

Abstract

Title:

The effect of box (parabox) on respiratory functions in wheelchair dependent.

Aim of thesis:

The main objective of this thesis is to present a new kind of sport, a qualitative pilot case study exploring the impact of boxing on respiratory functions in people dependent on wheelchairs. Next prepare a proper research methodology and finally make independent measurements including subjective feeling records of participants. The thesis is divided into two parts. In the first theoretical part, I tried to find out the latest information based on studies and research on the topic. Unfortunately, in the available literature the problem of people in wheelchairs has not yet been completely summarize and a significant number of publications relate exclusively to people with spinal cord lesions. In the second part of my thesis I include the aforementioned research monitories the chase in respiratory function, also depending on the subjective feelings of participants and their overall life valuation.

Methodology:

The research group consists of 3 participants - men fully attached to wheelchairs, training box once-twice a week. To fulfil the purpose of the research I used both clinical (spirometric measurements) and questionnaire (SQUALA) methods. Data was collected over a period of 2.5 months in the fall of 2015. At the beginning of the research participants received a questionnaire. Then over a period of 2.5 months spirometric measurements were performed by Personal spirometry MSP3 by Mesit company before and after boxing training, including a record of current health and mental state of the participant. During the last measurement SQUALA questionnaire was completed once more.

Results:

Based on regular box training people on wheelchairs have after 2.5 months changed their respiration functions, which are shown by spirometry measurements. Changes have also shed light on the subjective assessment of life quality of participants.

Conclusion:

Despite the small number of participants participating in this pilot casuistical study we can confirm the influence of this activity on respiratory functions in people who are dependent on

wheelchairs, including the development of subjective satisfaction ratings. Overall, we can say that the physical activity makes sense even in these individuals.

Keywords:

Handicap, wheelchairs dependents, box, respiration, sport - respiration relation