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1

CLINICAL-NEUROPHYSIOLOGICAL PROFILE OF PAIN IN PEOPLE WITH PARKINSON'S DISEASE: CROSS-SECTIONAL OBSERVATIONAL STUDY

Leylanne Oliveira [1], Annanda Oliveira Santos [2], Beatriz Menezes de Jesus [3], Josimari Melo de Santana [4]: [1] Master's student at the Federal University of Sergipe,[2] PhD from the Federal University of Sergipe, [3] PhD from the Federal University of Sergipe, and [4] Full Professor in the Department of Physiotherapy at the Federal University of Sergipe.

Background: Parkinson's Disease (PD) is a progressive and chronic neurodegenerative disorder characterized by the degeneration of dopaminergic neurons in the nigrostriatal pathway within the basal ganglia. In addition to motor manifestations, the disease presents with non-motor symptoms, among which pain is considered a frequent, complex, and difficult-to-manage clinical symptom, significantly impacting functionality and quality of life. **Objective:** To identify the characteristics of pain in PD and to theorize its condition and pathophysiology through qualitative sensory clinical tests (QSTs). **Methods:** This is a cross-sectional observational epidemiological study that followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) recommendations, with CAAE: 64807417.6.0000.5546. The sample was composed of participants (men, n = 20, 58.75 ± 5.16 years; women, n = 13, 65.92 ± 7.70 years) with a clinical diagnosis of PD. Intensity, presence and interference of pain, cutaneous and peripheral sensory thresholds, primary and secondary hyperalgesias, ascending and descending nerve function, and thermal latency were the variables analyzed. Statistical analyzes were performed using SPSS 30.0 and GraphPad Prism 8.0 software ($p \leq 0.05$). Normality was verified using the Shapiro-Wilk test. Correlations, Mann-Whitney U tests, Wilcoxon tests, and one-way ANOVA with repeated measures and Bonferroni post hoc tests were used. **Results:** The majority of participants reported moderate to severe pain in the past week, with an average intensity of 6.15 (maximum) and 3.61 (average). Men reported a higher average and minimum pain intensity compared to women, and the maximum pain in the last week was significantly higher than the resting pain ($p < 0.001$). The variability in pain perception during the thermal and painful sensitivity test indicated a possible deficit in sensory accommodation. Only six participants endured the maximum time of the thermal test, with an average tolerance of 46.06 seconds. In total, 88 distinct pain sites were identified. These findings highlight the impact of pain in PD and suggest deficits in sensory modulation. **Conclusion:** People with DP experience associated chronic pain, with deficits in both excitatory and inhibitory pain pathways. Furthermore, pain perception is heightened, corroborating the findings of a risk of chronicity.

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IMPACT OF MUSCULOSKELETAL PAIN ON PARKINSON'S DISEASE: THE ROLE OF PAIN INTERFERENCE IN GAIT

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Background: Parkinson's disease (PD) is a progressive neurodegenerative condition characterized by motor and non-motor symptoms that impose significant functional limitations. Alterations in gait pattern, difficulty in turning, freezing episodes, and reduced balance are prevalent symptoms, yet often underappreciated, that negatively impact daily activities and quality of life. Although both pain and gait disturbances are common, the specific relationship between them remains underexplored. **Objective:** To evaluate the relationship between pain and functional mobility, specifically gait performance, in individuals with PD. **Methods:** This is a cross-sectional observational epidemiological study that followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines, with CAAE:64807417.6.0000.5546. Pain was assessed using the Brief Pain Inventory (BPI), while functional mobility was measured through the Timed Up and Go (TUG), the distance covered in the Six-Minute Walk Test (6MWT), and the total score on the Freezing of Gait Questionnaire (FOGQ). **Results:** Thirty-four individuals with PD were evaluated during the "ON" medication state. Although the reported pain intensity was low, the pain interference was moderate and showed a significant correlation with reduced gait performance and greater severity of gait freezing ($p < 0.05$; $\varrho = 0.37$). It is worth noting that greater pain interference, but not its intensity, was associated with shorter distances in the 6-minute walk test (6MWT) ($p < 0.01$; $\varrho = -0.48$) and more frequent episodes of freezing of gait ($p < 0.001$; $\varrho = 0.64$). However, there was no interference in the TUG, which suggests that pain may not hinder the ability to perform a brief functional task as is the case with this test, but it significantly limits the ability to maintain prolonged physical effort, as in the 6MWT. **Conclusion:** Evaluating the interference of pain, rather than just its intensity, is essential when addressing functional mobility in PD. Pain interference is significantly related to reduced gait performance and increased freezing, highlighting the importance of rehabilitation strategies focused on minimizing the negative impact of pain on movement.

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3

COMPARISON BETWEEN DRY NEEDLING AND PERCUTANEOUS MICRONEEDLING IN MUSCLE TRIGGER POINTS IN THE LUMBAR SPINE

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Background: Low back pain is the leading cause of disability worldwide, and due to its multifactorial nature, it is commonly individualdescribed as nonspecific. This condition affects not only physical discomfort but also the quality of life and functionality of the , making the adoption of an appropriate treatment essential. Physiotherapeutic approaches such as Dry Needling (DN) and Percutaneous Microelectrolysis (PME) are options for the treatment of this condition. **Objective:** To compare the difference and indicate the superiority of one of the techniques, DN or MEP, in improving pain, function, and quality of life in individuals with nonspecific chronic low back pain. **Methods:** This is a randomized and blind study involving individuals with a clinical diagnosis of nonspecific chronic low back pain, aged between 18 and 60 years, divided into two groups to receive either the Dry Needling or MEP technique in three sessions, with one session per week. The efficacy of the interventions was evaluated through the pressure pain threshold, Rolland-Morris questionnaire, VAS scale, and WHOQOL-bref questionnaire, before and after treatment, as well as a follow-up assessment 4 weeks later. The project contains the number (CAAE) 88957425100005514 and the opinion number 7608383. **Results:** A total of 396 responses were screened for recruitment, of which 98 individuals were evaluated in person and 97 were included, with 50 participants completing the final evaluation. The average pressure pain threshold of greater irritability in the lumbar region showed a difference between the initial and final assessments of 0.820 kgf in the DN group and 0.888 kgf in the MEP group. The Rolland-Morris questionnaire showed an average of -3.08 in the DN group and -3.73 in the MEP group. On the EVA scale, it was -0.154 in the DN group and -0.221 in the MEP group. For the WHOQOL-Bref, the average value in the DN group was 4.63 and in the MEP group was 4.77. For all outcomes, there was no statistical difference between the techniques. **Conclusion:** The results indicate positive effects of the interventions performed on individuals with nonspecific chronic low back pain, signaling the efficiency of the techniques, but with no difference between groups for the studied outcomes.

4

OCCURRENCE OF KINESIOPHOBIA IN PATIENTS WITH TEMPOROMANDIBULAR DYSFUNCTION ATTENDED AT A PUBLIC UNIVERSITY IN BAHIA

Marcelle Macena Bonfim [1]; Karoline Moreira Rios [1]; Joana Loureiro Valadares [1]; Yasmin Oliveira Telles [1]; Alcylene Carla de Jesus dos Santos [2]: [1] Undergraduate student at the State University of Bahia (UNEB), in the Department of Life Sciences (DCV); [2] Professor at the State University of Bahia (UNEB).

Background: Kinesiophobia is characterized by an excessive fear of movement due to the expectation of pain or re-injury, which can contribute to functional disability and the chronicity of pain in individuals with Temporomandibular Dysfunction (TMD)1-5. However, its occurrence in this population remains under-researched. **Objective:** To investigate the occurrence of kinesiophobia in patients with TMD treated at a public university in the State of Bahia. **Methods:** Observational, cross-sectional study conducted with secondary data from patients treated at the Physiotherapy Outpatient Clinic for TMD and Oral and Maxillofacial at the State University of Bahia. Of the 38 eligible individuals, 24 met the inclusion criteria. Sociodemographic variables, diagnoses according to the Research Diagnostic Criteria for Temporomandibular Disorders (RDC/TMD) 1-3, and the presence of kinesiophobia through the Brazilian version of the Tampa Scale for Kinesiophobia for Temporomandibular Disorders (TSK/TMD-Br) 1-3 were analyzed. The study was approved by the Research Ethics Committee (CAAE: 10051318.5.0000.0057). **Results:** The sample was predominantly composed of women (91.7%), aged between 20 and 45 years (52.2%), and with occupational activity (73.9%). Mixed TMD was the most frequent diagnosis (91.7%), followed by muscle dysfunctions (87.5%). It was observed that 91.7% of the participants exhibited a high level of kinesiophobia. There was no statistically significant association between the level of kinesiophobia and other variables. **Conclusion:** The occurrence of high levels was frequent in patients with TMD, regardless of sociodemographic characteristics and diagnostic subtype. These findings reinforce the importance of assessing kinesiophobia in clinical practice, considering its potential impact on functionality and pain chronicity.

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IMPACT OF PHYSIOTHERAPY ON THE FUNCTIONAL RECOVERY OF PATIENTS UNDERGOING ORTHOGNATHIC SURGERY

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Background: Dentofacial deformities can compromise functional, esthetic, psychosocial, and professional aspects, negatively impacting individuals' quality of life. Orthognathic surgery is considered the treatment of choice for correcting dentoskeletal deformities, providing improvement in masticatory function, occlusion, and facial esthetics. However, the postoperative period is often marked by edema, pain, limited range of motion in the jaw, and sensitivity changes resulting from surgical trauma. These changes can delay functional recovery and compromise daily life activities. In this context, physiotherapy plays an important role in the rehabilitation of these patients through therapeutic resources aimed at reducing pain and edema, recovering mandibular mobility, preventing tissue adhesions, and stimulating the return of sensitivity 1-4. **Objective:** To evaluate the impact of physiotherapy on the functional recovery of patients who have undergone orthognathic surgery. **Methods:** Longitudinal study conducted with patients treated at the Physiotherapy School Clinic of the State University of Bahia (UNEB), referred by different services of Oral and Maxillofacial Surgery and Traumatology after orthognathic surgery. The participants were evaluated for mandibular range of motion using a caliper; facial sensitivity through an esthesiometer; and the presence of pain and edema through clinical assessment. The patients were monitored weekly and received physiotherapeutic treatment, along with home care instructions. The study was approved by the Research Ethics Committee (CAAE: 81129417.4.0000.0057). The statistical analysis was conducted using descriptive statistics. **Results:** 29 patients were evaluated, of which 69% were female, with an average age of 31.6±3.2 years. The combined surgical technique was the most frequent (44.8%). Between the first and the tenth appointment, an increase in pain-free mouth opening from 5±2 mm to 35±5 mm, right lateral excursion from 0±2 mm to 6±2 mm, left lateral excursion from 0±1.8 mm to 5±2 mm, and mandibular protrusion from 0±1.9 mm to 6±2.5 mm was observed. All patients presented with hypoesthesia in the immediate postoperative period, with partial regression of the sensory alteration observed in 54% of cases. Moreover, 86.4% reported having been referred for physiotherapy follow-up. **Conclusion:** Physiotherapy showed a positive impact on the functional recovery of patients undergoing orthognathic surgery, favoring the gain of mandibular mobility and the partial recovery of sensitivity. These results reinforce the importance of the early inclusion of physiotherapy in the multidisciplinary team, contributing to a faster and more functional rehabilitation.

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IMMEDIATE EFFECTS OF NEUROMUSCULAR ELECTRICAL STIMULATION ON PAIN IN INDIVIDUALS WITH ACHILLES TENDINOPATHY

Leandro Andrade Moreira [1]; José Roberto de Souza Júnior [2]; Beatriz Tavares Manoel Galvão [1]; Vitória dos Santos Nogueira [3]; João Luiz Quagliotti Durigan [4]

Background: The Achilles tendon is capable of withstanding extremely high loads, adapting to mechanical stimuli within a tissue homeostasis window. Even so, it remains susceptible to different conditions, such as tendinopathy (TA), accompanied by pain, structural changes, and loss of function. Load-bearing exercise is the main clinical management, but the unfavorable prognosis justifies new complementary approaches, with a focus on neuromuscular electrical stimulation (NMES). **Objective:** To compare the immediate effects of two NMES protocols on pain intensity during the single-leg heel raise task in patients with TA. **Methods:** This is a randomized, crossover, and blinded clinical trial conducted at LaPlasT/UnB (CAAE: 94397825.9.0000.8093). Eleven participants, aged between 18 and 60, with complaints of pain in the mid-portion or insertional site of the Achilles tendon upon palpation and during load-bearing activities, were included. Each individual performed the functional task of heel raise under three conditions: control without intervention (CT); NMES at the maximum tolerated intensity (MAX); and placebo NMES, with active stimulation only during the first contractions (SHAM). Each condition was performed in three sets of 10 repetitions, with the order determined by simple randomization. NMES was applied in a superimposed manner during the movement (75 Hz; 400 μs), with the stimulus manually triggered and synchronized to the concentric phase. Pain was measured using the Visual Analog Scale (VAS, 0–10) immediately after the task. Repeated measures ANOVA with Bonferroni post hoc and intention-to-treat analysis was used ($p < 0.05$; partial η^2; Cohen's d). **Results:** A statistically significant difference in pain intensity was observed, with a large effect size ($F = 20.68$; $p < 0.001$; $\eta^2 = 0.67$). The MAX condition showed a significant reduction compared to CT (mean difference = 1.84; 95% CI 0.71 to 2.98; $p = 0.003$; $d = 0.79$) and to SHAM (mean difference = 1.85; 95% CI 1.03 to 2.67; $p < 0.001$; $d = 0.78$). **Conclusion:** NMES at the maximum tolerated intensity (MAX) promotes immediate and significant pain reduction during unilateral heel raise in patients with TA, surpassing the CT and SHAM conditions, with a large effect size. The observed reductions exceeded the minimum clinically important difference of 1.1 points for TA. Clinically, NMES can be a complementary strategy for immediate pain control, favoring the early introduction of load in rehabilitation.

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PREDICTIVE RISK FACTORS FOR CENTRAL SENSITIZATION IN PATIENTS WITH CHRONIC LOW BACK PAIN

Miguel Almeida Santos Nunes [1]; Ana Verena Alves Calmon Almeida [2]; Luana Caroline Dantas Pereira [3]; Jader Pereira de Farias Neto [4]; Valter Joviniano de Santana Filho [5]: [1] Student, Federal University of Sergipe (UFS); [2] Doctor, Preceptorship Professor at Tiradentes University (UNIT); [3] Doctor, Professor at Ages University; [4] Doctor, Tenured Professor at Federal University of Sergipe (UFS); [5] Doctor, Tenured Professor at Federal University of Sergipe (UFS).

Background: Chronic low back pain (CLBP) is the leading cause of functional disability worldwide, negatively affecting individuals' physical and mental health and quality of life. This multifactorial condition is often exacerbated by mechanisms such as central sensitization, which amplifies the perception of pain even in the absence of relevant structural injuries. Given this scenario, understanding the factors that directly influence the risk of central sensitization in individuals with FMS is of utmost importance. **Objective:** To understand whether the pain catastrophizing scale, the pressure pain threshold, and the patient's expectation of improvement directly affect the risk of central sensitization in individuals with FMS. **Methods:** This is a cross-sectional study with patients diagnosed clinically with FMS, aged over 18 years and of both sexes. The central sensitization inventory (CSI) was used to assess the risk of sensitization, algometry to evaluate the pressure pain threshold, the pain catastrophizing scale to assess pain catastrophizing, the numerical pain scale to evaluate pain intensity, and questions such as "on a scale of 0 to 10, how much do you think you improve with treatment" and "how long have you been experiencing back pain." All assessments were conducted in a single afternoon in a controlled and air-conditioned environment. For the prediction analysis, the linear regression model was used in the R software. The descriptive data are presented as mean and standard deviation, and significance is considered at $p < 0.05$. **Results:** 140 patients with DLC were evaluated (mean age of 50.7 years and symptom duration of 81.42 months), who presented a mean ISC score of 50.32 ± 17.54. The analysis of the results revealed that cognitive-sensory factors are significant predictors of central sensitization. The increase of each unit in the pressure pain threshold and the expectation of improvement reduces the risk of sensitization by 1.68 ($p = 0.004$) and 1.20 points ($p = 0.037$), respectively. On the other hand, each point on the catastrophizing scale increases the ISC score by 0.42 points ($p < 0.001$). The intensity of pain and the duration of the clinical condition did not show significant statistical relevance ($p > 0.05$). **Conclusion:** Given the results presented, it is concluded that high levels of catastrophizing and low pressure pain thresholds amplify the risk of central sensitization, while optimistic expectations of improvement reduce the risk of central sensitization.

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COMORBIDITIES PRESENT IN ORTHOPEDIC, RHEUMATOLOGICAL, AND TRAUMATOLOGICAL PATIENTS ATTENDED IN AN AMAZONIAN STATE.

Paula Vanessa Araújo Silva [1] ; Isabella Souza Barbosa [1]; Adria de Carvalho Tabosa [1]; Luma Camilly dos Santos Barroso [1]; Natália Camargo Rodrigues Iosimuta [2]. [1] Master's student in the Graduate Program in Health Sciences - Federal University of Amapá; [2] Professor in the Graduate Program in Health Sciences - Federal University of Amapá.

Background: There is a wide range of traumatic, orthopedic, and rheumatological diseases that are referred to physiotherapy services daily[1]. Although they are areas of health with distinct characteristics, it is known that the association of comorbidities in the context of the disease is a problem that strongly interferes with the physiotherapeutic rehabilitation process, as it can result in lower adherence to postoperative treatment, higher levels of pain, and impacts on physical and mental health. So far, the national literature presents a gap regarding the identification of comorbidities in people with musculoskeletal diseases in the Northern region. Thus, it is necessary to investigate the prevalence of comorbidities associated with diseases in the traumatological, orthopedic, and rheumatological fields in this population. **Objective:** To identify the most frequent comorbidities in patients treated in the areas of traumatology, orthopedics, and rheumatology in the context of physiotherapeutic rehabilitation at the University Hospital in the Northern region. **Methods:** This is a cross-sectional and observational study, conducted with secondary data collection from the medical records of trauma-orthopedic and rheumatological patients treated at the physiotherapy outpatient clinic of the University Hospital (UNIFAP) from April 2019 to August 2024. Those from other areas of Physiotherapy were excluded. The data were managed on the REDCap platform. The project was approved by the UNIFAP Ethics Committee (no. 5.336.093). **Results and Discussion:** A total of 405 participants were included, mostly women (58.5%) with an average age of 45.3 ± 16.7 years, single (43.7%), from Amapá (48.9%), and with completed high school (31.3%). All three clinical areas—traumatological, orthopedic, and rheumatological—showed comorbidities in different proportions. Regarding the comorbidities found, in the traumatology department, the predominance of comorbidities such as hypertension (23.3%), diabetes (7.6%), and hypercholesterolemia (2.9%) was observed. Similarly, in orthopedics, there was a higher prevalence of hypertension (26.7%) and diabetes (18.2%), in addition to comorbidities such as asthma and obesity being at the same level (3.4%). Similarly, in rheumatology, there was a higher prevalence of hypertension (49.2%), diabetes (18.6%), and also obesity (13.6%). Other studies related to the Amazonian population corroborate the association of multimorbidity, in addition to this, patients with pre-existing comorbidities present worse clinical outcomes, including higher mortality, more complications, and a greater need for intensive care. Thus, the management of comorbidities is essential to reduce complications, improve prognosis, and ensure that rehabilitation is effective and multidisciplinary. **Conclusion:** It is concluded that although all clinical areas present comorbidities, the distribution is differentiated among trauma, orthopedic, and rheumatology patients; in this sense, the management of these patients cannot be generalized. Thus, our findings demonstrate that the clinical profile of the patient can directly influence the pattern of present comorbidities and, consequently, impact the decision-making of rehabilitation strategies.

9

EFFECTS OF TRUNK STABILIZATION ON PAIN AND DISABILITY IN NON-SPECIFIC CHRONIC LOW BACK PAIN: A SYSTEMATIC REVIEW

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Background:Chronic nonspecific low back pain is a condition of high prevalence and functional impact, with trunk stabilization exercises being widely used in physiotherapy practice as a strategy to reduce pain and improve functionality. However, differences between the intervention protocols and the therapeutic modalities used can influence the results obtained. **Objective**: To analyze the effects of trunk stabilization exercises on pain and functional disability in individuals with chronic nonspecific low back pain. **Methods**: This is a systematic literature review, developed from the search for studies in the PubMed, PEDro, and Virtual Health Library databases. Studies that investigated the effects of trunk or core stabilization exercises in individuals with chronic nonspecific low back pain were considered. After the stages of identification, screening, and eligibility, 15 studies were included in the review synthesis. **Results**: The studies analyzed generally demonstrated favorable effects of stabilization exercises in reducing pain intensity and functional disability. The results also indicated benefits related to motor control, proprioception, balance, and the function of the spinal stabilizing muscles. However, differences were observed regarding the duration, frequency, and structure of the protocols, as well as variations in the results when stabilization exercises were compared or associated with other therapeutic modalities. **Conclusion**: Trunk stabilization exercises present significant therapeutic potential for reducing pain and functional disability in individuals with nonspecific chronic low back pain, and may also promote improvements related to motor control and muscle function. However, the heterogeneity of the protocols and interventions analyzed highlights the need for future studies with greater standardization of exercise programs and long-term follow-up.

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CORRELATION BETWEEN PHYSICAL ACTIVITY LEVEL, SEDENTARY BEHAVIOR, AND MEDICATION USE IN THE ELDERLY

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Background: Despite recommendations on physical activity levels and reducing sedentary behavior, the increase in physical inactivity among the elderly, especially in low- and middle-income countries, remains challenging. In addition, polypharmacy is a common practice that can negatively influence the performance of the elderly.**Objective**: To analyze the correlation between the level of PA and CS with the number of medications used by elderly individuals in the community.**Methods**: Cross-sectional study, part of an ongoing study, conducted between June 2025 and July 2026, at the Department of Physiotherapy of the Federal University of Ceará, which included elderly individuals capable of moving independently for 100 meters. Data on sociodemographic variables, medication use, CS time, and PA were collected using the Modified Baecke Questionnaire for the Elderly (QBMI). Descriptive statistical analyzes and Spearman correlation were performed.**Results**: 76 elderly individuals were evaluated, with 84.21% being women and an average age of 69.71 (±6.71) years. It was found that 51 (67.1%) participants engage in more than 150 minutes of physical activity weekly and use an average of 3.78 (±2.72) medications daily. About 66 (86.84%) elderly individuals have a low level of physical activity and 10 (13.15%) of them have a moderate level of physical activity. The elderly spend 4.90 (±2.22) hours/day sitting, with 3.15 (±2.78) hours watching television and 2.35 (±2.40) hours distracted by screens. There was no correlation between the level of PA and the use of medications ($p = 0.525$). The time spent watching television has a weak and positive correlation with the number of medications ($p = 0.030$; $r=0.249$).**Conclusion**: The average use of medications represents a warning sign for polypharmacy in the elderly investigated, and is related to the increased sedentary time spent watching television. Encouraging the interruption of sedentary behavior and its replacement with other leisure activities, as well as optimizing medication prescriptions, can be strategies that positively impact the health of the elderly.

