## **Annotation**

The thesis deals with the possibility to influence the values of the lung function in patiens with chronic obstructive pulmonary disease (COPD) after exercise carried out according to the Methodology of sensorimotor training. The thesis contains a summary of theoretical knowledge about the pathophysiologic expresion of COPD, including their consequences not only for the respiratory system, but musculoskeletal system as well. Furthermore the thesis includes the information about the Methodology of sensorimotor training, that was used to influence the posture correction in our research.

Methods: The spirometric examination of flow-volume curves monitor the changes prior to and after the exercise according to sensorimotor training in patiens with COPD (mean age  $60,733 \pm 11,817$ ).

Results: The using of sensorimotor training can provide correction of the position of the whole body, of the chest, and change a chest mobility and in total to set up conditions for more economical muscle activation. This enable the changes in the values of the lung functions in the patiens with COPD, that we measured. Not all changes showed statistically significant change.

Conclusion: Using sensorimotor training have an objective effect on the values of the lung function in patiens with COPD.