

ABSTRACT

The Effect of Breathing Exercise : Pursed Lip Breathing and Diaphragma Breathing on the Increase of Maximum Expiratory Flow in COPD Patients at Asthma and CPOD Polyclinic Dr. Soetomo Hospital Surabaya

Pre-Experimental Research

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Now, Chronic Obstructif Pulmonary Disease (CPOD) is reckoned as one of healthy problem that cause increasing number of illness, morbidity, and cost of treatment. The symptoms are dyspnea, cough, and excessive secret causing decrease of the lungs function resulting in the decrease of forced expiratory volume, and oxigenation disorders so that it will influence productivity and quality of life. Breathing exercise expected to maintain the lungs function, decrease symptompms, and prevent morbidity. However, it's effectiveness has been unclear.

This research was pre-experimental to find how breathing exercise influence increasing of maximum expiratory flow in CPOD patients. Using *purposive sampling* there were 9 subjects, who were subjected to PEFr, pulse, respiratory rate, and subjective symptoms measurements.

Statistic test showed that there were increasing PEFr 236,67 ($p = 0,002$) significantly, decreasing pulse 64,00 ($p = 0,000$), insignificant decrease of respiratory rate 21,56 ($p = 0,899$), and decreasing of subjective symptoms and the patients feel better.

The activation of symphatetic nerve by breathing exercise producing epinephrin hormone that cause bronchodilation and vasodilation of veins, and it's effects are improvement of air and blood flow in alveolus so that gas exchange can be optimum. Increasing intrabonchial pressure and expiratory muscle contraction also help bronchus open and expel air trapping from airways.

Key Word : breathing exercise

