

Prevalence of a mental health diagnosis in patients prescribed Continuous Positive Airway Pressure therapy and its impact on treatment adherence

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Introduction

Obstructive Sleep Apnoea (OSA) is a common condition characterised by repetitive upper airway obstruction during sleep and associated with increased morbidity, mortality and diminished quality of life¹. There is evidence that OSA is under-recognized in patients with a Mental Health Diagnosis (MHD)² where it can affect up to 46 to 57% of patients versus only 2 to 7% of the general population³. Patients with MHD have a higher prevalence of risk factors such as obesity^{2,4}, diabetes, hypertension, hyperlipidaemia³, tobacco smoking, alcohol consumption and sedative medication use². Patients with MHD lose potential decades of life as compared with people without MHD¹.

A Cochrane meta-analysis confirmed that Continuous Positive Airway Pressure (CPAP) therapy is effective in reducing sleepiness and improving quality of life^{4,5} and this treatment has been proven to be cost-effective⁴. However, treatment adherence can be low³ which can compromise its effectiveness⁵ and hence why we assessed the effect of MHD on adherence to CPAP therapy.

Method

We performed a **Service Audit** of all patients prescribed and started on CPAP therapy **between June 2011 and July 2018 (n = 2642)** with the aim of determining the prevalence of a mental health diagnosis, characterizing this population and determining adherence to treatment within this group. The information was collected by reviewing clinical letters pertaining to the patients' first assessment by a Consultant or Specialist Nurse and the Department's own patient database. The data was analysed using descriptive statistics only.

Results

Prescribed CPAP	n = 2642	
Using CPAP	2018	76.4%
Dropouts	451	17.1%
Mental health diagnosis	442	16.7%
Discharged	119	4.5%
Deceased	54	2.0%

Table 1: Sample breakdown

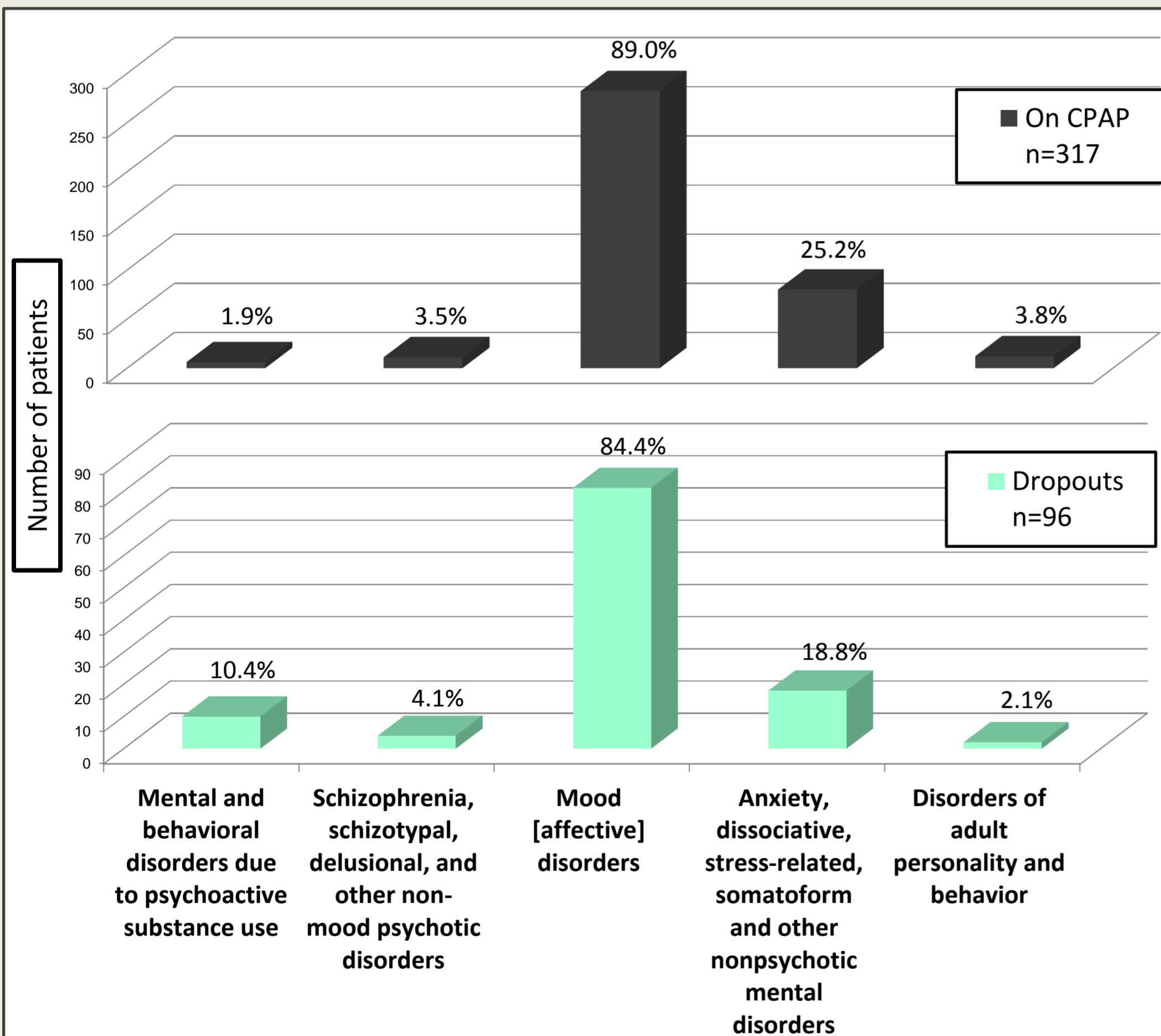


Table 2: Mental health diagnosis; vertical axis are number of patients, labels are percentage of patients with that diagnosis within the group

