

(29.1%) and knee (14.9%). Exercises identified as triggering pain are squatting (39.7%), bench press (17.7%), leg press (17.7%), rowing (13%), stiff (7%) and extension chair (7%). Among the exercises that possibly triggered the injury, the squat (28.4%), bench press (16.2%), rowing (11.5%), stiff (8.1%) and press (5.4%) stand out. %).

Conclusion: The prevalence of musculoskeletal PI in the last year is higher than existing data in developed countries. The results of this study can be used by the government, the private sector, universities, and professionals working in sports health, providing a better targeting of public policies and research funding, as well as an effective management of musculoskeletal disorders in middle-income countries.

Implications: This study highlights possible risk factors and appropriate interventions for the prevention and treatment of musculoskeletal disorders in Brazil. This is an important step towards revealing the magnitude of the effects of these musculoskeletal disorders, providing guidance for preventive and intervention strategies in this population.

Keywords: Musculoskeletal pain, Musculoskeletal injury, Resistance training

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

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RELATIONSHIP BETWEEN MUSCULOSKELETAL PAIN AND COVID-19 SEVERITY IN RESISTANCE TRAINING PRACTITIONERS

Maria Augusta de Araújo Mota¹, Daltro Izaias Pelozato de Oliveira¹, Lucas Araújo Siqueira¹, Breno Pereira da Silva¹, Anderson Lúcio Souza de Andrade¹, Wagner Rodrigues Martins¹

¹ Departamento de Fisioterapia Universidade de Brasília (UnB), Brasília, Distrito Federal, Brasil

Background: Musculoskeletal pain (MP) in sports has been compared to an acute traumatic injury or overuse injury. This scenario represents a challenge for sports science, as it is not fully explained by biomechanics, muscle stress, or overuse injuries. Practitioners of resistance training (RT) affected by COVID-19 still need investigations into the relationship between MP and the severity of COVID-19 because Brazil is still incipient with regard to relevant and quality studies that investigate this relationship.

Objectives: To investigate the relationship between MP and the severity of COVID-19 in the city of Brasília/DF.

Methods: A cross-sectional study that recruited 730 RT practitioners of both sexes, aged 18 years or older, regular RT practitioners, who trained at a gym in Brasília/DF registered with the CREF-7, who had not undergone surgery in the musculoskeletal system in the last 6 (six) months and had not fractured at the time of data collection. The collection was carried out in four gyms in Brasília-DF that authorized the research to be carried out on their premises. Participants were invited to participate in the study according to the arrival or departure flow at the gyms, from May to December 2022. Interviews and self-administered questions were used to estimate the relationship between MP and the severity of Covid-19.

Results: Regarding the prevalence of MP, participants who reported a diagnosis of Covid-19 have a higher prevalence of pain in the last 30 days (42.0% with 95% CI: 31.4% to 52.6%), being higher than the prevalence in the group that did not report a diagnosis of Covid-19

(29.5% with CI 13.5% to 45.6%). In the mild Covid-19 severity groups (did not require hospitalization) and moderate (hospitalization in the ward), men, from social class A, with a postgraduate degree, employed and who have been practicing bodybuilding for more than 12 months, stand out.

Conclusion: The prevalence of pain was higher in RT practitioners who were diagnosed with Covid-19 in the last 30 days, compared to the group that was not affected by Covid-19. Indicating that in Brazil there is a need for coordinated efforts by the government, the private sector, universities, civil society, and health professionals, in order to provide effective management of musculoskeletal pain in people affected by Covid-19.

Implications: This study highlights possible risk factors and appropriate interventions for the prevention and treatment of musculoskeletal pain in Brazil. This is an important step towards revealing the magnitude of the effects of these musculoskeletal disorders, providing guidance for preventive and intervention strategies in this population.