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CHRONIC PAIN AND FUNCTIONALITY OF ELDERLY PEOPLE RESIDING IN THE COMMUNITY

Liz Maria De Araujo Gesteira [I], Jose Ailton Oliveira Carneiro [I], Luciana Araujo Dos Reis [I], Marcos Henrique Fernandes [I], Claudineia Matos De Araujo Gesteira [I]

Background: Aging brings about significant physiological changes, such as: loss of muscle mass, postural instability, gait difficulties, and the presence of chronic pain, associated with osteoarticular and musculoskeletal alterations, which can lead to kinesiophobia and a decrease in tolerance to ADLs. These changes compromise various aspects of the lives of elderly people, especially functionality, defined as the ability to manage their own lives and perform self-care tasks, enabling the execution of daily activities, reflecting on autonomy and independence. **Objective**: To describe chronic pain and functionality in elderly people residing in the community. **Methods:** Cross-sectional, observational, and quantitative study. Data collection was conducted between July 2022 and May 2024, in two Health Units in Jequié/Ba, with 225 elderly people (aged 60 years or older), approved by the CEP/FAINOR (4.351.219). Sociodemographic data, chronic pain, and functional capacity were evaluated: sex (female/male); age group (60 to 68/above 68 years); marital status (with/without partner); education (without/with); family income (up to 1 minimum wage/2 or more); work situation (retired/active). Regarding chronic pain: presence of chronic pain (yes/no); location of pain (none/one/two or more segments); pain intensity (absent/mild/moderate to severe); use of pain medication (yes/no). Functional capacity: Barthel index that evaluates basic activities of daily living (ADL) for independent (100 points); dependent (below 95); Lawton scale, evaluates instrumental activities of daily living (IADL) for independent (>=21 points) and dependent (less than 21). Descriptive statistics were used, with absolute and relative frequencies. **Results**: A majority of the participants were female (65.8%), aged 60 to 68 years (51.1%), with a partner (51.1%), with education (92.0%), with a family income of 2 or more minimum wages (51.1%), and retirees (65.8%). With the presence of chronic pain (69.3%), pain in two or more segments (36.4%), moderate to severe pain (61.3%), with the use of medications (85.8%). In functional capacity: dependent for instrumental activities of daily living (99.1%) and basic activities (76.9%); **Conclusion**: It is evident that assessing chronic pain and functionality in elderly people assumes epidemiological, clinical, and social relevance, considering the physiological and functional changes related to aging, aiming to support the development of early prevention and intervention strategies, capable of reducing the impact of chronic pain on functional capacity, promoting greater autonomy, independence, and quality of life for this population**.**

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EFFECTS OF TRANSCRANIAL DIRECT CURRENT STIMULATION ASSOCIATED WITH EXERCISE IN INDIVIDUALS WITH KNEE OSTEOARTHRITIS

Vinícius Batista Lima [1]; César Augusto Medeiros Silva [1]; Wellen Rayane dos Santos Medeiros [2]; Denize Guedes da Silva [2]; Clécio Gabriel de Souza [3]

Background: Knee osteoarthritis (KOA) is a chronic, progressive musculoskeletal condition of multifactorial etiology characterized by pain, functional limitation, and reduced quality of life. Physical exercise is considered the gold standard intervention for the management of knee osteoarthritis (KOA). However, complementary interventions, such as transcranial direct current stimulation (tDCS), have been investigated with the aim of enhancing the effects of treatment, especially on pain and functional capacity.**Objective**: To analyze the effects of tDCS associated with physical exercise on pain and functional capacity in individuals with knee osteoarthritis, evaluated through the Lequesne Algofunctional Questionnaire.**Methods**: This is a subset of a randomized clinical trial approved by the ethics and research committee of UFRN (CAAE: 78013724.0.0000.5568), with 41 individuals diagnosed with KOA, distributed into two groups: Active TENS group associated with physical exercise (G1; n=20) and Sham TENS group associated with physical exercise (G2; n=21). The interventions were carried out over five weeks, twice a week. The tDCS was applied to the primary motor cortex area with an intensity of 2 mA, for 20 minutes. The protocol was based on current evidence for OA, including some of these exercises: knee extension and flexion, hip abduction and extension, standing plantar flexion. Pain and functional capacity were assessed at three time points: pre-intervention (T0), post-intervention (T1), and 15-day follow-up. For data analysis, a mixed repeated measures ANOVA was used, adopting a significance level of 5%.**Results**: A significant group×time interaction was observed ($p = 0.039$), indicating that the behavior of the scores over the evaluations differed between the groups. Group 1 showed a greater reduction in Lequesne scores, decreasing from 13.95 ± 2.72 at T0 to 6.42 ± 2.48 at T1 and 6.48 ± 2.41 at follow-up. In G2, the scores decreased from 14.68 ± 3.10 to 8.79 ± 3.00 and 9.46 ± 3.60, respectively. These findings demonstrate a more significant improvement in pain reduction and functional capacity in the participants of G1.**Conclusion**: The TENS associated with physical exercise promoted superior benefits compared to physical exercise associated with simulated stimulation, resulting in greater symptom reduction and functional improvement in individuals with knee osteoarthritis. These results suggest that TCC can be an effective complementary strategy to enhance the effects of physical exercise in the treatment of KOA.

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FUNCTIONAL TESTS CAN PREDICT THE FUNCTIONAL IMPACT OF KNEE OSTEOARTHRITIS?

César Augusto Medeiros Silva [1]; Débora Thaís da Silva Dantas [2]; Vinícius Batista Lima [1]; Clécio Gabriel de Souza [3]

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Background: Knee osteoarthritis (KOA) is a health condition that can cause functional limitations, as well as increased pain and joint stiffness. The severity of functional repercussions can be assessed through questionnaires and functional tests.**Objective**: To investigate the explanatory capacity of functional test scores in a validated questionnaire for people with OA.**Methods**: This is a cross-sectional quasi-experimental study with 50 participants diagnosed with OA. The dependent variable was the Western Ontario and McMaster Universities Arthritis Index (WOMAC) questionnaire, and the independent variables were the 40-meter walk test (TC40) and the 30-second sit-to-stand test (TSL 30). A multiple linear regression was conducted to compare the level of relationship between these variables. This research has ethical approval under registration CAAE: 60.443.422.0.0000.5504.**Results**: The average age of the participants was 63.96±12.21 years. The WOMAC score was 39.82±15.18 points; the TSL was 9.82±2.74 seconds; and TC40 was 39.66±9.13 seconds. The final regression model TSL+TC40 explained 10.2% of the variance in the WOMAC questionnaire (R^2=0.102; F(2,48)=2.72; p = 0.076) and the only predictor capable of contributing significantly was TC40 (B=0.572; β=0.344; p = 0.028).**Conclusion**: The 40-meter walk test is capable of significantly impacting WOMAC results, suggesting that the gait performance, measured through this test, of an individual with OA can better predict the WOMAC score, which encompasses, among its domains, in addition to pain, stiffness, and functional limitation.

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CLUSTER OR SINGLE PHOTOBIOMODULATION, ASSOCIATED WITH THE ECCENTRIC EXERCISE PROTOCOL IN THE SYMPTOMATOLOGY OF PATIENTS WITH PATELLAR AND ACHILLES TENDINOPATHY

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Background: Tendinopathy is characterized by localized pain in the tendon and is related to physical activity, edema, increased sensitivity in the tendon region, decreased strength, and range of motion, resulting in a reduction in function. Although there have been advances in scientific evidence regarding the treatment of tendinopathies, photobiomodulation (PBM) still presents divergences in dosimetry and application techniques concerning clinical efficacy. In this way, it becomes necessary to conduct clinical studies that investigate the effect of photobiomodulation in relation to dosimetry in tendinopathies.**Objective**: To compare the effect of cluster or single FBM when associated with eccentric exercise on pain intensity and function in patients with patellar and calcaneal tendinopathy.**Methods**: Randomized, uncontrolled, and blinded clinical trial. It was developed at the Federal University of São Paulo – UNIFESP, Baixada Santista campus. 42 volunteers were randomly distributed into two groups, with 21 in Group 1: FBM cluster associated with eccentric exercise and 21 in Group 2: FBM single associated with eccentric exercise. The exercise protocol was carried out twice a week for 4 weeks. The application of FBM was carried out after the protocol with the following parameters: FBM single 810 nm (GaAsAl) for 6 J (30s per point - 3 points), and 200 mW of power, and FBM cluster 5 x 810 nm (GaAsAl) 200 mW, 6 J (30s per point totaling 30J per cluster area and 1W of power). The evaluations were conducted at three points: pre-treatment, end of treatment (4th week), and 4-week follow-up (8th week). The following were used: NRS-11, VISA-P or VISA-A, DN-4, IPAQ, pressure pain threshold (PPT), modified Blazina scale, lunge test, and LEFS. An independent samples t-test was conducted for the analysis of the primary outcome (VISA at week 4), and for other analyzes, repeated measures ANOVA and effect size calculation were used.**Results**: The VISA questionnaire in the 4th week did not show a difference between the groups ($p = 0.81$, es = 0.06). For the other analyzes, there was no intergroup difference. For the activity that causes the most pain measured by the NRS-11, there was no intergroup difference ($p = 0.79$ and es = 0.08). Regarding the LDP, there was no intergroup difference ($p = 0.3$ and es = 0.37).**Conclusion**: There was no difference between the modes of application of FBM (cluster and single) in symptomatology, measured by the VISA questionnaire, in patients with patellar and calcaneal tendinopathy.

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EXPERIENCES OF INDIVIDUALS WITH CHRONIC LOW BACK PAIN REGARDING FUNCTIONALITY: A QUALITATIVE STUDY.

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Background: Chronic low back pain (CLBP) is characterized by the persistence of pain in the lower region of the spine for a period equal to or greater than 12 weeks. According to the Global Burden of Disease, it is among the leading causes of years lived with disability, interfering with individuals' quality of life. Considering the biopsychosocial model, it becomes relevant to understand how this condition impacts the daily experiences of patients. **Objective**: To explore the experiences of people with DLC, investigating, based on their reports, the influence of physical, emotional, social, and environmental factors on the barriers faced daily. **Methods**: This is a qualitative research study, approved by the institution's Research Ethics Committee, under CAAE No. 46795121.2.0000.5546. The study was conducted with 19 individuals with DLC at the University Hospital of Sergipe. Those with significant cardiovascular alterations and a history of previous spinal surgeries were excluded. The data were collected through individual semi-structured interviews, conducted by a trained interviewer, in a controlled environment, with consented recording and guarantyd confidentiality. The interviews were fully transcribed with the help of dict.io, and the textual corpus was analyzed in IRAMUTEQ, version 0.8 alpha 7, using similarity analysis and Descending Hierarchical Classification. **Results**: The participants were predominantly female, with pain ≥ 3 on the Numeric Pain Scale, an average age of 52.31 years, and an average pain duration of 90.9 months. The Descending Hierarchical Classification identified six thematic classes: "position-related worsening," "medication pain relief," "non-medication pain relief," "work and domestic service," "difficulties," and "activities of daily living." The analysis of the reports revealed that the LBP was not limited to pain, but also compromised the functionality, autonomy, and occupational participation of the interviewees, as it made movements such as walking, lifting, squatting, and remaining in certain positions for extended periods difficult. This impairment manifested in the need to adapt tasks, reduce efforts, avoid certain movements, and depend on help for daily activities. Emotional and social impacts were also identified, such as mood changes, non-restorative sleep, difficulty in sexual relations, fear of getting hurt, feelings of invalidity, and perception of social judgment. For symptom relief, the most commonly used strategies were medications, rest, massages, ointments, stretching, and exercises. **Conclusion**: The findings indicate that DLC interferes with different dimensions of the interviewees' lives, requiring continuous adaptations to cope with pain and preserve their social, family, and occupational roles.

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EVALUATION OF NEUROPATHIC INVOLVEMENT IN LOWER LIMBS OF PEOPLE WITH DIABETES MELLITUS: CROSS-SECTIONAL STUDY

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Background: Diabetic peripheral neuropathy is a common complication of diabetes mellitus, associated with sensory loss, motor alterations, and a higher risk of ulcers and amputations in the lower limbs. **Objective**: To identify the frequency and analyze the distribution of neuropathic impairment in the lower limbs of patients with type 2 diabetes mellitus (T2DM) participating in a university extension program in Salvador, Bahia.**Methods**: Descriptive cross-sectional observational study conducted with 27 individuals with T2DM, with a diagnosis time equal to or greater than five years, attended in the Risk Foot and Lower Limb Amputation Extension Project of the State University of Bahia. The Neuropathic Impairment Score (NIS) was used for classification into mild, moderate, and severe. Sociodemographic and clinical variables were analyzed using descriptive statistics and Fisher's exact test, with a significance level of 5%. **Results**: Female participants predominated (51.9%), with an age of ≥ 60 years (70.4%), self-identified as black/brown (96.3%), without a partner (55.6%), and with low education (85.2%). The majority had a diagnosis of DM for more than 10 years (70.4%). Previous lower limb amputation was observed in 55.6% of the participants, with 66.7% of these amputations occurring below the ankle. Moderate and severe neuropathic impairment was present in 51.8% of the sample. There was a significant association between severe neuropathy and male sex ($p = 0.05$), as well as with the age group of 44 to 59 years ($p = 0.001$).**Conclusion**: Severe neuropathic impairment showed a higher proportion among male participants, especially among younger individuals. Such results highlight the importance of early screening and systematic monitoring of these changes as fundamental measures for the prevention of complications related to diabetic foot. In this context, the training of physiotherapists for the application of the ECN is established as a relevant strategy to strengthen the multiprofessional approach in the identification and management of diabetic neuropathy.

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TENDINOPATHY PAIN SCORE: A MULTIMODAL PAIN SCORE FOR PATELLAR TENDINOPATHY

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Background: Patellar tendinopathy is characterized by localized pain related to mechanical load, with repercussions on function and sports participation. The intensity of symptoms can vary across different domains, which limits their characterization by a single clinical measure. The integration of different pain assessment contexts can, therefore, provide a more comprehensive estimate of the clinical condition of these individuals.**Objective**: To propose the Tendinopathy Pain Score (TPS), a multimodal clinical score to assess pain in individuals with patellar tendinopathy, and to investigate its association with the Victorian Institute of Sport Assessment–Patella (VISA-P).**Methods**:Exploratory study, with longitudinal observational analysis and correlation of secondary data. Approved by the Research Ethics Committee of the Federal University of São Paulo, under CAAE 73943817.2.0000.5505 and opinion no. 2.351.182. Data from 59 individuals with patellar tendinopathy were analyzed. The TPS was composed of four measures: i) pain intensity at rest; ii) during the most painful activity; iii) during a provocative functional test, measured by the Numerical Rating Scale; iv) pressure pain threshold, measured by algometry (PPT). The components were assigned weights, after consulting via email with 10 experienced professionals in the field of tendinopathy, references in the area, from various countries, of 0.6%, 4.0%, 4.4%, and 1.0%, respectively, resulting in a score from 0 to 10, where higher values represent greater overall pain intensity. The association between the TPS and the VISA-P was examined at the initial and final moments using the Spearman correlation coefficient.**Results**: 59 volunteers were included, at the initial moment, the average TPS was 6.03 points, while the average VISA-P was 53.22 points. A weak negative correlation without statistical significance was observed between the instruments (ρ = -0.236; p = 0.072). At the final moment, the means of the TPS and VISA-P were 2.38 and 76.27 points, respectively, with a moderate negative correlation between the scores (ρ = -0.653; p < 0.001).**Conclusion**: The TPS showed a moderate inverse association with the VISA-P at the final moment, but not at the initial moment. These findings suggest that the score may contribute to the multidimensional monitoring of pain in patellar tendinopathy. Additional studies are necessary to investigate its reliability, validity, and responsiveness.

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PROSTHETIC TRAINING IN THE REHABILITATION OF ELDERLY PEOPLE WITH MAJOR LOWER LIMB AMPUTATION: A CASE REPORT

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Background: Major lower limb amputation, defined as the surgical removal of the limb at a level proximal to the ankle joint, often resulting from Diabetes Mellitus (DM) and/or peripheral arterial disease (PAD), represents a significant cause of functional disability in the elderly, compromising mobility, independence, and quality of life. In this context, prosthetic training constitutes an essential stage of rehabilitation, facilitating adaptation to the use of the prosthesis, the development of functional gait, and the recovery of independence in daily living activities. **Objective**: To report the experience of physiotherapeutic assistance focused on prosthetic training for elderly individuals with major lower limb amputations, developed within the scope of a university extension project. **Methods**: This is an experiential report on the physiotherapeutic assistance developed in the Extension Project on Risk Foot and Lower Limb Amputation (EPRAMI), linked to a public university in Salvador, Bahia. The sessions take place in person once a week at the school clinic, lasting one hour, and remotely via WhatsApp, aiming to encourage adherence to the exercises and clarify any possible doubts of the participants. The follow-up is conducted by Physical Therapy students, properly trained and under the supervision of the EPRAMI coordinator. Prosthetic training is individualized, including global muscle strengthening, balance training in orthostasis, weight bearing, walking with a prosthesis, and functional activities such as climbing stairs and ramps and postural changes. **Results**: Of the 52 participants admitted to EPRAMI, five used transtibial prostheses and two, transfemoral. The experience made it possible to monitor the rehabilitation process in different phases of prosthetic adaptation with individualized and progressive physiotherapeutic interventions. Throughout the sessions, progress was observed in the participants' confidence and performance in balance activities, weight-bearing, gait, and functionality. Additionally, they improved in the proper management of the prosthesis and in the preventive care of the residual and remaining limbs. For the students, participation in EPRAMI facilitated the integration of theory and practice, the enhancement of clinical and practical skills and competencies, as well as the development of therapeutic reasoning. **Conclusion**: The experience highlighted the relevance of prosthetic training in elderly individuals with major amputations. Assistance at EPRAMI promoted autonomy, functional independence, and consequently, greater social participation. The contribution of extension actions to comprehensive care and the practical and critical training of students is highlighted.

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ASSESSMENT INSTRUMENTS IN PROXIMAL HUMERUS FRACTURES: A LITERATURE MAPPING.

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Background: Among the injuries affecting the shoulder, proximal humerus fracture (PHF) stands out, which is associated with significant functional loss. To assess the clinical and functional evolution post-fracture, different clinical measures, performance measures, scales, and self-report questionnaires are available, yet there is still no consensus on the most appropriate instruments to evaluate the functional impact in this population. **Objective**: To map the most commonly used assessment tools for patient-reported outcome measures (PROMs) in individuals who have suffered a proximal humerus fracture. **Methods**: This is a systematic mapping of the literature, conducted according to the PRISMA-ScR recommendations and registered in the Open Science Framework. Studies published in the last 10 years, in English, with patients aged ≥18 years, with FUP, subjected to conservative or surgical treatment, and that employed quantitative and/or qualitative assessment instruments were included. The searches were conducted in the MEDLINE (PubMed), PEDro, and Cochrane Library databases. Two independent reviewers conducted the selection of studies on the RAYYAN platform, with standardized data extraction. **Results**: A total of 2245 studies were selected, with a randomized subsample of 499 articles. Of these, 105 were included for analysis and data extraction. There was a predominance of studies conducted in Europe (51.4%) and Asia (37.1%), with low representation in the Americas (11.4%), and absence from Africa and Oceania. The use of 40 different instruments was identified, highlighting significant methodological heterogeneity in the evaluation of patients with FUP. There was a low proportion of randomized clinical trials, with a predominance of cohort studies and case series. The Constant–Murley Score (CMS) was the most used instrument, followed by the American Shoulder and Elbow Surgeons Shoulder Score (ASES), in addition to pain scales. The evaluation in the post-fracture phase, especially in the post-surgical phase, remained focused on clinical outcomes, such as radiographic evolution and range of motion, characteristic of the biomedical model, although there was a growing application of PROMs observed between 2020 and 2025. The instruments most frequently used for the assessment of self-reported functionality were the DASH, satisfaction scales, and the SPADI. For the assessment of quality of life, the SF-12, SF-36, and EQ-5D were the most commonly used, indicating an expansion of the biopsychosocial perspective. **Conclusion**: Although the use of PROMs in studies with patients who have suffered from FUP is increasing, evaluations based on clinical outcomes still predominate. The low proportion of randomized clinical trials and the methodological variability of the evaluated studies reinforce the need for greater standardization and scientific rigor in the selection and validation of assessment instruments for this population.

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HEALTH EDUCATION IN THE CARE OF PERSONS WITH LOWER LIMB AMPUTATION

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Background: Non-traumatic lower limb amputation constitutes a severe clinical outcome, generally resulting from complications of diabetes mellitus and/or peripheral arterial disease. It is associated with high rates of morbidity and mortality, functional impairment, reduced quality of life, and significant impact on healthcare systems. Moreover, it increases the risk of reamputations, including of the contralateral limb, and of early mortality, reinforcing the need for preventive strategies in health education and multidisciplinary management.**Objective**: To report the experience developed in the Extension Project on Risk Foot and Lower Limb Amputation (EPRAMI) at the State University of Bahia, highlighting health education as a strategy for physiotherapeutic practice in health promotion, complication prevention, and functional rehabilitation.**Methods:**This is a descriptive experience report developed at EPRAMI. The participants underwent physiotherapeutic evaluation for clinical and functional characterization, including neuropathic impairment, changes in tactile sensitivity, and repercussions on quality of life. The results supported the development of individualized educational booklets with guidelines on foot and residual limb care, complication prevention, use of assistive devices, home exercises, and healthy habits. To enhance understanding and identification with the material, artificial intelligence tools were used to produce personalized illustrations, compatible with the clinical and anthropometric characteristics of the participants. As a complementary strategy, the participants joined a WhatsApp group of EPRAMI, mediated by the coordinator and twelve monitors, aimed at reinforcing guidance, clarifying doubts, and encouraging self-care and adherence to treatment.**Results:** The development of individualized booklets enabled guidance compatible with the clinical and functional needs of the participants, favoring the understanding of care for the remaining and residual limbs, the prevention of complications, home exercises, and healthy habits. The illustrations produced by artificial intelligence made the material more representative and accessible. The WhatsApp group strengthened communication between the team and participants, reinforcing guidelines, clarifying doubts, and encouraging adherence to treatment. The experience also contributed to the technical-scientific training of the students, strengthening competencies in health education, therapeutic communication, and integration between teaching, research, and extension.**Conclusion:** The EPRAMI experience demonstrates that health education, combined with physiotherapeutic assistance and the use of digital technologies, strengthens self-care, promotes continuity of care, and enhances academic training, reaffirming university extension as a space for the integration of teaching, research, and assistance.

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EMOTIONAL SUFFERING, KINESIOPHOBIA, PAIN CATASTROPHIZING, AND QUALITY OF LIFE AFTER ORTHOPEDIC TRAUMA

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Background: In addition to clinical characteristics, psychosocial factors can influence functional recovery and impact quality of life after orthopedic trauma. However, this relationship remains under-researched in the Brazilian population.**Objective**: To characterize the clinical and psychosocial profile and investigate the correlation between emotional suffering, quality of life, kinesiophobia, and pain catastrophizing in patients who are victims of orthopedic trauma treated at a high-complexity teaching hospital.**Methods**:Observational, cross-sectional study, approved by the Research Ethics Committee (CAAE: 76144223.4.0000.5440), conducted between 2024 and 2025. Sociodemographic data and self-report instruments were collected: Depression, Anxiety, and Stress Scale (DASS-21), Numeric Pain Scale (NPS), Short Form Health Survey (SF-12), Tampa Scale for Kinesiophobia (TSK), and Pain Catastrophizing Scale (PCS). The data were analyzed using descriptive statistics and Spearman correlation between the DASS-21, SF-12, TSK, and PCS scores.**Results**: 147 patients participated in the study, of which 65.3% were men, with an average age of 38 years and an average post-trauma period of 72.8 days; 57.8% were away from work. The majority had completed or incomplete high school (51.3%) and were single (46.6%). The upper limbs (UL) were affected in 42.9% of the cases, the lower limbs (LL) in 40.8%, with multiple fractures present in 16.3% of the patients. Traffic accidents constituted the main cause of trauma (60.5%) and fractures were the most frequent type of injury (87.8%), with a predominance in the radius and tibia; surgical treatment was adopted in 87.1% of the participants. The DASS-21 showed a moderate positive correlation with the TSK (ρ = 0.44) and with the PCS (ρ = 0.58); a moderate negative correlation with the mental component of the SF-12 (ρ = -0.68) and a weak negative correlation with the physical component (ρ = -0.15). Despite the low average pain intensity (END = 2.29), higher levels of emotional suffering were associated with greater kinesiophobia, higher catastrophization of pain, and worse perceived mental health.**Conclusion**: The clinical profile of the evaluated patients was similar to that described in the literature. The association between emotional suffering, kinesiophobia, catastrophization of pain, and perception of mental health reinforces that orthopedic trauma produces repercussions that go beyond physical injury, highlighting the importance of the biopsychosocial approach in rehabilitation planning.

