

Background: Interstitial Lung Disease (ILD) encompasses a heterogeneous group of over 200 diffuse parenchymal lung disorders, primarily characterized by pulmonary interstitial involvement, frequently affected by inflammation and fibrosis. Signs and symptoms vary depending on the underlying ILD condition but generally include dyspnea, fatigue, persistent cough, bibasilar crackles, digital clubbing, and psychological symptoms. These manifestations contribute to a decline in quality of life, reduced functional capacity, and low tolerance to physical exercise.

Objectives: This study aimed to investigate the association between functional disability, health status, quality of life, physical performance, muscle strength, and physical activity level in people with ILD.

Methods: This is a preliminary cross-sectional, multicenter study, part of a larger project, conducted with people diagnosed with ILD. In addition to clinical history and spirometry for pulmonary function assessment, specific instruments were applied, including the 12-item short version of the World Health Organization Disability Assessment Schedule (WHODAS 2.0), which assesses the impact on daily activities and social participation; the King's Brief Interstitial Lung Disease Questionnaire (K-BILD), which evaluates the quality of life and health status; the Participation Scale, measuring self-perceived social participation and daily activities; the Human Activity Profile (HAP), classifying physical activity level; the Handgrip Strength Test (HST), assessing peripheral muscle strength using a Jamar dynamometer; and the 6-Minute Walk Test (6MWT), which measures functional exercise capacity and cardiorespiratory endurance.

Results: The sample comprised 13 participants, with a mean age of 55.82 years (± 13.84 years), ranging from 33 to 81 years. The majority were male (7 participants, 53.8%), and five people (38.5%) were classified as overweight. Regarding educational background, 7 participants (53.8%) had completed high school, and in terms of self-reported ethnicity, 7 (53.8%) identified as mixed-race. Additionally, 4 participants (30.8%) had a prior diagnosis of post-COVID-19 pulmonary fibrosis. The mean WHODAS 2.0 score was 32.39 (± 19.14), ranging from 15 to 67 points. Correlation analysis revealed an association only between the WHODAS 2.0 short version and K-BILD (ICC = -0.56; $p = 0.05$).

Conclusion: Preliminary results indicate that a more significant functional disability in people with ILD is associated with poorer health status, as assessed by the K-BILD. The lack of significant associations with other variables may be attributed to the small sample size of this preliminary study. However, the findings suggest relevant trends that warrant further exploration in future analyses.

Implications: These findings suggest that physiotherapeutic assessments and interventions for people with ILD should consider not only pulmonary aspects but also functional and social dimensions. An integrated approach may be essential to improving the quality of life and social participation in this population.

Keywords: Lung Diseases, Interstitial, Functional Disability, WHODAS

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INTER-RATER RELIABILITY AND VALIDITY OF THE PERME ICU MOBILITY SCORE IN PEDIATRIC INTENSIVE CARE AND WARD SETTINGS

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Background: Early mobilization in pediatric intensive care units (PICUs) is essential to minimize complications and promote functional recovery. However, there is a lack of validated tools specifically designed to assess mobility in children with critical illness. The Perme ICU Mobility Score (Perme Score), originally developed for adults, assesses mobility considering barriers such as medical devices and ventilatory support. The validation of the Perme Score for pediatric use is crucial to guide rehabilitation strategies in this population.

Objectives: To validate the Perme Score for evaluating mobility in patients admitted to PICU and pediatric wards, by analyzing its inter-rater reliability and its correlation with the Functional Status Scale (FSS), a widely used instrument in the pediatric population.

Methods: A cross-sectional observational study was conducted in two hospitals including pediatric patients aged 6 to 17 years. The Perme Score and FSS were applied independently by trained physical therapists. Inter-rater reliability was assessed using the intra-class correlation coefficient (ICC), while the correlation between the two tools was analyzed using Pearson's test. P -value < 0.05 was defined statistically significant.

Results: A total of 166 participants were included, with a median age of 11 years. The initial assessment showed a mean Perme Score of 26.13 ± 7.89 and a mean FSS of 7.25 ± 2.21 . A moderate to strong negative correlation was observed between the Perme Score and FSS ($r = -0.642$; $p < 0.01$), indicating that better mobility is associated with less functional impairment. Interrater reliability was excellent (ICC = 0.99).

Conclusion: The Perme Score proved to be a valid and reliable tool for assessing mobility in hospitalized pediatric patients. Its structured approach allows for the identification of mobility barriers and effective monitoring of functional progress throughout hospitalization.

Implications: Validating the Perme Score for the pediatric population supports its integration into clinical practice in both ICU and ward settings. The Perme Score can support early mobilization protocols and contribute to personalized rehabilitation strategies by objectively assessing mobility status of patients. Consequently, it has the potential to improve functional outcomes for critically ill children and promote evidence-based decision-making in physical therapy.

Keywords: Pediatric Intensive Care, Physical Functional Performance, Mobility Limitation Assessment

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VIVIFRIL TRAINING IMPROVES FUNCTIONAL CAPACITY OF INSTITUTIONALIZED ELDERLY PEOPLE: A RANDOMIZED CLINICAL TRIAL

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