

ABSTRACT

The main objective: This study aims to answer the question of whether one therapy, which focuses on chest exercises, can have a positive effect on the values of FVC (Forced Vital Capacity).

Methods: The participants of this study were patients hospitalized in the internal medicine inpatient ward of the C2 Faculty Hospital Královské Vinohrady. They were selected by the head of my study, who comes to this ward regularly and knows the patients' health condition. The participants were individually asked if they wanted to participate in the study voluntarily. The condition for participation in the study was a definitive diagnosis of chronic obstructive pulmonary disease (COPD). A total of 15 individuals, 7 females and 8 males, participated in the study. Their heart rate, haemoglobin saturation and FVC were measured both before and after the intervention. The therapist then completed the Barthel index (BI) questionnaire and the participants filled out the anamnestic-diagnostic questionnaire and the SF-36 scoring questionnaire.

Results: 19 individuals were originally selected for this study, of which 11 were men and 8 were women. However, 3 probands withdrew during the study and 1 proband was eliminated. The mean age of all probands is 73 ± 7.38 years (males 69 ± 6.88 years, females 77 ± 5.07 years). The mean BMI is 28.4 ± 6.3 (males 28.1 ± 2.89 , females 28.8 ± 8.68). The average value of the change in saturation is -0.6 ± 3.91 %. The average value of the change in heart rate is 2.53 ± 11.94 beats per minute. The resulting average value of the change in FVC is 0.05 ± 0.16 l.

Conclusion: FVC, haemoglobin saturation and heart rate increased after one therapy.

Key words: COPD, FVC, saturation, heart rate, Respiratory Physiotherapy