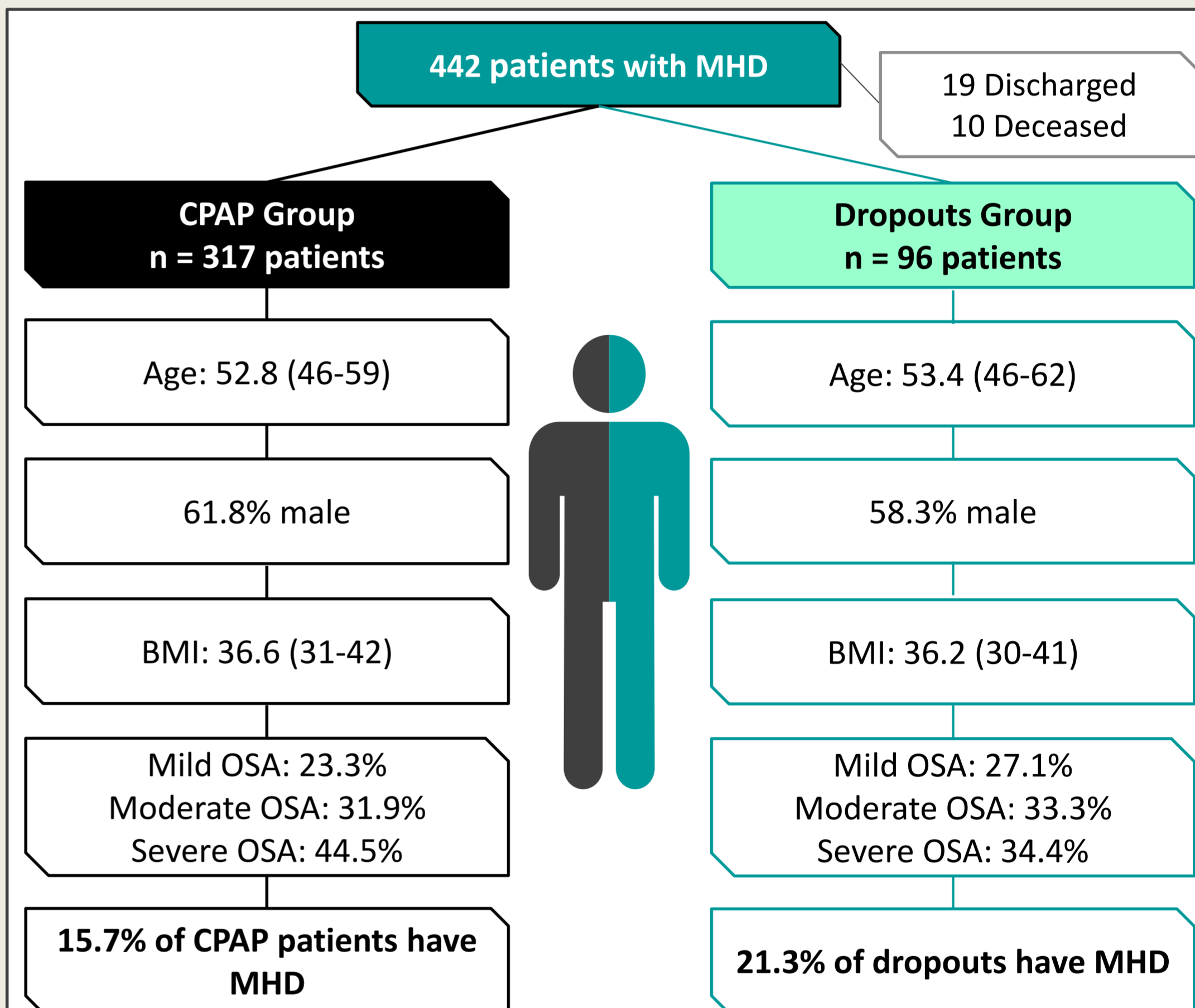


Table 3: Baseline characteristics; data are mean (25th, 75th percentiles)

Conclusion

The adherence rate in our service is 76.4%, higher than reported in literature³. The percentage of patients with MHD (16.7%) is lower than expected as it is estimated that 39% of the adults in the UK suffer with common health conditions⁶. There is a higher percentage of patients diagnosed with a mental health condition in the dropout group (21.29%) than in the CPAP group (15.71%). The groups were similar in age, gender and BMI distribution. There was a higher proportion of adherent patients diagnosed with severe OSA, while in the dropouts group we saw a higher percentage of patients diagnosed with mild OSA.

References

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