeen comparisons were driven from single randomized controlled trials with low and very low certainty of evidence (GRADE). The mean risk of bias for the included studies was

5.9 (SD=1.5), measured on a 0-10 scale. SMT was shown to be more effective than conventional physical therapy for leg pain, with a low certainty evidence and a moderate effect size (MD= -1.78 points; 95% CI -0.44 to 3.11 in 4 weeks) but not for back pain (MD= -2.04 points; 95% CI -5.15 to 1.07 in 4 weeks). There is low certainty evidence that SMT is similar to microdiscectomy for chronic sciatica in the short term (MD= -0.3; 95% CI -0.95 to 0.35), medium-term (MD= -0.2; 95% CI -0.87 to 0.47), and long term (MD= -0.1; 95% CI -0.82 to 0.62).
Conclusion: The certainty of the evidence ranged from low to very low in all comparisons, with small to moderate size effects. There is uncertainty around the effect estimates of SMT for patients with acute, subacute, and chronic sciatica.
Implications: Based on this systematic review, there is uncertainty about the efficacy of spinal manipulative therapy (SMT) for patients with acute, subacute, and chronic sciatic pain. Healthcare professionals should carefully evaluate treatment options for patients with sciatic pain. Further research is needed to evaluate the efficacy of manipulative therapy in patients with sciatic pain.
Keywords: Low back pain, Sciatica, Spinal Manipulative Therapy

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DO SLEEP DISORDERS INFLUENCE THE COGNITION AND QUALITY OF LIFE OF INDIVIDUALS WITH PARKINSON'S DISEASE?

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Background: Poor sleep is common among individuals with Parkinson's disease (PD) and may affect up to 98% of patients. However, the relationship between poor sleep, cognitive aspects, and quality of life (QoL) in this population remains unclear.
Objective: To investigate the relationship between poor sleep, cognition, and QoL in individuals with Parkinson's disease.
Methods: This cross-sectional study included 53 subjects with idiopathic Parkinson's disease (PD), who were non-institutionalized and had mild to moderate PD. Sociodemographic data was collected using a questionnaire, and the following assessment tools were used: the Parkinson's Disease Sleep Scale-2 (PDSS-2) to assess the quality of sleep, the Montreal Cognitive Assessment (MoCA) to assess the cognitive status of patients, and the Parkinson's Disease Quality of Life Questionnaire (PDQ-39) to assess the QoL. Spearman correlations were used for statistical analysis, with a significance level of 5%.
Results: Out of the 53 subjects, 34 were men and 19 were women, they had an average age of 66.62 $\pm$ 9.46. In analysing the sleep and cognition, a moderate correlation was found between the Parkinson's Disease Sleep Scale-2 (PDSS-2) and the visuospatial domain (r=-0.401; p=0.003) as well as the total Montreal Cognitive Assessment (MoCA) score (r=-0.309; p=0.024). In analysing the sleep and quality of life, a moderate to strong correlation was observed between the PDSS-2 and the PDQ-39 domains, specifically mobility (r=0.598; p=<0.001), communication (r=0.628; p=< 0.001), bodily discomfort (r=0.620; p=< 0.001), and the total score (r=0.773; p=< 0.001). Furthermore, a subanalysis by gender was performed, and the groups of men and women were found to be similar in terms of age, time of diagnosis, the stage of the disease, and the PDSS-2, PDQ-39, and MoCA scores. The results showed that in men, the PDSS-2 had a correlation with cognition, with a strong correlation observed between the PDSS-2 and the naming domain (r=-0.623; p=< 0.001), and moderate correlations with the visuospatial (r=- 0.494; p=0.003), language (r=-0.365; p=0.034), abstraction (r=-0.400; p=0.019), delayed recall (r=-0.416; p=0.014), orientation (r=-0.392; p=0.022), and the total MoCA score (r=-0.512; p=0.002) domains. In terms of QoL, women showed a strong correlation between the PDSS-2 and the Activities of Daily Living domain (r=0.685; p=0.001), bodily discomfort (r=0.649; p=0.003), and the total PDQ-39 score (r=0.728; p< 0.001). In men, a strong correlation was found between the PDSS-2 and the domains of emotional well- being (r=0.644; p=< 0.001), communication (r=0.731; p=< 0.001), bodily discomfort (r=0.718; p=< 0.001), and the total PDQ-39 score (r=0.772; p=< 0.001).
Conclusion: Individuals with worse sleep quality have poorer cognitive scores, particularly men. Additionally, poorer sleep quality is associated with a worse quality of life in domains such as mobility, communication, and bodily discomfort.
Implications: Screening for sleep disorders and implementing prevention and treatment strategies are necessary for individuals with Parkinson's disease (PD) who have worse sleep quality, given the negative impact on cognitive performance and quality of life. Further studies should explore the association of sleep quality with other symptoms of PD.
Keywords: Parkinson's Disease, Sleep, Cognition

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Ethics committee approval: This study was approved by the Research Ethics Committee from the State University of Londrina (UEL) under approval, CEP-UEL No. 5,271,985.

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THE EFFECT OF BIOFEEDBACK ON ANXIETY AND BALANCE CONFIDENCE DURING STANDING

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Background: Postural control involves the maintenance of orientation and postural balance, which are crucial aspects to allow the activities of daily living. The biofeedback technique has been of potential interest to postural control rehabilitation, since it seems to confine postural sway within the stability limits, ensuring postural balance during standing. However, whether the performance of postural balance is associated with other factors, such as anxiety and balance confidence, is an open issue we addressed here.
Objectives: This study aimed to investigate the effect of different biofeedback techniques on anxiety and balance confidence during standing.
Methods: Twenty-sixty participants were recruited in this study and tested in three tasks while standing on the force platform: 1) standing with eyes open (EO); (2) posturography biofeedback (BFcp), consisting of keeping the center of pressure (CP) position as close as possible to a target located in front of the individual; (3)