

Results: In muscle strength, 11 children (68.75%) shown preserved strength. Regarding muscle tone of MMSS and LL, all were characterized as normotonic. On the GMFCS scale, of the 16 children assessed, 10 (62.5%) had level 1; Two (12.5%) had level 2; Three (18.75%) had level 5, and 1 (6.25%) was not specified. Of the 16 participants evaluated by the MACS scale, 10 (62.5%) obtained grade 1; 4 (25%) achieved grade 5, and 1 (6.25%) was not specified. Furthermore, the lowest averages obtained through the PEDI scale were in the Self-Care item (21.68) and in the Social Function item, whose average was 9.56.

Conclusion: Children exposed to ZIKV during pregnancy, despite preserved tone and strength, have impaired gross motor function and poor performance in activities involving social function and self-care.

Implications: Research shows that exposure to ZIKV during the gestational period requires attention and care for the early detection of motor deficits and oriented instructions to improve self-care and socialization.

Keywords: Physiotherapy, Neurology, Zika virus

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

Acknowledgment: The Federal University of Pará, which offers extension scholarships and strengthens scientific research in the state.

Ethics committee approval: Evandro Chagas Institute (seem CAAE 68067217.0.0000.0019)

<https://doi.org/10.1016/j.bjpt.2024.100972>

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E-HEALTH SELF-MANAGEMENT PROGRAM FOR WORKERS WITH (RISK) OF LOW BACK PAIN

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Background: Low back pain is an important health problem in the world, with a high prevalence among workers. It is a complex condition that can be influenced by several biological, psychological, social, cultural, and occupational risk factors. Symptoms of pain and physical-functional disability resulting from low back pain directly affect participation at work. Therefore, interventions to manage low back pain must be carried out at all levels of care, including approaches compatible with the occupational context and with the characteristics of the workers. Pain self-management through educational interventions is an approach capable of meeting this need. In this case, workers must have access to knowledge of their own pain experience (self-assessment) and to content and information related to the neurophysiology of pain and the factors that modulate it (pain education). The use of an application to deliver the pain education program seems to be an innovative, easily accessible solution capable of generating significant learning in the worker so that he can assess and intervene in his health status.

Objectives: Develop a self-management program (pain assessment and education) to be delivered in digital format (E-Health) through an application for mobile devices focused on the prevention and/or control of low back pain in workers.

Methods: The project will be carried out in 3 stages. Step 1 focuses on the conceptual and structural development of the self-management program; step 2 is aimed at developing the prototype of the mobile application to be used to deliver the program; and, finally, step 3 is intended to assess the acceptability and viability of the prototype. Each step has its own method that follows guidelines and criteria established by international and national recommendations.

Results: The conceptual framework of the self-management program adopted a model that articulates three intervention approaches for the prevention and control of low back pain. Each approach has self-assessment tools and specific content. The first approach is aimed at preventing low back pain in the occupational environment. The second and third approaches are aimed at controlling acute and chronic low back pain, respectively. Choosing these approaches allows the self-management program to be centered on each worker's individual pain or occupational exposure experiences. Fliplet (<https://fliplet.com/>) was chosen as the platform that would host the developed application, called Back Education and Management For Workers APP. A brief detail can be viewed at the link: <https://drive.google.com/drive/folders/1vgolliUhdv42E8KVghPYflUL486bqlzr?usp=sharing>

Conclusion: The self-management program developed for the management of low back pain in workers seems to be a useful tool for self-assessment of pain and for access to knowledge and educational guidelines.

Implications: We believe that the program will be able to contribute to the production of data and analysis of information collected in the databases; and that its effects are able to generate in the worker the ability to assess and intervene on his health status with reliable information. This will help minimize barriers that limit management in workers with (risk) low back pain.

Keywords: Self-management, Backache, Workers

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

Acknowledgment: Not applicable.

Ethics committee approval: UFSB (Federal University of Southern Bahia).

<https://doi.org/10.1016/j.bjpt.2024.100973>

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PROFILE OF OLDER PEOPLE ACTIVE AT WORK DURING THE COVID-19 PANDEMIC: REMOBILIZE STUDY

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Background: The number of workers over 50 has increased, which creates a need to understand the impact that the extension of working life can have on health, ability to work, and well-being. In addition, we must consider that the isolation caused by the period of the COVID-19 Pandemic may have been a negative factor for the physical and emotional functions of these older adults, resulting in time off work.

Objectives: To describe the profile of older adults active at work during the COVID-19 Pandemic.

Methods: We analyzed data from the REMOBILIZE study, which involved a cohort study of older adults (60 years or older) living in 22 states in Brazil, during the COVID-19 pandemic, for an 18-month follow-up period. Data collection was performed through a questionnaire using the SurveyMonkey online platform. Participants were recruited using social networks (Facebook and Instagram) and WhatsApp. Older adults who were bedridden and who lived in long-term care facilities were excluded from the study. Data collection was carried out between May 18, 2020, and December 30, 2021, and for this analysis, we used only the information collected at baseline (May to July 2020).

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

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

Acknowledgment: This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001.

Ethics committee approval: Universidade Cidade de São Paulo (CAAE: 31592220.6.0000.0064).

<https://doi.org/10.1016/j.bjpt.2024.100974>

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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 medialis 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 medialis (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 medialis (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

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

Acknowledgment: We are thankful to agencies CNPq, CAPES, and FAPERJ for funding our research.

Ethics committee approval: UNISUAM, 61633422.1.0000.5235.

<https://doi.org/10.1016/j.bjpt.2024.100975>

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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