Keywords: Musculoskeletal pain, Resistance training, Covid-19

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

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THE EFFECT OF ILIOPSOAS MYOFASCIAL RELEASE ON POSTURAL balance in futsal athletes

Maria Carolina Schmitz¹, Thiago Lemos de Carvalho¹, Arthur de Sá Ferreira¹, Fabio Vieira dos Anjos¹

¹ Programa de Pós-graduação em Ciências da Reabilitação, Centro Universitário Augusto Motta (UNISUAM), Rio de Janeiro, Rio de Janeiro, Brasil

Background: Myofascial release (MFR) is a technique based on the application of compression and stretches to the myofascial complex. MFR has been of potential interest in sports to the injury prevention and the rehabilitation of iliopsoas function; a muscle often injured in futsal athletes. Even though MFR seems to benefit functional performance, such as increased range of motion, reduced myofascial pain and improved postural balance, its effects applied to iliopsoas muscle on neuromuscular responses is still an open question we addressed here.

Objectives: To investigate the immediate effect of iliopsoas MFR on postural balance during standing in female futsal athletes.

Methods: Non-randomized, controlled, before-and-after study with a sample size of 50 participants. Participants performed one session of MFR lasting 5 minutes and involving 15 applications of compression and stretches to the iliopsoas bilaterally. Participants were assessed before and after the intervention and in each session they were asked to stand upright barefoot with their arms alongside the body on a baropodometric platform during four postural tasks lasting 60 seconds each one, involving the manipulation of support base and visual information: i) feet apart with eyes open (EO); ii) feet apart with eyes closed (EC); iii) feet together with EO; iv) feet together with EC. The center of pressure (CP) under the feet was measured (sampling frequency of 100Hz) and the following parameters were computed: the standard deviation and the mean velocity in the antero-posterior (AP) and medio-lateral (ML) directions using the whole trial data. For each condition of support base, a one-way analysis of variance (ANOVA) for repeated measures was used, with

time (before and after) as within-group factor and visual condition (EO and EC) as between-group factor, and post hoc comparisons were made with the Bonferroni test (significance level of 5%).

Results: For the configuration feet apart, ANOVA showed a main effect of time for the AP standard deviation ($F=4.715$, $p=0.032$), with a smaller CP variability after than before the intervention, regardless of visual condition (before EO: 4.021 ± 2.515 mm, EC: 4.765 ± 4.220 mm; after EO: 3.627 ± 2.790 mm, EC: 3.950 ± 2.943 mm). For feet together, there was no interaction between time and vision ($F=3.697$, $p=0.057$), with a difference in CP variability between EO and EC ($p=0.056$) only before the intervention (before EO: 4.072 ± 1.919 mm, EC: 5.443 ± 3.318 mm; after EO: 4.650 ± 2.714 mm; EC: 4.915 ± 2.252 mm). Regarding the other CP parameters, ANOVA did not reveal an interaction or time effect ($p>0.05$).

Conclusion: The main findings suggest iliopsoas MFR reduces the amplitude of CP sways and the difference in the sway variability (AP) between EO and EC conditions during standing.

Implications: Given the reduction of postural sways' size seems to benefit balance control, the iliopsoas MFR could provide benefits to motor performance in futsal athletes.

Palavras-chave: Myofascial Release; Iliopsoas; Postural Control

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

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ASSESSING FUNCTIONING BY WHODAS-12 IN WOMEN WITH DYSMENORRHEA

Maria Eduarda Chinotti Batista da Silva¹,
Guilherme Tavares de Arruda¹, Barbara Inácio da Silva¹,
Leticia Bianca de Farias¹, Mariana Arias Avila¹

¹ Department of Physical Therapy, Postgraduate Program in Physical Therapy, Federal University of São Carlos (UFSCar), Study Group on Chronic Pain (NEDoC), Laboratory of Research on Electrophysical Agents (LAREF)

Background: Dysmenorrhea is the most common gynecological condition reported by women, and 33% to 50% of them report moderate to severe symptoms. It is defined by menstrual pain in the pelvic region and lower abdomen that can be associated or not to other secondary gynecological conditions (e.g., endometriosis, myoma, adenomyosis). The symptoms are frequently associated with others and can affect women's quality of life and functioning, such as missing school/university/work, decreased sleep quality and fatigue. Those symptoms can be intensified by emotional stress, lower social support and lower socioeconomic conditions. Given the great interference of dysmenorrhea in various spheres of life, a comprehensive evaluation of disability and functioning is necessary for this population.

