



Service Priorities and Programmes
Electronic Presentations

Convention ID: 427

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Enhancing long-term Continuous Positive Airway Pressure (CPAP) compliance with a Specialist Nurse Clinic

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Keywords:

Specialist Nurse Clinic

CPAP compliance

Introduction

In 2009, we demonstrated that acceptance rate of Continuous Positive Airway Pressure (CPAP) treatment in patients diagnosed with Obstructive Sleep Apnoea (OSA) was significantly higher with an additional 15-minute individual consultation after the “usual” structured educational talk than those having the talk alone. A Specialist Nurse-Clinic follow-up would be offered to all patients who agreed to receive CPAP therapy, where the use and compliance of CPAP treatment would be monitored and evaluated.

Objectives

This is a retrospective study to evaluate 1-year CPAP compliance rate after CPAP therapy from both medical and nursing consultation notes in CMS.

Methodology

That was carried out in Queen Elizabeth hospital in the year 2010. Patients were all scheduled to the clinic one month after initiation of CPAP therapy for an initial assessment. Objectives include (a) offering advice towards therapy; (b) identifying problems and offering solutions about CPAP; (c) monitoring CPAP compliance and machine data. Respiratory nurses would (a) deal with problems associated with machine, accessories or interface; (b) question the duration of CPAP use each night; (c) assess clinical symptoms; (d) check equipment function. Compliance usage, data reading including average usage hours of CPAP device, mask leakage, residual Apnoea-Hypnoea-Index was recorded. Advices concerning interfaces, the need of heated humidifiers, chin straps etc. was frequently offered to enhance comfort and adherence. Overnight oximetry reports would be reviewed. Phone follow-up would also be offered, if necessary, between CPAP compliance appointments.

Result

Two-hundred and fifty-nine patients diagnosed with OSA and after CPAP titration during the year. 90% patients attended the educational talk and 15-minute individual consultation. The patients were mostly males (84.2%). The mean Respiratory Disturbance Index was 39.8 and pressure prescribed was 11cmH₂O. Although 181 (77.4%) patients initially agreed for CPAP therapy, only 140 patients attended the

Specialist Nurse-Clinic and the rest attended physician clinics. Eighty-four patients (60%) reported side effects or problems related to CPAP during follow-up, of which 86% were eventually solved. Acceptable compliance was defined by Kribbs et al. as CPAP use at least 4h/day for at least 70% of the nights per week. The CPAP compliance rates were significantly higher for patients attending specialist nurse-clinic (86.4%) than those who did not (52.1%) (only attended physician follow-up). ($p < 0.001$)

A Specialty Nurse Clinic on CPAP therapy can improve patient compliance with CPAP therapy