

and Standing Test (5STS), appendicular muscle mass using bioimpedance analysis (BIA), and physical performance using the Timed Up and Go Test (TUG Test). Subsequently, the participants were evaluated for the presence and degree of sarcopenia (pre-sarcopenia, sarcopenia, severe sarcopenia), following the criteria and cutoff points for muscle strength, muscle mass, and physical performance proposed by the EWGSOP2. Statistical analysis: Student's *t*-test for independent samples and Chi-square test, significance level of 5%.

Results: Women with fibromyalgia had worse results for 5STS (GF 16.7 ± 5.5 ; GC 10.3 ± 3 s, $p < 0.001$) and TUG TEST (GF 8.7 ± 2.4 ; GC 6.3 ± 0.6 s, $p < 0.001$) compared to healthy women. There was no statistical difference between groups regarding appendicular skeletal muscle mass (GF 22.9 ± 2.8 ; GC 22.9 ± 2.6 kg/m², $p = 0.981$). Pre-sarcopenia occurrence was higher in GF than in GC (GF 57.9%; GC 5.3%, $p < 0.001$). There was no occurrence of sarcopenia and severe sarcopenia in either group.

Conclusion: The occurrence of pre-sarcopenia is higher in adult women with fibromyalgia when compared to women without fibromyalgia. In addition, women with fibromyalgia have lower muscle strength and worse physical performance than women without fibromyalgia, but without a reduction in muscle mass.

Implications: It is important to monitor muscle function (muscle strength and physical performance) in individuals with fibromyalgia, even in the absence of muscle mass reduction, to develop health intervention strategies that attenuate or prevent sarcopenia.

Keywords: Sarcopenia, Chronic pain, Fibromyalgia

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MULTICOMPONENT TRAINING ASSOCIATED WITH WHOLE BODY VIBRATION: EFFECT ON FUNCTIONAL CAPACITY AND QUALITY OF LIFE IN ELDERLY WOMEN WITH OSTEOPOROSIS

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Background: Aging is associated with functional decline and increased risk of contracting diseases. Osteoporosis (OP), a systemic disease, causes deterioration in bone microarchitecture and an increased propensity for fractures. Functional decline in the elderly is linked to decreased physical fitness, balance changes, increased risk of falls and impaired quality of life. Multicomponent Training (MCT) associated with Whole Body Vibration (WBV) brings functional benefits to the health of the elderly, as it is able to improve balance, muscle strength, functional capacity and reduce the risk of falls.

Objectives: To verify the effect of MCT associated with WBV on functional capacity and quality of life in osteoporotic elderly women.

Methods: Case study approved by CEP/CCS/UFPE, position n°: 3.608.668. During the intervention, the volunteer underwent 3 reassessments (after the 8th, 16th and 24th session). To measure the functional capacity, the distances covered in meters in the 6-Minute Walk Test (6MWT) were considered and the evaluation of the quality

of life was made through the results expressed in the WHOQOL-OLD questionnaire. The interventions lasted for 8 consecutive weeks, three times a week, totaling 24 sessions. MCT lasted 45 minutes, consisting of 3 stations: cardiorespiratory/aerobic resistance; strength/endurance and flexibility; body balance/stability, respectively. The WBV was performed on a side-to-side oscillating vibrating platform, with progressive frequency incremental increase up to 30 Hz and oscillation amplitude of 2 mm peak to peak, duration of 60 seconds and rest of 10 to 30 seconds. Statistical analysis was carried out descriptively with data summarization before and after the 8 interventions, calculating the percentage differences between the predicted values, the frequencies of cut-off points achieved and the percentage increase in gain or loss, being represented numerically or graphically.

Results: Through the distance covered in the 6MWT, a variation from 521m to 564m in the last reassessment was verified. As for quality of life, the score ranged from 61.46% to 85.42% in the last reassessment.

Conclusion: The study showed significant effects on the functional capacity and quality of life of the evaluated elderly women. However, it is still not possible to state that the proposed protocol promotes greater benefits to the observed population in general.

Implications: Faced with the scarcity of protocols that prescribe MCT training associated with a vibrating platform in osteoporotic elderly women with risk of falls, the importance of proceeding with the proposed method was perceived in order to identify alternatives to guarantee functional capacity and quality of life in this population.

Keywords: Multicomponent Training, Whole Body Vibration, Osteoporosis

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LEVEL OF SELF-DETERMINATION AND SELF-EFFICIENCY IN PATIENTS HOSPITALIZED FOR COPD EXACERBATION: PRELIMINARY ANALYSIS

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Background: Chronic obstructive pulmonary disease (COPD) is characterized by a persistent respiratory disorder due to airflow limitation. COPD is considered a debilitating disease in which the symptomatology and muscle and functional damage affect the performance of physical activity and the quality of life of individuals. In these, periods of exacerbation of the disease can be frequent, with increased symptoms and even the need for hospitalization, which accentuates physical deconditioning, loss of strength and muscle mass. In this context, rehabilitation strategies should be designed and knowing the level of self-determination and symptomatology after COPD exacerbation can be useful for clinical decision.

Objectives: The objective of the study was to evaluate the existence of a correlation between self-determination, self-efficacy for physical activity and symptomatology in patients hospitalized for COPD exacerbation.

