

## Introduction

Obstructive sleep apnea is the most common sleep-related breathing disorder in the general adult population. Due to improvements in its diagnostics availability, the number of treated patients is rising. Therefore, new approaches as a telemetry are needed to manage care of these patients.

Figure 1 – Difference in Age

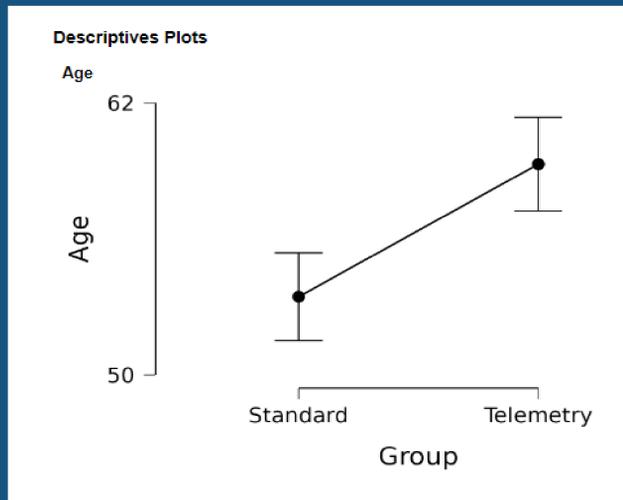
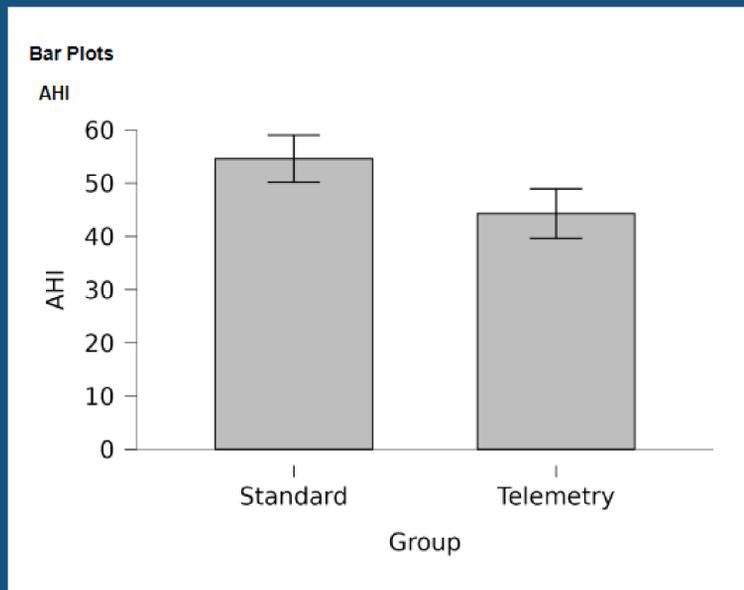


Figure 2 – Difference in AHI



## Methods

All patients were diagnosed with obstructive sleep apnea by polysomnography and were indicated for Continuous positive airway pressure treatment (CPAP). It was their decision whether the follow ups would take place using telemetry or in person at the ambulance. Data was analyzed using JASP Team (2023, version 0.17.1) and Jamovi project (2022, version 2.3).

Picture 1 – Prisma CPAP



Picture 2 – Polysomnography

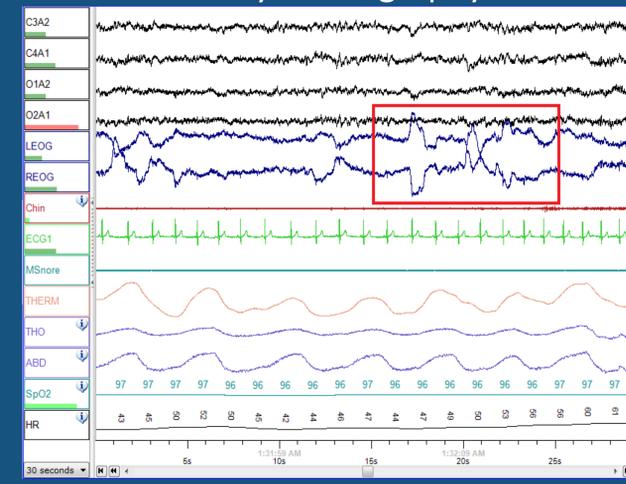
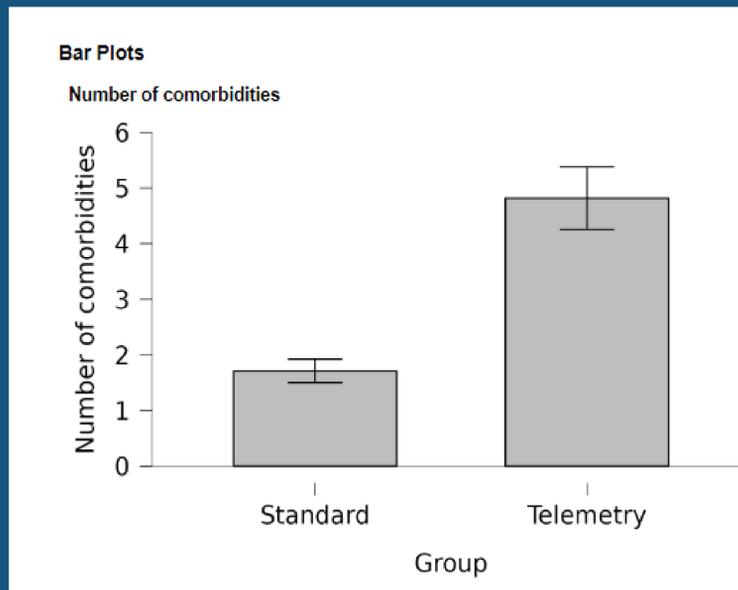


Figure 3 – Difference in Number of comorbidities



## Results

- 107 Standard group: 106 Telemetry group
- Sex ratio: no significant difference
- Age: Telemetry 59.3  $\pm$  10.1; Standard 53.5  $\pm$  10.7 (see figure 1)
- AHI: Telemetry 44.3  $\pm$  24 ; Standard 54.6  $\pm$  23.1 (see figure 2)
- ODI: no significant difference
- t90: no significant difference
- Number of comorbidities: Telemetry 4.8  $\pm$  2.9; Standard 1.7  $\pm$  1.1 (see figure 3)
- Mean CPAP use: Telemetry 3.6  $\pm$  2.3; Standard 4.5  $\pm$  2.4

## Conclusion

The patients deciding to the telemetry were of higher mean age, had more comorbid diseases and higher AHI. However, their mean CPAP usage/therapy adherence was significantly worse compared to the standard follow-up group.

Table 1 – Contingency Tables

		Group		
		Telemetry	Standard	Total
Female	adjustment	7	4	10
	check-up	11	7	18
	warning	3	4	7
	Total	21	15	36
Male	adjustment	24	15	39
	check-up	47	61	108
	warning	13	16	29
	Total	84	92	176
Total	adjustment	31	19	49
	check-up	58	68	126
	warning	16	20	36
	Total	105	107	212