慢性阻塞性肺疾病患者運動自我效能與實際運動結果之探討

Expolar treadmill self-efficacy and acture performance in patients with chronic obstructive pulmonary disease

中文摘要

本研究目的在於探討慢性阻塞性肺疾病患者執行跑步機之運動自我效能和實際運動測試結果之差異性，及其影響因素。以立意選樣法選取台北市某四家地區級以上醫院之 48 位符合選樣條件之慢性阻塞性肺疾病患者。採運動測試及結構式問卷（包括訊息資源量表、情境-特質焦慮量表、運動自我效能量表）兩種方式進行資料收集；並以典型鑑別分析、逐步回歸、皮爾森積差相關、配對 t 檢定、及單因子變異數分析等統計方法，進行資料的分析處理。由本研究之運動測試結果發現：參與本研究之慢性阻塞性肺疾病患者的體能狀態極差，平均最大心肺功能僅能達<I94METs。多數患者 35 位，72.9%）呈現低估其運動能力；而且僅有 7 位（14.6%）能正確評估其運動能力。呼吸困難是運動測試期間停止運動測試的最常見原因。研究結果也發現，執行跑步機之運動自我效能與過去經驗、呼吸困難程度及 FEV1 %pred、FVC %pred 、FEV1/FVC%呈現顯著相關；然而，以病人的過去經驗為最重要預測變項，其可解釋總變異量達 35%。言語說服經驗、替代經驗、及焦慮程度與執行跑步機之運動自我效能間並不具統計上顯著相關。另外，跑步機之運動自我效能與最大心肺功能間呈顯著相關，然而以過去經驗、休息時心跳速率、FEV1/FVC %為決定其心肺功能的重要預測變項；角又以病人的過去經驗為最重要之預測變項，可解釋變異量達 39%。本研究發現意喻著可促進慢性阻塞性肺疾病患者生理、心理、社會統合。因而，一個有關執行跑步機運動自我效能與最大心肺功能的評估，對於幫助病人獲得適當的健康照護之個別化的護理處置上，似乎是非常重要的。

英文摘要

The purpose of this study was to explor the difference between self-efficacy of treadmill performance and actual treadmill performance in patients of chronic obstructive pulmonary disease. Factors, which influence the self-efficacy and actual performance, were examined also. Forty-eight subjects who had chronic obstructive pulmonary disease （COPD）and met the selection criteria were selected from four taipei medium size hospitals by purposive sampling.A explored-correlated design was used. Data was collect by exercise testing and structure questionaire, which include Information Source of Self-Efficacy Scale, State - Trait Anxiety Inventory, and Treadmill Self-Efficacy Scale. Discriminatey analysis, stepwise regression, person correlation coefficient, pair t-test, and one way ANOVA was used for data analysis. Based on the result of exercise test

ing, it was found that the subject''s physical condition was extremely poor. Th
e average maximal functional capacity was 2.94 METs. The majority of patients (35 subjec or72.9%) under-estimated their treadmill performaing and only 7 sub jects (14.6%) assessed accurately. Dyspnea was the most commom stop reason dur ing the exercise testing. A significant correlation between self-efficacy of treadmill performance and past experiences, level of dyspnea, FEV1 %pred, FVC %pred, and FEV1/FVC% was observed. However, the patient''s past experience was
the most important predictor, which explained 35% of variance. Verbal persuasi on, vicarious experience, and anxiety were not signifintly correlated with sel f-efficacy of treadmill performance. There was a significant relationship betw een treadmill self-efficacy and maximal functional capacity. However, past exp eriences, resting heart rate , and FEV1/FVC % were the significant predictor i n determining maximal functional capacity. Also the patient''s past experience
explained 39% of the variance and was the most important predictor in maximal functional capacity.The findings of this study have implications in facilitati ng physical, psycholical, and social integration of COPD patients. An assessme nt of self-efficacy of treadmill performance and maximal functional capacity s eems imperative in the development of individualized nursing interventions to help COPD patients obtain the optimum health status.