

Gender differences in polysomnography of OSA patients: A Case Series

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INTRODUCTION

Obstructive Sleep Apnea (OSA) is a prevalent sleep disorder with gender-specific differences in presentation and outcomes. Investigating these nuances is crucial to a tailored diagnosis. Our study explores OSA in women, providing valuable insights into Polysomnography (PSG) results. The study compares PSG differences between men and women.

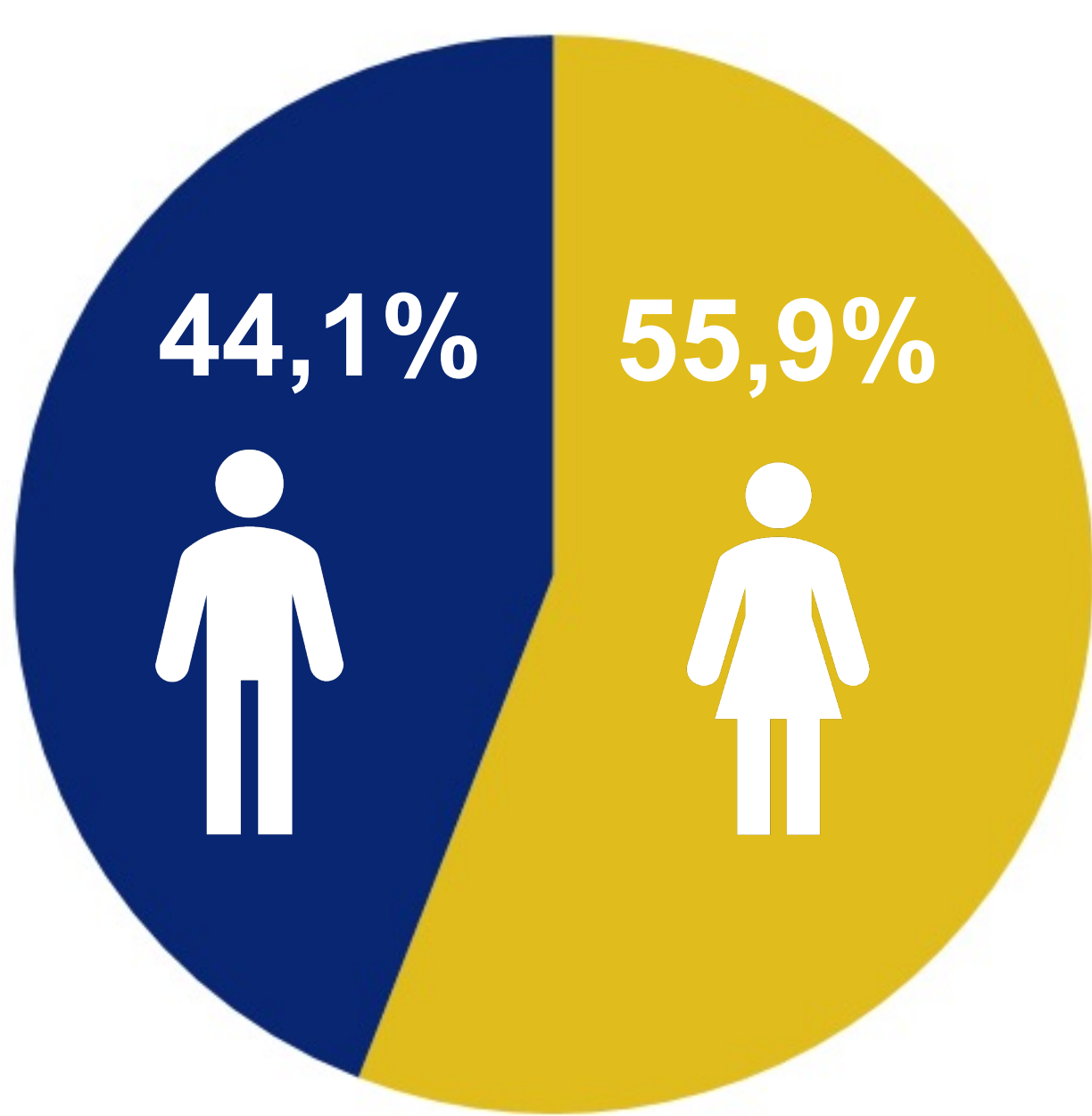
METHODS

An observational study was performed. Demographic, sleep symptoms using Berlin Questionnaire and PSG data were analysed from 238 individuals followed as outpatient in our hospital, between 2021 and 2022. A statistical analysis was performed using SPSS IBM®.

