



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 575

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**Role Expansion of Nuresse: One-stop Sleep Service for Moderate-Severe OSAS patients with Comorbid Illness**

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**Keywords:**

Role Expansion

Nurse-led

Obstructive sleep apnea

Comorbid illness

**Introduction**

Sleep related breathing disorders is a prevalent disease. Obstructive sleep apnea (OSA) syndrome affects an estimated 57 millions adult Chinese and is present in a large proportion of patients with hypertension and in those with other cardiovascular disorders, including coronary artery disease, stroke, and atrial fibrillation. Long patient waiting lists for diagnosis and treatment of OSA were reported in state at 2004. Often limited clinical resources and a large and rising demand to clinical services and become a burden to our healthcare system.

**Objectives**

To evaluate a Nurse-led One-stop Sleep Service (NOSS) can produce health outcomes in symptomatic moderate to severe OSA with comorbid illness.

**Methodology**

Eight suspected OSA patients with comorbid illness (Stroke, DCM, CAD, COPD, Metabolic syndrome & Hypertension) were referred to our sleep laboratory for attended overnight, laboratory-based polysomnography (PSG) under Nurse-led One-stop Sleep Service during period of January 2011 to December 2012. NOSS is a nurse-directed to provide a package of care incorporating PSG diagnosis, auto-adjusting positive airway pressure titration, manual nurse/ technician– observed titration of CPAP/ BPAP, and overall care of patients receiving CPAP/ BPAP.

**Result**

A retrospective review of eight moderate to severe OSA patients underwent NOSS during period of January 2011 to December 2012. All of them are male with mean age was  $56.4 \pm 9.7$  years, mean body mass index (BMI) was  $30.5 \pm 4.2$  kg/m<sup>2</sup> and mean apnoea-hypopnea index (AHI) was  $48.4 \pm 27.3$ . There was an average of 6.5 physician consultations per patient during this period. Two patients with complex sleep apnea syndrome detected on PSG & titration by the nurse. The total time spent for out-patient consultation(unscheduled and scheduled) by nurse for those two patients were 150 minutes and 330 minutes respectively to help them to commence

the treatment. All of them were treated either by CPAP or BPAP with the mean average daily usage of the machine was  $5.6 \pm 1.1$  hrs. It seems almost ridiculous that nurses are considered to be competent to assess, diagnose and contract complicated management plans for patients with complex sleep apnea as they likely to be most problematic. NOSS is most innovative examples of nurse-led care, certainly within the domain of sleep related breathing disorder but the challenge faced by the clinical nursing staff had been made more difficult by the regulatory hurdles which currently exist for nurses looking after patients in this extended role, particularly in the areas of prescribing the pressures setting of PAP machine.