

246

COMPARISON OF PELVIC FLOOR DISCOMFORT SYMPTOMS BETWEEN VAGINAL AND CESAREAN DELIVERY WOMEN

Leticia Aparecida da Silva¹, Jeisyelli Costa de Souza¹,
Clarice Selau Alexandre¹, Janeisa Franck Virtuoso¹

¹ Universidade Federal de Santa Catarina (UFSC), Florianópolis, Santa Catarina, Brasil

Background: Pelvic floor disorders (PAD) include urinary, pelvic and anorectal symptoms. According to the type of delivery performed, the symptoms become more frequent. It is known that there is a greater risk of developing urinary incontinence and pelvic organ prolapse in women who had a vaginal childbirth when compared to women who had a cesarean section.

Objectives: The aim of the present study was to compare the symptoms of pelvic floor discomfort among puerperal women after vaginal and cesarean deliveries.

Methods: This is an observational study, conducted in two micro-regions in southern Santa Catarina, with 242 primiparous puerperal women aged 18 years or older. Women with up to 12 months of puerperium were selected. The instruments were applied through an online questionnaire. First, the participants were asked about sample characterization data. Afterwards, the Pelvic Floor Distress Inventory (PFDI-20) was used, which evaluates the symptoms of pelvic, anorectal, and urinary discomfort, with higher scores demonstrating more symptoms of PAD. Data were analyzed descriptively and inferentially, with a significance level of 5%.

Results: Analysis in progress.

Conclusion: Postpartum women with normal delivery are more affected by urinary symptoms when compared to postpartum women with cesarean section. It is necessary to conduct studies that seek to create strategies to minimize this type of symptom after vaginal childbirth.

Implications: The lack of national studies on this theme is highlighted, evidencing the importance of its realization.

Keywords: Pelvic floor disorders, vaginal delivery, cesarean delivery

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: We would like to thank the Coordination for the Improvement of Higher Education Personnel - CAPES.

Ethics committee approval: UFSC:13189919.0.0000.0121.

<https://doi.org/10.1016/j.bjpt.2024.100843>

247

ANALYSIS OF MOTOR FUNCTION MEASUREMENT, MUSCLE STRENGTH, AND FATIGUE LEVEL IN INDIVIDUALS WITH MUSCULAR DYSTROPHIES

Geovane Balcanufo de Sousa e Silva¹, Natália Guimarães Melo¹,
Francine Aguilera Rodrigues da Silva¹,

Graziella França Bernardelli Cipriano², Leticia de Araújo Morais¹

¹ State Center for Rehabilitation and Readaptation Dr. Henrique Santillo (CRER), Goiânia, Goiás, Brazil

² University of Brasília (UnB), Brasília, Distrito Federal, Brazil

Background: Muscular dystrophies (DMs) represent a complex, varied, and important subset of neuromuscular disorders, caused by genetic alterations that result in skeletal muscle degeneration and progressive muscle weakness, generating changes in motor function and directly impacting functionality. Fatigue is a common symptom that prevents adequate muscle contraction and interferes with daily activities, reducing the quality of life.

Objective: To assess motor function, muscle strength, and fatigue in individuals with DM.

Methods: Quantitative and cross-sectional study, carried out in a state rehabilitation center in Goiânia, Goiás, Brazil. and data collection took place between March and July 2022. The research consisted of individuals with a confirmed diagnosis of muscular dystrophy, over 18 years and who attended the neuromuscular diseases clinic of the institution. Motor function was assessed using the Motor Function Measurement Scale (MFM-32), muscle strength using the Medical Research Council (MRC), and fatigue using the Fatigue Severity Scale (FSS). All evaluations were performed by the same, duly trained evaluator. The parametricity of the data was verified using a normalized Q-Q plot and a histogram of standardized residues. Comparison between groups was tested by applying the Analysis of Variance (ANOVA) and Pearson's Chi-square tests. The significance level adopted was $p < 0.05$.

