"The effect of pulmonary rehabilitation program on self-efficacy and severity of symptoms among patients with chronic obstructive pulmonary disease"

A thesis submitted in partial fulfillment of the requirements for Master Degree of Medical_ Surgical Nursing

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ABSTRACT

Title: The effect of pulmonary rehabilitation program on self-efficacy and severity of symptoms among patients with chronic obstructive pulmonary disease

Background: Chronic obstructive pulmonary disease (COPD) is one of the most common chronic diseases worldwide that have no definite cure. The goals of care in COPD patients include reducing symptoms, optimizing independency as well as increasing self efficacy. The aim of this study was to investigate the effect of pulmonary rehabilitation program on self efficacy and severity of symptoms in people with chronic obstructive pulmonary disease.

Methods: This is a clinical trial on "mild to moderate COPD patients were recruited from an outpatient clinic which have been sampled simply and randomized divided in to experimental (n=τ) and control (n=τ) groups. The control group received only routine visits and telephone follow up weekly. Experience group participated in pulmonary rehabilitation classes that design based on Bandura’s self efficacy theory. Pulmonary rehabilitation program included self care and self management education, nutrition recommendations, stress reduction methods, effective cough, breathing exercises, control of breathing in crucial situations, and muscle stretching exercises that instructed by researcher in τ parts of τ minutes. Then the patients were asked to perform practices at home τ times a week for υ weeks and followed up by telephone weekly. Each telephone follow up consisted of τ parts: health behaviors assessment, reinforcement of education, answers to the patient questions and encourage them to continue the performance. The data gathering tools were demographic and disease related questionnaires, Persian version of COPD Self efficacy Scale (CSES), Fatigue Severity Scale (FSS) and dyspnea and cough severity scales. Data were collected at baseline and after υ weeks of intervention and analyzed with SPSS software version υ and descriptive and analytic statistical tests.

Results: The results showed that average self efficacy of experience and control group before the study was intermediate. While experience group report very high self efficacy after intervention. Also, t test (P=τ) showed a significant difference between the experience and control groups on the self efficacy after the study. Regarding severity of symptoms, findings indicated that majority of subjects suffer from medium intensity of fatique and dyspnea. Most of experience group report mild fatigue and dyspnea after the study. Also, t test (P=τ) showed a significant difference between the experience and control groups regarding the severity of symptoms after the study. Wilcoxon (p=τ) indicated that there was no significant deference before and after the study in control group. While significant difference indicated in experience group (p=τ). Also, mann-whitney test showed significant deference between experience and control groups after the study (p=τ).

Conclusion: It can be concluded that pulmonary rehabilitation program is effective in reducing the severity of symptoms and improving self efficacy in the patients with COPD.

Keywords: Pulmonary rehabilitation program, Self efficacy, Fatigue intensity, Dyspnea intensity, Cough intensity, Chronic obstructive pulmonary disease.