analyze gait as the primary outcome of interventions with different exercise modalities for both elderly men and women with osteoporosis, in order to define more effective short and long-term strategies for this population.
Implications: From this review, it is still difficult to determine whether balance training combined with other types of exercise brings benefits to elderly people with osteoporosis. However, balance training with multi-task exercises deserves attention, as it simulates everyday situations, making elderly people more prepared and confident while walking.
Keywords: Aged, Gait, Osteoporosis

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PREVALENCE AND FACTORS ASSOCIATED WITH CHRONIC BACK PAIN IN ELDERLY BRAZILIANS: DATA FROM THE 2019 NATIONAL HEALTH SURVEY

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Background: Chronic back pain (CHP) is a prevalent condition in the general population and has been associated with socioeconomic, clinical, and health factors. Despite this, studies with elderly people involving all regions of Brazil are not yet available.
Objectives: To analyze the prevalence and factors associated with chronic back pain in elderly Brazilians.
Methods: This is a cross-sectional study that used data from the 2019 National Health Survey, with 23,144 people aged 60 years or older. The factors associated with CHD were established based on the estimates of odds ratios by the binary logistic regression model, using the Statistical Package for the Social Sciences (SPSS) program, version 27.0.
Results: The prevalence of CHD among elderly Brazilians corresponded to 31.1% (95% CI: 31.0-31.1). The following variables were consolidated as associated factors: male sex (OR: 0.88; 95% CI: 0.87-0.89), age group from 70 to 79 years (OR: 1.16; 95% CI: 1.15-1.16) and 80 years and over (OR: 1.16; 95% CI: 1.15-1.17); lack of education (OR: 1.06; 95% CI: 1.06-1.07), 1 to 4 years of education (OR: 1.47; 95% CI: 1.45-1.48), 5 to 8 years of education (OR: 0.94; 95% CI: 0.93-0.96); income of up to 1 minimum wage (OR: 1.42; 95% CI: 1.40-1.43), 1 to 2 minimum wages (OR: 1.29; 95% CI: 1.28-1.31); absence of partner (OR: 1.16; 95% CI: 1.15-1.16); perception of health as regular (OR: 0.61; 95% CI: 0.60-0.62) and poor/very poor (OR: 1.26; 95% CI: 1.25-1.27); sleep problems (OR: 0.85; 95% CI: 0.84-0.86); presence of multimorbidities (OR: 0.74; 95% CI: 0.73-0.74); use of medications (OR: 3.17; 95% CI: 3.14-3.20); dependence for basic (OR: 0.40; 95%CI: 0.39-0.40) and instrumental activities of daily living (OR: 1.19; 95%CI: 1.18-1.20); body mass index (OR: 1.02; 95%CI: 1.02-1.02); depression (OR: 1.19; 95%CI: 1.18-1.20); and occurrence of falls (OR: 0.63; 95%CI: 0.62-0.63).
Conclusion: The prevalence of CHD was high and associated with socioeconomic, clinical, and health variables.
Implications: The results shown may provide support for the implementation of health actions aimed at elderly Brazilians.
Keywords: Elderly health, Risk factors, Back pain

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THE INFLUENCE OF VISUAL CONTRIBUTION ON MUSCLE ACTIVITY DURING VISUAL FEEDBACK TASKS WHILE STANDING

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Background: Visual biofeedback has been widely used in training programs aimed at improving postural balance through the reduction of postural sway. However, studies have shown variability between individuals in their ability to reduce postural sway while using visual biofeedback, suggesting that some individuals may not rely heavily on visual cues to adjust their posture. An important question arising from these findings is whether individuals who rely on visual information differ from those who do not in their postural strategies when engaging in biofeedback tasks.
Objectives: This study investigated the effect of visual contribution on muscle activity and postural sway in young adults while standing and using different visual biofeedback tasks.
Methods: Twenty participants performed four distinct postural tasks, each lasting sixty (60) seconds: (1) Eyes open (EO), as a control condition; (2) Eyes closed (EC); (3) center of pressure (CoP) biofeedback using 2 cm (3a) and 4 cm (3b) targets; and (4) wrist-controlled laser biofeedback. Electromyograms (EMG) were collected from the right tibialis anterior (TA) and medial gastrocnemius (MG), and CoP displacement was measured in the anterior-posterior (AP) and medial-lateral (ML) directions. The index, based on percentage difference of COP sway area [(EC area EO area)/(EC area +EO area) $\times$ 100] was used to determine the weight of visual information in postural control, dividing individuals into vision or non-visual. The Friedman test was used, followed by the post-hoc Wilcoxon test for pairwise comparisons between conditions, with a significance level of 5%.
Results: Eight individuals were classified as visual, with a larger COP sway area in the EC than in the EO condition, while eleven ($\sim$58%) were classified as non-visual. In the visual group and when considering CoP biofeedback, the RMS of TA activity increased when using 2 cm target ($p = 0.047$) in relation to EO, but without differences in CoP variability. In the non-visual group, there were no significant differences in muscle activity, but the SD of the AP CoP and CoP sway area decreased with the 2 cm and 4 cm targets when compared to EO ($p < 0.05$). For laser biofeedback, no differences in muscle activity were observed; however, the SD of the AP CoP increased during this biofeedback task compared to the EO condition, regardless of the visual group.
Conclusion: Postural adaptations to CoP biofeedback appear to depend on an individual's reliance on vision for postural control and

