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Background: Individuals with spinal cord injury (SCI) have frequent pulmonary complications, with impaired respiratory muscle strength and lung function.

Objective: To analyze the behavior of static and dynamic measures of inspiratory muscle strength in individuals with SCI after inspiratory muscle training (IMT).

Methods: Clinical, randomized, controlled trial, carried out at the Centro Estadual de Reabilitação e Readaptação Dr. Henrique Santillo (CRER), with individuals diagnosed with complete motor SCI, classified as having chronic quadriplegia. ASIA Impairment Scale (AIS) A or B, hospitalized for rehabilitation, from March 2020 to June 2021. Maximal inspiratory muscle pressure (MIP) was evaluated using manovacuometry and dynamic measurement of inspiratory muscle strength (S-Index) using the PowerBreathe K5. The subjects were randomized into blocks of six patients into three groups, two intervention groups, as follows: (Group I) care with conventional physiotherapy associated with lowpressure IMT (30% S-Index), (Group II) care with conventional physiotherapy associated with a specific IMT with high pressure (50% S-Index), and a control group (Group III) that received care with conventional physiotherapy. IMT was performed with the PowerBreathe K5 device, with load adjustment performed weekly and 10% increments based on the S-Index. The protocol consisted of 4 weeks of intervention, with training 5 times a week. 2 times a day. Parametric data were presented with mean and standard deviation and non-parametric data with median and 25th and 75th percentiles. Factorial and Friedman ANOVA were used for comparison between groups, and a significant value of p<0.05 was adopted.

Results: Partial data from 6 individuals with a mean age of $33\pm$ 11.3 years, all male, mean height 1.75 ± 0.08 cm, Body Mass Index 73.3 \pm 19.9 kg/m2, with an average time of injury 28 \pm 17.4 months, 2(33.3%) with the neurological level of injury in C4, 2(33.3%) C5, 2 (33.3%) C6, 5 (83.3%) classified as AIS A, 3 (50%) declared to be former smokers. Comparing MIP before and after IMT, we observed an increase in all groups, with predominance in group I (-60 \pm 14 vs -105 \pm 21cmH2O, p=0.18) followed by GII and GIII (-45 \pm 7 vs -57 \pm 3cmH2O, p=0.18; -80 \pm 0 vs -92 \pm 3cmH2O p=0.18, respectively) with no significant difference. The S-Index showed an increase in GI (79.5 \pm 38.39 vs - 112 \pm 38cmH2O, p=0.14) and GIII (107 \pm 57 vs - 180 \pm 149cmH2O, p=0.49) and a reduction in GII (193 \pm 55 vs - 166 \pm 159cmH2O, p=0.49) with no difference between groups.

Conclusion: The IMT seems to promote an increase in the static and dynamic inspiratory muscle forces, with a predominance in the training group with lower loads, however, we did not observe any difference in the inspiratory muscle forces with different loads in the IMT for the studied population.

Implications: The incipient data are still not enough.

Keywords: Spinal cord injury, Functionality, Inspiratory muscle training

Conflicts of interest: The authors declare no conflicts of interest.

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EVIDENCE OF MUSIC THERAPY IN THE MANAGEMENT OF INDIVIDUALS IN THE TERMINAL STAGE: A SYSTEMATIC REVIEW

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Background: Music therapy (MT) for terminally ill patients (PT) has been used as a complementary and multidisciplinary palliative treatment, and numerous repercussions may be present in the management of patient treatment. TM aims to relieve physical and emotional symptoms, including reducing pain and improving quality of life. In addition, it can bring support and help in communicating with family members in coping with grief. Being of great importance to individuals to be more comfortable at the end of life.

Objectives: to analyze the evidence in the literature of studies related to the use of music therapy in the management of terminally ill patients.

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Methods: A systematic review was carried out under the PRISMA guidelines, through the databases: PubMed, Cinahl and Cochrane Library CENTRAL and the descriptors found in the Medical Subject Headings (MeSH) and, in the Health Sciences Descriptors (DeCS). Studies containing the descriptors "Palliative care", "Music Therapy" and "Terminal patients" and their cognates were selected, with no restriction regarding languages.

Results: A total of 5,836 studies were identified, 12 of which were selected for the review, and only those that described the effects of TM on PT were recruited. In 6 studies it was demonstrated that TM was able to reduce pain, in 5 articles it was identified an increase in well-being. 5 studies identified improvement in QoL through the application of a questionnaire. One study used spirituality as a relevant factor in the effectiveness of TM. Four publications analyzed the effect of TM on pre- and post-intervention discomfort, showing a reduction in discomfort after the intervention.

Conclusion: TM proves to be an intervention capable of generating positive responses that correspond to an increase in QoL, with effects on the clinical, physiological and psychological outcomes of individuals in the terminal phase.

Implications: The use of TM in PT is a cheap and accessible approach, which can bring many benefits to individuals who are in the final stages of life, bringing greater comfort and general wellbeing.

Keywords: Palliative care, Music therapy, Terminal Patients

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