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WHEN PAIN IS NOT VISIBLE: QUALITATIVE ANALYSIS OF SOCIAL SUPPORT IN WOMEN WITH FIBROMYALGIA

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Background: Fibromyalgia is a chronic condition whose symptoms are often not visible, leading to misunderstanding, stigmatization, and difficulties in interpersonal relationships. Although social support is recognized as important for coping with the disease, the experiences of women in different social contexts are still underexplored. **Objective:** To understand how women with fibromyalgia experience social support in their family and interpersonal relationships. **Methods:** This is a qualitative study, of an exploratory and descriptive nature, based on the theoretical framework of comprehensive qualitative research and subjected to thematic analysis. Seven women with a clinical diagnosis of fibromyalgia, aged between 37 and 53, residing in the municipality of São Carlos, São Paulo, participated in the study. The participants were informed about the objectives, procedures, and ethical aspects of the research, including the authorization for audio recording of the interviews, and participated by signing the Free and Informed Consent Form. The interviews were conducted in person and individually in the Department of Physiotherapy at the Federal University of São Carlos, following a semi-structured script composed of open-ended questions, allowing the interviewer to follow the flow of the narratives, delve into relevant aspects, and clarify information when necessary. The interviews were conducted by a previously trained researcher, accompanied by a second researcher responsible for observation and field note-taking during the interviews. None of the researchers had prior contact with the participants. All interviews were recorded in audio, with the participants' consent, and subsequently transcribed in full for analysis. The study was approved by the Research Ethics Committee of the Federal University of São Carlos (CAAE: 87426625.8.0000.5504). **Results:** The thematic analysis revealed two central themes that synthesize the participants' experiences related to social support. The first theme highlighted the invisibility of fibromyalgia, characterized by the delegitimization of symptoms and the judgments experienced in different social contexts. The second theme revealed familial misunderstanding, expressed through the difficulty of family members in recognizing the limitations imposed by the disease, resulting in conflicts, restrictions on participation in family activities, and feelings of isolation. **Conclusion:** The participants' experiences revealed that the invisibility of fibromyalgia and the difficulty in understanding the disease in family and social relationships influence how women experience and cope with the condition. These findings reinforce the importance of care strategies that consider women's experiences beyond the clinical symptoms of fibromyalgia.

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BETWEEN FEAR AND MOVEMENT: BELIEFS ABOUT PHYSICAL EXERCISE IN WOMEN WITH FIBROMYALGIA

Maria Vitória Nunes[1]; Luiz Ricardo Garcez[2]; Nathália Franciely Inêz de Moraes[3]; Bianca Oliveira de Jesus[4]; Mariana Arias Avila[5]

Background: Physical exercise is recommended as one of the main strategies for managing fibromyalgia. However, many women have difficulties starting or maintaining this practice. Exploring beliefs related to exercise can contribute to understanding how these women perceive this intervention and how such perceptions influence their experience. **Objective:** To understand the beliefs of women with fibromyalgia related to the practice of physical exercise. **Methods:** This is a qualitative study, of an exploratory and descriptive nature, based on the theoretical framework of qualitative research with a comprehensive basis and subjected to thematic analysis. Seven women with a clinical diagnosis of fibromyalgia, aged between 37 and 53, residing in the municipality of São Carlos, São Paulo, participated in the study. The participants were informed about the objectives, procedures, and ethical aspects of the research, including the authorization for audio recording of the interviews, and participated by signing the Free and Informed Consent Form. The interviews were conducted in person and individually in the Department of Physiotherapy at the Federal University of São Carlos, following a semi-structured script composed of open-ended questions, allowing the interviewer to follow the flow of the narratives, delve into relevant aspects, and clarify information when necessary. The interviews were conducted by a previously trained researcher, accompanied by a second researcher responsible for observation and field note-taking during the interviews. None of the researchers had prior contact with the participants. All interviews were recorded in audio, with the participants' consent, and subsequently transcribed in full for analysis. The study was approved by the Research Ethics Committee of the Federal University of São Carlos (CAAE: 87426625.8.0000.5504). **Results:** The thematic analysis revealed two central themes related to the participants' beliefs about physical exercise. The first theme highlighted the fear of symptom worsening, constructed from limited information, previous experiences, and discourses present in healthcare, which contributed to the perception of physical exercise as a possible threat. The second theme revealed the redefinition of physical exercise, showing that access to information and positive experiences enabled the reconstruction of the participants' beliefs, promoting greater safety and confidence regarding the practice. **Conclusion:** Beliefs related to physical exercise can act as facilitators or barriers to its practice in women with fibromyalgia. Strategies that promote information and positive experiences can foster a safer relationship with physical exercise.

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ANALYSIS OF LATERO-LATERAL OSCILLATION OF BALANCE IN DIABETIC FOREFOOT AND MIDFOOT AMPUTEES

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Background: Diabetic peripheral neuropathy and forefoot and midfoot amputations compromise the integrity of the somatosensory system, favoring alterations in postural control. However, there are still few studies that objectively investigate the lateral-lateral oscillation of balance in this population. **Objective:** To evaluate and compare the medio-lateral oscillation of semi-static balance between diabetic individuals with forefoot and midfoot amputations and individuals without diabetes mellitus and without amputations. **Methods:** Cross-sectional study approved by the Research Ethics Committee of the Federal University of Amapá (Opinion No. 5.336.093). Twenty-two individuals participated, distributed into a diabetic amputee group (n=11) and a control group (n=11). Balance was assessed using the Modified Sensory Integration Test under four conditions (stable surface with eyes open and closed; unstable surface with eyes open and closed). The lateral oscillation was measured by kinematic analysis using the CVMob software. The comparisons between the groups were conducted using parametric or non-parametric tests, considering a significance level of $p < 0.05$. **Results:** The amputee group showed a greater lateral sway area in all evaluated conditions compared to the control group. Statistically significant differences were observed on a stable surface with eyes open ($p = 0.007$), stable surface with eyes closed ($p < 0.001$), unstable surface with eyes open ($p < 0.001$), and unstable surface with eyes closed ($p = 0.002$), with large effect sizes between the groups. These findings highlight a consistent impairment in postural control in the medio-lateral plane, especially in situations of higher sensory demand. **Conclusion:** Diabetic individuals with forefoot and midfoot amputations exhibit significant impairment in medio-lateral sway during semi-static balance. The assessment of this variable can contribute to the early identification of postural changes and support physiotherapeutic strategies aimed at functional rehabilitation.

The evaluation of this variable can contribute to the early identification of postural changes and support physiotherapeutic strategies aimed at functional rehabilitation.

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MUSCLE STRENGTH DEFICITS AFTER CONSERVATIVE STRENGTHENING IN LATERAL PATELLAR DISLOCATION: A SECONDARY ANALYSIS

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Background: Patellar dislocation (PD) is a condition characterized by the loss of joint congruence in the patellofemoral joint, predominantly affecting young individuals. Conservative treatment with lower limb muscle strengthening is often indicated after the first episode, usually lasting 6 to 12 weeks; however, it remains uncertain whether this period is sufficient to restore muscle strength to levels comparable to those of healthy individuals. **Objective:** To compare the lower limb muscle strength between individuals with lateral patellar dislocation (LPD) subjected to an eight-week supervised strengthening program and a healthy control group. **Methods:** Secondary analysis study of two randomized clinical trials and one case-control study, approved by the institutional Research Ethics Committee (CAAE 70349817.2.3001.5463; 93912818.8.0000.5463; 10181919.4.0000.5463). Seventy-seven individuals with atraumatic LPL and 44 healthy controls, comparable in age, weight, and height, were included. The LPL group underwent supervised strengthening of the quadriceps femoris twice a week for eight weeks, with a load progression to 80% of one repetition maximum. Isometric strength was assessed using manual dynamometry and compared using independent t-tests and hierarchical linear regression, adjusted for age, sex, and body mass index (BMI). **Results:** The LPL group exhibited significant strength deficits compared to the control group: knee extensors (-23.7%; d=1.13; $p < 0.001$), hip external rotators at 0° (-18.2%; d=0.97; $p < 0.001$), hip adductors (-19.2%; d=0.74; $p < 0.001$), hip external rotators at 90° (-14.7%; d=0.64; $p < 0.01$), and hip internal rotators at 0° (-9.7%; d=0.46; $p = 0.045$). These differences remained significant after adjusting for age, sex, and BMI. No significant differences were observed for hip flexors, extensors, and abductors, nor for medial rotators at 90°. **Conclusion:** After eight weeks of high-intensity conservative strengthening, individuals with LPL exhibited clinically relevant strength deficits compared to healthy controls, particularly in knee extensors and specific hip muscle groups. These findings reinforce the need for objective criteria for muscle strength, and not just fixed treatment timelines, to guide physiotherapy discharge and return to physical activity in this population.

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HIGH-DOSE ENERGY THERAPEUTIC ULTRASOUND IN THE TREATMENT OF PATELLAR TENDINOPATHY: RANDOMIZED, CONTROLLED CLINICAL TRIAL

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Background: Contextualization: Patellar tendinopathy is a multifactorial musculoskeletal condition, characterized by structural changes in the tendon tissue, persistent pain, and reduced function. Exercise programs are recommended as the central approach to treatment, while therapeutic ultrasound has been proposed as a complementary strategy for the management of tendinopathies. **Objective:** To evaluate the effect of adding high-energy dose therapeutic ultrasound to a rehabilitation exercise program on pain intensity and function in individuals with patellar tendinopathy. **Methods:** This was a randomized, controlled, and blinded clinical trial involving patients, assessors, and therapists. Sixty-six participants, both men and women, aged between 18 and 40 years (M=33.24/SD=6.10) with a diagnosis of patellar tendinopathy were recruited. The therapeutic ultrasound group (UST; n=33) received a program consisting of active therapeutic ultrasound and exercise, twice a week, for 8 weeks. The ultrasound was applied with a frequency of (1MHz, continuous mode, intensity of 1.2W/cm2, 8', 4.032J of final energy per session). The placebo group (n=33) received the same exercise program, associated with placebo therapeutic ultrasound. The assessments were conducted at the initial time point, after 4 weeks, at the end of 8 weeks, and at the 3 and 6-month intervals. The primary outcomes were pain intensity (visual analog scale, VAS) and function, assessed by the Victorian Institute of Sports Assessment – Patella (VISA-P) questionnaire. The primary time points were the initial (T0) and final (T2) of the treatment. In addition, the International Physical Activity Questionnaire – short form (IPAQ-short form), muscle strength, two-dimensional kinematics (2D), pressure algometry, thermography, and magnetic resonance imaging were also collected. **Results:** Although all participants showed improvement in the assessed outcomes (T0 versus T2) – except for thermography (the UST group showed higher temperatures than the placebo group, $p < 0.05$) – no differences were detected between the groups ($p > 0.05$). **Conclusion:** The high energy dose of therapeutic ultrasound did not add positive effects to the rehabilitation exercise program on pain intensity and motor function of the lower limbs in individuals with patellar tendinopathy. Registration: This study was prospectively registered on April 3, 2018, and updated on September 1, 2019, in the Brazilian Registry of Clinical Trials (REBEC) under the registration number: RBR-658n6w.

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BETWEEN REHABILITATION AND PERFORMANCE: BIOMECHANICAL PROFILE OF PARALYMPIC BOCCIA ATHLETES

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Background: Paralympic boccia is a sport designed for individuals with severe motor impairments, requiring high motor control, precision, and functional adaptation. Although parasports have shown significant growth in recent decades, evidence regarding the biomechanical and functional characteristics of athletes in this modality is still limited. Understanding these aspects can contribute to the development of rehabilitation strategies, injury prevention, and optimization of sports performance. **Objective:** To characterize the functional and biomechanical profile of Paralympic boccia athletes participating in a university extension program. **Methods:** Observational, cross-sectional, and descriptive study, approved by the Research Ethics Committee (CAAE nº 95345626.0.0000.5097). Ten Paralympic boccia athletes participated, linked to an extension project of the Estácio de Sá College, carried out in partnership with the Belo Horizonte Paraboccia Association. The sample included athletes with different neurological and motor conditions, such as spastic cerebral palsy, spinal cord injury, myelomeningocele, and sequelae of meningitis. Functional and biomechanical variables obtained through previously conducted clinical assessments were analyzed, including cervical and upper limb range of motion, grip strength, functional reach, muscle tone, and pain perception. The data were analyzed using descriptive statistics. **Results:** The sample consisted of 10 athletes, with 70% being male, and an average age of 19 years. Complaints of pain were reported by 70% of the participants. The functional reach averaged 27.1 cm for forward reach, 19.3 cm for right lateral reach, and 24.7 cm for left lateral reach. The handgrip strength showed averages of 137.0 mmHg in the right upper limb and 136.8 mmHg in the left. The measurements of cervical, shoulder, elbow, and wrist range of motion demonstrated significant interindividual variability. The heterogeneity observed among the participants reflected different levels of functional impairment and motor abilities, highlighting distinct biomechanical profiles within the modality. **Conclusion:** Paralympic boccia athletes presented a heterogeneous biomechanical and functional profile, characterized by significant differences in joint mobility, muscle strength, functional reach, and the presence of pain. These findings reinforce the importance of individualized assessments for planning interventions aimed at rehabilitation, sports performance, and injury prevention. Moreover, the results provide preliminary evidence that can support future investigations and contribute to the scientific strengthening of Brazilian parasports.

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MODIFIED SPHYGMOMANOMETER TEST: EVIDENCE OF VALIDITY AND RELIABILITY IN ADOLESCENTS

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Background: Muscle strength is considered an important health marker in adolescents, being widely used in clinical monitoring, training programs, and rehabilitation processes. However, instruments traditionally used for its assessment have limitations related to cost, accessibility, and clinical applicability. The modified sphygmomanometer test has been identified as a low-cost alternative for measuring muscle strength; however, its measurement properties in adolescents had not yet been adequately investigated. **Objective:** To investigate the concurrent validity, test-retest reliability, and inter-examiner reliability of the modified sphygmomanometer test for assessing upper limb and trunk muscle strength in adolescents, as well as to analyze different ways of operationalizing the obtained measures. **Methods:** Methodological study approved by the Research Ethics Committee (CAAE nº 36792720.0.0000.5108). Fifty-two adolescents participated, with an average age of 16.5 ± 0.7 years. The muscle strength of the upper limbs and trunk was assessed using the modified sphygmomanometer test and portable dynamometers. Concurrent validity, test-retest reliability, inter-examiner reliability, standard error of measurement, and the smallest real difference detectable were analyzed. Different ways of operationalizing the results were also compared, considering the first measurement, the average of two measurements, and the average of three measurements. **Results:** Moderate to strong correlations were observed between the modified sphygmomanometer test and the dynamometers for most of the evaluated muscle groups, with coefficients ranging from 0.50 to 0.83 ($p < 0.001$). Test-retest reliability showed intraclass correlation coefficients between 0.63 and 0.94, while inter-examiner reliability ranged from 0.71 to 0.97. The values of the standard error of measurement and the smallest detectable real difference were considered low for most of the analyzed variables. No statistically significant differences were observed between the different ways of operationalizing the measures. **Conclusion:** The modified sphygmomanometer test showed adequate concurrent validity and reliability for assessing upper limb and trunk muscle strength in adolescents. The results support its use in clinical practice and research, constituting an accessible and low-cost alternative for measuring muscle strength in this population.

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MODIFIED SPHYGMOMANOMETER TEST: EVIDENCE OF VALIDITY AND RELIABILITY IN ADOLESCENTS

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EXPERIENCES OF PATIENTS WITH FIBROMYALGIA IN A PAIN EDUCATION PROGRAM: QUALITATIVE STUDY

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Background: Fibromyalgia (FM) is a condition of generalized chronic musculoskeletal pain. Pain education is one of the approaches that has strong evidence of efficacy in the management of FM. However, there is a gap in the literature regarding the experiences and knowledge acquired by patients in a pain education program. **Objective:** To identify and analyze the experiences of FM patients after the pain education program. **Methods:** Qualitative study based on the Consolidated Criteria for Reporting Qualitative Research and Standards for Reporting Qualitative Research. Pain education was conducted in two meetings, either in-person or online, with discussion circles based on focus groups led by healthcare professionals on topics such as fibromyalgia, pain neuroscience, and management strategies, with an average duration of 1.5 hours. The intervention included educational videos and informational booklets. The thematic analysis and coding of the pain education content data were carried out using MAXQDA® version 26 software. **Results:** The sample consisted of 6 focus groups, totaling 54 participants diagnosed with fibromyalgia. Eight themes were identified: (1) Experiences and identifications with symptoms in the juvenile phase; (2) Challenges and feelings in the face of the FM diagnosis; (3) Perceptions about living with symptoms and personal experiences with fibromyalgia; (4) Doubts and perceptions about pain, illness, and treatment; (5) Perceptions and expectations around pain education; (6) Challenges, fears, and doubts regarding physical exercise; (7) Experiences with the approach of healthcare professionals; and (8) Interactions and social relationships with other people with fibromyalgia. Experiences with late diagnosis, doubts about factors associated with the onset of the disease, and fears related to physical exercise, especially fear of worsening symptoms and injuries, were reported. Barriers in healthcare were also described, such as the lack of qualified listening, invalidation of symptoms, lack of professional knowledge, and fragmentation of care. **Conclusion:** The experiences of people with fibromyalgia in the context of pain education revealed processes of identification and reflection on the experiences of the disease since the juvenile phase, highlighting challenges related to diagnosis, interpersonal relationships, and difficulties in care by healthcare professionals, often marked by the absence of support. Pain education was perceived by individuals with FM as a fundamental resource for strengthening confidence, validating personal experiences, identifying with others who share the condition, and building resilience and motivation to cope with the disease.

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PREVALENCE AND FACTORS ASSOCIATED WITH CHRONIC PAIN IN A STATE OF BRAZILIAN AMAZONIA

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Background: Chronic pain is a multidimensional condition that impacts functionality and quality of life. It may be associated with factors such as age, sex, presence of comorbidities, and physical activity. Despite its relevance, there is a gap in epidemiological studies in the Northern region of Brazil that address the prevalence of this health condition. **Objective:** To estimate the prevalence and identify the factors associated with chronic pain in a sample of the population of the state of Amapá, Brazil. **Methods:** This is an observational, cross-sectional study with a quantitative approach, developed according to STROBE recommendations, approved by the Research Ethics Committee (CAAE: 82013424.2.0000.0003). A total of 375 adult individuals residing in Amapá were included through an online structured questionnaire. The data were analyzed using Jamovi software, version 2.6.26. Descriptive statistics were used to characterize the sample, including the prevalence of chronic pain and the profile of the participants. Multivariate logistic regression was performed, adjusted for variables with theoretical relevance, to evaluate the factors associated with the presence of chronic pain. Odds ratios (OR) were estimated with 95% confidence intervals (CI 95%) and a significance level of 5% ($p < 0.05$). **Results:** A prevalence of chronic pain of 57.1% (n=214) was revealed in the studied sample. The predominant profile was of female individuals (72%), with an average age of 34 years (± 13.8). The pain was predominantly reported in the trunk (33.2%) and lower limbs (28.5%). It was classified as intense by 50.5% of the participants. Multivariate logistic regression demonstrated significant associations between the presence of chronic pain and three variables: female sex (OR = 1.75; CI=1.09-2.80), presence of comorbidities (OR = 3.28; CI=1.77-6.09), and physical activity, associated with a lower chance of chronic pain (OR = 0.47; CI=0.28-0.78). **Conclusion:** This research provided an unprecedented overview of the epidemiology of chronic pain in a sample from the state of Amapá, filling a critical information gap about the Northern Region of Brazil. The main factors associated with the presence of pain were female sex and the presence of comorbidities, while the practice of physical activity was associated with a lower chance of chronic pain.

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CONSENSUS ON THE USE OF DRY NEEDLING IN TEMPOROMANDIBULAR DYSFUNCTION: RESULTS OF A DELPHI STUDY

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Background:Temporomandibular Dysfunction (TMD) is the main cause of non-odontogenic orofacial pain. By compromising the function of the masticatory system, TMD has been widely addressed by physiotherapy professionals. Dry needling is one of the resources that have been used in the treatment of this condition due to its analgesic potential and improvement of mandibular function. However, the lack of standardization of protocols and the influence of clinical and contextual factors in professional practice highlight the need to establish consensus among specialists. **Objective**: To analyze clinical practices, application parameters, barriers, and facilitating factors related to the use of dry needling in the treatment of TMD by Brazilian physiotherapists. **Methods:** This is the first phase of a Delphi investigation, approved by the Ethics Committee (CAAE no. 7.470.756), conducted with 93 Brazilian physiotherapists experienced in dry needling and TMD treatment. Information was collected on professional profile, clinical practice, and technique application through an electronic form. The quantitative data were analyzed using descriptive statistics, considering consensus when there was agreement ≥70%. The open-ended responses regarding barriers and facilitators were analyzed using the IRAMUTEQ software (Interface de R pour les Analyzes Multidimensionnelles de Textes et de Questionnaires) and content analysis. **Results**: 93 physiotherapists participated (77.4% women; 38.32±7.55 years) who predominantly used dry needling in a multimodal manner, associated with manual therapy (92.5%) and electrothermophototherapy (88.2%), mainly aiming at pain reduction (90.3%) and muscle tension reduction (89.2%). The muscles most frequently addressed were the masseter (92.5%) and the upper trapezius (89.2%). The majority of participants considered that the effectiveness of the technique is independent of the local contraction response (84.9%) and reported achieving therapeutic goals (94.6%). On the other hand, there was no consensus regarding the depth of insertion, duration of stay, and number of needles. The qualitative analysis identified the main barriers as fear of needles, clinical factors, cultural factors, and technical limitations, while professional experience, patient adherence, therapeutic response, and immediate analgesic effect were recognized as facilitators. **Conclusion**:The results demonstrate a high level of consensus regarding the clinical use of dry needling in the treatment of TMD, especially in a multimodal approach aimed at pain control. The persistence of divergences regarding technical parameters and the influence of barriers and facilitators reinforce the need for clinical recommendations based on consensus and scientific evidence. The next phase of this study will greatly contribute to a future consensus.

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IS RHEUMATOLOGY PHYSIOTHERAPY TAUGHT IN PRIVATE HIGHER EDUCATION INSTITUTIONS IN BRAZIL? A DOCUMENTARY ANALYSIS

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Background: It is estimated that around 15 million Brazilians live with some form of rheumatic disease. The increase in the prevalence of these diseases, combined with the growing demand for healthcare services, reinforces the need to expand rehabilitation strategies and qualify professionals for their management, given the functional limitations they entail. Since 1969, physiotherapy has been recognized in Brazil as a higher education profession, requiring solid scientific training, technical qualification, and clinical experience. Currently, the country has over a thousand undergraduate courses in Physiotherapy authorized by the Ministry of Education (MEC), distributed among public and private institutions. Despite the wide range of courses offered, gaps in training persist in specific areas, such as Physiotherapy in Rheumatology. In this context, it is essential to analyze the curriculum structure of undergraduate courses to ensure training aligned with professional demands and the needs of the population. **Objective:** To map the presence of the rheumatology course in undergraduate Physiotherapy programs at Brazilian private institutions. **Methods:** Cross-sectional study with systematic documentary analysis of the curricula of undergraduate Physiotherapy courses recognized by the Ministry of Education in the National Registry of Courses and Higher Education Institutions of Brazil e-MEC. Curricula from face-to-face courses that provided information about the curriculum via website or email were analyzed. Curricula that contained references, mentions, or citations of the exact term or synonym for "Physiotherapy in Rheumatology" were analyzed to identify the discipline offering the content. For the descriptive analysis of the data, absolute and relative frequencies were used. **Results:** 1207 regular Physiotherapy courses were found on the MEC website. Of these, 682 curricula were included and evaluated. 615 (90.1%) were from private higher education institutions, 62 (9.1%) from public higher education institutions, and 5 (0.8%) from special regime higher education institutions. Only 174 (28.3%) of the private higher education institutions offered a specific course focused on rheumatology content, and 441 (71.7%) do not have the course or the content is covered in other courses, such as Traumatology. Proportionally, the largest number of courses is located in the Central-West region (22/62) 35.48%, followed by the South region (35/118) 29.66%, Northeast (46/168) 27.38%, Southeast (62/233) 26.6%, and North (9/34) 26.47%. **Conclusion:** The presence of the Rheumatology course in undergraduate Physiotherapy programs at Brazilian private institutions is still scarce throughout the country. The Central-West region, with the highest proportion, has 35.48% of curricula with specific Rheumatology content.

