



THE EFFECT OF A 12-WEEK PHYSIOTHERAPY PROGRAM WITH RESPIRATORY EXERCISES ON THE VITAL CAPACITY AND FORCED VITAL CAPACITY IN ADULT MALES AND FEMALES WITH CEREBRAL PALSY

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The purpose of this study was to determine if breathing exercises can improve specific respiratory parameters in adult males and females with cerebral palsy. 18 adults (11 males/7 females) with spastic cerebral palsy consisted the experimental group and 18 (11 males/7 females) serving as control group took part in the study. A spirometer was used to measure vital capacity (VC) and the forced vital capacity (FVC) before and after the exercising protocol. The breathing exercises selected, emphasized strengthening of the muscles of inspiration and the muscles of expiration. The study revealed that a breathing exercise program can increase the VC and FVC in people with cerebral palsy. The pre-test and post-test examined variables of both groups were within normal limits. The VC of the experimental group was increased by 0.20 litres and this of FVC increased by 0.25 litres after exercising for five to seven minutes each day for a period of twelve weeks. The mean increase of the VC and FVC was 6% and 7% respectively over the baseline values. The control group showed no change in VC neither in FVC. The results support application and development of the treatment concept with respiratory exercises and highlight that physical activity at its simple status can improve function and quality of life in adults with cerebral palsy when added to standard care.

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