

## 1073

### WHAT HAPPENS TO PATIENTS AFTER A DIAGNOSIS OF SLEEP APNEA?

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**Introduction:** Obstructive sleep apnea (OSA) common in older family medicine patients, yet hard to identify and even more challenging to treat. Little has been described about what happens to patients after a diagnosis is made and treatment is recommended. What determines which patients will adopt and persist with treatment?

**Methods:** Consecutive older family medicine patients (n=35, M, age = 58) underwent in-laboratory polysomnography (PSG) and completed sleep-related questionnaires. Those receiving a diagnosis of OSA were followed for treatment according to usual medical practice. After two years, we enquired about what OSA treatment they had declined, initiated, maintained, or had given up. We examined their baseline responses to the Sleep Symptom Checklist (SSC) which assesses severity of sleep-related difficulty in four domains.

**Results:** Thirty-one patients (13 men, 18 women) received a diagnosis of OSA. All were recommended treatment, including CPAP, dental appliance, surgery, nasal sprays, etc. Only 17 patients initiated treatment. Of the 13 who initiated CPAP treatment (2 men, 14 women), 10 (all women) were still using their machines at 2-year follow-up. Fourteen participants with OSA, 8 men and 6 women, refused treatment. Reasons given were: could not afford CPAP machine, did not want to sleep with a machine, did not believe in OSA. Group comparisons show that those who persisted with CPAP treatment showed more severe sleep-related symptoms at baseline than those who refused treatment, including worse daytime functioning (p<.01), sleep disorder symptoms (p<.006), and psychological adjustment (p<.01). There were no significant differences between these two groups in severity of insomnia symptoms or of OSA as measured by the AHI or SpO<sub>2</sub>.

**Conclusion:** This older family medicine sample was not typical of a sleep clinic population since they were all offered sleep testing regardless of suspected OSA. The most notable results include 1) a high presence of OSA, 2) a high proportion of women volunteering for testing, and 3) that having more severe daytime, sleep disorder, and psychological symptoms may be an important motivation for adopting and persisting with CPAP therapy.

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## 1074

### IS SELF-REPORT FOLLOWING A MOTIVATIONAL ENHANCEMENT FOR CPAP INITIATION GROUP A PREDICTIVE TOOL FOR ADHERENCE IN A MILITARY HEALTH SETTING?

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**Introduction:** Perceived readiness, self-efficacy, and social support have been shown to improve CPAP adherence; however, it is unclear how durable the benefits are. Our study aims to determine whether self-reported motivational factors and/or baseline AHI predict CPAP adherence over 6 months following a CPAP initiation class utilizing elements of motivational enhancement in a military health setting.

**Methods:** Observational cohort study at an academic military medical center. We included all military healthcare beneficiaries with OSA who participated in a CPAP initiation class from NOV2016-SEP2017. The class incorporated motivational enhancement techniques within the first 3 weeks of receiving CPAP. Motivational factors (self-rated readiness, self-rated confidence, and social support) and baseline AHI were compared with objectively measured CPAP usage to determine whether these factors could predict CPAP adherence at 1 month, 3 months, and 6 months. Participants that did not provide responses to questionnaire and those without digital adherence data were excluded from analyses.

**Results:** 98 patients (89.8% male, age 44.5 ± 9.1 years) were included in our analysis. The mean AHI was 23.3 ± 19.3 events per hour (47% mild OSA, 24.5% moderate OSA, 28.5% severe OSA). Self-rated readiness displayed a statistically significant correlation with CPAP adherence at all time points evaluated. Self-rated confidence significantly predicted adherence at one-month, but not at 3 and 6 months. Baseline AHI was not associated with CPAP adherence at any time points. Social support significantly predicted CPAP adherence at all time points measured.

**Conclusion:** Self-readiness and social support were predictive of CPAP adherence across all time points measured. Self-rated confidence predicted adherence at one month, but not at later time points. Interventions that focus on these measures may improve CPAP adherence for patients with OSA. Consideration for increased frequency of follow up to enhance durability of adherence is suggested by these findings.

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## 1075

### THE EFFECT OF CHANGING THE FIRST CPAP MASK ON COMPLIANCE

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**Introduction:** CPAP and mask comfort is important to patient satisfaction and compliance. Yet the choice of the first mask varies across Sleep Centers and labs, DMEs, providers, patients, and coverage. We evaluated whether requesting masks changes after the initial CPAP fitting was associated with compliance or the type of medical insurance. We hypothesized that CPAP adherence would be higher in patients who changed their mask.

**Methods:** Penn CPAP Program patients are all fitted by a lab technician, provider, or DME. We examined data on requests for replacement of the first mask among new CPAP prescriptions over a 6-month period (January - June 2017). We compared the rates of compliance in the first 90 days between those with and without mask replacements using chi-squared tests and whether these differences were dependent on specific insurers.

**Results:** Of 1065 new CPAP patients, 302 (28.4%) requested replacement of the first mask within the first 90 days. Rates of treatment compliance did not differ between those with (67.9%) or without (68.8%) CPAP mask replacements (p=0.7691). Patients with Medicaid and Medicare had a higher rate of mask replacements (31.1% and 32.3%, respectively) than patients with Commercial (25.9%) or other insurance (22.9%) on average, although the difference did not reach statistical significance (p=0.133).

**Conclusion:** In this study of our patients with personal mask fittings, 28.4% requested a replacement of the first mask during the initial compliance