Objectives: To analyze functioning and the affected domains in women with dysmenorrhea.

Methods: Cross-sectional and online study conducted between 2022 and 2023 with 2,609 Brazilian adult women with dysmenorrhea (27.7 ± 7.4 years old). Pregnant women, with 6 months of puerperium and transgender were excluded. The translated and validated Brazilian Portuguese version of WHODAS-12 for women with dysmenorrhea was used. The WHODAS-12 is an instrument with 12 items developed by the World Health Organization (WHO) to briefly assess health and disability and provide the level of general functioning of the following domains: life activities, mobility, cognition, social participation, self-care, and interpersonal relationships. All the items

and domains are directly linked to International Classification of Functioning, Disability and Health (ICF). The maximum score of each domain is 10 points and the higher the score, the greater the disability. Data were analyzed descriptively and presented as the mean and standard deviation in SPSS 22.

Results: The average of life activities domain was 4.7 ± 1.8 points, the mobility domain had 4.5 ± 2 points, the cognition domain had 4.4 ± 1.8 points, social participation had 4.8 ± 2 points, self-care had 2.6 ± 1.2 points, and interpersonal relationships had 4 ± 1.9 points. Interpersonal relationships and life activities were the most affected domains in women with dysmenorrhea.

Conclusion: In addition to pain intensity, the WHODAS-12 provided a screening of other domains of functionality that may be affected in women with dysmenorrhea, such as social participation and activities of daily living.

Implications: From the use of the WHODAS-12, it is possible to evaluate important aspects that are relevant beyond the intensity of pain in women with dysmenorrhea. Thus, clinicians can use WHODAS-12 as a specific and individualized therapeutic goal by approaching the woman from an integrality perspective. In addition, it is also possible to have a broader view of the impact of dysmenorrhea on the quality of life and functioning of Brazilian women.

Keywords: Dysmenorrhea, International Classification of Functioning, Disability and Health, women's health

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

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TELEHEALTH CURRICULUM AT HEALTH CARE HIGHER EDUCATION: AN INTERNATIONAL EDELPHI STUDY

Maria Fernanda Jacob¹, Junior V Fandim¹, Felipe JJ Reis²,
Jan Hartvigsen³, Paulo H Ferreira⁴, Bruno T Saragiotto^{1,5}

¹ Master's and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, São Paulo, Brazil

² Physical Therapy Department, Instituto Federal do Rio de Janeiro (IFRJ), Pain in Motion Research Group, Department of Physiotherapy, Human Physiology and Anatomy, Faculty of Physical Education & Physiotherapy, Vrije Universiteit Brussel, Brussels, Belgium

³ Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Denmark, Chiropractic Knowledge Hub, Odense, Denmark

⁴ The University of Sydney, Discipline of Physiotherapy, Faculty of Health Sciences, Australia

⁵ Discipline of Physiotherapy, Graduate School of Health, University of Technology Sydney, Sydney, Australia

Background: Considering the increasingly frequent use of telehealth, the lack of training of health professionals in telehealth care, it becomes essential to train and specialize future health professionals, with a formal and structured education at a higher level in the use of telehealth. There is no guideline on the core competencies in telehealth at health care higher education, therefore, a consensus is of paramount importance to externally validate these findings, compiling the core competencies in telehealth.

Objective: To identify the core competencies in telehealth needed in the curriculum at higher education.