Controlled breathing improved sleep quality in patient with chronic obstructive pulmonary disease

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Aim: The aim of this randomized controlled trial study was to evaluate sleep quality in patients with chronic lung disease and the role of nurse to educate controlled breathing to improve quality of sleep.

Methods: 64 patients with chronic lung disease in two group (experimental and control group) enrolled in 8 weeks. Before the interventions, the Pittsburgh sleep quality index and the demographic information questionnaire were completed by the samples in the control and intervention groups. Next, the pursed-lip breathing, diaphragmatic breathing and coughing techniques were taught to the experimental group by the specialist nurse, whereas the control group received the typical treatments. 8 weeks after the breathing exercises the Pittsburgh sleep quality index was once again completed by the samples in the control and intervention groups.

Results: Results show that after controlling the differences of mean groups sleep quality scores in pre-exam, the intervention (breathing exercises) has affected on the means of the dependent variable scores (quality of sleep) in post-exam (p<0.001). In other words, the sleep quality of intervention group has improved.

Conclusion: The researcher recommends the respiratory nurses and members of treatment groups to use non-pharmacologic methods and controlled breathing exercises for sleeping management and improvement programs designed for patients with COPD.

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