

Investigation of the difference between treadmill self-efficacy and actual performance in Taiwanese patients with chronic obstructive pulmonary disease.

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OBJECTIVE: Because overactivity or underactivity may result in inadequate physical responses among patients with chronic obstructive pulmonary disease (COPD), the purpose of this study was to examine the difference between treadmill self-efficacy and actual treadmill performance. Factors that influence self-efficacy and actual performance were also examined. **DESIGN:** The design was a descriptive and correlational study. **SETTING:** The study took place at the Research Center of Sports Medicine in University. **PATIENTS:** A total of 48 subjects with COPD were recruited from 4 hospitals. **Outcome Measures:** The outcome measures were treadmill self-efficacy and actual treadmill performance. **INTERVENTION:** Data were collected by means of treadmill exercise testing and 3 structured questionnaires. **RESULTS:** The findings of the study demonstrated that the average maximal functional capacity was 2.94 METs. A positive significant relationship between treadmill self-efficacy and actual performance was observed. However, the majority of subjects (72.9%) underestimated their treadmill performance and only 7 subjects (14.6%) assessed their treadmill performance accurately. Dyspnea was the most common reason for a subject to stop during the exercise testing. The patient's past experience was the most important predictor for both treadmill self-efficacy and actual treadmill performance. **CONCLUSIONS:** These results revealed that patients in Taiwan who have COPD have extremely poor functional capacity and most of them underestimated their exercise performance. An assessment of self-efficacy and exercise performance seems imperative in the development of individualized nursing interventions to help COPD patients.