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MAPPING OF RHEUMATOLOGY COURSES IN PHYSIOTHERAPY PROGRAMS IN BRAZIL

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Background: Rheumatology Physiotherapy is a specialty recognized by the Federal Council of Physiotherapy and Occupational Therapy (COFFITO) since 2022, and it operates at all levels of healthcare, developing actions for promotion, prevention, health education, treatment, and rehabilitation of people with rheumatic diseases. At the same time, Brazil is experiencing a significant demographic transition, marked by an aging population and an increase in the proportion of elderly people. This scenario represents a significant challenge for public health, due to changes in the epidemiology of diseases and the increasing demands on health systems. As a consequence, there is an observed increase in the prevalence of rheumatic diseases, expanding the need for qualified physiotherapists in this area. Given this context, it becomes essential to analyze the curriculum structure of undergraduate Physiotherapy courses to ensure training that is compatible with the needs of the population and the current demands of the country.**Objective:** To map the presence of the Rheumatology course in undergraduate Physiotherapy programs in Brazil.**Methods**: Cross-sectional study with systematic documentary analysis of the curricula of undergraduate Physiotherapy courses recognized by the Ministry of Education in the National Registry of Courses and Higher Education Institutions of Brazil e-MEC. Curricula of face-to-face courses that contained references, mentions, or citations of the exact term or synonym "Physiotherapy in Rheumatology" were examined. This information provided via website or email was analyzed to identify the courses that offered the content. For the descriptive analysis of the data, absolute and relative frequencies were used.**Results**: A total of 1207 regular Physiotherapy courses were found on the MEC website. Of these, 682 curricula were included and analyzed. Of these, 615 (90.18%) of the courses were from private higher education institutions, 62 (9.1%) from public higher education institutions, and 5 (0.72%) from special regime higher education institutions. Only 218 (31.96%) of the courses offered a specific subject focused on Rheumatology, and 464 (68.03%) do not have the subject or have the content taught together with other subjects, such as Traumatology. Proportionally, the largest number of courses is located in the Central-West region (26/67) 38.8%, followed by the South region (46/132) 34.84%, Northeast (56/184) 30.43%, Southeast (78/257) 30.35%, and North (12/42) 28.57%.**Conclusion**: The presence of the Rheumatology course in Physiotherapy programs at public and private institutions in Brazil is still insufficient for the current scenario, and the region of the country with the highest proportion of these courses is the Central-West Region.

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PHYSICAL ACTIVITY, SEDENTARY BEHAVIOR, AND DISABILITY IN ELDERLY PEOPLE WITH AND WITHOUT CHRONIC LOW BACK PAIN

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Background: Low back pain (LBP) is one of the most prevalent health complaints in the world, characterized as chronic low back pain (CLBP) when its duration exceeds 12 weeks. Chronic low back pain (CLBP) is considered one of the main causes of disability in the elderly, with a significant social impact and reduced independence. From a biopsychosocial perspective, this condition is associated with lifestyle factors, such as levels of physical activity (PA) and sedentary behavior (SB). **Objective:** To analyze whether there is a difference between the levels of PA and SB in community-dwelling elderly individuals with and without MCI and to verify the correlation between these variables and the disability of elderly individuals with MCI. **Methods:** Cross-sectional study conducted at the Department of Physiotherapy of the Federal University of Ceará, which included elderly individuals, with or without DLC, capable of moving 100 meters without assistance. Data were collected on sociodemographic variables, clinical variables, related to physical exercise (PE), CS (questionnaire created by the researchers), disability (Oswestry Low Back Pain Disability Questionnaire), and PA (Modified Baecke Questionnaire for the Elderly - QBMI). Descriptive statistical analyzes, non-parametric tests (Mann-Whitney) to compare groups, and Spearman correlation to evaluate relationships between the domains of PA and disability in elderly individuals with DLC were conducted. **Results:** 42 elderly individuals were evaluated, with an average age of 70.95 (± 7.17) years, 81% of whom were women. Of the participants, 61.9% presented cognitive decline, with an average disability score of 19.79 (± 14.01) points. Elderly individuals without DL (n=16) had a median of 110.00 (0–360) min/week of physical exercise, a total QBMI score of 4.27 (0–15.04) points, and 3.50 (1–13) hours/day sitting, while elderly individuals with DL (n=26) had a median of 127.50 (0–450) min/week of physical exercise, a total QBMI score of 4.15 (0–14.95) points, and 5.00 (1.5–12) hours/day sitting. No statistically significant differences were observed between the groups regarding the levels of PA and CS ($p > 0.05$). However, a moderate, negative, and significant correlation was identified between disability and weekly minutes of PA ($p = 0.005$; $r = -0.538$), as well as with the sports domain of the QBMI ($p = 0.028$; $r = -0.458$). **Conclusion:** Elderly individuals with and without DLC exhibit similar levels of PA and CS. However, a greater weekly amount of physical exercise, especially sports activities, is associated with less disability related to dementia.

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STRENGTH AND MUSCLE POWER OF RECREATIONAL BEACH TENNIS PLAYERS AFTER MATCHES IN A COMPETITIVE ENVIRONMENT

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Background: Beach Tennis is a high-intensity sport that requires strength, power, and quick movements. Muscle fatigue can reduce performance and increase the risk of injuries, making the assessment of acute exercise responses important. **Objective:** To evaluate the strength and power of recreational beach tennis players after matches in a competitive environment. **Methods:** Observational, quantitative, and cross-sectional study conducted with female recreational beach tennis players during a competition (CAAE: 93098725.3.0000.5371). Before and after three matches, body mass, handgrip strength, and scapular strength (dynamometry) as well as upper limb power (medicine ball throw) and lower limb power (vertical jump) were assessed. The data were analyzed using the paired t-test, with effect size calculation ($p < 0.05$). **Results:** 14 recreational beach tennis players participated in the study, with an average age of 33.86 ± 11.07 years, an average weight of 63.57 ± 6.76 kg, and an average height of 164 ± 0.5 cm, with an average of 2.25 ± 1.12 years of practice in the sport and a weekly frequency of 2.93 ± 0.91 times per week. There was no statistically significant difference in shoulder girdle strength between the pre- and post-competition moments (13.84 ± 4.34 vs. 14.29 ± 4.19 kgf; $p = 0.604$; $d = -0.14$). Handgrip strength did not show a significant difference (25.47 ± 4.15 vs. 24.90 ± 3.42 kgf; $p = 0.226$; $d = 0.34$). A significant increase in lower limb power was observed (2678.84 ± 369.23 vs. 2908.20 ± 479.43 W; $p < 0.05$; $d = -1.00$). The upper limb power showed a reduction after the competition (168.70 ± 14.44 vs. 168.17 ± 14.74 W; $p < 0.05$; $d = 0.90$). A moderate positive correlation was observed between the total match time and lower limb power ($r = 0,544$; $p = 0,044$). No statistically significant correlations were observed between the total match time and the power of the upper limbs ($r = -0.109$; $p = 0.712$), scapular strength ($r = 0.292$; $p = 0.311$), and grip strength ($r = 0.204$; $p = 0.483$). **Conclusion:** Competitive Beach Tennis matches promoted acute changes in muscle power, with an increase in lower limb power and a decrease in upper limb power, without changes in muscle strength.

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ELECTROTHERAPY ASSOCIATED WITH KINESIOTHERAPY VERSUS WITHOUT THERAPEUTIC INTERVENTION IN LUMBAR DISK HERNIATION

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Background: Lumbar disk herniation is one of the main causes of low back pain and functional disability, significantly compromising the quality of life of affected individuals. Among the physiotherapeutic resources used for the treatment of this condition, electrotherapy and kinesiotherapy stand out. Although both are widely used in clinical practice, evidence is still needed to clarify the benefits of combining these interventions compared to isolated electrotherapy.**Objective**: To compare the effects of electrotherapy combined with kinesiotherapy to isolated electrotherapy in reducing pain and improving functionality in patients with lumbar disk herniation. **Methods**: This is a systematic review conducted according to PRISMA recommendations. The search was conducted in the PubMed, SciELO, and LILACS databases, using descriptors related to lumbar disk herniation, low back pain, electrotherapy, and physiotherapy, combined with the boolean operators AND and OR. Randomized clinical trials involving adults with lumbar disk herniation were included. The methodological quality of the studies was assessed using the PEDro scale.**Results**: Eleven studies were included in the systematic review. The analyzed studies indicated that the combination of electrotherapy and kinesiotherapy showed better outcomes in pain reduction and functional improvement compared to isolated electrotherapy. In addition, gains were observed in muscle strength, recruitment of lumbar stabilizing muscles, and functional capacity. Among the most investigated resources, transcutaneous electrical nerve stimulation (TENS), interferential current, therapeutic ultrasound, diadynamic currents, and neuromuscular electrical stimulation stood out.**Conclusion**: The available evidence suggests that the combination of electrotherapy and kinesiotherapy may provide better results than electrotherapy alone in reducing pain and improving functionality in patients with lumbar disk herniation. However, studies with more standardized therapeutic protocols and greater methodological rigor are still needed to strengthen this evidence.

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QUALITY OF LIFE AND SATISFACTION AFTER TREATMENT OF DEFORMITIES AND BONE LENGTHENING WITH EXTERNAL FIXATOR

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Background: The use of external fixators is widely employed in the treatment of bone deformities and the lengthening of the lower limbs, causing various alterations in daily life activities, which can impact quality of life, functionality, pain, and psychosocial aspects. **Objective:** Considering these changes caused in patients subjected to treatment with an external fixator, this research aims to evaluate the satisfaction and quality of life of these patients, considering that the understanding of quality of life is a multidimensional perception, which is relative and variable, dependent on the historical, environmental, and sociocultural conditions of a group or individuals. **Methods:** This is a cross-sectional observational, descriptive study, with a sample composed of 20 patients subjected to the use of an external fixator and a Control Group with 20 healthy individuals, without a history of orthopedic surgeries for comparison. Sociodemographic and clinical data were collected, in addition to the application of the WHOQoL-bref questionnaire (World Health Organization Quality of Life - Brief version), and a specific satisfaction questionnaire developed for the research. Approved by the Scientific Committee of the Department of Orthopedics and Traumatology of the Faculty of Medicine of the University of São Paulo, under protocol no. 1740 (SGP: 27511), and with CAAE: 94058025.6.0000.0068. **Results:** The sample was equally composed of men and women, with an average age of 35 ± 12.9 years. The duration of external fixator use had an average of 273.6 ± 245.1 days. The physical domain of the WHOQoL-bref showed the lowest average scores, while the psychological and social relationships domains showed higher values when compared to the Control Group. The intensity of pain during the use of the external fixator had an average of 7.35 ± 2.3 points. Descriptive differences were observed between the sexes, with greater pain intensity and lower quality of life scores in females. The majority of patients (85%) reported satisfaction with the treatment and recommend its use in similar situations. **Conclusion:** Treatment with external fixators in lower limbs was associated with a significant impact on the physical aspects of quality of life and high levels of pain, although psychological, social aspects, and satisfaction with the treatment were preserved. The findings reinforce the importance of a multidisciplinary approach in the follow-up of these patients.

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"I KNOW IT'S REAL." MATERNAL EXPERIENCES OF PAIN IN JUVENILE FIBROMYALGIA: A QUALITATIVE STUDY

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Background: Juvenile fibromyalgia (JF) is a syndrome characterized by generalized chronic musculoskeletal pain, fatigue, sleep disturbances, cognitive and emotional changes, impacting the quality of life of children and adolescents. Although the literature has advanced regarding its clinical aspects, studies exploring how family members interpret the painful experience of the pediatric population affected by the condition are still limited. Thus, understanding how mothers interpret their children's pain can contribute to the management of the condition and the development of new therapeutic strategies.**Objective**: To analyze the experiences, beliefs, and perceptions of mothers regarding the pain experienced by their children diagnosed with FMJ.**Methods**: This is a qualitative study (CAAE: 48042721.0.0000.5546; opinion: 5.147.25), which followed the recommendations of the Consolidated Criteria for Reporting Qualitative Research (COREQ) and Standards for Reporting Qualitative Research (SRQR). Semi-structured interviews were conducted via videoconference, with the responses transcribed in Reshape® and the data organized and managed in MAXQDA 2022®.**Results**: Fifteen mothers (38.5 years ± 7.3) were included, and the results were organized into five main categories. Regarding pain beliefs, the mothers perceive a relationship between emotional factors, pain experiences, and family issues, in which they recognize that emotions can influence the onset and intensity of symptoms. Regarding the implications in daily life, pain significantly affects functionality and social participation, generating repercussions that are exacerbated by stigma and the difficulty in understanding the condition. Regarding perceptions of the characteristics of pain, the mothers define it as unbearable and horrible, highlighting its affective component. The mothers also indicate that the painful experience is marked by emotional suffering, excessive worry, feelings of helplessness, and initial difficulty in accepting the diagnosis, highlighting empathy. Regarding how the children cope with pain, the mothers perceive that there are facilitating factors, such as resilience and maternal support, as well as negative factors, such as withdrawal and avoidance behaviors. Finally, the mothers indicate that physical exercise is beneficial for symptom improvement, but it can be difficult to maintain consistency due to the pain.**Conclusion**: The mothers' reports indicate that their children's pain involves emotional, environmental (familial), and behavioral factors, which seem to impact the functionality, social participation, and daily life of these children and adolescents with JFM.

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PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION VERSUS CONVENTIONAL EXERCISES IN ROTATOR CUFF TENDINOPATHY: RANDOMIZED CLINICAL TRIAL

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Background: Rotator cuff tendinopathy (RCT) is one of the main causes of shoulder pain and disability, negatively impacting functionality and the performance of daily life activities. Although therapeutic exercises are widely recommended for its treatment, there are still few studies comparing conventional approaches and Proprioceptive Neuromuscular Facilitation (PNF) using self-reported outcome measures. **Objective:** To compare the effects of a PNF-based protocol and conventional exercises on pain, function, fear/avoidance of activities, and satisfaction in individuals with RMT. **Methods:** Controlled, randomized, double-blind clinical trial, registered in the Brazilian Clinical Trials Registry (ReBEC; RBR-38xfyp5). Thirty-six participants with a clinical diagnosis of TMD were randomly distributed into two groups: FNP Group (FG) and Conventional Group (CG). Both underwent three weekly sessions for four weeks. The outcomes evaluated were upper limb function by the Shoulder Pain and Disability Index (SPADI), pain intensity by the Numeric Rating Scale (NRS), fear and avoidance of daily activities by the Avoidance of Daily Activities due to Pain Scale (ADAP), as well as expectations of improvement, adherence, and satisfaction with the treatment. The assessments were conducted at baseline, after two weeks, and at the end of the intervention. **Results:** Both groups showed significant improvement in function, pain, and fear/avoidance of activities over time ($p < 0.001$). In the SPADI, a significant reduction in scores was observed in both groups; however, the GFNP group performed better than the GC group in the fourth week ($p = 0.034$). Regarding pain (NRS), both groups showed a significant reduction in symptoms ($p < 0.001$), with no intergroup differences at the end of the treatment ($p = 0.297$). Similar results were observed for the ADAP, with significant intragroup improvement ($p < 0.001$), but no difference between the groups at the final assessment ($p = 0.341$). Adherence to treatment was high in both groups, with 89% in the GFNP and 83% in the GC. Regarding satisfaction, 67% of the participants in the GFNP reported being very satisfied, compared to 27% in the GC. **Conclusion:** Both interventions were effective in reducing pain, fear of movement, and improving function in individuals with rotator cuff tendinopathy. However, PNF demonstrated superiority in functional recovery and showed higher satisfaction rates among participants, suggesting that this approach may represent a relevant therapeutic alternative for the rehabilitation of this condition.

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EVALUATION OF THIRST, PERCEPTION OF EFFORT, AND REACTION SPEED IN ATHLETES

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Background: Hydration is a determining factor for athletic performance, as changes in hydration status can increase the sensation of thirst, elevate the perception of effort, and compromise cognitive functions, such as reaction speed. In beach tennis, a sport characterized by high intensity and frequent exposure to heat, understanding this relationship can contribute to strategies that enhance athletes' performance and safety. **Objective:** To evaluate the sensation of thirst and its relationship with the perception of effort and reaction speed in recreational beach tennis players in a competitive environment. **Methods:** This is an observational, quantitative, and cross-sectional study conducted with female beach tennis practitioners in category C during a competition, with a minimum of 6 months of practice (CAAE: 93098725.3.0000.5371). The participants were evaluated at the moments before the competition (M0), after the 1st (M1), after the 2nd (M2), and after the 3rd (M3) game. Before and after the matches, body mass and reaction speed were collected. Before and after each moment of the match, thirst sensation (TS) and perceived exertion (PE) were assessed. Parametric analysis was used, with the calculation of mean and standard deviation. The differences between M0 and M3 were evaluated using the paired t-test, the operations between the moments were performed using ANOVA-RM, and Pearson correlation was used to relate the variables. Statistical significance was adopted when $p < 0.05$. **Results:** 14 recreational beach tennis players participated in the study, with an average age of 33.86 ± 11.07 years, an average weight of 63.57 ± 6.76 kg, and an average height of 164 ± 0.5 cm. They had 2.25 ± 1.12 years of practice in the sport and a weekly frequency of 2.93 ± 0.91 times per week. When evaluating SS, it was observed that throughout the matches there was no statistically significant difference ($F(3) = 0.949$, $p = 0.426$); however, they started the matches with an average of 6.64 ± 2.59 and finished with 7.34 ± 2.28. The PE increased throughout the matches, showing a statistically significant difference between the second (4.48 ± 0.51) and the end of the third match (6.62 ± 0.49), with a large effect size ($F(3) = 3.977$, $p < 0.05$, $\eta p^2 = 0.23$). When correlating thirst sensation (TS) and perceived exertion (PE), it was observed that the greater the sensation of thirst, the greater the perception of effort ($r = 0.845$, $p < 0.001$), with a shared variance of 84.5%. Even with the increased PE, enhanced by the SS, there was no statistically significant difference in VR between the pre-competition (17.29 ± 4.59 cm) and post-competition (17.05 ± 4.22 cm) moments ($t(13) = 0.171$, $p = 0.867$). Moreover, there was no statistically significant correlation between VR and SS ($r = 0.369$, $p = 0.195$) and between VR and PE ($r = 0.436$, $p = 0.119$). **Conclusion:** The sensation of thirst was associated with an increase in the perception of effort, without changes in reaction speed, highlighting the importance of monitoring hydration during beach tennis competitions.

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ASSOCIATION BETWEEN BODY MASS INDEX AND CURVATURE SEVERITY IN ADOLESCENTS WITH IDIOPATHIC SCOLIOSIS

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Background: Adolescent idiopathic scoliosis (AIS) is a three-dimensional deformity of the spine that predominantly affects females. Nutrition and nutritional status, often assessed by body mass index (BMI), influence growth and bone density, and are investigated as potential factors associated with the development and progression of scoliotic deformity. **Objective:** To evaluate the association between body mass index and the severity of the scoliotic curve in adolescents with idiopathic scoliosis treated in a specialized service. **Methods:** Observational, retrospective, and cross-sectional study, derived from a project approved by the Research Ethics Committee (CAAE 89692125.6.0000.0057). The data were extracted from the electronic medical records of the Scoliosis Brazil Clinic (Salvador-BA unit). Adolescents aged 10 to 14 with complete data on age, sex, height, weight, and Cobb angle of the largest scoliotic curve were included. Patients with a history of previous surgery on the spine or lower limbs, neurological impairments, incomplete data, or previous use of a brace were excluded. The BMI (kg/m²) was classified as underweight, normal weight, and overweight. The severity of the curve was determined by the Cobb angle: mild (10° to 24°), moderate (25° to 44°), and severe (≥45°). The association between BMI and severity was evaluated using Pearson's chi-square test ($p < 0.05$) in Jamovi software. **Results:** The final sample consisted of 117 patients, with 95 (81.2%) being female and 22 (18.8%) male. The average age was 12.6 ± 1.23 years, the average BMI was 17.9 ± 2.86 kg/m², and the Cobb angle had an average of 34.2° ± 14.8°. The girls had a higher Cobb angle than the boys (35.9 ± 14.9° vs. 26.8 ± 12.0°; $p = 0.008$). In the BMI classification, 65.8% (n=77) were underweight, 31.6% (n=37) were normal weight, and 2.6% (n=3) were overweight. Patients with low weight and normal weight showed a higher predominance of moderate severity (45.5% and 54.1%, respectively). The statistical analysis did not show a significant association between the BMI classification and the severity of the scoliotic curve ($\chi^2(4)= 3.47$; $p = 0.482$). **Conclusion:** There was no statistically significant association between the nutritional status assessed by BMI and the severity of the scoliotic deformity in the studied population. BMI, in isolation, proves insufficient to indicate the severity of the scoliotic curve, reinforcing the need to evaluate other nutritional, metabolic, and clinical parameters in AIS.

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PILOT STUDY COMPARING DIFFERENT DOSES OF PHOTOBIOMODULATION AS PRECONDITIONING IN MODERATE MAGNITUDE MUSCLE DAMAGE

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Background: Photobiomodulation (PBM) has been proposed as a preconditioning strategy to attenuate exercise-induced muscle damage (EIMD). However, the only study that compared different doses used a mild muscle damage model, limiting the investigation of possible dose-response effects. In this context, pilot trials inducing moderate magnitude muscle damage can provide methodological and effect estimates to support definitive clinical trials.**Objective**: To evaluate the feasibility of a randomized clinical trial comparing different doses of preconditioning with FBM by light-emitting diode and to preliminarily explore possible dose-response effects on indirect markers of MIE. **Methods**: Pilot study, randomized, sham-controlled, with four parallel groups, approved by the Research Ethics Committee (CAAE: 65606522.2.0000.0055) and prospectively registered in the Brazilian Clinical Trials Registry. Twenty young, healthy, and physically active men were randomized to FBM with 6 J, 24 J, 72 J, or SHAM. FBM was applied prior to an eccentric exercise protocol for the elbow flexors. Indicators of feasibility (eligibility, recruitment, retention, and data completeness) and indirect markers of DOMS were evaluated before, immediately after, and 24 and 48 hours after the exercise, including maximum voluntary isometric contraction (MVIC), rate of force development (RFD), delayed onset muscle soreness (DOMS), pressure pain threshold, and muscle echogenicity (echo intensity) by ultrasound.**Results**: The study showed an eligibility rate of 84.4%, recruitment of 74.1% of eligible individuals, 100% retention, and no data loss. The protocol induced moderate magnitude DMIE (26.2% reduction in CVIM in the SHAM group after 24 hours), with incomplete recovery after 48 hours. No statistically significant differences were observed between the groups. In the descriptive exploratory analyzes, distinct trends were observed between the doses: the 72 J dose showed a smaller reduction in CVIM and TDF, while the 24 J dose showed smaller changes in DMT and pressure pain threshold. The echo intensity remained similar between the groups.**Conclusion**: This pilot study demonstrated the methodological feasibility of a clinical trial comparing different doses of FBM and showed that the experimental model was capable of producing muscle damage of moderate magnitude. Although no statistically significant differences were observed between the groups, exploratory analyzes revealed distinct descriptive patterns among the outcomes observed for each evaluated dose. These findings provide methodological parameters and preliminary estimates for the planning of clinical trials aimed at investigating FBM dosimetry.

