Results: The study shows that there are still difficulties in offering comprehensive care to users in the CER. CER physiotherapists have problems with internal communication and with the care network, in addition to difficulties in operationalizing interprofessional work; and that the physiotherapeutic practice in the CER is still very dependent on equipment and technologies.
Conclusion: The knowledge of the particular contexts contained in the physiotherapists' experiences allowed us to identify that there are still barriers to providing expanded and comprehensive care focused on the biopsychosocial model for PwD.
Implications: Generating discussions with themes provided from the individual experiences of physiotherapists provides greater understanding of the nuances of institutional disputes, thus extending greater possibilities to subsidize the process of permanent education in health, fostering discussions about the guise of practices of health, improvements in decision-making to improve the organization and work process of CER physiotherapists and provide professionals to reflect on their work process to produce better care in the biopsychosocial perspective of People with Disabilities.
Keywords: Physiotherapy, Rehabilitation Centers, Biopsychosocial Models

Conflict of interest: The authors declare no conflict of interest.
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ACUTE EFFECT OF AEROBIC AND/OR RESISTANCE EXERCISE ON BLOOD GLUCOSE IN INDIVIDUALS WITH TYPE 2 DIABETES: A SYSTEMATIC LITERATURE REVIEW

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Background: Type 2 diabetes (T2DM) is the most prevalent type of diabetes worldwide. Its treatment aims to control glycemic levels, with regular physical exercise being one of its pillars. The hypoglycemic effect of physical exercise varies according to the intensity, duration, type, and time of day it is performed.
Objectives: Synthesize the scientific evidence on the effect of a single session of continuous (AEc) or interval (AEi) aerobic exercise and/or resistance exercise (RE) on post-exercise glycemia in individuals with T2DM.
Methods: The study protocol (CRD42022289985) followed PRISMA guidelines. The search strategies were elaborated from the acronym PICO (P: individuals $\geq$ 18 years old with DM2; I: a single session of aerobic and/or resistance exercise; C: no exercise or any exercise that did not meet the characteristics of the intervention; O: glycemia measured before and up to 24h post-exercise). The electronic databases CINAHL, Cochrane Library, EMBASE, Google Scholar, LILACS, MEDLINE/Ovid, SciELO, SPORTDiscus, and Web of Science were searched, including randomized and non-randomized clinical trials published from the inception of the databases until February 2022, without limitation of language. The "Risk of Bias" tool was used to assess the risk of bias in the included studies. Reduction or no significant change in post-exercise glycemia is expressed as (↓) or (↔), respectively.
Results: 25 articles published between 1997 and 2021 were included from 6,237 retrieved from the literature. The total sample consisted of 424 participants (men = 290, women = 119, unreported = 15) aged between 21 and 70 years, with mean values of glycated hemoglobin between 6.0±0.3% and 10.4± 3.0% and body mass index between 22.2±2.3 and 37.0±5.7 kg/m^2. The duration of the exercise sessions varied between 10 and 60 minutes, with moderate to high intensities, and most (72%) were performed in the morning. Thirteen studies investigated AEc vs. control [glycemia: AEc ↓, control ↔ (n=10); AEc and control ↔ (n=3)]; five investigated AEi vs. control [glycemia: AEi ↓, control ↔ (n=2); AEi and control ↔ (n=3)]; three studied AEc vs. AEi vs. control [glycemia: AEc and AEi ↓, control ↔ (n=2); AEc, AEi, and control ↔ (n=1)], three investigated RE vs. control [glycemia: RE and control ↔ (n=3)], and one study investigated AEc vs. RE vs. AEc+RE vs. RE+AEc vs. control [glycemia: AEc and RE isolated and combined ↓, control ↔]. The significant reduction in glycemia was up to 24 hours post-AEc, up to 30 minutes post-AEi, up to 60 minutes post-RE, and up to 45 minutes after AEc and RE combined. The risk of bias was low in 5%, some concerns in 85%, and high in 10% of the included studies.
Conclusion: Sequentially, the most recurrent findings were that (1) a single isolated AEc session and (2) a single isolated AEi session can promote a significant reduction in post-exercise glycemia in individuals with T2DM, with the duration of this effect longer after isolated AEc.
Implication: The daily practice of aerobic exercises is essential for treating T2DM.
Keywords: Diabetes Mellitus, Type 2, Exercise, Systematic Review

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COGNITIVE AND VISUAL INTERACTIONS IN THE DECLINE OF POSTURAL STABILITY IN HEALTHY OLDER ADULTS

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Background: Preserved postural control is essential for older adults` functionality and social participation. Activities of daily living are commonly performed in dual-task situations and usually studied on movement, such as walking, but the interplay between cognitive tasks and vision for static balance control in older adults remains to be studied.
Objectives: This study investigated the interactions between cognitive task and visual inputs on upright postural control during aging.