the specific biofeedback protocol used. Visual-reliant individuals exhibit increased muscle activation when required to achieve a smaller reduction in CoP sway, as observed with the 2 cm target. In contrast, non-visual individuals reduce sway without additional muscular effort, regardless of the target size. Moreover, visual reliance did not influence postural strategy during laser biofeedback, as both groups demonstrated increased CoP sway variability under this condition.
Implications: These findings suggest that an individual's reliance on vision for postural control should be considered when developing postural sway biofeedback protocols. Visual-reliant individuals may exhibit increased muscle activity in response to interventions aimed at enhancing postural stability or reducing postural sway.
Keywords: Biofeedback, Electromyography, Postural Control

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STANDARDIZING HEALTH-RELATED QUALITY OF LIFE ASSESSMENT FOR OLDER ADULTS: INTEGRATING SF-36 AND ICF CODES FOR IMPROVED HEALTHCARE MANAGEMENT

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Background: The global aging population is rapidly increasing, prompting the United Nations to declare the "Decade of Healthy Aging" (2021-2030) with the goal of improving the quality of life for older adults. Health-related quality of life (HRQoL) is critical in this context, and the International Classification of Functioning, Disability, and Health (ICF) provides a standardized framework for its assessment.
Objectives: To develop a more precise method of assessing HRQoL using ICF codes, facilitating targeted interventions for older adults and improving healthcare management.
Methods: A cross-sectional study was conducted with older adults aged 60 and above who accessed primary healthcare services and had no cognitive impairment. Participants underwent HRQoL assessment using the SF-36, and ICF codes previously linked to SF-36 domains were classified using ICF qualifiers. A simple calculation method was developed to convert SF-36 scores into ICF qualifiers.
Results: The study included 52 participants, with a mean age of 71.6±7.0 years, 92.3% of whom were women. The ICF framework qualified 27 codes from SF-36 domains. Moderate impairments were observed in the "Bodily Pain," "General Health," and "Vitality" domains, while "Physical Functioning," "Social Functioning," and "Mental Health" showed mild impairments. No impairments were noted in the "Role Physical" and "Role Emotional" domains.
Conclusion: This approach offers a more interpretable method for assessing HRQoL impairments, making it a valuable tool for evaluating the health of older adults. The integration of ICF standardizes assessments, improves communication between healthcare providers, and streamlines data collection, thereby enhancing overall healthcare management for older adults.
Implications: This study provides a more precise and standardized approach to assessing HRQoL in older adults, which can inform the development of tailored interventions. The use of ICF qualifiers enables better communication and understanding across healthcare teams, potentially leading to more effective healthcare management. Additionally, this method can optimize healthcare provision for aging populations.
Keywords: Health-Related Quality of Life, Older Adults, Functional Assessment

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PSYCHOMOTOR SYNDROMES IN AGING

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Background: Aging is a complex and heterogeneous process characterized by a progressive decline in physiological functions. In aging, psychomotor syndromes are associated with neurodegeneration, cognitive decline, and psychiatric disorders. These syndromes involve motor changes such as bradykinesia, rigidity, tremors, apraxias, catatonia, dyskinesias, and psychomotor agitation. Understanding their mechanisms is essential for accurate diagnosis and proper management, aiming to reduce functional impact and improve the quality of life of older adults.
Objectives: To analyze the main psychomotor syndromes in aging, their neurobiological bases, clinical manifestations, and implications for differential diagnosis and therapeutic management.
Methods: We conducted a narrative literature review based on prospective studies on psychomotor syndromes, aging, and neurological disorders. We included original studies, reviews, and meta-analyses from 2000 to 2024 in electronic databases such as Cochrane Controlled Register of Trials, Lilacs, Medline, PubMed, SpringerLinks, and PsycINFO. The search terms used were psychomotor syndromes, aging, and psychiatric disorders. Studies that were irrelevant or had non-representative elderly samples were excluded.
Results: A total of 52 studies were selected, highlighting the following key aspects: bradykinesia and rigidity were the most prevalent motor changes, associated with Parkinson's disease and atypical parkinsonian syndromes. Apraxias were frequently observed in dementias, such as Alzheimer's disease. Essential tremors and tardive dyskinesias were linked to prolonged use of antipsychotics. Abnormal gaits, such as hemiparetic and cerebellar gaits, were associated with both neurological disorders and psychosocial factors.
Conclusion: Psychomotor syndromes in aging involve motor, cognitive, and emotional changes, requiring precise diagnosis and appropriate management. Understanding their mechanisms is essential for effective interventions and improving the quality of life of older adults. Medication use should be carefully monitored to minimize impacts and avoid associated complications.
Implications: This study is relevant as it contributes to understanding the neurobiological bases of psychomotor syndromes, enabling a more integrated approach to elderly patient care. It highlights the importance of improving physiotherapy practices, promoting personalized and effective interventions, and optimizing healthcare resource management by prioritizing early diagnoses and appropriate treatments for older adults with psychomotor disorders.
Keywords: Psychomotor Syndromes, Aging, Neurodegeneration