Background: Systemic sclerosis (SSc) is a connective tissue disease characterized by autoimmunity, small vessel vasculopathy and excessive collagen deposition in the skin and internal organs. Pulmonary involvement is responsible for reducing the functional capacity to exercise and represents the main cause of death. The six-minute walk test (6MWT) is a simple, non-invasive, easy-to-perform, and reliable submaximal aerobic exercise test that can used in patients with advanced lung disease. Patients with SSc often have not only lung disease, but combinations of cardiopulmonary involvement, skin fibrosis, musculoskeletal damage, and joint disease, which can confound the 6MWT interpretation. As it is an independent predictor of SSc-related mortality, the 6MWT is a potentially useful tool in the assessment of outcomes along with pulmonary function tests (PFTs) and computed tomography. Currently, there is a huge concern about the need for early screening, search for new treatments and closer monitoring of patients with diffuse cutaneous systemic sclerosis-associated interstitial lung disease (dcSSs-ILD) before irreversible deterioration of lung function occurs.
Objectives: To build a predictive model for the six-minute walk distance (6MWD) in women with dcSSs-ILD without pulmonary arterial hypertension.
Methods: This is a cross-sectional study in which 69 women with dcSSs-ILD underwent the 6MWT, Health Assessment Questionnaire-Disability Index (HAQ-DI), PFTs (including spirometry, measurement of pulmonary diffusion capacity for carbon monoxide-DLCO and measurement of respiratory muscle strength), handgrip strength (HGS) and quadriceps strength (QS).
Results: The mean 6MWD was 447 $\pm$ 78 m, with 43.5% of the participants not reaching 80% of the predicted value. The 6MWT was positively correlated with HR (r = 0.418, P = 0.0004), forced vital capacity (r = 0.306, P = 0.011), DLCO (r = 0.360, P = 0.002), maximal inspiratory pressure (r = 0.268 , P = 0.029), and maximal expiratory pressure (MEP, r = 0.288, P = 0.019) and negatively with age (r = -0.378, P = 0.001), body mass index (BMI) r = -0.248, P = 0.039) and HAQ-DI (r = -0.438, P = 0.0001). In the multiple linear regression analysis, QS, BMI, DLCO, age and MEP explained 72% of the 6MWD variability.
Conclusion: In patients with dcSSs-ILD, alongside reduced pulmonary diffusion, deterioration in respiratory and peripheral muscle strength negatively impact performance during the 6MWT. Furthermore, the greater the age and BMI, the lower the 6MWD. Our results are promising and may become a contribution to future investigations aimed at new pharmacological therapies for dcSSs-ILD.
Implications: These findings may help the growing number of randomized controlled trials that have emerged in search of disease-modifying therapies for dcSSs-ILD, with the aim of incorporating the 6MWD as a clinical outcome measure.
Keywords: Systemic sclerosis, Interstitial lung disease, Exercises

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EFFECTS OF DANCE THERAPY IN WOMEN WITH BREAST CANCER UNDERGOING RADIOTHERAPY TREATMENT

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Background: Radiotherapy is essential to reduce the risk of locoregional recurrence in patients with breast cancer. However, several symptoms and adverse effects can be manifested during or after radiotherapy. There is evidence that the use of non-pharmacological interventions can reduce symptoms resulting from radiotherapy treatment in cancer patients. Dance/movement therapy (DTM), defined by the American Dance Therapy Association (ADTA) as the psychotherapeutic use of movement to promote the emotional, social, cognitive and physical integration of the individual, could be a way of approaching to minimize the adverse effects of that treatment.
Objectives: Conduct a review on the effects of dance therapy in patients with breast cancer during and/or after radiotherapy.
Methods: The research was carried out between September and November 2022, through searches in the Pubmed, SciELO, Cochrane Library and Google Scholar databases with the search strategy of the descriptors obtained in the Medical Subject Headings (MESH) of the National Library of Medicine with the combination of keywords and the following Boolean operators: ((Dance therapy or Therapy or Dance or Dance Therapies or Therapies or Dance or dance movement therapy) AND (Breast cancer or Breast Neoplasm or Neoplasm or Breast or Neoplasms or Breast or Breast Tumors)) AND (Radiotherapies or Radiation Therapy or Radiation Therapies or Therapies, Radiation or Therapy or Radiation). Studies that addressed the use of dance therapy in patients with breast cancer undergoing radiotherapy were included. Exclusion criteria were studies involving patients with other types of cancer and studies made available in languages other than Portuguese and English.
Results: A total of 3,966 articles were found in the four searched databases. After reading the title and abstract, 16 articles were selected and read in full. Of these, 3 articles remained in the study for analysis. The results presented in this review demonstrate that dance therapy can contribute to improving or reducing the perception of stress, anxiety, fear, fatigue, pain, internal reconnections, in addition to improving functionality, returning to activities of daily living and improving the quality of life of patients undergoing radiotherapy.
Conclusion: Dance therapy can help improve morbidities in patients with breast cancer undergoing radiotherapy.
Implications: Dance therapy is a clinically relevant intervention, but it has few studies in the oncology area. More studies are needed, with better standardization of the intervention, for better scientific evidence of the effects of dance therapy in these patients.
Keywords: Dancetherapy, Breast neoplasm, Radiotherapy

