in 2023, large group set up events were undertaken. From 18/3/23 to 12/6/23 groups of 35–60 people with OSAS were invited to attend a single morning weekend event in the education centre at Aintree University Hospital. They attended a lecture about the condition and rationale for CPAP and then formed small break out groups to look at the devices, undergo mask fitting and troubleshoot. Each patient was given a patient experience feedback form to complete.

**Results** Feedback was received from 217 patients and showed a high level of satisfaction. 214 patients (98.6%) reported that when they had important questions, they received answers that they could understand and reported that they thought the care was effective. 100% of respondents would be happy to use the Sleep Service again.

We then compared CPAP compliance (>4 hours for 70% of the time) in the first weekend set up group (n=36) with a control group of patients (n=36) set up individually.

Large group set up showed a use of 42% of days with an average usage per day of 4.9 hours (SD 2.0) compared with the time) in the first weekend set up group (n=36) with a control group of patients (n=36) set up individually.

**Conclusion** We conclude that large group initiation consultations for CPAP in people with OSAS provide the potential to reduce waiting times for patients whilst maintaining compliance levels and patient satisfaction.

**P33**

**COMPARING CPAP COMPLIANCE IN OBESE AND NON-OBESE PATIENTS WITH OBSTRUCTIVE SLEEP APNEOA**

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Aim Previous literature has suggested that non-obese obstructive sleep apnoea (OSA) patients have a poorer compliance with their continuous positive airway pressure (CPAP) treatment than their obese counterparts.1 We wanted to expand on this and evaluate this hypothesis in greater detail.

**Methods** Consecutive patients diagnosed with OSA (apnoea hypopnea index [AHI] > 15) and initiated treatment of CPAP over a 1 year period were included in this study. CPAP compliance, measured by the inbuilt clock within the CPAP machines (in average hours per night), was recorded at 1 week and 1 year. Patient demographics, BMI (obese patients classified by BMI > 30 kg.m$^2$), CPAP compliance (average hours per night), and AHI were collected (found in table 1).

**Results** 497 patients were included in this study. After applying the exclusion criteria there were 285 patients suitable for inclusion. AHI was significantly higher in the obese group (38.5 vs. 28.2, p=.004). CPAP compliance at 1 week in the obese group and non-obese group were 6.05 vs. 5.87 (p=0.55) respectively; at 1 year this was 5.48 vs. 4.68 (p=.038). 38 patients (31 obese, p=ns) had a compliance of < 4 hours per night at 1 week; compliance at 1 year in this group remained lower (3.49 vs. 5.98 in the obese group, p < 0.001; and 4.68 vs. 5.87 in the non-obese group, p < 0.001), compared to those with > 4 hours per night.

**Conclusion** Our data demonstrates that non-obese OSA patients have a poorer long term CPAP compliance than obese OSA patients. It was also observed that a short term CPAP compliance of < 4 hours per night was a predictor of poorer compliance long term, irrespective of BMI. These patients may benefit from further interventions during the first year to improve their treatment outcomes.

**REFERENCE**


**P34**

**THE IMPACT OF COPD ON THE DISEASE COURSE IN OSA**

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**Introduction** The co-existence of chronic obstructive pulmonary disease (COPD) in obstructive sleep apnoea (OSA) is defined as the ‘Overlap Syndrome’ (OS). Overlap syndrome is associated with worse outcomes in COPD; however, its impact in patients with OSA is not fully understood.

**Methods** We investigated clinical history, comorbidities, Epworth Sleepiness Scale (ESS), home cardiorespiratory polygraphy data, including apnoea-hypopnoea index (AHI) in 370 patients referred to our tertiary sleep service with suspected OSA as part of a service evaluation project.

**Results** Three hundred and one patients had OSA and 32 (11%) patients had OS. OS was associated with older age (65 vs. 49 years, p<0.01), higher BMI (38 vs. 35, p=0.047), and similar frequency of males (62.5% vs. 61%, p=0.867) as compared to the OSA only population. As expected, AHI correlated with the ESS (r = 0.18, p=0.002). COPD was associated with more severe daytime sleepiness (ESS 13 vs. 11; p=0.015) after adjusting for AHI, age, and BMI. Amongst patients with mild OSA defined as an AHI <15 the difference was more pronounced (ESS 15 vs. 10, p=0.002). COPD was strongly associated with the presence of co-morbidities such as Type 2 Diabetes Mellitus (60% vs. 13%, p<0.001), hypertension (67% vs. 23%, p<0.001), and cardiovascular disease (33.3% vs. 7%, p<0.001). COPD was an independent predictor for cardiovascular disease (p=0.05) after correcting for age, sex, BMI and AHI.

**Conclusions** Patients with OS were more co-morbid, and the presence COPD was an independent predictor for cardiovascular disease. These patients also had worse daytime sleepiness; the difference was especially pronounced in patients with a low AHI (mild OSA), offering a possible explanation for disproportionately high ESS in this group. It is critical that we identify and treat COPD in the OSA population to reduce morbidity and mortality in this already under-diagnosed population.

**Abstract P33 Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Non-obese (n=44)</th>
<th>Obese (n=241)</th>
<th>Combined (n=285)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>58.1 ± 11.8</td>
<td>56.4 ± 13.1</td>
<td>56.7 ± 12.9</td>
</tr>
<tr>
<td>Number of males</td>
<td>37</td>
<td>172</td>
<td>209</td>
</tr>
<tr>
<td>AHI</td>
<td>28.2 ± 13.9</td>
<td>38.5 ± 21.7</td>
<td>36.9 ± 21.0</td>
</tr>
<tr>
<td>1 week usage (average hours per night)</td>
<td>5.9 ± 2.3</td>
<td>6.1 ± 2.0</td>
<td>6.0 ± 2.1</td>
</tr>
<tr>
<td>1 year usage (average hours per night)</td>
<td>4.7 ± 1.9</td>
<td>5.7 ± 3.6</td>
<td>5.5 ± 3.5</td>
</tr>
</tbody>
</table>