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AUTOMATED SYSTEM FOR DETERMINATION OF ARTERIAL OCCLUSION PRESSURE: CLINICAL VALIDITY AND OPERATIONAL FEASIBILITY

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Background: Automated systems for determining arterial occlusion pressure (AOP), capable of integrating the determination and application of this pressure in the same device, have been increasingly used to individualize the prescription of blood flow restriction exercise (BFRE). However, independent evidence on the accuracy, reliability, and operational feasibility of these systems is still scarce, limiting their safe and evidence-based incorporation into clinical practice.**Objective**: To evaluate the measurement properties and operational feasibility of an automated system for determining GA compared to a reference method based on Doppler ultrasound. **Methods**: Methodological study of concurrent validity and test-retest reliability, approved by the Research Ethics Committee (CAAE: 96296126.3.0000.0055). Forty healthy adults underwent repeated assessments of POA in the upper (MMSS) and lower (MMII) limbs using an automated system and the Doppler ultrasound-based method, in a randomized and counterbalanced design. The measurement properties of the system (concurrent validity, method agreement, and relative and absolute reliability) were investigated, as well as the operational feasibility (assessment time, measurement success rate, and need for re-evaluations) and the participants' experience (discomfort, affective responses, and symptoms related to the procedure).**Results**: The evaluations with Doppler ultrasound showed good to excellent reliability (ICC=0.84–0.98; CV=1.38–3.25%) and did not present measurement failures. The automated system significantly reduced the evaluation time by 81.9–86.7%, promoted less discomfort, and elicited more positive affective responses compared to the reference method. However, it showed moderate to good intra-day reliability (ICC=0.74–0.85), low inter-day reliability in the LLEs (ICC=0.36), a systematic bias of −8.7 mmHg in the ULEs and 13.7 mmHg in the LLEs, and wide limits of agreement, indicating low concordance with the reference method. In addition, there were 121 measurement failures in the upper limbs, reducing the success rate to approximately 57%, necessitating the rescheduling of sessions for some participants. **Conclusion**: Although the automated system substantially reduces evaluation time and provides greater comfort to participants, its lower reliability, low agreement with the reference method, and high frequency of failures prevent its use as an alternative to Doppler ultrasound for individualized determination of GA. The results demonstrate that speed and comfort do not compensate for limitations in measurement properties, reinforcing that the clinical adoption of automated technologies must simultaneously consider accuracy, reliability, and operational robustness to ensure greater safety in the individualized prescription of FHR

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WHAT IS JUVENILE ARTHRITIS PAIN LIKE? COMPARATIVE CROSS-SECTIONAL STUDY OF SOMATOSENSORY, FUNCTIONAL, AND PSYCHOEMOTIONAL ASPECTS

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Background: Juvenile idiopathic arthritis (JIA) is characterized by chronic musculoskeletal pain that can persist even in the absence of inflammatory activity. However, there are still significant gaps in the literature, especially regarding somatosensory processing in this population. **Objective:** To compare somatosensory, psychoemotional, and functional aspects of children and adolescents with JIA and healthy ones. **Methods:METHODS:** This is a comparative cross-sectional observational study (CAAE: 92045225.5.0000.5546). Participants aged 7-18 years with a diagnosis of JIA and healthy individuals, matched by age and sex, were included. The following were evaluated: quality of life, sleep quality, pain catastrophizing, kinesiophobia, depression, anxiety, self-efficacy, pressure pain threshold (PPT), temporal summation (TS), conditioned pain modulation (CPM), and the 6-minute walk test (6MWT). Normality was verified using the Shapiro-Wilk test. For comparison between groups, t-tests or Mann-Whitney tests were used. $p < 0.05$ was adopted. **Results:** 26 participants were evaluated in each group (12.5±2.78 years). The right knee was the most reported site of pain (73.1%), followed by the left knee (50.0%). Complaints of pain in the hands (23.1-34.6%), ankles (34.6%), and wrists (26.9%) were also observed. The JIA group showed worse quality of life, greater pain intensity during the assessment and in the past week, lower global LDP in both radioulnar joints, right styloid process, both forearms, both tibial muscles, and right malleolus ($p < 0.005$). Significant differences were observed in MCD ($p < 0.005$), but not in ST ($p > 0.005$). Moreover, they exhibited high levels of pain catastrophizing (26.60±12.60) and kinesiophobia (43.38±8.88) with variable values of depression (21.58±18.70) and anxiety (15.54±18.35) with low self-efficacy (4.69±2.42). In the subgroup analysis, participants with active disease (n=15) showed worse quality of life and shorter distance traveled, with higher levels of catastrophizing, kinesiophobia, and depression. They also exhibited lower self-efficacy and global LDP, as well as in the following locations: left styloid process, right metacarpophalangeal joint, right condyle, and both malleoli compared to participants with inactive disease (n=11). **Conclusion:** Children and adolescents with JIA present somatosensory, psychoemotional, and functional alterations compared to their healthy peers, with greater impairment when the disease is in the active stage. These findings reinforce the relevance of investigating pain from a multidimensional perspective and considering the disease status in evaluation and therapeutic management.

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SOMATOSENSORY, PSYCHOEMOTIONAL, AND FUNCTIONAL PROCESSING IN JUVENILE FIBROMYALGIA: PRELIMINARY RESULTS OF A COMPARATIVE CROSS-SECTIONAL STUDY

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Background: Juvenile fibromyalgia (JF) is a chronic condition characterized by diffuse musculoskeletal pain associated with autonomic, sensory, and cognitive alterations. Although studies in adults indicate nociceptive dysregulation and central nervous system sensitization, there is still a lack of information in children and adolescents. **Objective:** To compare somatosensory, functional, and psychoemotional aspects of adolescents with FMJ and healthy controls. **Methods:** This is a duly approved comparative cross-sectional observational study (CAAE: 92045225.5.0000.5546), conducted in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines. Participants aged between 7 and 18 years with a diagnosis of FMJ and healthy controls matched by age and sex were included. They were evaluated: quality of life, sleep quality, pain catastrophizing, kinesiophobia, depression, anxiety, self-efficacy, pressure pain threshold (PPT), temporal summation (TS), conditioned pain modulation (CPM), and the 6-minute walk test (6MWT). Normality was verified using the Shapiro-Wilk test. For comparison between groups, Student's t-test or Mann-Whitney test were used. $p < 0.05$ was adopted. **Results:** Eleven adolescents with FMJ and 11 controls were included, with an average age of 15.82 ± 2.36 years, of which 91.7% were female. The FMJ group presented greater pain intensity at the time of evaluation and in the past week ($p < 0.001$), lower global LDP ($p = 0.05$) and in all evaluated locations ($p < 0.05$), shorter distance covered in the TC6 ($p < 0.05$), and worse quality of life and sleep ($p < 0.001$). Significant differences were also observed in the ST and MCD tests ($p < 0.05$). In the FMJ group, average scores of catastrophizing (29.0±12.20), kinesiophobia (42.91±7.06), depression (18.73±7.9), anxiety (15.73±5.95), and self-efficacy (3.90±5.95) were observed. **Conclusion:** Preliminary results indicate that adolescents with FMJ experience greater pain intensity, alterations in nociceptive processing, lower functional capacity, poorer quality of life, and worse sleep quality when compared to healthy controls.

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IMPACT OF TELEREHABILITATION ON THE GLOBAL PERCEPTION OF CHANGE IN PATIENTS WITH ORAL-FACIAL PAIN: CASE SERIES

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Background: Tele-rehabilitation has expanded access to physiotherapeutic care for various musculoskeletal conditions1-3. However, evidence on its impact on the global perception of change (PGIC) of patients with orofacial pain is still limited.**Objective**: To investigate the impact of telerehabilitation on the global perception of change in patients with orofacial pain.**Methods:** This is a prospective case series consisting of five patients diagnosed with orofacial pain, remotely attended by the Program for Assistance to People with Temporomandibular Disorders, Orofacial Pain, and Headache at the State University of Bahia, selected according to specific criteria. The project was approved by the Research Ethics Committee of UNEB (CAAE: 56069122.3.0000.0057). They underwent six weekly sessions lasting 30 minutes each, with physiotherapeutic strategies including myofascial mobilization, active kinesiotherapy, and health education. The authors developed an instrument for collecting sociodemographic and clinical data, including the Patient Global Impression of Change Scale (PGIC), the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) symptom questionnaire, and the Numeric Pain Scale (NPS).**Results**: Five patients participated in the study, with an average age of 28.0 ± 3.1 years, the majority being female and of brown race/color. Regarding clinical characteristics, most had a diagnosis of Temporomandibular Dysfunction (TMD) or Tension-Type Headache (TTH), with an average symptom duration of 19.0 ± 13.1 months, with daily symptom frequency, located in the jaw, temporomandibular joint (TMJ), masseter, temporal, and cervical areas; and an average pain intensity of 5.8 ± 1.9 points. Regarding the scores on the PGIC scale, most reported improvement between 5 and 7, characterized as moderate to significant, with a reduction in pain intensity and functional improvement reported in all cases.**Conclusion**: It is concluded that telerehabilitation represents a promising strategy for the management of orofacial pain, with potential for expansion through investments in digital infrastructure and standardized protocols. The effectiveness of the model is highlighted, as well as its applicability in contexts with limited access to specialized services. As limitations, the absence of a control group and the selection bias resulting from the requirement for technological resources are noted.

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SLEEP QUALITY AND ITS ASSOCIATION WITH CENTRAL ADIPOSITY AND PAIN INTENSITY IN WOMEN WITH FIBROMYALGIA: CASE-CONTROL STUDY

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Background: Fibromyalgia is a primary chronic disease, whose main mechanism involves nociplastic pain, with complex and multifactorial symptomatology, and biopsychosocial aspects. The manifestations of the disease compromise physiological systems important for quality of life, affecting the rest, disposition, and physical and emotional functioning of the patients. Among these symptoms, sleep disorders stand out as one of the most prevalent and debilitating aspects of fibromyalgia, often being associated with greater pain intensity and poorer overall health perception. Given this, investigating the relationship between sleep quality and other clinical aspects of fibromyalgia is essential, as sleep disturbances may be associated with greater symptom severity. **Objective:** To compare the quality of sleep between women with fibromyalgia and healthy controls and to investigate its association with central adiposity and pain intensity in the fibromyalgia group. **Methods:** Cross-sectional observational case-control study, approved by the Research Ethics Committee (82180424.6.0000.5504) of the Federal University of São Carlos (UFSCar). A total of 64 women participated, with 32 diagnosed with fibromyalgia and 32 healthy controls. The quality of sleep was assessed using the Pittsburgh Sleep Quality Index (PSQI), pain intensity was measured with the Numeric Pain Scale (NPS), and central adiposity was evaluated by the waist-to-height ratio (WHtR). Comparisons between the groups, correlation analyzes, and linear regression were conducted, adopting a significance level of 5%. **Results:** Women with fibromyalgia had higher scores on the Pittsburgh Sleep Quality Index (PSQI), indicating poorer sleep quality, when compared to the control group (16.19 ± 2.81 vs. 10.53 ± 2.91; $p < 0.001$), as well as greater central adiposity (0.552 ± 0.076 vs. 0.490 ± 0.073; $p = 0.002$) and higher pain intensity (median: 5 [IQR: 3–7] vs. 0 [IQR: 0–0]; $p < 0.001$). 0 [IQR: 0–0]; $p < 0.001$). In the fibromyalgia group, higher PSQI scores were positively correlated with central adiposity ($r = 0.585$; $p < 0.001$) and pain intensity ($r = 0.434$; $p = 0.013$), while the waist-to-height ratio showed a positive correlation with pain intensity ($r = 0.477$; $p = 0.006$). In the linear regression analysis, higher PSQI scores remained associated with a higher waist-to-height ratio, explaining 34.2% of the variability of this central adiposity indicator ($R^2 = 0.342$; $p < 0.001$). **Conclusion:** Women with fibromyalgia exhibited poorer sleep quality, greater central adiposity, and higher pain intensity compared to healthy women. In the fibromyalgia group, poorer sleep quality was correlated with greater central adiposity and higher pain intensity, reinforcing the relevance of sleep quality in understanding the clinical manifestation of fibromyalgia.

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TRANSCULTURAL ADAPTATION AND VALIDATION OF THE NORWICH PATELLAR INSTABILITY SCORE FOR BRAZILIAN PORTUGUESE

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Background: Patellofemoral instability is characterized by episodes of subluxation and dislocation of the patellofemoral joint, predominantly affecting young individuals, with a predominance in females, and accounts for about 3% of all knee injuries. Various instruments are used to assess the functional performance of individuals with knee conditions; however, the Norwich Patellar Instability (NPI) Score is the only one specifically developed to evaluate patellofemoral instability, and it had not yet been translated or culturally adapted for the Brazilian population.**Objective**: To translate and culturally adapt the NPI Score into Brazilian Portuguese and assess its validity for this population.**Methods**: Translation, transcultural adaptation, and validation study conducted at the Institute of Medical Assistance to State Public Servants of São Paulo (IAMSPE), approved by the institutional Research Ethics Committee on August 16, 2018 (CAAE94056718.4.0000.5463). The process followed the procedure proposed by Price et al., including translation, back-translation, and evaluation by a multidisciplinary committee regarding semantic and cultural equivalence. Sixty participants (16 men; 44 women; average age of 20.85 years) with a diagnosis of patellar dislocation were recruited. Twenty participants were included in the item comprehension stage, and the remaining 40 responded to the NPI Score, the Lysholm Knee Score, and the Kujala Anterior Knee Pain Score for concurrent validity assessment, using Pearson's correlation coefficient ($p < 0.05$). RESULTS: The Brazilian Portuguese version of the NPI Score showed a moderate correlation with the Lysholm Knee Score ($r=-0.56$; 95% CI -0.74 to -0.30; $p < 0.01$) and with the Kujala Anterior Knee Pain Score ($r=-0.57$; 95% CI -0.75 to -0.31; $p < 0.01$).**Conclusion**: The Brazilian Portuguese version of the NPI Score was successfully translated and transculturally adapted, demonstrating validity for assessing patient-reported patellar instability in the Brazilian population, and can be used in clinical practice and future research.

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EFFECTS OF MODIFIED ILIB ON THE CLINICAL EVOLUTION OF DIABETIC FOOT WOUNDS

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Background: Diabetic foot wounds exhibit complex healing and may be associated with vascular changes, pain, reduced quality of life, and difficulties in self-care. The intravascular irradiation of blood with modified laser, called modified ILIB, has been investigated as a complementary resource in the treatment of these lesions. **Objective:** To evaluate the clinical progression of individuals with diabetic foot wounds, subjected to modified ILIB for 15 or 30 minutes. **Methods:** Comparative longitudinal study, approved by the Research Ethics Committee of the Federal University of Ceará, linked to the Pro-Rectorate of Research and Graduate Studies, under CAAE No. 77977323.5.0000.5054 and Opinion No. 6.954.148. Sociodemographic and clinical data were analyzed, in addition to the SINBAD score, Visual Analog Scale for pain, Ankle-Brachial Index, Diabetes Self-Care Activities Questionnaire, and SF-36. The participants were distributed according to the duration of the modified ILIB application, in groups of 15 and 30 minutes. Descriptive analyzes of the evolution between the initial and final assessments and exploratory Spearman correlations were conducted. **Results:** The initial assessment included 29 participants, of whom 14 underwent the final assessment. In the sensitivity analysis, the average SINBAD score decreased approximately from 2.3 to 1.2 points in the 15-minute group and from 2.4 to 1.4 points in the 30-minute group. Heterogeneous individual responses were observed, including reduction, stability, and increase in the score. No significant visual difference was identified in the progression between the application times. In the initial assessment, SINBAD showed a moderate positive correlation with foot care (r_s=0.47) and a moderate negative correlation with pain intensity (r_s=-0.38). The correlations with the body mass index, overall quality of life, and the deviation of the Ankle-Brachial Index were weak or practically nonexistent. **Conclusion:** Participants subjected to modified ILIB showed favorable clinical progression of diabetic foot wounds, evidenced by the reduction in the SINBAD score in the 15 and 30-minute groups. The findings indicate a reduction in the severity of the lesions and suggest that both application durations may contribute as a complementary resource to physiotherapeutic care. Although no clear superiority was observed between the application times, the results reinforce the potential of modified ILIB in monitoring healing and justify conducting studies with larger samples, greater participant retention, and a control group. Acknowledgments to CNPq and FUNCAP for granting the doctoral and master's scholarships, respectively.

Acknowledgments to CNPq and FUNCAP for granting the doctoral and master's scholarships, respectively.

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EFFECTIVENESS OF PHYSIOTHERAPY TREATMENT ON PAIN AND FUNCTIONALITY IN PATIENTS WITH HEEL SPUR: RETROSPECTIVE OBSERVATIONAL STUDY

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Background: The calcaneal spur, often associated with plantar fasciopathy, constitutes one of the main causes of plantar pain in adults, compromising gait, functionality, and quality of life. Conservative physiotherapy has been widely employed in the treatment of this condition through analgesic resources, manual therapy, and therapeutic exercises, aiming at pain reduction and functional recovery.**Objective**: To evaluate the effectiveness of physiotherapeutic treatment in reducing pain and achieving functional recovery in patients with calcaneal spur treated at a school clinic.**Methods**: Retrospective observational study, of a descriptive nature, conducted through the analysis of 30 medical records of patients diagnosed with calcaneal spur treated at the Physiotherapy School Clinic of Anhanguera College, São Luís/Turu I Unit, during the Mandatory Outpatient Curricular Internship I of the Physiotherapy Course, from February 27 to June 16, 2026. The variables analyzed were age, sex, body mass index, affected side, pain intensity using the Visual Analog Scale (VAS), muscle strength assessed by the Oxford Scale, gait pattern, number of sessions, treatment duration, and clinical outcome. The physiotherapy protocol included myofascial release, therapeutic ultrasound, stretching of the plantar fascia and the triceps surae, muscle strengthening, proprioceptive exercises, gait re-education, functional exercises, and home care instructions, according to individual clinical progress.**Results**: 30 patients were analyzed, of which 66.7% were female, with an average age of 52.5 years. A predominance of unilateral involvement of the calcaneus was observed. The average pain intensity reduced from 7.7 to 2.5 points on the Visual Analog Scale. There was an improvement in muscle strength, with progression from grades 3–4 to 4–5 on the Oxford Scale, as well as the normalization of the gait pattern in most patients. The treatment was carried out in an average of 15.7 sessions, distributed over approximately eight weeks, resulting in a high rate of physiotherapy discharge and return to daily life activities.**Conclusion**: Physiotherapeutic treatment demonstrated favorable results in pain reduction and functional recovery of patients with heel spur. The combination of analgesic resources, manual therapy, and therapeutic exercises contributed to the improvement of gait, muscle strength, and functionality, reinforcing physiotherapy as an effective conservative approach in managing this condition.

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SLEEP, HIP MOBILITY, AND RIGIDITY CONTRIBUTE TO LOW BACK PAIN IN MILITARY FIREFIGHTERS?

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Background: Low back pain is one of the main causes of disability in the world and is common among military firefighters. Characteristics of joint movement and sleep have been related to low back pain. **Objective:** To investigate the associations of sleep duration and quality, thoracolumbar mobility, and passive hip stiffness in military firefighters with low back pain. **Methods:** Cross-sectional analytical observational study with 101 military personnel from the Preparatory Course for Officers of the Military Fire Department of the Federal District in the years 2024 and 2025. Records of low back pain symptoms in the previous six months, sleep duration in hours, sleep quality (restorative or not), thoracolumbar mobility through the lateral reach test in centimeters (cm), and passive hip stiffness through inclinometry in degrees (º) were collected. After checking for normality using the Kolmogorov-Smirnov test, the groups with and without nonspecific low back pain were compared using independent Student's t-tests or Mann-Whitney tests. The association between sleep and low back pain was examined through logistic regression adjusted for physical and functional variables, with a significance level of 5%. The study was approved by the Research Ethics Committee (CEP), under CAAE: 73825623.6.0000.8153. **Results:** 24.8% of the sample reported lower back pain. The duration of sleep was shorter in the pain group (median: 6.5 hours; interquartile range (IQR): 6.0 – 7.0) compared to the no pain group (median: 7.0 hours; IQR: 6.0 – 7.0) with $p = 0.02$ and effect size (r) = 0.23. Non-restorative sleep increased the chance of a low back pain episode by 3.5 times, after adjusting for variables (odds ratio = 3.50; 95% confidence interval: 1.23 – 10.06; $p = 0.018$). Right thoracolumbar mobility was greater in the group with low back pain (76.60 ± 15.94 cm) compared to the group without pain (68.64 ± 20.13 cm; $p = 0.04$; $r = 0.20$). There were no statistically significant differences between the groups in left hip stiffness ($p = 0.52$) and right hip stiffness ($p = 0.54$). **Conclusion:** The quality and duration of sleep may contribute to nonspecific low back pain, and greater thoracolumbar mobility may indicate a possible relationship between greater range of motion and pain. The passive stiffness of the hip did not show significant differences. The results indicate the need for integrated screening of sleep and movement in the physiotherapeutic assessment of military firefighters, without establishing causality.

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BASIC FACTORS ASSOCIATED WITH GREATER ADHERENCE TO PHYSICAL EXERCISE IN INDIVIDUALS WITH CHRONIC LOW BACK PAIN

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Background: Although therapeutic exercise is the main recommendation for the treatment of chronic low back pain (CLBP), adherence to it is still a challenge. Adherence is essential for the effectiveness of physiotherapeutic treatment. However, the influence of baseline psychosocial and demographic factors on adherence remains uncertain. **Objective:** To identify baseline characteristics associated with greater adherence after 3 months of exercise treatment in individuals with DLC, as well as their predictive capacity. **Methods:** Longitudinal observational study. The study included a total of 24 adults with CLBP, aged between 18 and 65 years. All participants were assessed using the following instruments: Exercise Adherence Rating Scale (EARS); Pain Self-Efficacy Questionnaire (PSEQ-10), Numeric Pain Scale (NPS), Oswestry Disability Index (ODI), STarT Back Screening Tool (SBST), Tampa Scale for Kinesiophobia (TSK), and Pain Catastrophizing Scale (PCS). They completed 3 months of exercises prescribed by physiotherapists, with a frequency of 3 times a week. The associations were analyzed using Spearman correlation, Kruskal-Wallis test, and simple linear regression with bootstrapping. **Results:** The participants were predominantly men (58.3%) and had a median age of 30.5 years. The EARS at 3 months correlated positively and moderately with baseline self-efficacy (ρ= 0.403; p = 0.051), while pain, disability, kinesiophobia, catastrophizing, and risk according to the SBST did not show significant associations. In the simple linear regression adjusted by bootstrap, the PSEQ explained 10.5% of the variance in EARS, with a 95% confidence interval (0.009 to 0.222), corroborating the positive effect of self-efficacy on adherence. **Conclusion:** Self-efficacy was the main variable with a positive association to exercise adherence at 3 months. The higher the baseline self-efficacy, the greater the adherence of patients to active protocols. Thus, interventions aimed at increasing initial self-efficacy can promote adherence. The identification of characteristics associated with exercise adherence helps physiotherapists in identifying patients with a higher chance of adhering to the treatment, and consequently, can guide clinical decision-making.

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FACTORS ASSOCIATED WITH HIGHER LEVELS OF TECHNOLOGY TRUST IN INDIVIDUALS WITH CHRONIC LOW BACK PAIN

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Background: Tele-rehabilitation has been widely used and has shown effects similar to in-person rehabilitation in individuals with chronic low back pain (CLBP). Its use depends not only on access to technology but can also be influenced by the patient's confidence in using it. However, little is known about which participant characteristics may be associated with their confidence in technology.**Objective**: To identify possible factors associated with the level of confidence in the use of technology in individuals with CLBP.**Methods**: Cross-sectional study (CAAE 88446325.8.0000.5504) that included 45 adults with chronic low back pain, aged between 18 and 65 years. All participants were evaluated through the collection of demographic data (age, education, and confidence) and through the Pain Self-Efficacy Questionnaire (PSEQ-10). The associations were evaluated using Spearman and Kendall correlation.**Results**: The participants were predominantly women (53.3%) and had an average age of 37.91 years (±13.56). The majority of participants reported a moderate level of confidence in using technology (55.6%). A moderate negative correlation was observed between age and confidence (ϱ=-0.387, p=0.009; Tb=-0.317, p=0.008), indicating that older participants exhibited lower confidence. Meanwhile, the level of education showed a positive correlation (ϱ=0.294, p=0.050; Tb=0.272, p=0.033). No significant association was observed between self-efficacy and confidence.**Conclusion**: Older individuals tend to exhibit a lower level of confidence in using technology, while a higher level of education shows a tendency for positive association. The results suggest that age group and education level are factors to be considered when recommending telerehabilitation interventions, aiming for better acceptance of digital technologies and, consequently, greater benefits.

