

Weight reduction as one effect of a multidisciplinary intervention for people with obesity and CPCP-treated sleep apnoea

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ABSTRACT

Introduction: The WHO refers to obesity as a global epidemic, affecting both affluent and developing countries. Obesity is a chronic disease that causes medical, psychological and social consequences. This life-threatening disorder is defined as Body Mass Index (BMI) ≥ 30 , and is associated with obstructive sleep apnoea syndrome (OSAS). The diagnosis of OSAS is confirmed by the nightly average number of apnoea per hour. One of the most common treatments of OSAS is the application of constant positive airway pressure (CPAP).

Objectives: We hypothesized that a multidisciplinary intervention performed by an occupational therapist, a physiotherapist and a dietician would lead to weight reduction, changes in life style concerning diet and physical activity, increase the ability to perform daily activities and have positive effects on health related quality of life. The aim was to increase the ability for people with obesity and CPAP-treated OSAS to loose weight and be able to achieve long-lasting changes.

Methods: Eligible persons (n=65) in an age range of 18 to 70 years were recruited to this randomized controlled study. In total 43 participants were divided into an intervention (n=21) and a control group (n=22). The intervention model included group tuition with scheduled program, home work and weight control at 10 occasions during 12 months. The team met each participant individually for specific professional data sampling. These data constituted the base for further planning of individual/group interventions. Individual evaluation was carried out after 12 months. The control group got their yearly check-up of the CPAP-treated sleep apnoea and was called at follow-up.

Results: The primary outcome was weight (kg) reduction and there was a significant difference between base-line (mean 112.1 (CI 105.2 - 119.0)) and follow-up after 12 months (mean 109.4 (CI 101.5 - 117.4)) (p=0.022). Improvement was found in physical activity as increased length of pace and in health related quality of life (bodily pain, physical function, role emotional and mental health). No significant results were found for the control group. The 24-month follow-up is currently being undertaken.

Conclusion: This multidisciplinary intervention may be useful in occupational therapy.