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APPLICATION OF TIMP SCALE ON THE HOSPITAL ENVIRONMENT: A REALITY FOR EARLY INTERVENTION IN PRETERM INFANTS

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Background: The upscale of surlife on preterm neonates (PTN) is due to the advances in antenatal care, those individuals must have

higher chances of showing delays on the psychomotor development. Prematurity may be associated with antenatal external factors, such as socioeconomic conditions and low education level and the postnatal variables, such as the birth weight and growth percentile. The Test of Infant Motor Performance (TIMP), it is a clinical tool highly sensitive to small changes in motor performance. As much sooner as changes are detected on motor milestones, sooner the intervention will occur.
Objectives: Analysis on the motor development profile in PTNs.
Methods: Cross-sectional study. performed in a joint accommodation (JA) in a public hospital in Brazil. It included the neonates (NT) with gestational age (GA) higher than 34 and stable, excluding NTs with genetic syndromes, congenital malformations, osteomyo-articular disorders, sensory impairments, and neurological disorders. The tool used was the TIMP scale, the childs were filmed and evaluated by a blind researcher who has scored and categorized the groups with or without changes in the motor performance. In the data analysis we wore the Minitab® 14 statistical package, the statistical significance was considered as $p<0.05$. For the comparison between the groups, we used the unpaired *t* test or the Mann Whitney depending on the data distribution.
Results: The sample of the study was composed of 8 neonates' terms and 6 preterm neonates. Regarding the characterization of the sample, the maternal age of the group of PTN was 26.4 ± 6 and the group of NNT 25.1 ± 6.7, the inferior social class was 100% and 75%, appointment number of antenatal 6.2 ± 1.3 e 7.2 ± 3.2. Considering the head circumference the PTNs presented 28.7 ± 2.6 and the NNTs 39.2 ± 2.1, chest circumference 27.5 ± 1.2 and 33.8 ± 1.9, the GA 33.2 ± 2.2 and 39.7 ± 1.3, birth weight 1707 ± 258 and 3275 ± 388, and height 37 ± 7.7 e 49.2 ± 2.6 respectively. The data related to the brute score from TIMP have shown that the PTNs had the score lower (42.1 ± 2.4) to the NNT (48.5 ± 5.7), $p = 0.01$.
Conclusion: This current research shows that there is a statistically significant difference in the motor performance on pre preterm neonates in the hospital environment. Thus, showing that the early detection enables the implementation of sensorimotor intervention programs performed by a child physiotherapist.
Implications: Premature infants presenting motor decline in the first months of life, presents commitment to learning and social interaction, pointing to the relevance of having a professional physiotherapist on JA and the role of early intervention guiding the parents and reducing the consequences of prematurity.
Keywords: Prematurity, Child Development, Psychomotor Development

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DEVELOPMENT OF A PROTOCOL WITH BEHAVIORAL STRATEGIES TO INCREASE ADHERENCE TO THE PRACTICE OF SELF-ADMINISTERED HOME EXERCISES IN POST-STROKE INDIVIDUALS

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Background: Home rehabilitation in post-stroke patients seems to be more beneficial than hospital or outpatient treatment, as it allows the repeated practice of tasks incorporated in the person's own environment. However, patient adherence to treatment is a crucial determinant of rehabilitation.
Objective: This study aims to develop a clinical trial protocol for the feasibility of a group task-oriented therapy (TOT) program in post-stroke patients, which uses behavioral strategies based on the Theory of Self-Determination to increase adherence to guidance from patients. home exercises.
Methods: Initially, a protocol development study will be carried out, without a control group, with pre and post intervention evaluations that will last for 6 weeks. Participants will be 20 individuals diagnosed with stroke who will be submitted to a group TOT program twice a week, lasting 1 hour and to a self-administered home exercise program. Behavioral strategies will be applied during the TOT and the results will be compared with the pre-intervention assessments. The exercises will be organized in the form of four tasks, targeting specific movement components that must be performed for a certain number of repetitions defined individually. The primary outcome measure is adherence to the exercise program and will be assessed using the Exercise Adherence Assessment Scale (EARS-Br); adherence to formal guidance on the home exercise program (self-monitoring diary) and motivational regulations, self-determination and basic psychological needs assessed using the Exercise Behavioral Regulation Questionnaire (BREQ-3) and the Basic Psychological Needs on Exercise scale (BPNES). The feasibility of the methods and protocol performance aiming at a future large-scale randomized controlled clinical trial (RCT) will be explored using predefined feasibility criteria. Feasibility criteria include (1) a minimum 75% adherence rate to home exercise (self-monitoring diary), (2) a minimum 10% change in the Exercise Adherence Rating Scale (EARS-Br) from control week, without behavioral strategies; (3) at least a 10% change in behavior between pre- and post-intervention (assessed using the BREQ-3; (4) a 10% change with the protocol in basic psychological needs assessed using the BPNES pre- and post-intervention.
Results: This protocol may contribute to increase adherence to home exercises in post-stroke patients and help in the change of patients' behavior. The characterization of the sample will be presented through descriptive analysis; the frequency of the practice of household chores, through means and standard deviation and adherence rate to the number of prescribed repetitions (%).
Conclusion and Implications: results will allow us to define the protocol and identify the preliminary viability in increasing adherence to the practice of self-administered home exercises, changing behavior and changing basic psychological needs.
Keywords: Stroke, Adherence, Behavior change, Self-Determination Theory

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