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Title of the master thesis: Physiotherapy as a way to improve adherence to CPAP therapy of patients with obstructive sleep apnea syndrom

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Abstract: Obstructive sleep apnea is the most common type of sleeping disorder. It is characterized by an excessive daytime sleepiness, deficits of cognitive functions, serious cardiovascular issues and general decrease in the quality of life. The golden standard of the treatment is CPAP therapy. However the long-term disadvantage of this method is the low rate of patients adherence. The minimum requirements for CPAP machines usage are only met by approximately fifty percent of the patients. The presented thesis is divided into three main parts. Firstly, the positive effects of CPAP therapy such as reduction of excessive daytime sleepiness, improvement of cognitive functions and overall increase of life quality of the patients were reviewed. In the next part the relationship between the monitored factors and patients adherence to CPAP was investigated. Lastly, the desired increase of patients adherence to CPAP therapy was tested. Selected patients were divided into three different groups according to their therapeutical programme: 1) education and physiotherapy, 2) solely education, 3) control group. A positive improvement of all the monitored factors for all the tests after CPAP therapy was obtained. Positive relationship between patients adherence and the results of the tests were not found. The results of additional testing examined the correlation between a low rate of adherence and negative effects of CPAP. The patients of

groups 1 and 2 experienced a significantly higher rate of adherence for CPAP therapy when compared to the patients of the control group.