Results: The sample consisted of 66 participants, with a mean age of $35.7(\pm 13)$ years, most of them male 39(59.1%). The sample was divided into three groups according to the presented diagnosis. The group with limb girdle muscular dystrophy (LGMD) was composed of 30(45.5%) individuals, Duchenne Muscular Dystrophy (DMD) 17 (25.8%), and Myotonic Dystrophy type 1 (DM1) with 19(28.8%). The mean found in the MFM-32 score was 54.9 ± 29.5 , with the DMD having the lowest value of 23.5 ± 12.6 with a statistical difference between groups ($p < 0.001$). The MRC presented a total average of 32.4 ± 17.4 with the DMD presenting lower values of 12.8 ± 5.8 with the statistical difference ($p < 0.001$). The general FSS presented a mean of 36.0 ± 13.3 , predominantly classified as moderate in DM1 11 (57.9), without fatigue in LGMD 11(36.7) and DMD and 6(35.3) with no difference between the groups.

Conclusion: Motor function and muscle strength were reduced in individuals with DM, and DMD showed lower values concerning LGMD and DM1, showing greater severity of the disease. Fatigue was not reported in most individuals with LGMD and DMD, however, it was moderate in DM1. **Implications:** This article is innovative in describing the clinical aspects of a rare disease, and the sample size of this study proved to be satisfactory, allowing a more robust and detailed interpretation of the functionality of this population, and enabling better rehabilitation strategies.

Keywords: Muscular Dystrophies, Respiratory Function Tests, Muscle Weakness

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

Acknowledgment: Not applicable

Ethics committee approval: The research was approved by the Leide das Neves Ferreira Research Ethics Committee (CAAE: 53491221.6.0000.5082).

<https://doi.org/10.1016/j.bjpt.2024.100844>

248

DYNAMIC AND STATIC INSPIRATORY MUSCLE STRENGTH OF CHRONIC QUADRIPLÉGIC PATIENTS UNDERGOING PULMONARY REHABILITATION: A CONTROLLED CLINICAL TRIAL

Leticia de Araújo Morais¹, Lorena Gomes de Medeiros²,
Amanda Moreira Ferreira³, Gerson Cipriano Junior³,

Rogério Gaspar Chiappa⁴, Graziella França Bernardelli Cipriano¹

¹ Postgraduate Program in Health Program, University of Brasília, Brasília, Distrito Federal, Brazil

² State Center for Rehabilitation and Readaptation Dr. Henrique Santillo, Goiânia, Goiás, Brazil

³ Postgraduate Program in Rehabilitation Science, University of Brasília, Brasília, Distrito Federal, Brazil

⁴ The Evangelical University of Goiás, Anápolis, Goiás, Brazil

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 low-pressure 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 $p \leq 0.05$ was adopted.

Results: Partial data from 6 individuals with a mean age of 33 ± 11.3 years, all male, mean height 1.75 ± 0.08 cm, Body Mass Index 73.3 ± 19.9 kg/m², with an average time of injury 28 ± 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 ± 14 vs -105 ± 21 cmH₂O, $p=0.18$) followed by GII and GIII (-45 ± 7 vs -57 ± 3 cmH₂O, $p=0.18$; -80 ± 0 vs -92 ± 3 cmH₂O $p=0.18$, respectively) with no significant difference. The S-Index showed an increase in GI (79.5 ± 38.39 vs 112 ± 38 cmH₂O, $p=0.14$) and GIII (107 ± 57 vs 180 ± 149 cmH₂O, $p=0.49$) and a reduction in GII (193 ± 55 vs 166 ± 159 cmH₂O, $p=0.49$) 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.

Acknowledgment: Financial aid from public notice 0011/2022 of Support for the execution of scientific, technological, and innovative research projects for postgraduate students at the University of Brasília.

Ethics committee approval: Ethics committee in research Leide das Neves Ferreira. CAAE: :06744919.8.0000.5082.

<https://doi.org/10.1016/j.bjpt.2024.100845>

249

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

Leticia de Siqueira Napoleão¹, Claudia Mirian de Godoy Marques¹, Jefferson Luiz Brum Marques²

¹ Universidade do Estado de Santa Catarina (UDESC), Florianópolis, Santa Catarina, Brasil

² Universidade Federal de Santa Catarina (UFSC), Joinville, Santa Catarina, Brasil

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.

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

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 well-being.

Keywords: Palliative care, Music therapy, Terminal Patients

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

Acknowledgment: Not applicable.

Ethics committee approval: Not applicable.

<https://doi.org/10.1016/j.bjpt.2024.100846>