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VALIDATION OF CVMOBXR FOR THREE-DIMENSIONAL ANALYSIS OF UPPER LIMB MOVEMENTS

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Background: Upper limb tasks are fundamental for daily life activities. Three-dimensional motion analysis systems are considered the gold standard for quantitative analysis. However, they present high costs, low individual immersion, and dependence on technical knowledge for data application and interpretation. Given this fragility, a software for three-dimensional analysis of kinematic data captured by the Quest 3, CVMobXR, was developed. Since this is a new measurement instrument, a validation process is necessary. **Objective:** To validate CvMobXR as a tool for three-dimensional analysis of upper limb movement. **Methods:** The study is observational, cross-sectional, and accuracy-based, registered under CAAE: 83730424.8.0000.5531. Fifty participants were recruited who used the Quest 3, with control and reflective markers on their dominant hand. A virtual table was projected by the glasses, on which a box and a ball were placed, in 3 different sizes (small, medium, and large), proportionally (e.g., small ball with small box). The task was to place the ball inside the box. 21 repetitions were performed: 7 repetitions for each ball size. The kinematic properties of the movement were measured simultaneously with the three-dimensional video capture system and the Quest 3. Speed and maximum and total trajectory values in all planes were used for validation through the Bland-Altman method and correlation analysis. **Results:** The trajectory and velocity in the time series of the X, Y, and Z axs obtained by both systems have a strong correlation (median R>0.98). The Bland-Altman analysis showed that the amplitude values and maximum speed values on all axs of the CVMobXR are higher compared to the Optitrack. **Conclusion:** The CVMobXR is a valid and applicable tool for kinematic measurements in different planes of upper limb movement.

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CORRELATION OF ANALGESIA WITH THE VARIATION OF KNEE EXTENSOR TORQUE IN PATIENTS WITH CHONDROPATHY

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Background: Knee pain is associated with instability, reduced muscle strength, power, and torque, as well as alterations in movement control. In chondral changes, treatment generally includes lower limb strengthening exercises, aiming to recover functional capacity. However, although pain may be associated with reduced muscle performance, its relationship with force production still needs to be better studied. **Objective**: To evaluate the association between pain reduction and the variation in quadriceps muscle strength in patients with knee pain who were anesthetized. **Methods**: Cross-sectional clinical study (CAAE 59192322.0.0000.5404). Thirteen patients with pain and a diagnosis of knee chondropathy confirmed by MRI were included. The participants underwent two isokinetic evaluations, before and after the administration of anesthetic in the painful knee, measuring the peak torque and pain during concentric strength tests. The tests were conducted on the Cybex Humac 2009/Norm isokinetic dynamometer, performing five concentric repetitions of extension and flexion at 60º/s. Thirty minutes after the initial assessment, 5 mL of 1% lidocaine was administered to the painful knee, and the protocol was repeated. The intensity of the pain was measured using the Visual Analog Scale (VAS); the post and pre difference generated the pain delta. The delta of the peak torque (N/m) between the assessments on the affected limb was also calculated. **Results**: The data are presented as mean ± standard deviation. The pre- and post-anesthesia differences were analyzed using paired Student's t-test or Wilcoxon test. The correlation was evaluated using the Pearson coefficient. There was a significant reduction in pain (pre 4.47 ± 2.19; post 1.02 ± 1.84; $p = 0.002$) on the anesthetized side, but not in the peak torque values of the extensors (pre 136.76 ± 64.48 N/m; post 147.69 ± 53.64 N/m; $p = 0.121$). A significant moderate negative correlation was observed between the delta of peak torque and the delta of pain ($r = -0.565$; $p = 0.044$). **Conclusion**: Patients with symptomatic chondropathy showed a significant reduction in pain when receiving intra-articular anesthesia. This reduction showed a negative correlation with the change in extensor torque, indicating that greater decreases in pain were associated with increases in extension torque during the test. The findings suggest that acute analgesia may influence the performance of knee extensors, having a direct impact on clinical strategies that combine strengthening and analgesia.

The findings suggest that acute analgesia may influence the performance of knee extensors, directly impacting clinical strategies that combine strengthening and analgesia.

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PSYCHOSOCIAL FACTORS ASSOCIATED WITH HEALTHCARE IN CHRONIC LOW BACK PAIN: A QUALITATIVE STUDY

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Background: Chronic low back pain (CLBP) is a multidimensional health condition, influenced by the interaction of contextual factors and the individual's subjective experiences. This condition profoundly impacts functionality and well-being, being the leading cause of disability worldwide. Cognitive-behavioral factors, such as catastrophizing and kinesiophobia, as well as socioeconomic barriers, can be associated with a worse prognosis. However, there are limitations in clinical practice, requiring a more comprehensive understanding of psychosocial factors in CLBP. **Objective:** To explore the perspective of patients with chronic low back pain on the healthcare received. **Methods:** This is an exploratory study with a qualitative approach, using individual semi-structured interviews. The sampling included individuals of both sexes, aged ≥18 years, with a report of low back pain for ≥12 weeks and pain intensity ≥3 on the Numeric Pain Scale (NPS). The interviews were conducted until data saturation was achieved, with collection and analysis carried out iteratively. The data analysis followed a condensation process: identification of units of meaning, thematic categorization, and organization of categories, allowing for an interpretative synthesis of the contents. **Results:** 29 interviews were conducted, with an average age of 50.0 ± 15.94 years and an average pain intensity of 7 ± 2.52 on the NRS. From the analysis, 46 codes emerged, distributed into 5 main thematic categories, namely: "Psychological Aspects," "Professional Follow-up," "Guidelines," "Support System," "Barriers to Treatment." In "professional follow-up," 3 codes were identified, referring to the number of professionals involved in the treatment of DL: "one professional," "more than one professional," and "no professional." Regarding the "guidelines," they were divided into active and passive conduct, totaling 15 codes. The "support system" was identified with 6 codes, linked to the type of support received by the patients. Regarding the "barriers to treatment," 5 codes were generated, namely: financial situation, work or family overload, access to the healthcare system, and low treatment adherence. The 'Psychological Aspects' demonstrated the highest number of findings, totaling 17 codes, from which 3 subcategories emerged: expectations, positive emotions, and negative emotions, with the latter standing out with 11 of the 17 codes. Among the findings in this subcategory are the fear of disability, the feeling of abandonment, and the invalidation of symptoms by third parties. **Conclusions:** The patients' reports show that DLC surpasses the physical dimension, being deeply affected by the psychosocial and emotional contexts experienced. This expanded perspective supports a humanized and integrated approach, favoring treatment adherence and clinical outcomes.

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ASSOCIATION BETWEEN RHEUMATOID ARTHRITIS/OSTEOARTHRITIS/RHEUMATISM AND FALLS IN ELDERLY COMMUNITY RESIDENTS

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Background: The aging process is associated with a combination of multifactorial physiological changes such as loss of lean mass and muscle strength, chronic comorbidities, and sensory and motor decline, which increase the risk of falls in elderly people, with sarcopenia being one of the main mechanisms involved, resulting from hormonal changes, chronic inflammation, and reduced motor innervation. Among the most prevalent diseases in this population, rheumatoid arthritis and osteoarthritis stand out for exacerbating the postural response already compromised by aging, relating to an increased risk of falls, as pain, joint stiffness, and cartilage degradation alter movement patterns and the ability to support body weight, resulting in unstable gait and impaired postural control.**Objective**: To analyze the association between self-reported rheumatoid arthritis/osteoarthritis/rheumatism and fall risk in elderly individuals residing in the community.**Methods**: This is a cross-sectional study conducted with 217 individuals aged (≥60 years), of both sexes, residing in a small municipality in the year 2019. The presence of rheumatoid arthritis/osteoarthritis/rheumatism was identified through self-report using the following question: "Has a doctor or nurse ever told you that you have arthritis, osteoarthritis, or rheumatism?" The risk of falls was also identified through self-report using the following question: "Have you had any falls in the last 12 months?" The association between the presence of rheumatoid arthritis/osteoarthritis/rheumatism and falls was conducted using Pearson's chi-square test, adopting a significance level of 5%.**Results**: Of the 217 elderly people who participated in the study, 61.8% were female. The average age was 77.69 ± 8.8 years. The prevalence of rheumatoid arthritis/osteoarthritis/rheumatism was 39.2% and the prevalence of falls was 25.3%. Of the elderly people who reported episodes of falls in the last year, 53.7% did not have rheumatoid arthritis/osteoarthritis/rheumatism and 46.3% reported having rheumatoid arthritis/osteoarthritis/rheumatism. No association was observed between the analyzed variables ($p > 0.05$).**Conclusion**: The results showed that there was no association between self-reported rheumatoid arthritis/osteoarthritis/rheumatism and the occurrence of falls in elderly people residing in the community**.**

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TRANSCULTURAL ADAPTATION OF THE OSTEOARTHRITIS CONCEPTUALIZATION QUESTIONNAIRE FOR BRAZILIAN PORTUGUESE: PRE-TEST RESULTS

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Background: Knee osteoarthritis (KOA) is highly prevalent and debilitating. Beliefs, knowledge, and expectations of patients directly influence pain, function, and treatment adherence. International guidelines recommend patient education as first-line care for OA, but evaluating its effect requires valid instruments. The Osteoarthritis Conceptualization Questionnaire (OACQ) was developed for this purpose, but it is only available in English, with no adapted version for Brazilian Portuguese. **Objective:** To translate and adapt the OACQ into Brazilian Portuguese and evaluate the comprehension, clarity, and relevance of the pre-final version of the instrument. **Methods:** This is a study of translation and transcultural adaptation, approved by the Ethics Committee of the Federal University of São Carlos (CAAE: 84572424.8.0000.5504). The process followed five stages: initial translation by a specialist translator, familiar with the health field, and a non-specialist translator, both native Portuguese speakers; synthesis and consensus among translators; back-translation by blind bilingual translators, whose native language is English; meeting of an expert committee; and testing of the pre-final version. The OACQ is composed of 36 items distributed across four domains (contextual influence, physiology, expectations, and conceptual change). In this final stage, the instrument was applied to 37 participants diagnosed with OAJ through individual cognitive interviews, assessing comprehension, relevance, clarity, and adequacy of the layout and instructions. Changes would be made if 20% or more of the participants reported the same difficulty. **Results:** 31 women and 6 men participated, with an average age of 55.2 ± 7.7 years, 10 with elementary education, 15 with high school, and 12 with higher education, with an average application time of approximately 8 minutes (ranging from 4 to 17 minutes). More than 80% of the participants adequately understood the items of the questionnaire; less than 20% reported occasional difficulties, concentrated on the term "severity" (item 5 of the OACQ). Only one item was considered irrelevant by a single participant. Everyone understood the instructions and found the response options clear, and no suggestions for layout changes were recorded. In light of these findings, an explanatory note was added to item 5, and the original structure of the instrument was maintained. **Conclusion:** The process of translation and transcultural adaptation resulted in a version of the OACQ in Brazilian Portuguese that is understood, clear, and relevant for patients with OA of different educational levels, preserving the equivalence with the original instrument and being ready for the subsequent stage of testing the measurement properties.

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IS THE PEAK PROGRAM CAPABLE OF ALTERING PAIN INTENSITY IN PEOPLE WITH OSTEOARTHRITIS?

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Background: Knee osteoarthritis (OA) is one of the main causes of disability, compromising physical function and quality of life. International guidelines recommend health education, self-management strategies, exercise therapy, and weight control, when indicated, as first-line treatments. In this context, the PEAK program (Physiotherapy Exercise and Physical Activity for Knee Osteoarthritis), developed by the University of Melbourne and translated, cross-culturally adapted, and implemented in Brazil by researchers Ana Jorge, Tânia Salvini, and Hugo Jário, consists of an evidence-based intervention that integrates health education, muscle strengthening exercises, and an individualized physical activity plan, aiming to promote self-care and improve the functionality of people with knee OA. **Objective:** To observe the effects of an exercise and health education program in primary care on the pain intensity in patients with knee OA. **Methods:** Intervention study with a pretest-posttest design, without a control group, approved under opinion no. 7.184.538, conducted at the Pedra do Sino Basic Health Unit and the Service for University Employees of the Federal University of Rio Grande do Norte (UFRN), both in Natal-RN. The sample was composed of individuals with a clinical diagnosis of osteoarthritis, with no restrictions regarding sex or age. The intervention took place in a group setting, in person, once a week for 12 weeks, with 60-minute sessions involving health education and exercises according to the PEAK program. The sociodemographic and anthropometric characteristics of the patients were assessed through questionnaires developed by the researchers, and pain was measured using the WOMAC domain. The evaluations took place before and after the intervention. The data were analyzed using descriptive statistics and the paired Student's t-test, adopting a significance level of 5% ($p < 0.05$). **Results:** Eight individuals with knee osteoarthritis participated, with 5 females and 3 males, an average age of 60.8 ± 9.3 years, an average BMI of 29.7 ± 5.8 kg/m², and an average symptom duration of 75.3 ± 81.1 months. After the intervention, a significant reduction in pain was observed as assessed by the pain domain of the WOMAC (mean difference = 4.43 points; 95% CI: 2.75–6.11; $p = 0.001$). **Conclusion:** The results suggest that group treatment may be a promising strategy for managing OA pain intensity in Primary Health Care, with larger sample studies needed to confirm these findings.

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IS THE PEAK PROGRAM CAPABLE OF ALTERING GAIT SPEED IN KNEE OSTEOARTHRITIS?

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Background: Knee osteoarthritis (OA) is one of the main causes of disability, compromising mobility and functionality, with the reduction in gait speed being an important indicator of functional performance. The guidelines recommend education and self-management strategies as part of the treatment. The PEAK program (Physiotherapy Exercise and Physical Activity for Knee Osteoarthritis), developed by the University of Melbourne and translated, cross-culturally adapted, and implemented in the Brazilian context by researchers Ana Jorge, Tânia Salvini, and Hugo Jário, consists of an evidence-based intervention that integrates health education, muscle strengthening exercises, and an individualized physical activity plan, with the aim of promoting self-care and improving the functionality of people with knee OA.**Objective**: To observe the effects of an exercise and health education program in primary care for patients with knee OA on the improvement of gait speed. **Methods**: Intervention study with a pretest-posttest design, without a control group, approved under opinion no. 7.184.538, conducted at the Pedra do Sino Basic Health Unit and the Service for University Employees of the Federal University of Rio Grande do Norte (UFRN), both in Natal-RN. Individuals of both sexes, aged 18 years or older, who reported knee pain and had a clinical diagnosis of knee osteoarthritis were included. The sociodemographic, clinical, and anthropometric measurements of the participants were obtained through a questionnaire developed by the researchers. To assess gait speed, the 40-meter Walk Test (40mWT) was conducted. The intervention took place in a group setting, in person, once a week for 12 weeks, with 60-minute sessions involving health education and exercises according to the PEAK program.**Results**: Eight individuals participated in the study, predominantly female, aged between 41 and 70 years, with an average BMI of 29.7 ± 5.8 kg/m², and an average symptom duration of 75.25 ± 81.06 months. After the intervention, a statistically significant increase in gait speed was observed ($t(7) = -2.549$; $p = 0.038$), with a large effect size ($d = 0.90$).**Conclusion**: The results of this study suggest that a self-management program developed in the context of Primary Health Care can contribute to the improvement of gait speed in individuals with knee osteoarthritis, with larger sample studies needed to confirm these findings.

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EFFECT OF BLOOD FLOW RESTRICTION ON PAIN AND BALANCE IN KNEE OSTEOARTHRITIS

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Background: Knee osteoarthritis (KOA) is a chronic joint disease characterized by pain, stiffness, and functional impairment, which can affect balance and joint proprioception. Blood Flow Restriction (BFR) associated with low-load exercises emerges as an alternative in rehabilitation, allowing strengthening with less joint overload. However, the effects of 40% and 80% occlusions on balance and pain still need to be clarified. **Objective:** To compare the effect of two percentages of RFS occlusion (40% vs. 80%) associated with low load on balance and pain in individuals with OA. **Methods:** Randomized clinical trial approved by the Research Ethics Committee of UNIFAP (Opinion No. 4.248.398). Twelve individuals with symptomatic OA were distributed into two groups: 40% RFS + low load and 80% RFS + low load (30% of 1RM; n=6 per group). The intervention lasted 16 weeks, totaling 32 sessions, with two sessions per week, interspersed with a one-day interval. Balance was assessed using the Romberg Test with parallel feet, and pain was measured using the Visual Analog Scale (VAS), both pre- and post-intervention. The intragroup analysis was performed using the paired t-test, comparing the initial and final values of pain and balance, and the intergroup analysis was conducted using analysis of covariance (ANCOVA), considering the initial values of pain and balance as covariates ($p < 0.05$). **Results:** The intragroup analysis indicated a significant reduction in pain intensity and improvement in balance after the intervention in both groups ($p < 0.001$). In the 80% RFS group, the VAS reduced from 7.33±1.37 to 2.83±1.47, while in the 40% RFS group it reduced from 7.17±0.98 to 2.83±1.33. In balance, the 80% RFS group increased from 11.00±2.45 to 24.70±2.07, while the 40% RFS group evolved from 12.30±3.08 to 23.70±2.34. In the intergroup analysis, the ANCOVA did not show a statistically significant difference for final pain ($F=0.10$; $p = 0.760$) or final balance ($F=1.48$; $p = 0.254$). The initial values of pain and balance significantly influenced the final outcomes ($p = 0.003$ and $p = 0.025$, respectively). **Conclusion:** Low-load training with RFS at 40% showed effects similar to those at 80% in improving balance and reducing pain in individuals with OA, indicating that lower occlusion intensities may represent a potentially applicable alternative in clinical practice.

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CINESIOPHOBIA IN HEALTHCARE STUDENTS: FREQUENCY AND ASSOCIATION WITH QUALITY OF LIFE

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Background: Persistent pain can negatively impact the quality of life of university students, favoring the development of kinesiophobia, characterized by the fear of movement due to the possibility of worsening the pain. The study aims to estimate the frequency of kinesiophobia and its association with the quality of life in health science students.**Methods**: Quantitative, observational, and cross-sectional study conducted with 181 students from the Bahiana School of Medicine and Public Health. Sociodemographic questionnaire, Tampa Scale for Kinesiophobia (TSK), and SF-36 were applied. The statistical analysis was performed in SPSS, adopting a significance level of 5%.**Results**: There was a predominance of the female sex (66.9%), with gender being the only variable associated with the presence of pain ($p = 0.017$). According to the SF-36, there was no statistical difference ($p > 0.05$) in the eight domains assessed between students with and without kinesiophobia. Therefore, the condition did not impact the quality of life in this sample.**Conclusion**: Persistent pain is frequent, especially in females, but kinesiophobia did not show a significant impact on quality of life (SF-36) in this sample. However, this absence of statistical differences may be due to the small sample size, which suggests the need for new studies with larger samples to confirm these findings.

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TENDINOPATHY PAIN SCORE: A MULTIMODAL PAIN SCORE FOR PATELLAR TENDINOPATHY

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Background: Patellar tendinopathy is characterized by localized pain related to mechanical load, with repercussions on function and sports participation. The intensity of symptoms can vary across different domains, which limits their characterization by a single clinical measure. The integration of different pain assessment contexts can, therefore, provide a more comprehensive estimate of the clinical condition of these individuals.**Objective**: To propose the Tendinopathy Pain Score (TPS), a multimodal clinical score to assess pain in individuals with patellar tendinopathy, and to investigate its association with the Victorian Institute of Sport Assessment–Patella (VISA-P).**Methods**: Exploratory study, with longitudinal observational analysis and correlation of secondary data. Approved by the Research Ethics Committee of the Federal University of São Paulo, under CAAE 73943817.2.0000.5505 and opinion no. 2.351.182. Data from 59 individuals with patellar tendinopathy were analyzed. The TPS was composed of four measures: i) pain intensity at rest; ii) during the most painful activity; iii) during a provocative functional test, measured by the Numerical Rating Scale; iv) pressure pain threshold, measured by algometry (PPT). The components were assigned weights, after consulting via email with 10 experienced professionals in the field of tendinopathy, references in the area, from various countries, of 0.6%, 4.0%, 4.4%, and 1.0%, respectively, resulting in a score from 0 to 10, where higher values represent greater overall pain intensity. The association between the TPS and the VISA-P was examined at the initial and final moments using the Spearman correlation coefficient.**Results**: 59 volunteers were included, at the initial moment, the average TPS was 6.03 points, while the average VISA-P was 53.22 points. A weak negative correlation without statistical significance was observed between the instruments ($\rho = -0.236$; $p = 0.072$). At the final moment, the means of the TPS and VISA-P were 2.38 and 76.27 points, respectively, with a moderate negative correlation between the scores ($\rho = -0.653$; $p < 0.001$).**Conclusion**: The TPS showed a moderate inverse association with the VISA-P at the final moment, but not at the initial moment. These findings suggest that the score may contribute to the multidimensional monitoring of pain in patellar tendinopathy. Additional studies are necessary to investigate its reliability, validity, and responsiveness.

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MECHANICAL BEHAVIOR OF THE ACHILLES TENDON IN INDIVIDUALS WITH CHRONIC ANKLE INSTABILITY: COMPARISON WITH CONTROL GROUP

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Background: Ankle sprain is the most common orthopedic injury in the ankle-foot complex that leads individuals to seek medical care. The progression can lead to chronic ankle instability (CAI) defined by a sensation of joint giving way, pain, and recurrence of mild sprains. **Objective:** To evaluate the mechanical behavior of the Achilles tendon (AT) in participants with chronic ankle instability (CAI). **Methods:** This is a cross-sectional observational study, with a sample of research participants diagnosed with chronic ankle instability. Participants of both sexes, aged between 18 and 60 years, presenting chronic ankle instability. The participants will be referred for a single assessment of the architecture of the Achilles tendon. The participants will be evaluated for tendon properties (tendon length, cross-sectional area, strength, stress and strain, stiffness, tendon elongation and displacement, elastic modulus, and echogenicity). Participants with chronic ankle instability will be compared to a group of seemingly healthy participants (Control Group) who will undergo the same evaluations. **Results:** It is anticipated that individuals with chronic ankle instability will exhibit changes in the mechanical behavior of the Achilles tendon, with lower stiffness and greater deformation when compared to the control group. Furthermore, differences in the Young's modulus, initial elongation, and functional scores in clinical questionnaires are expected. This project will provide support for understanding the mechanical and structural behavior of the Achilles tendon in individuals with chronic ankle instability, contributing to the comprehension of the musculotendinous adaptations associated with this condition and to underpinning rehabilitation strategies based on biomechanical evidence. **Conclusion:** This project will provide subsidies for understanding the mechanical and structural behavior of the Achilles tendon in individuals with chronic ankle instability, contributing to the understanding of the musculoskeletal adaptations associated with this condition and to underpinning rehabilitation strategies based on biomechanical evidence.

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EFFECTS OF FUNCTIONAL AND COMBINED TRAINING ON THE IMPACT OF FIBROMYALGIA AND PSYCHOLOGICAL SYMPTOMS

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Background: Fibromyalgia is a multisystemic syndrome characterized by generalized chronic nociplastic musculoskeletal pain, associated with fatigue, headache, dysautonomia, fibrofog, gastrointestinal disorders, insomnia, and significant biopsychosocial impairment, such as depressive and anxious symptoms, drastically affecting quality of life. Knowing that physical exercise is the first-line non-pharmacological treatment for chronic pain conditions, this study aimed to investigate whether functional training, compared to combined training, promotes reductions in the overall impact of fibromyalgia, depressive symptoms, and anxiety after a three-month intervention protocol associated with pain education. **Objective:** To evaluate the effects of functional training compared to combined training on the impact of fibromyalgia, depressive symptoms, and anxiety in individuals with fibromyalgia. **Methods:** Randomized controlled clinical trial (Opinion 6.515.065) conducted with 46 adults, aged 18 to 60, diagnosed with fibromyalgia. The participants were equally distributed between the functional training group (n=23) and the combined training group (n=23), with both protocols associated with pain education over a three-month period, with a frequency of two sessions per week. As outcome measures, the impact of fibromyalgia was assessed using the Fibromyalgia Impact Questionnaire-Revised (FIQ-R), depressive symptoms were evaluated using the Patient Health Questionnaire-9 (PHQ-9), and the severity of anxiety was measured using the Generalized Anxiety Disorder-7 (GAD-7). The statistical treatment employed mixed linear models in RStudio® software, with Bonferroni correction (α=5%), also including intention-to-treat (ITT) analysis. **Results:** There was a significant effect of time on the impact of fibromyalgia (FIQ: $F = 14.06$; $p < 0.001$), with a reduction in scores in both groups at the fourth week, eighth week, and after the intervention, with no significant group effect ($p = 0.716$) or group × time interaction ($p = 0.707$). For psychological symptoms, a significant effect of time was observed only for depressive symptoms (PHQ-9: $F = 9.46$; $p = 0.003$), indicating a reduction in scores in both groups, with no group effect ($p = 0.314$) or interaction ($p = 0.897$). The anxiety symptoms (GAD-7) did not show significant changes ($p > 0.05$). **Conclusion:** Both training programs, when combined with pain education, induce clinically and statistically significant reductions over time in the overall impact of fibromyalgia and depressive symptoms, without showing superiority between the modalities. The absence of changes in anxiety scores suggests that specific psychoemotional outcomes may require extended intervention timeframes or complementary multidisciplinary approaches.

