

THE RELATIONSHIP BETWEEN SLEEP DISORDERS AND ADHERENCE TO TREATMENT WITH INHALATION THERAPY IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Objectives: Sleep disorders are common in patients with chronic obstructive pulmonary disease (COPD) and are associated with greater disease severity, more frequent exacerbations, greater use of emergency health care, and higher mortality. They may indirectly contribute to worsening of the course of the COPD by reducing patients adherence. The aim of the study was to evaluate quality of sleep among patients with COPD and to assess the relationship between impaired sleep and adherence to treatment with inhalation therapy.

Methods: The study included 106 COPD patients who were asked to answer the Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS) and Adherence to Refills and Medications Scale (ARMS) questionnaires. Clinical and demographic data were also collected. Comparison between groups with and without sleep disorders was conducted with Pearson's chi-squared test, Fisher's exact test, and Mann-Whitney U test depending on variable type. Reliability of AMRS was calculated. ROC curves were used to determine discriminants of poor adherence.

Results: Over 60% of COPD patients presented with sleep disorders (PSQI³⁵) and 75% with daytime sleepiness. None of the patients presented with optimal adherence to pharmacotherapy. Worse adherence was correlated with greater sleep disorders ($r=0.56$; $p<0.001$). ARMS questionnaire proved to be of high overall internal consistency (Cronbach's $\alpha=0.845$).

Conclusions: Poor quality of sleep coexists with poor adherence to treatment among COPD patients. ARMS was proved to be a reliable tool for the assessment of adherence. Interventions aimed at improving sleep quality may be helpful to improve adherence to inhalation therapy in this group of patients.