

Abstracts (Poster Presentation)**Factors Affecting CPAP Adherence in Thai Patients with Obstructive Sleep Apnea**

Narongkorn Saiphoklang, M.D.^{1,2,3}, Kanyada Leelasittikul, M.Sc.²,
Apiwat Pugongchai, M.Sc.², Shayada Suksupakit, B.Sc.²,
Nithita Sattaratpajit, M.D.⁴

Abstract

Introduction: Continuous positive airway pressure (CPAP) is an effective treatment for patients with obstructive sleep apnea (OSA). CPAP compliance affects short-term and long-term clinical outcomes. Data on factors associated with adherence to CPAP has been limited. This study aimed to determine the prevalence of CPAP adherence and factors affecting non-adherence in OSA patients.

Methods: A cross-sectional study was conducted in OSA patients aged 18 years or older with CPAP treatment. Demographics, clinical characteristics, and CPAP adherence (usage ≥ 4 hours/night for $\geq 70\%$ of nights) at 2 weeks, 4 weeks, 3 months, and 6 months were recorded. Patients were divided into 2 groups: adherence and non-adherence.

Results: In total, 210 patients (61% male) participated in this study. Mean age was 53.5 ± 14.8 years. Body mass index was 30.7 ± 6.9 kg/m². Comorbidities included hypertension (63%), heart disease (18%), and cerebrovascular disease (5%). Polysomnographic data showed apnea-hypopnea index was 48.9 ± 32.0 events/hour, nadir saturation was $79.3 \pm 11.4\%$ and 3% oxygen desaturation index was 14.3 ± 16.9 events/hour. Severe OSA was 68%. The proportion of CPAP adherence in 2 weeks, 4 weeks, 3 months, and 6 months was 59.1%, 60.0%, 57.6%, and 56.8%, respectively. The factors associated with CPAP non-adherence were CPAP mask off at night, irregular sleep time, no time to use CPAP, dry month, and doctor follow-up schedule more than 6 months. Moreover, when patients had good compliance at 2 weeks, they had significantly good compliance at 4 weeks, 3 months, and 6 months.

Conclusions: Only about a half of OSA patients had a good adherence to CPAP. There were many factors affecting CPAP adherence. When patients had a good compliance in a short-term period, they were likely to have good compliance in a long-term period.

Keywords: Adherence, Compliance, Continuous positive airway pressure, CPAP, Factors, Obstructive sleep apnea

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¹ Department of Internal Medicine, Faculty of Medicine, Thammasat University, Pathum Thani, Thailand

² Medical Diagnostics Unit, Thammasat University Hospital, Pathum Thani, Thailand

³ Center of Excellence for Allergy, Asthma and Pulmonary Diseases, Thammasat University Hospital, Pathum Thani, Thailand

⁴ Department of Otolaryngology, Faculty of Medicine, Thammasat University, Pathum Thani, Thailand