Evaluation of Physical Activities Using the 30-s Chair Stand Test in Male Patients with Chronic Respiratory Diseases

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**Purpose:** The 30-s chair-stand (CS-30) test is a useful method to evaluate exercise capacity. The study aimed to investigate whether standing frequency during the CS-30 test could evaluate physical activities (PA) in patients with chronic respiratory diseases.

**Methods:** The study population consisted of 33 patients with chronic respiratory diseases. During hospital stay, CS-30 test, knee extension strength assessment, and spirometry were performed. One week after discharge, PA was assessed again. The results were analyzed using correlation and multiple regression analyses.

**Result:** Multiple regression analysis, showed that the modified medical research council (mMRC) scale ($\beta = -0.55$), and standing frequency during the CS-30 test ($\beta = 0.34$) significantly ($R = 0.83, R^2 = 0.67, p < 0.05$) associated with PA, as derived using a moderately accurate multiple regression equation. However, knee extension strength and pulmonary function did not significantly associate with PA.

**Conclusion:** Our results have indicated that the standing frequency during the CS-30 test is feasible to evaluate PA in patients with chronic respiratory diseases.