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

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Obstructive Sleep Apnoea (OSA)

repetitive episodes of partial or complete upper airway obstruction during sleep

Symptoms of dozing, sleepiness, impaired cognition, mood disorders, nocturia

Cx : CVD, CNS, metabolic syndromes, peri-operative Cx & car accident
Prevalence of OSA in HK

- Male: 4%
- Female: 2%

Total nos in HK: 400,000-500,000

Statistics from DH in 2005
Treatment of OSA

Continuous Positive Airway Pressure (CPAP)

–gold standard therapy for sleep apnoea
Continuous studies on improving CPAP acceptance & compliance since 2004

A single-nurse conducted educational session might make a difference (2004)
- Patient with or without group CPAP education (45.3% vs. 54.7)

Individual nurse-led clinic consultation for patients with OSAS (2009)
- Nurse clinic consultation after CPAP education in 2009 (66.1%)

Enhancing long-term Continuous Positive Airway Pressure compliance with a Specialist Nurse Clinic (2012)
Enhancing long-term Continuous Positive Airway Pressure compliance with a Specialist Nurse Clinic

Methodology--- Data retrieval from 4/2010-3/2011

- Retrospective study
  - Medical consultation notes
  - Nursing consultation notes

Evaluate 1-yr. CPAP compliance rate in 2011
Methodology

Pts with newly Dx OSA

Gp educational class & nurse clinic

Agree CPAP

Reclined CPAP

Refer to Dr.’s Clinic

Assessment

Data review & monitoring

Check machine & accessories

Advice & solution

Cx prevention
### Epworth Sleepiness Scale (ESS)

**What is your total score from the Epworth Sleepiness Scale?**

**Choose:**
- 1 if score is 0-6
- 2 if score is 7-10
- 3 if score is 11-13
- 4 if score is > 14

<table>
<thead>
<tr>
<th>Situation</th>
<th>Chance of dozing (0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitting and reading</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Watching television</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Sitting inactive in a public place - for example, a theater or meeting</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>As a passenger in a car for an hour without a break</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Lying down to rest in the afternoon</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Sitting and talking to someone</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Sitting quietly after lunch (when you’ve had no alcohol)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>In a car, while stopped in traffic</td>
<td>0 1 2 3</td>
</tr>
</tbody>
</table>

Total Score: 13

0 = would never doze  
1 = slight chance of dozing  
2 = moderate chance of dozing  
3 = high chance of dozing
Appropriate Mask application

Proper machine operation

Appropriate assembling

headgear

Chin strap

tubing
Most commonly problems, Cx & advice

- Pressure intolerance
- Mid-night awakening
- Mask intolerance
- Severe nasal / oral dryness
- Abdominal bloating
- Nasal sore
Agree on CPAP therapy after 1\textsuperscript{st} visit to nurse clinic

- Attended nurse clinic: 140 (77.3%)
- Not attended nurse clinic: 41 (22.7%)

Reported problems related to CPAP during nurse clinic Follow-Up

- without problem: 84 (60%)
- with problem: 56 (40%)

72 (86\%) 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.
Patients' decisions to accept CPAP treatment depend on the balance between perceived benefit and cost. A specialty Nurse Clinic on CPAP therapy can improve patient compliance with CPAP therapy.
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Acknowledgement

- Thank You

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