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EFFECT OF FUNCTIONAL AND COMBINED TRAINING ON PAIN AND FUNCTIONAL CAPACITY IN FIBROMYALGIA

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Background: Fibromyalgia is a multifactorial condition with extensive symptomatology, encompassing nociplastic musculoskeletal pain and is linked to implications in functional capacity and muscle strength, autonomic dysfunctions, fatigue, headache, as well as cognitive and psychological impairment. In the treatment of chronic pain, physical exercise constitutes the non-pharmacological intervention with the most scientific support in the literature. Thus, this research aimed to investigate whether functional training promotes superior responses to combined training in improving central pain modulation mechanisms, functional capacity, and muscle strength gain after three months of intervention associated with pain education in patients with fibromyalgia.**Objective**: To investigate the effects of functional training and combined training on pain severity and interference, lower limb muscle strength, and functional capacity in individuals with fibromyalgia.**Methods**: Controlled and randomized clinical trial (Opinion 6.515.065) involving adults (18-60 years) diagnosed with fibromyalgia. A total of 46 participants were allocated to the functional training group (n = 23) and the combined training group (n = 23), both associated with pain education, over a period of three months (two sessions per week). They were evaluated: pain severity and interference (brief pain inventory), lower limb strength (30-second sit-to-stand test), and functional capacity (6-minute walk test, 6MWT). The data were analyzed using mixed linear models with Bonferroni correction (α=5%).**Results**: A significant reduction in pain severity was observed in the functional training group after the intervention (F = 7.952; p = 0.007), with no statistical change in the combined group and no difference between the groups (p = 0.575 for group effect; p = 0.753 for interaction). The interference of pain did not show significant changes (F = 1.134; p = 0.293). Both groups showed a significant increase in lower limb muscle strength after the intervention (F = 6.258; p = 0.016), with no group × time interaction (p = 0.914). The distance covered in the 6-Minute Walk Test did not show significant changes (p > 0.05).**Conclusion**: Functional training shows specific efficacy in reducing pain severity, while both modalities are equally effective in inducing adaptive gains in lower limb muscle strength. The stability in pain interference and cardiorespiratory capacity, even after the implementation of systematic load and volume progression, may indicate that such multidimensional progress may exhibit slower adaptive response profiles, requiring therapeutic windows in fibromyalgia rehabilitation.

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PROFILE OF SEDENTARY BEHAVIOR IN THE ELDERLY: PRELIMINARY RESULTS OF A COMMUNITY SAMPLE

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Background: Sedentary behavior (SB) is characterized by activities performed while awake in sitting, reclining, or lying positions, with an energy expenditure of ≤1.5 metabolic equivalents. In the elderly, excessive sedentary time has been associated with functional decline, frailty, chronic diseases, and a higher risk of mortality, regardless of physical activity. In this way, the characterization of sedentary behavior patterns can contribute to the planning of strategies aimed at healthy aging. **Objective:** To describe sedentary behavior in community-dwelling elderly individuals. **Methods:** Cross-sectional study, with preliminary data from 25 elderly individuals (≥60 years) participating in a longitudinal project developed at the Human Movement Analysis Laboratory of the Federal University of Ceará. Sedentary behavior was objectively assessed using accelerometry (ActiGraph wGT3X-BT), worn for seven consecutive days, allowing for the analysis of daily sedentary time, number and duration of sedentary periods (bouts), interruptions of sedentary behavior (breaks), and moderate to vigorous physical activity (MVPA). Descriptive analysis of the data was performed using SPSS 22.0. **Results:** The sample showed a predominance of females (92.0%) and an average age of 70.76 ± 7.62 years. The average sedentary time was 575.5 (± 136.2) min/day, equivalent to 9.6 h/day. An average of 163.8 (± 44.7) bouts were observed, with an average duration of 23.8 (± 2.6) min and a maximum duration of 99.6 (± 27.9) min. The participants had 162.8 (± 44.6) breaks, with an average duration of 34.6 (± 10.5) min. The MTFA showed an average of 279.4 (± 137.6) min/week. **Conclusion:** The evaluated elderly individuals exhibited a high daily time in sedentary behavior, although distributed in multiple interrupted periods throughout the day. The findings reinforce that sedentary behavior and physical activity are distinct constructs, highlighting that meeting physical activity recommendations does not eliminate prolonged exposure to sedentarism. These results highlight the importance of interventions aimed not only at increasing physical activity but also at reducing sedentary time.

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SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN SERGIPE MUNICIPALITIES: AN ANALYSIS BASED ON OFFICIAL HEALTH DATA

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Background: Systemic Lupus Erythematosus (SLE) constitutes an important public health problem due to its chronic nature, high morbidity, and potential impact on mortality. A global prevalence of 43.7 cases per 100,000 inhabitants is estimated, predominantly affecting women of reproductive age (Cao et al., 2023). In Brazil, epidemiological information remains limited and is mainly concentrated in the South and Southeast regions, restricting the understanding of the disease burden in the Northeast and hindering the planning of evidence-based health actions (Borba et al., 2021). **Objective:** To evaluate the spatial pattern of mortality from Systemic Lupus Erythematosus in the municipalities of the state of Sergipe through spatial autocorrelation analysis. **Methods:** Epidemiological, ecological, retrospective, and descriptive study, conducted using data from the Mortality Information System (SIM/DATASUS). All deaths due to SLE (ICD-10: M32.1, M32.8, and M32.9) recorded between 2015 and 2025 in the state of Sergipe were included. The epidemiological characteristics were described according to sex, color/race, age group, education level, marital status, place of occurrence, and distribution in the municipalities of the state. Mortality rates per 100,000 inhabitants were calculated, and spatial analysis was conducted using the Global Moran's Index. **Results:** In the analyzed period, 94 deaths from SLE were recorded, mainly concentrated between 2017 and 2019 (32.98%). A predominance of the female sex (80.85%), individuals between 20 and 39 years old (50.0%), and self-identified brown people (52.13%) was observed. In the spatial analysis at the municipal level, the contiguity and distance matrices did not show significant spatial autocorrelation ($p > 0.05$), indicating the absence of consistent geographical clusters. Only broader k-nearest neighbor matrices showed low-magnitude positive autocorrelation (Global Moran's Index <0.04), suggesting low-magnitude spatial dependence, detected only when considering broader neighborhood matrices. **Conclusion:** The mortality from SLE in Sergipe showed a diffuse spatial distribution among the municipalities, with no evidence of consistent geographical clusters. The consistency of this pattern across different neighborhood matrices suggests that the occurrence of deaths is not associated with specific areas of the territory, reinforcing the need for surveillance and assistance strategies distributed throughout the state. These findings demonstrate that analyzes at the municipal scale can provide relevant information for the territorial planning of assistance, even in the absence of significant spatial clusters.

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FIBROMYALGIA GOES BEYOND PAIN: A COMPARATIVE CROSS-SECTIONAL STUDY ON DYNAMIC BALANCE

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Background: Although balance alterations are commonly reported by women with fibromyalgia, no studies have yet been identified that specifically assess dynamic balance through the Y-Balance Test in this population. Thus, there is a scarcity in the literature of data that jointly investigate the multiple clinical and functional factors capable of explaining this impairment.**Objective**: To compare dynamic balance between women with fibromyalgia and healthy women and investigate their associations with pain, fatigue, muscle strength, physical fitness, central adiposity, and autonomic modulation.**Methods**: This study consists of a comparative cross-sectional observational study, approved by the Research Ethics Committee (CAAE 82180424.6.0000.5504), with 32 women with fibromyalgia and 32 healthy women matched by age and body mass index. Dynamic balance was assessed using the Y-Balance Test, pain intensity (11-point numerical scale), pressure pain threshold (digital algometer), fatigue (Multidimensional Fatigue Inventory), knee muscle strength (isokinetic dynamometer), physical fitness (six-minute walk test), central adiposity (waist-to-height ratio), and heart rate variability (heart rate monitor). The comparisons between groups were performed using the t-test or Mann-Whitney test, depending on the data distribution, and the association between clinical variables and dynamic balance was tested using multiple linear regression, with adjustment for confounding variables defined from a theoretical model (DAG).**Results**: Women with fibromyalgia showed significantly lower performance in dynamic balance compared to healthy women ($p < 0.05$) for the three directions assessed in the test, bilaterally. In the adjusted model, greater fatigue, higher central adiposity, lower physical fitness, lower pressure pain threshold, lower heart rate variability, and lower muscle work capacity were each independently associated with poorer dynamic balance performance, explaining between 20% and 40% of its variance.**Conclusion**: The impairment of dynamic balance in women with fibromyalgia does not depend on a single isolated factor, but on the joint action of multiple systems: fatigue, body composition, physical fitness, muscular work capacity, autonomic modulation, and pain sensitivity. Although pain is a central component of the syndrome, the findings suggest that balance performance is more strongly organized around fatigue, physical capacity, and autonomic regulation, reinforcing the need for rehabilitation strategies that integrate these dimensions.

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EFFECTS OF PHYSIOTHERAPY INTERVENTION IN PATIENTS WITH TEMPOROMANDIBULAR DYSFUNCTION AND ORAL-FACIAL PAIN

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Background: Orofacial Pain (OFP) ranges from a simple intraoral pain to more difficult-to-manage conditions, such as myofascial pain and arthralgia in the temporomandibular joint, associated with Temporomandibular Dysfunction (TMD), making the role of a Physiotherapist important for managing this condition. **Objective:** To report the impact on the clinical outcomes of TMD in patients treated during the implementation of the Physiotherapy service. **Methods:** It was a quantitative, experimental, and clinical study. The data collection was conducted from April to December 2024 in the Department of Physiotherapy. The sample consisted of 24 patients who were evaluated through specific questionnaires for TMD and TMD associated with physiotherapeutic techniques of manual therapy, kinesiotherapy, and electrothermobiological resources, over ten alternating days, each lasting one hour. The research was approved by the research ethics committee under the number 6.762.004. The statistical analysis was performed using the Prism 3.0 program. **Results:** There was statistical significance for mild TMD and no TMD (***$p < 0.001$), after the re-evaluation of the participants, indicating a general pattern of severity reduction. There was also an increase in the range of motion and a decrease in the level of pain. **Conclusion:** It is concluded that there was an improvement in the mandibular movements involved in the basic activities of daily life, especially those related to the depression and maximum elevation of the mandible, such as functional biting and chewing, and that, after the treatments, it was possible, within the available resources, to successfully implement the service for patients with TMD and TMD. The authors thank the National Council for Scientific and Technological Development (CNPq) and the Cearense Foundation for Scientific and Technological Development Support (FUNCAP) for granting the master's and doctoral scholarships, respectively. The authors thank the National Council for Scientific and Technological Development (CNPq) and the Cearense Foundation for Scientific and Technological Development Support (FUNCAP) for granting the master's and doctoral scholarships, respectively.

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RISK PROFILE OF KNEE PAIN IN UNIVERSITY HANDBALL ATHLETES

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Background: Handball is a sport that involves changes of direction and jumps and has a prevalence of 58.3% of injuries in the lower limbs. Sports injuries are a complex phenomenon that emerges from the interaction between different elements. To understand this phenomenon and reduce the likelihood of occurrence, it is essential to comprehend the interaction between human movement variables, based on a risk profile.**Objective**: To identify the risk profile of knee pain in university handball athletes**Methods**: Cross-sectional study, registered under CAAE: 79609424.4.1001.5531. The target population consists of university handball athletes, aged 18 years or older, with a minimum practice of 2 times/week or 180 minutes per week. A sociodemographic questionnaire was applied to identify the presence of pain and its location. The structural tests are: internal hip stiffness (IHS), leg-forefoot alignment (LFA), range of motion of the dorsiflexors (ROM-D), and function of the hip extensors (FHE). The following alterations were observed during the single-leg jump landing: anterior trunk inclination (ATI), pelvic drop, knee medialization, and arch collapse (AC). The variables were categorized according to normative data from the literature. A decision tree was used to analyze the interaction between variables using the Orange Data Mining software.**Results**: Of the participants evaluated, nine reported knee pain in the month prior to the assessment, with four in the right knee and five in the left knee. The decision tree revealed that, among the four athletes who reported right knee pain in the past month, three performed IAT during the landing of the single-leg jump and exhibited closed-chain ADM-D <=35°. The other athlete performed IAT, had ADM-D>35°, RIQ>40°, and DAP. Of the 5 athletes who reported left knee pain, all performed fewer than 15 repetitions in the FEQ test. Of these, four exhibited DAP and medialization of the knee upon landing the single-leg jump. Of these, two had a Q angle between 30° and 40°, and the other two had hip mobility >40°, excessive pronation, and ITB syndrome.**Conclusion**: Five risk profiles for knee pain in handball athletes were identified: (1) IAT during single-leg jump landing + Limitation of ADM-D (<35°); (2) IAT during single-leg jump landing + Normal ADM-D + Hip stiffness + DAP during single-leg jump landing; (3) EQ weakness + no DAP + no IAT + hip hypermobility; (4) EQ weakness + DAP + knee medialization + normal hip mobility; (5) EQ weakness + DAP + IAT + hip hypermobility + excessive pronation + knee medialization.

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"I DON'T FEEL IN CONTROL OF MY BODY": PERCEPTIONS OF MOTOR CONTROL IN WOMEN WITH FIBROMYALGIA

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Background: Although functional tests indicate that balance is altered in women with fibromyalgia, little is known about how these women perceive the impact of symptoms on the organization of their own body and movement in daily life. **Objective:** To explore the perceptions of women with fibromyalgia regarding the impact of the disease on body functioning and movement organization, also considering its emotional and social repercussions. **Methods:** Qualitative research approved by the Research Ethics Committee (CAAE 82180424.6.0000.5504), with 30 women with fibromyalgia from all regions of Brazil. The data were collected through semi-structured interviews, conducted remotely via the Google Meet platform, and analyzed through phenomenological analysis based on content analysis. **Results:** The analysis resulted in three categories. In the first category, regarding the functioning of the body, the participants described difficulty in recognizing their own bodily limits, confusion between right and left associated with fibrofog, alternation of the dominant side according to the day's pain, postural instability with fear of falls, and fine motor coordination failures, that is, a body that ceased to operate automatically and began to require constant vigilance. In the second, regarding emotional aspects, these changes impacted self-esteem and self-confidence, associated with feelings of frustration, sadness, and a sense of not belonging to one's own body, in addition to a self-perception often distinct from the image reflected in the mirror. In the third, regarding social challenges, the stigma and invisibility of suffering worsen the tension in family, marital, and professional bonds, restricting participation in daily activities, with support networks being identified as a protective factor against isolation. **Conclusion:** Women with fibromyalgia describe a body that ceases to operate automatically and becomes constantly monitored, marked by vigilance, instability, and unpredictability. These changes in body awareness, laterality, postural balance, and motor coordination impact confidence and self-esteem, with a direct influence on autonomy and social participation. In this way, fibromyalgia reorganizes the body, movement, identity, and participation, being interdependent dimensions that reinforce the need for physiotherapeutic approaches centered on the experience of those living with the disease. In this way, fibromyalgia reorganizes the body, movement, identity, and participation, being interdependent dimensions that reinforce the need for physiotherapeutic approaches centered on the experience of those living with the disease.

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PREVALENCE OF SPIN IN ABSTRACTS OF SYSTEMATIC REVIEWS ON MUSCULOSKELETAL PHYSIOTHERAPY

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Background: Systematic reviews are established as a tool for synthesizing scientific evidence, being the gold standard for clinical decision-making, such as patient care, resource allocation, among others, and are considered crucial in the scientific community due to their high methodological rigor, ensuring a thorough and safe analysis of the existing literature. **Objective:** To evaluate the prevalence and types of spin in abstracts of systematic reviews on musculoskeletal physiotherapy published in the five journals with the highest Journal Impact Factor (JIF) of 2022. **Methods:** Meta-epidemiological study that included systematic reviews on interventions in musculoskeletal physiotherapy published in the five journals with the highest Journal Impact Factor (JIF), according to the 2022 Journal Citation Reports (JCR). Information was extracted regarding the year of publication, protocol registration, risk of bias assessment, and the use of the GRADE approach. The abstracts were compared to the full texts to identify and classify the presence of the nine types of spin, according to the typology proposed by Yavchitz et al. The data were analyzed using descriptive statistics. **Results:** 36 systematic reviews published between 2020 and 2025 were included. The majority of the studies were published in the British Journal of Sports Medicine (n = 25; 69.4%), Journal of Sports and Health Science (n = 9; 25%), and Journal of Cachexia, Sarcopenia and Muscle (n = 2; 5.56%). The presence of spin was identified in 18 (50.0%) of the evaluated abstracts. The most frequent types of spin were type 5 (n = 8; 22.2%) and type 1 (n = 4; 11.1%), while the others showed lower frequency. Regarding methodological characteristics, 30 (83.3%) reviews had a registered protocol, 31 (86.1%) conducted a risk of bias assessment, and 19 (52.8%) used the GRADE approach. **Conclusion:** The presence of spin was observed in half of the abstracts of the systematic reviews evaluated, with type 5 being the most frequent. This finding indicates that, in several studies, the conclusion asserts the beneficial effect of the experimental treatment despite the high risk of bias in the primary studies, which may lead to an overvaluation of the results. These results reinforce the importance of creating transparent abstracts, aligned with the evidence presented in the full text and the methodological rigor of systematic reviews.

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WHAT ARE THE PAIN COPING STRATEGIES IN JUVENILE FIBROMYALGIA? A QUALITATIVE STUDY.

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Background: Juvenile fibromyalgia (JF) is a condition characterized by chronic musculoskeletal pain that affects children and adolescents and is often associated with poor school performance, sleep disturbances, and emotional distress, significantly impacting the daily lives of these patients and their families. Despite the significant repercussions of the condition, there are still gaps in understanding the experiences of children and adolescents living with chronic pain. Therefore, the accounts obtained through qualitative study allow for a deeper understanding of the pain experience, providing support for an individual-centered approach.**Objective**: To investigate the pain coping strategies used by children and adolescents living with FMF.**Methods**: This is a cross-sectional study with a qualitative approach (CAAE: 48042721.00000.5546, opinion: 5.147.25) that included children and adolescents aged 8 to 18 years diagnosed with FMJ. Semi-structured remote interviews were conducted via telephone contact, lasting between 10 and 15 minutes, which were recorded in audio and subjected to double transcription. Its content was analyzed using Bardin's methodology, utilizing the MAXQDA 2022® software.**Results**: 15 participants were included, with an average age of 13.87±2.36 years, of which 73% were female and 27% were male. The analysis of the data allowed the division of the reports into a general category with 5 subcategories: psychological strategies, physical strategies, rest, family and social support, and conception and knowledge of pain. The use of medications, massages, seeking medical help, and prolonged rest during crisis moments were reported, in addition to engaging in pleasurable activities as a form of distraction to reduce pain vigilance and shift focus. The importance of family and social support was highlighted, built through dialog with family and friends, being related to feelings of belonging, appreciation, and well-being. Additionally, symptoms such as fatigue, malaise, and memory difficulties can be perceived as factors that compromise participation and functionality in daily life activities, leisure, and school performance.**Conclusion**: The findings show that the impact of pain in JFM can lead children and adolescents to mobilize an extensive repertoire of coping strategies to deal with the daily challenges of the disease. Such strategies extend beyond conventional clinical management, such as the use of medications and physical exercises, highlighting the importance of the biopsychosocial model in addressing this population, in order to direct therapeutic management to the dimensions affected by the disease.

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CORRELATION OF ANALGESIA WITH THE VARIATION OF KNEE EXTENSOR TORQUE IN PATIENTS WITH CHONDROPATHY

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Background: Knee pain is associated with instability, reduced muscle strength, power, and torque, as well as alterations in movement control. In chondral changes, treatment generally includes lower limb strengthening exercises, aiming to recover functional capacity. However, although pain may be associated with reduced muscle performance, its relationship with force production still needs to be better studied. **Objective:** To evaluate the association between pain reduction and the variation in quadriceps muscle strength in patients with knee pain who were anesthetized. **Methods:** Cross-sectional clinical study (CAAE 59192322.0.0000.5404). Thirteen patients with pain and a diagnosis of knee chondropathy confirmed by MRI were included. The participants underwent two isokinetic evaluations, before and after the administration of anesthetic in the painful knee, measuring the peak torque and pain during concentric strength tests. The tests were conducted on the Cybex Humac 2009/Norm isokinetic dynamometer, performing five concentric repetitions of extension and flexion at 60º/s. Thirty minutes after the initial assessment, 5 mL of 1% lidocaine was administered to the painful knee, and the protocol was repeated. The intensity of the pain was measured using the Visual Analog Scale (VAS); the post and pre difference generated the pain delta. The delta of the peak torque (N/m) between the assessments on the affected limb was also calculated. **Results:** The data are presented as mean ± standard deviation. The pre- and post-anesthesia differences were analyzed using paired Student's t-test or Wilcoxon test. The correlation was evaluated using the Pearson coefficient. There was a significant reduction in pain (pre 4.47 ± 2.19; post 1.02 ± 1.84; p = 0.002) on the anesthetized side, but not in the peak torque values of the extensors (pre 136.76 ± 64.48 N/m; post 147.69 ± 53.64 N/m; p = 0.121). A significant moderate negative correlation was observed between the delta of peak torque and the delta of pain (r = -0.565; p = 0.044). **Conclusion:** Patients with symptomatic chondropathy showed a significant reduction in pain when receiving intra-articular anesthesia. This reduction showed a negative correlation with the change in extensor torque, indicating that greater decreases in pain were associated with increases in extension torque during the test. The findings suggest that acute analgesia may influence the performance of knee extensors, having a direct impact on clinical strategies that combine strengthening and analgesia. The findings suggest that acute analgesia may influence the performance of knee extensors, directly impacting clinical strategies that combine strengthening and analgesia.

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PAIN IN FIBROMYALGIA AND ARTHRITIS: WHERE IT APPEARS AND HOW IT IS DESCRIBED BY CHILDREN AND ADOLESCENTS?

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Background: Chronic musculoskeletal pain in children and adolescents has a significant biopsychosocial impact and represents one of the most relevant symptoms in pediatric rheumatology. In this context, conditions such as juvenile idiopathic arthritis (JIA), which presents an inflammatory predominance, and juvenile fibromyalgia (JF), which is associated with non-inflammatory mechanisms and central sensitization, stand out. Although understanding the pathophysiology of pain is fundamental, its multidimensional assessment is also necessary. However, there is a scarcity of studies regarding the multidimensional characterization of pain, especially concerning sensory and affective aspects. **Objective:** To describe the body distribution and multidimensional characteristics of pain in children and adolescents with JIA and JFM. **Methods:** This is an observational study, duly approved (CAAE: 92045225.5.0000.5546), conducted according to the guidelines of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). Children and adolescents (7-18 years old) with a diagnosis of JIA or JRA were included. The Pediatric Adolescent Pain Tool (PAPT) was used, consisting of a body map, a five-level intensity scale, and a list of qualitative pain descriptors. **Results:** 26 participants with JIA were evaluated, consisting of 13 children and 13 adolescents (12.5 ± 2.78 years), and 11 with JFM, all of whom were adolescents (15.82 ± 2.3 years). The pain intensity showed a predominance of mild to moderate in JIA, while most participants with JFM reported moderate or intense pain. In JIA, there was a predominance of peripheral and articular involvement, especially in the knees, ankles, and fingers, with low axial involvement, while JFM showed diffuse, bilateral, and axial distribution. The selected descriptors were different between the conditions. In JIA, descriptors such as "hot," "like a cramp," and "swollen" were more frequent, suggesting an inflammatory component. In FMJ, descriptors such as "pressure," "numb," "cracking," and "throbbing" stood out, suggesting alterations in central pain processing. Despite these differences, the selected affective descriptors were similar between the conditions, such as "very unpleasant," "makes you cry," and "makes you scream." The high frequency of these terms reveals emotional suffering in both groups. **Conclusion:** JIA and JFM present distinct pain profiles. It is worth noting that both conditions have a significant emotional impact, reinforcing the need for multidimensional approaches to the assessment and management of pediatric pain.