Methods: This is a cross-sectional study. Nine individuals hospitalized for COPD exacerbation were evaluated. At the time of pre-hospital discharge, they were asked about self-determination (Behavioral Regulation in Exercise - Questionnaire 2 [BREQ-2]), self-efficacy (The COPD Self-Efficacy Scale) and symptomatology (COPD Assessment Test™ [CAT] and Medical Research Council [mMRC

dyspnoea]). The BREQ-2 questionnaire was scored by domains (amotivation, introjected regulation, identified regulation, external regulation, and intrinsic motivation) and relative autonomic index. The COPD Self-Efficacy Scale was also scored by domains (negative effects, intense emotional arousal, physical exertion, time/environment, and behavioral risk factors).

Results: The sample consisted of nine patients, 5 (55.6%) males and 4 (44.4%) females, aged 67 ± 9 years old and hospital stay of 7.44 ± 5 days. A positive correlation was found between the physical exertion domain of The COPD Self-Efficacy Scale and the relative autonomic index and introjected regulation of BREQ-2 ($r = 0.83$; $p < 0.01$; $r = 0.86$; $p < 0.01$, respectively). Furthermore, a negative correlation was found between the CAT and the BREQ-2 amotivation domain ($r = -0.80$; $p < 0.01$) and a positive correlation between the mMRC and the BREQ-2 external regulation domain ($r = 0.64$; $p = 0.05$).

Conclusion: In patients hospitalized for COPD exacerbation, there is an association between the motivational level to perform physical activity and COPD symptomatology. The greater symptomatology was associated with greater external regulation for performing physical activity, as well as being more self-determined for the practice of physical activity and with more self-efficacy for managing dyspnea when performing physical exertion.

Implications: These results, even if determined by external reward, demonstrate susceptibility to changes in behavior related to the practice of physical activity.

Keywords: Motivation, Physical exercise, Respiratory diseases

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Ethics committee approval: UFSCar Research Ethics Committee (CAAE: 51088115.3.0000.5504) and Santa Casa of São Carlos (CAAE: 55143521.0.3001.8148).

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BARRIERS AND DRIVES OF TO THE PARTICIPATION OF CHILDREN AND YOUNG ADULTS WITH DOWN SYNDROME: A SYSTEMATIC REVIEW

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Background: Participation promotes the development of skills, competences, peer interaction and greater independence, thus contributing to the growth and development of children and young people. Despite the numerous benefits related to participation, children and young people with Down Syndrome participate less when compared to their typically developing peers. So far, the literature does not have comprehensive systematic reviews that investigate the barriers and facilitators for the participation of individuals with Down Syndrome.

Objective: This paper aims to identify barriers and facilitators for the participation of children, adolescents, and young adults with Down Syndrome.

Methods: A systematic review was conducted following the Preferred reporting items of Systematic Reviews and Meta Analysis Guide – PRISMA and with protocol registered at the International Prospective Register of Systematic Reviews - PROSPERO (number:

CRD42022302556). A deeply literature review using PubMed, Embase, Web of Science, PsycINFO, and Scielo electronic databases, with no date restriction. Original studies, published in peer-reviewed journals, written in any language, were included if they examined perceived barriers and or drivers of to participation by children, adolescents, and young adults with Down Syndrome. The methodological quality of the studies was assessed by McMaster Critical Review Forms for qualitative and quantitative studies.

Results: Ten studies, eight qualitative and two quantitative, involving 206 participants, were included in the review. Of these, seven studies scored above 70% on the McMaster Scale, indicating good methodological quality. The physical characteristics of individuals with Down Syndrome (eg, hypotonia) were identified as personal barriers to participation. Social barriers frequently addressed in studies were associated with family attitudes, social interaction, and financial resources. The lack of professionals and specialized activities were the most commonly reported political barriers, while the lack of accessibility and transportation were identified as environmental barriers. Personal enablers for participation in Down Syndrome were pleasure, individual skills, motivation, and fun. Factors such as the attitude of families, friends and social interaction appeared as social facilitators for participation. The availability of specialized professionals to carry out activities, as well as specific activities for people with Down Syndrome, were considered important political drivers of. None of the studies reported environmental facilitators.

Conclusion: There are personal, social, political, and environmental barriers and facilitators that determine participation in Down Syndrome.

Implications: The findings of this review show that the factors for children, adolescents and Young people with Down Syndrome to have lived participation are diverse and complex. The results obtained in this study make the professionals know and understand these factors in order to minimize the barriers and enhance the drivers of more effectively, improving their clinical practice and helping to raise awareness about the impacts of these aspects on the lives of people with disabilities.

Keywords: Participation, Down's syndrome, Barriers, Drivers of

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LOW BACK PAIN TREATMENT STRATEGIES IN PRIMARY CARE AND USER SATISFACTION: CROSS-SECTIONAL STUDY OF USER PERSPECTIVES

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Background: Limited access to evidence-based information and ineffective treatment modalities, especially in low- and middle-income countries, may contribute to the increase in years lived with disability associated with low back pain. Added to this, early referral to more complex levels of care increases waste and hinders this population's equitable access to health services.