

433

BLOW GUN TRAINING ENHANCES THE VENTILATORY CAPACITY IN PATIENTS WITH DOWN SYNDROME: A PILOT STUDY

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Introduction: There are over fifteen thousand people with Down syndrome in Portugal. The worst performance of their respiratory muscles aggravates the expiratory effort, leading to a diminished aerial flow.

Objective: To verify if the blow gun training induces a higher expiratory intensity, in patients with Down syndrome.

Methods: Four participants (17 to 56 years of age) engaged in a 5 weeks period of training, with 2 sessions per week. In each session, after a standard warm-up, each participant performed 4 series of 10 shots 3 m from the target. Forced expiratory intensity was recorded via a portable spirometer (Datospir Peak-10, Sibelman) at the beginning and at the end of each session. Prior to analysis, the results of the first and the fifth week were averaged. Shapiro-Wilk and Levene tests were conducted before inferential procedures.

Results: The intensity of the air flow in the fifth week (215.9±81.3 l/min) was significantly higher than in the first week (177.7±79.1 l/min; t=5.188; p=0.014). Plus, a very strong correlation between measurements was observed (r=0.983; p=0.017).

Conclusions: This pilot study showed that 5 weeks of such a captivating activity, enhanced the ventilatory capacity of Down syndrome patients. Taking into consideration that the elastic recoil of the lung and the resistance of the intra-thoracic airways are of great importance for the prevention of cardio-respiratory infections, the proposed training can be a methodology to increase the quality of life and well-being of this population.

Descriptors: trisomy 21; expiratory intensity; quality of life; well-being.

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434

INTERGENERATIONAL RELATIONS – GRANDPARENTS AND GRANDCHILDREN’S: A WELL-BEING FACTOR?

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Introduction: The purpose of the present study was to build upon the concept of well-being and analyze the interaction between grandparents and grandchildren, and their contribution in life by having a pleasant life – hedonic well-being, meaningful life – eudaimonic well-being, and social life – social well-being.

Objective: Measuring the intergenerational relations by assessing the interaction between grandparents and grandchildren is one way to demonstrate the need for affections in order to accomplish well-being and improve health.

Methods: In this exploratory study the approach used, to examine the relation mentioned above, was a questionnaire survey, composed by two basic questions, with 15 different characteristics.

Results: In 218 respondents (58,7% females, 41,3% males), a pleasant, meaningful and social life, is a reflex of a more integrated context of usefulness, as there is an active participation on family in aspects such as sharing practical knowledge of life, daily life questions, improving writing, reading and feeling useful and valued. These questions prevail above others and present differences in face of health condition (p-value=0,000), but none in gender (p-value=0,061).

Conclusions: Although a great deal of research in the well-being field is done, exists a lack of evidence of the importance of the intergenerational relations. The analysis points out that importance, and it should be an argument to improve the conditions for well-being, alongside with economic and social factors.

Descriptors: intergenerational relations; satisfaction; positive affections; well-being; integration.

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