Methods: 64 healthy older adults performed postural stability assessment in an upright position on a stabilographic platform (Force Platform, EMG Systems) and a performance-based balance assessment (Mini-BESTest). Analysis was performed using a within-subject 2 × 2 factorial design experiment, including visual condition (Eyes-Open or Eyes-Closed) and task condition (single- or dual-task). We performed two-way repeated measures analysis of variance (ANOVA) and correlation analysis to analyze the Center of Pressure (COP) variables and Mini-BESTest results.
Results: Postural control decreased when participants performed cognitive tasks or had their eyes closed. The interaction of task condition and visual condition were detected and showed that when older adults performed the cognitive task with eyes-closed, COP total displacement and anteroposterior (AP) velocity showed a higher postural sway.
Conclusion: Cognitive task performance reduces the upright postural control of older adults in a quiet standing position, and the interaction between cognitive demand and visual information performance influences postural balance in older adults. Additionally, the weak correlations between Mini-BESTest and COP suggest the need for complementary assessment to better screen older adults' populations in health services assistance.
Implications: The decrease in static balance due a cognitive task and the interaction between the cognitive task and the visual information indicate the need for preventive strategies in primary health care to maintain postural control, even in healthy older adults. The weak correlations between the clinical test used (Mini-BESTest) and the gold standard postural control assessment toll (force platform) indicate the need for complementary evaluation, but mainly, claim for the wide adoption of preventive strategies dedicated to balance.
Keywords: Postural Balance, Aging, Dual-task

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PSYCHOLOGICAL AND PAIN PROCESSING FACTORS IN PATELLOFEMORAL PAIN: SEX DIFFERENCES AND CORRELATION WITH CLINICAL OUTCOMES

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Background: Patellofemoral pain (PFP) is a multifactorial condition involving psychological factors (e.g. kinesiophobia and catastrophism) and pain processing factors (eg, hyperalgesia), which seem to be increased in individuals with PFP. Studies suggest that these factors appear to differ between men and women in other populations. Considering that PFP is twice as prevalent in females as in males, it is possible that sex influences psychological and pain processing factors and their relationship with clinical outcomes (e.g. pain and function) in individuals with PFP.
Objectives: The aim of this study was to compare the levels of kinesiophobia, catastrophism and pain pressure threshold (PPTs) between men and women with and without PFP and to investigate whether these outcomes are correlated to pain, function, and quality of life (QoL) in men and women with PFP.
Methods: 65 women and 38 men with PFP, 30 women and 30 men without PFP aged 18-40 years were enrolled in this cross-sectional study. The levels of kinesiophobia, catastrophism, pain, function and QOL were assessed by the Tampa Scale of Kinesiophobia, Pain Catastrophizing Scale, Visual Analog Pain Scale, Anterior Knee Pain Scale and the Medical Outcome Short-Form 36, respectively. PPTs were obtained with a digital algometer on the contralateral shoulder and patella. Generalized linear models (GzLM) were used for comparison analyzes while Spearman's test was used for correlation analyses.
Results: Women and men with PFP had greater kinesiophobia (CI: 1.88, 10.33; 1.55, 10.37), catastrophism (CI: 4.90, 14.01; 8.63, 27.78) and smaller Patellar PPTs (CI: -1.71, -.36; -1.43, -.04) compared to asymptomatic controls. Women with PFP had lower shoulder PPTs than men with PFP (CI: -1.89, -.74), which was not observed for psychological factors. In women with PFP, kinesiophobia and catastrophism correlated with pain (rho= .44 to .53), function (rho= -.55 to -.58) and the physical component of QoL (rho= -.63 to -.65). For men with PFP, only catastrophizing correlated with pain (rho= .42) and function (rho= -.43). Patellar and shoulder PPTs had only weak correlations with pain, function and QoL.
Conclusion: Individuals with PFP showed alterations in psychological and pain processing factors when compared to asymptomatic controls, although the presentation of psychological factors did not differ between genders, only for PPTs. However, it is important to note that psychological factors correlated differently with clinical outcomes in men and women with PFP.
Implications: Interventions focused on psychological and pain processing factors are recommended for individuals with PFP. Our results corroborate with these recommendations. Furthermore, our results are the first to indicate that interventions focused on kinesiophobia may be especially important for women with PFP, since higher levels of kinesiophobia are not directly correlated to worse levels of pain and function in men with PFP. Future clinical studies are needed in this area.
Keywords: Pain, Kinesiophobia, Catastrophism

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ADAPT PROJECT - USABILITY OF THE ADAPTED MOTORIZED CAR FOR MOBILITY OF CHILDREN WITH CEREBRAL PALSY

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Background: Cerebral Palsy (CP) refers to a group of developmental disorders that affect movement and posture due to non-progressive impairment in the brain during childhood, causing children and adolescents with this condition to experience restrictions in participation and limitations in performing activities. Children classified in Levels IV and V, in the Gross Motor Function Classification System (GMFCS), have limited participation due to their dependence on mobility. This lack of mobility or locomotion in some way affects cognitive development, learning, independence, and autonomy. In