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CLINICAL EFFECTS OF THE ASSOCIATION BETWEEN PULSED THERAPEUTIC ULTRASOUND AND CANNABIDIOL ELECTROLYTIC GEL IN THE TREATMENT OF KNEE OSTEOARTHRITIS

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Background: Knee osteoarthritis is one of the most prevalent musculoskeletal diseases, characterized by chronic pain, joint stiffness, reduced range of motion (ROM), and impaired muscle function, negatively impacting quality of life. In this context, phonophoresis using pulsed therapeutic ultrasound (PTU) combined with cannabidiol (CBD) electrolyte gel emerges as a promising strategy to enhance the analgesic and anti-inflammatory effects of the phytocannabinoid. **Objective:** The present study aimed to evaluate the clinical effects of the association between PUS and CBD electrolyte gel in individuals with knee osteoarthritis. **Methods:** This is a quantitative, analytical, and interventional study conducted with individuals of both sexes, aged between 40 and 65, diagnosed with knee osteoarthritis. The participants were divided into two groups: UTP, subjected to pulsed therapeutic ultrasound associated with 0.9% saline conductive electrolyte gel, and CAN, subjected to pulsed therapeutic ultrasound associated with cannabidiol electrolyte gel. Both groups performed a kinesiotherapy exercise protocol after each session. The pre- and post-intervention assessments included the Brief Pain Inventory for measuring pain intensity and interference, goniometry for assessing ROM, and manual digital dynamometry for measuring muscle strength. The therapeutic protocol was carried out over three months. The study was approved by the Research Ethics Committee of the Federal University of Sergipe (CAAE 56421216.0.0000.5546). **Results:** The results demonstrated clinical improvement in both groups after the intervention. However, the group treated with UTP associated with the cannabidiol electrolyte gel showed a significantly greater reduction in pain intensity and pain interference in daily activities compared to the group treated with UTP associated with the 0.9% saline conductive electrolyte gel ($p < 0.05$). Furthermore, a significant increase in the range of motion in flexion and muscle strength was observed in the CAN group compared to the UTP group ($p < 0.05$). In contrast, the range of motion in extension did not show statistically significant differences between the groups ($p > 0.05$). **Conclusion:** It is concluded that the association between pulsed therapeutic ultrasound and cannabidiol electrolyte gel enhances the effects of physiotherapy in the treatment of knee osteoarthritis, promoting greater pain reduction, less functional interference from pain, improvement in flexion range of motion, and increased muscle strength compared to the use of pulsed therapeutic ultrasound associated with 0.9% saline conductive electrolyte gel. These findings reinforce the potential of phonophoresis with cannabidiol as an innovative and safe physiotherapeutic strategy for the clinical management of knee osteoarthritis, justifying the conduct of randomized clinical trials with larger samples and long-term follow-up to consolidate its clinical applicability.

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SPATIAL EPIDEMIOLOGICAL ANALYSIS OF MORTALITY DUE TO SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN THE MICROREGIONS OF SERGIPE.

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Background: Systemic Lupus Erythematosus (SLE) is a chronic and multifactorial autoimmune disease, characterized by systemic inflammation and multisystem involvement. Its pathogenesis involves the interaction between genetic, hormonal, environmental, and immunological factors, resulting in dysregulation of the immune response (Tsokos, 2011). The clinical manifestations of SLE are heterogeneous and can significantly compromise the quality of life and survival of patients (Fanouriakis et al., 2019). Mortality associated with SLE remains influenced by clinical, social, and territorial factors, making the investigation of its spatial distribution relevant.**Objective**: To conduct a temporal and spatial analysis, observing the evolution of the number of deaths and their distribution over the years by microregions of the state of Sergipe.**Methods**: Epidemiological, retrospective, and descriptive study conducted with data from the Mortality Information System (SIM/DATASUS). All deaths due to SLE (ICD-10: M32.1, M32.8, and M32.9) registered between 2015 and 2025 in the state of Sergipe were included. The epidemiological characteristics were described according to sex, color/race, age group, education level, marital status, place of occurrence, and distribution across health regions. Mortality rates per 100,000 inhabitants were calculated, and spatial analysis was conducted using the Global Moran's Index and Local Indicators of Spatial Association (LISA).**Results**: 94 deaths from SLE were recorded in Sergipe between 2015 and 2025, with a concentration in the period from 2017 to 2019 (32.98%). There was a predominance of females (80.85%), individuals aged 20 to 39 years (50.0%), and self-identified brown people (52.13%). The highest frequencies occurred in the Health Region of Aracaju (43.62%), followed by Lagarto and Nossa Senhora do Socorro (12.77% each). The spatial analysis revealed positive spatial autocorrelation (Global Moran's Index = 0.190; p = 0.0015), indicating spatial dependence between neighboring areas. However, the local analysis (LISA) did not identify statistically significant spatial clusters, suggesting a diffuse spatial distribution of mortality.**Conclusion**: Mortality from SLE in Sergipe showed global spatial dependence, but without the formation of significant local clusters. A higher occurrence was observed among young adult women, reinforcing the importance of early diagnosis and longitudinal follow-up. Spatial analysis proved to be a relevant tool to support epidemiological surveillance and health action planning, with future investigations needed on the territorial determinants associated with SLE mortality.

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MACHINE LEARNING IN IDENTIFYING PERFECTIONISM AS A RISK OF INJURY IN RECREATIONAL RUNNERS

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Background: The expansion of street running in Brazil is accompanied by a high prevalence of overuse injuries. In addition to physical factors, perfectionism—divided into adaptive and maladaptive dimensions—acts as a relevant psychological predictor in athletes' vulnerability. This study proposes to investigate the influence of perfectionism on the occurrence of injuries in recreational runners using Machine Learning techniques. This approach allows for the identification of complex and non-linear interactions between behavioral, training, and clinical variables, aiming to overcome current methodological limitations, offering an integrated view that underpins personalized and more effective preventive strategies for the modality. **Objective:** To identify whether perfectionism is a risk factor for injury, using machine learning. **Methods:** Prospective observational study (STROBE) with 50 recreational runners (18-65 years), followed for six months between 2025 and 2026. Data collection will be conducted via the REDCap platform and weekly monitoring using Garmin devices. The inclusion criteria require regular practice for more than six months, and the exclusion criteria disallow recent injuries. The analyzes combine inferential statistics (mixed-effects models and Cox regression) and Machine Learning algorithms — Random Forest, Support Vector Machines (SVM), and Long Short-Term Memory (LSTM) networks. The prediction of injuries is monitored by the Oslo Sports Trauma Research Center (OSTRC-BR) questionnaire and validated by accuracy and interpretability metrics using SHAP (SHapley Additive exPlanations) values. The project was approved by the Research Ethics Committee of the Bahiana School of Medicine and Public Health (CAAE No. 90122025.7.0000.5544). **Results:** The project is in the follow-up phase. So far, 62 recreational runners (66.1% female, average age of 40 ± 10 years) are being monitored, with an initial adherence rate of 67% in filling out questionnaires via REDCap and syncing their Garmin devices. The pipeline for data processing and implementation of Machine Learning models (Random Forest, SVM, and LSTM) has already been developed and tested with synthetic/pilot data, presenting a functional data flow and adequate integration with interpretability metrics via SHAP values. Data collection continues to reach the six-month follow-up. **Conclusion:** It is expected that, through the application of the Machine Learning model, it will be possible to more accurately identify the impact of perfectionism on the occurrence of injuries in recreational runners. The integration of psychological, biometric, and training variables aims to offer a robust predictive model, helping health professionals to devise preventive and personalized strategies, thereby reducing the incidence of overuse injuries in the activity.

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DEVELOPMENT OF AN INFORMATION SYSTEM FOR MANAGING PATIENTS WITH DISTAL RADIUS FRACTURE

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Background: Distal radius fracture is among the most frequent injuries of the upper limb and can cause significant functional limitations. Despite its clinical relevance, the lack of specific systems for the standardized recording of information hinders the longitudinal follow-up of patients, the generation of care indicators, and the development of rehabilitation research. In this context, an information system was developed aimed at managing clinical and functional data of patients treated in a physiotherapy outpatient clinic. **Objective:** To develop and test an information system for the storage, organization, and management of data for patients with distal radius fractures treated at the university's Physiotherapy Outpatient Clinic. **Methods:** Quantitative study, of the survey type, developed in stages that included the collection of clinical requirements, database modeling in partnership with the Biomedical Informatics team, prototype development, patient data entry, functionality testing, and system adjustments. For the initial evaluation, a pilot study was conducted with 28 patients (29 wrists), using clinical and functional data collected during the physiotherapeutic assessment. **Results:** The pilot population was predominantly composed of women (67.9%), with an average age of 61.7 years, while the men had an average age of 38.9 years. Among the patients who underwent surgical treatment, the start of physiotherapy occurred, on average, 5.2 weeks after the surgery. The system allowed for the structured registration of patients, name search, standardized recording of clinical variables, storage of functional scales such as the visual analog scale for pain, DASH questionnaire, and Kapandji pinch, range of motion measurements, and recording of physiotherapeutic procedures. The preliminary analysis of the data showed a tendency for an association between a longer time to start physiotherapy and higher levels of pain, as well as a reduction in wrist flexion range, reinforcing the potential of the database for producing clinical indicators. **Conclusion:** The developed system demonstrated feasibility for the organization and standardized storage of clinical data, favoring patient monitoring, management of care information, and the development of future research. The expansion of the sample and the implementation of new features may strengthen its clinical and scientific applicability. CAAE: 81590524.5.0000.5345.

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STANDARDIZATION OF PLATELET-RICH PLASMA (PRP) EXTRACTION FOR A CLINICAL TRIAL ON OSTEOARTHRITIS REHABILITATION IN HIP AND KNEE

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Background: Knee and hip osteoarthritis (OA) is a musculoskeletal condition associated with pain, stiffness, reduced mobility, and functional limitation, impacting quality of life. Physiotherapeutic rehabilitation, especially through therapeutic exercises, constitutes a central component of OA management. However, the persistence of symptoms and functional limitations reinforces the need to investigate complementary strategies. In this context, platelet-rich plasma (PRP) has been studied as a possible intervention for OA, although differences in preparation methods and product composition hinder the comparison between studies and the interpretation of effects. Thus, a future randomized clinical trial will evaluate PRP associated with a standardized physiotherapy program, compared to corticosteroid and simulated procedure, also associated with physiotherapy. To adequately investigate this combined approach, it is necessary to previously establish a standardized and reproducible protocol for PRP preparation. **Objective:** To identify the plasma fraction and aspiration technique associated with the highest platelet concentration and to evaluate the cellular composition and reproducibility of PRP, aiming for its standardization for use as a complementary intervention in physiotherapeutic rehabilitation in a future clinical trial of people with OA. **Methods:** Experimental methodological study, approved by the Research Ethics Committee (CAAE 94648325.0.0000.5345) of UFCSPA. Samples from six participants were analyzed. The protocol employed double centrifugation: 300 × g for five minutes, without brake, followed by 700 × g for 17 minutes. The plasma was divided into ten sequential fractions and aspirated using an intravenous catheter (Abocath) or a calibrated micropipette. The fractions were subjected to automated blood count. The platelet count constituted the primary outcome, while leukocytes and erythrocytes were analyzed as indicators of cellular composition. The platelet concentration factor was calculated by the ratio between the platelet count of the fraction and the baseline, adopting ≥3 as a preliminary adequacy criterion. **Results:** Aspiration with Abocath showed greater consistency in obtaining the fraction with higher platelet concentration. In the records with complete data, the target fraction obtained with Abocath reached a concentration factor ≥3 in all evaluated participants, ranging from 3.73 to 9.70. The micropipette met this criterion in one out of three participants and showed greater variability. The platelet concentration was found to be restricted to a specific portion of the plasma, while the other fractions showed values close to or below the baseline. In some samples, the more concentrated fractions also showed an increase in leukocytes and erythrocytes, highlighting the need to simultaneously consider platelet enrichment and cellular composition. **Conclusion:** Aspiration with Abocath showed greater consistency in obtaining the fraction with the highest platelet concentration in this protocol. However, the presence of leukocytes and erythrocytes in the more concentrated fractions indicates the need for additional control of the cellular composition. The developed standardization establishes methodological parameters for obtaining more reproducible PRP, enabling its investigation as a complementary intervention to physiotherapeutic rehabilitation in future clinical trials. The findings of this methodological study do not allow for inferring clinical efficacy.

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EFFECTS OF SPECIFIC PHYSIOTHERAPY EXERCISES FOR SCOLIOSIS IN ADULTS: A SYSTEMATIC REVIEW

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Background, Objective: To synthesize the evidence regarding the effects of specific physiotherapeutic exercises for scoliosis on functional disability, pain, Cobb angle, and quality of life in adults. **Methods:** This study was conducted as a systematic review following PRISMA guidelines, using the approach. Randomized clinical trials were selected from databases such as PubMed, Embase, Web of Science, PEDro, Virtual Health Library (VHL), and Cochrane Library until July 2026. The inclusion criteria involved adults with scoliosis who underwent PSSE, while studies with postoperative patients or with other etiologies of scoliosis were excluded. The selection of articles was carried out using the Rayyan platform, and the quality of the studies was assessed using the PEDro scale. **Results:** Of the 453 studies identified, the analysis included three studies that demonstrated the benefits of PSSE in reducing pain, improving functional disability, and quality of life. Interventions such as self-correction exercises and personalized programs proved effective in these outcomes. However, the effectiveness of PSSE in reducing the Cobb angle was inconsistent, suggesting limitations for more advanced structural corrections. **Conclusion:** Specific physiotherapeutic exercises for scoliosis are an effective alternative for conservative management in adults, especially in symptom relief and functional improvement. However, more research is needed to standardize protocols and confirm their effectiveness in different clinical aspects, including the reduction of scoliotic curvature. However, more research is needed to standardize protocols and confirm their effectiveness in different clinical aspects, including the reduction of scoliotic curvature.

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HOW SOCIODEMOGRAPHIC VARIABLES AFFECT THE LEVEL OF CHRONIC LOW BACK PAIN IN PATIENTS FROM THE NORTHERN REGION

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Background: Chronic low back pain represents a serious global public health problem due to its high prevalence and its social and economic impact. It is also known that this health condition has a multifactorial nature and is associated with sociodemographic factors such as age, sex, education level, and marital status. However, in the Brazilian context, scientific productions that sought to understand and relate the sociodemographic profile of individuals with chronic low back pain are limited and outdated, and the minority were conducted in the Northern region. **Objective:** To analyze how sociodemographic variables interfere with the level of chronic low back pain in the Northern region of Brazil. **Methods:** This is a cross-sectional observational study, with a sample of 281 volunteers native to the Northern region of Brazil, with chronic low back pain and aged over 18 years. The data collection was conducted online and the data were managed on the REDCap platform. Sociodemographic and clinical questionnaires were administered to identify the age, sex, education level, and marital status of the sample, and the multiple linear regression model in Jamovi Software (2.2) was used to evaluate associations. The project was approved by the Ethics Committee of UNIFAP (No. 7.010.322). **Results:** The sample had an average age of 40.4±13.2 years and a pain level of 7.14±2.41 according to the numerical pain scale (NPS). It was observed that there was a predominance of chronic low back pain in females (75.1%), single marital status (54.4%), and among people with a high level of education (51.2% had completed higher education). In the multiple linear regression model (R^2=0.125), age (p = 0.008), male sex (p = 0.011), and low educational level (p = 0.029) were associated with a higher level of pain. No statistically significant association was identified between pain intensity and marital status. **Conclusion:** The findings of this study are in line with the evidence described in the literature on this condition, both in other regions of Brazil and in the international scenario. This equivalence in the results reveals a consistent epidemiological pattern, demonstrating that the determinants of chronic low back pain transcend geographical or socioeconomic barriers. By consolidating that the reality observed in this region aligns with the findings of major urban centers, the study reinforces the universality of the problem and highlights the importance of directing health strategies toward the subgroups most vulnerable in this region.

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APPLICATION OF THE LEAN SIX SIGMA TOOL FOR IMPROVING THE BILLING EFFICIENCY OF THE FISIOTRAUMA CLINIC: CASE STUDY

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Background: This project aimed to reduce financial losses and improve operational efficiency in a physiotherapy clinic by optimizing the patient journey throughout the billing cycle — from appointment scheduling to final billing. The goal was set to reduce the average billing time by 50%, initially recorded at 26.7 days (to 13.35 days). The data were collected in the company's service management system and analyzed based on the Lean Six Sigma methodology, specifically using the DMAIC cycle (Define, Measure, Analyze, Improve, and Control). A new process mapping was developed and a standardized procedure was implemented with the help of the 5W2H tool. Technical training sessions were conducted, and the workflow was restructured to reduce waste, improve patient flow, and strengthen coordination between departments. The results demonstrate that the application of Lean Six Sigma in the healthcare sector can drive significant performance improvements, increase profitability, and provide higher quality services, contributing to sustainable growth and better outcomes for patients. **Objective:** The healthcare sector has numerous variables, mainly because it still has many (manual) care processes that depend on people, making it possible to identify a higher percentage of errors. To improve the efficiency of the patient journey, which consequently reduces the average billing time and generates more profitability, we need to look at the waste throughout this patient experience. Seeking "process improvement" and revenue assurance in the sectors. Thus, this work aims to improve the company's billing by reducing waste, acting preventively in the phases prior to billing, being more assertive during billing, and increasing the operational efficiency of the organization. **Methods:** A case study was conducted at the Fisiotrauma physiotherapy clinic. The data collections were taken from the company's service system and compiled into Excel spreadsheets. The analysis of the company's revenue evolution was carried out by the Revenue Assurance assistant and the support data by the Unit and Quality Coordinators, but to obtain reliable data collection, a single blind and trained employee was used. The data were collected from November 1, 2022, to February 28, 2023. The Lean Six Sigma methodology was applied with its two tools: Lean, focusing on eliminating waste such as inventory, queues, and unnecessary processes, and Six Sigma, which brings statistical analysis. Both tools complement each other for better performance of processes and projects. The analyzes were conducted using the Action software and Excel. The methodology was based on Lean Six Sigma concepts, through the phases of Definition, Measurement, Analysis, Improvement, and Control. **Results:** The analyzed inputs were prioritized according to the effort/impact matrix, starting with inputs that have high impact and low effort (prioritized). Since this is a pilot project, which involves a cultural adaptation on the part of the employees, it was decided to analyze the priority entries, complex ones, and see and act. The process control plan will be based on the average billing time (Control spreadsheet of the guides sent by billing - Admed). The billing time in days was 26.7, and with the improvement, it reached 13.3 days. **Conclusion:** This project was innovative at the Physiotherapy clinic and had a significant impact on the organization with the aim of improving the efficiency of the patient journey, from the beginning to the end of the treatment, reducing the average billing time and generating more profitability using Lean Six Sigma methodology. A 65.3% reduction in the average billing time was achieved, decreasing from 26.7 days to 13.3 days.

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EVALUATION OF PERIPHERAL MUSCLE STRENGTH IN HOSPITALIZED ELDERLY PATIENTS WITH FEMUR FRACTURE

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Background: Population aging is associated with the progressive loss of peripheral muscle strength, a condition exacerbated by periods of immobilization, such as those resulting from fractures. In elderly patients hospitalized with a femur fracture, the deficit in muscle strength directly impacts functional capacity and autonomy for basic activities of daily living. **Objective:** To evaluate peripheral muscle strength in elderly patients with femur fractures hospitalized in a public reference hospital in Recife, Pernambuco. **Methods:** Cross-sectional study, with a convenience sample composed of 24 elderly individuals (≥ 60 years) of both sexes, hospitalized with a diagnosis of proximal femur fracture. Patients with severe cognitive deficits that hindered communication or with medical contraindications for the assessment were excluded. The research was approved by the Research Ethics Committee (CAAE: 97690226.2.0000.5198). Peripheral muscle strength was assessed through manual dynamometry for grip strength and the Medical Research Council scale for lower limbs (quadriceps and anterior tibial). **Results:** The sample (n=24) had an average age of 72.3±8.1 years, with 62.5% being female. The grip strength presented an average of 18.4±5.2 kgf, a value below the cutoff points for sarcopenia. In the assessment using the Medical Research Council scale, 70.8% of patients presented a grade ≤ 4 in at least one of the evaluated muscle groups, with a notable emphasis on quadriceps weakness (mean grade = 3.2±0.7). A moderate negative correlation was observed between the length of hospitalization and grip strength ($r = -0.48$; $p < 0.05$). **Conclusion:** Elderly patients with femoral fractures hospitalized exhibit a marked reduction in peripheral muscle strength, especially in the affected lower limb. Early assessment using dynamometry and the Medical Research Council scale proves useful for identifying the degree of impairment and guiding muscle rehabilitation strategies during hospital admission. Early assessment using dynamometry and the Medical Research Council scale proves useful for identifying the degree of impairment and guiding muscle rehabilitation strategies during hospitalization.

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MUSCULOSKELETAL PAIN IN PARKINSON'S DISEASE SUBJECTED TO A FORRÓ EXERCISE PROTOCOL

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Background: In Parkinson's disease (PD), a progressive neurodegenerative condition, musculoskeletal nociceptive pain stands out as a little-explored non-motor symptom with a significant impact on functionality. **Objective:** To evaluate the clinical pain parameters in people with PD subjected to an exercise protocol through dance. **Methods:** This is an excerpt from a feasibility study that evaluated a dance protocol based on the forró style as an intervention for people with PD. Individuals with characteristics of neuropathic or nociplastic pain were excluded. The study was approved by the Human Research Ethics Committee of the Federal University of Sergipe – Brazil (CAAE: 64807417.6.0000.554, opinion no. 2.350.544). The participants were recruited through public calls on social media and evaluated using the Brief Pain Inventory (BPI), which measured intensity, interference, and the pain diagram. The statistical analysis included mean, standard deviation, and percentage frequency of the affected regions. **Results:** The sample consisted of 24 individuals (59.3±6.4 years; Hoehn and Yahr 1-4). A reduction in BPI scores was observed after the intervention (Baseline vs Final; mean±standard deviation): intensity (3.0±1.9 vs 2.4±2.0); interference (4.2±2.8 vs 3.1±2.9). In the pain diagram, the lumbar and cervical regions were the most prevalent, showing a reduction in pain frequency after the intervention: lumbar region (55.2% vs 41.7%) and cervical (14.0% vs 2.5%). **Conclusion:** The study evaluated the parameters and proved to be feasible for the reduction of nociceptive musculoskeletal pain in people with PD, highlighting the importance of broader studies on pain and functionality in this population.

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MEDITATION FOR MANAGING SYMPTOMS IN PEOPLE WITH FIBROMYALGIA: A SYSTEMATIC REVIEW

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Background: Fibromyalgia is a chronic condition that negatively affects people's quality of life, characterized by widespread pain, fatigue, and other associated symptoms. Meditation has been considered a complementary intervention in the management of these symptoms, due to its potential to relieve pain and improve mental health. **Objective:** To analyze the effect of meditation on the improvement of pain, stress, and sleep quality in people with fibromyalgia. **Methods:** This is a systematic review based on PRISMA 2020, registered in PROSPERO (CRD420251000178), which involved a thorough analysis of scientific articles available in databases, following the PICO strategy, including only randomized clinical trials with blinding. The selected studies were subjected to a peer methodological evaluation, and the results were presented in tabular format. **Results:** The findings suggest that the practice of meditation may contribute to the reduction of pain, improvement of mood, and enhancement of sleep quality in people with fibromyalgia. However, the studies analyzed indicate variations in the protocols and methods used, highlighting the importance of standardizing interventions in future research. **Conclusion:** Meditation emerges as an effective and safe complementary intervention in the treatment of fibromyalgia, potentially serving as an ally to traditional therapies. However, more research is needed to consolidate its effectiveness.