STUDY PERIOD



RESULTS



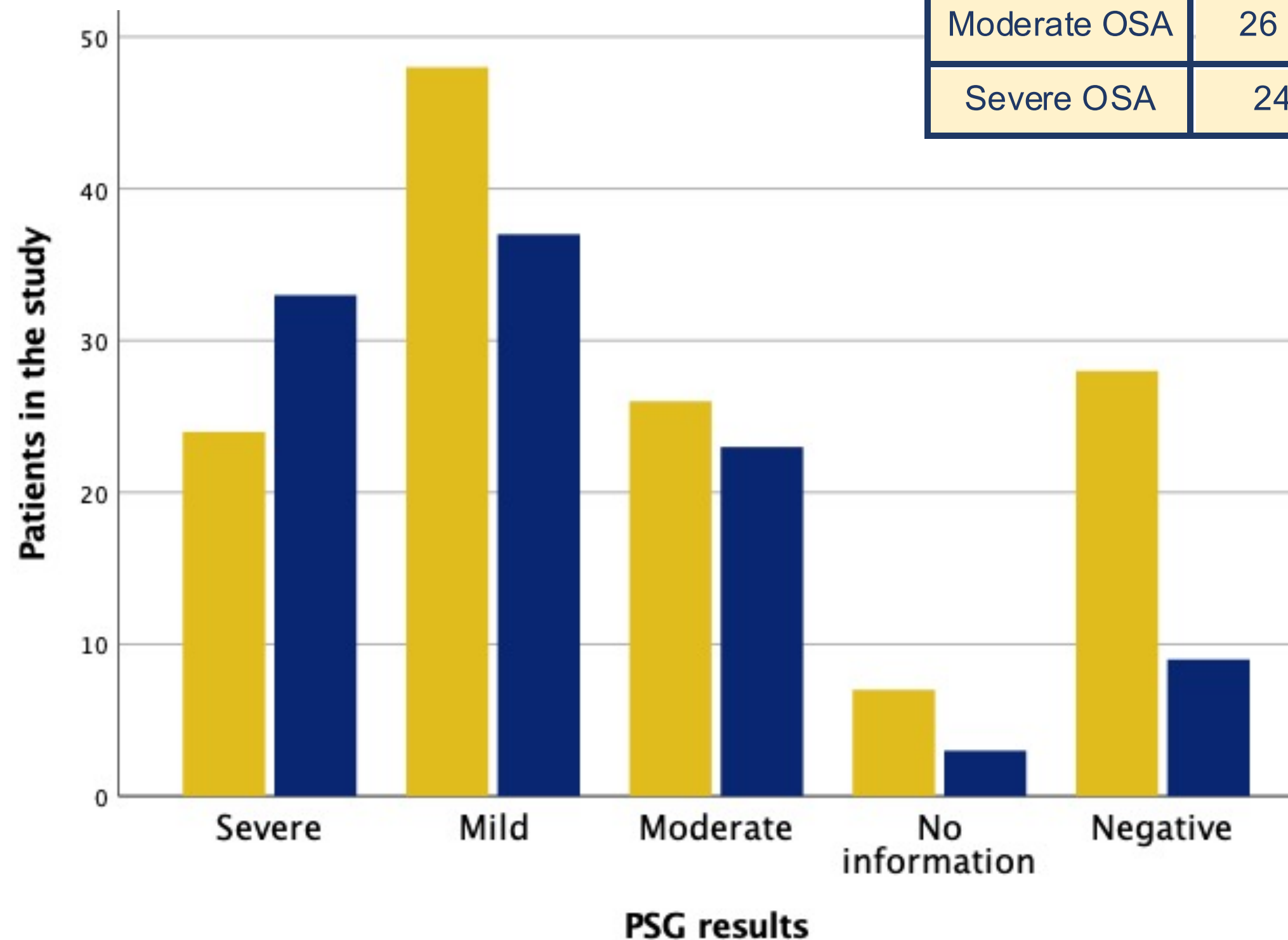
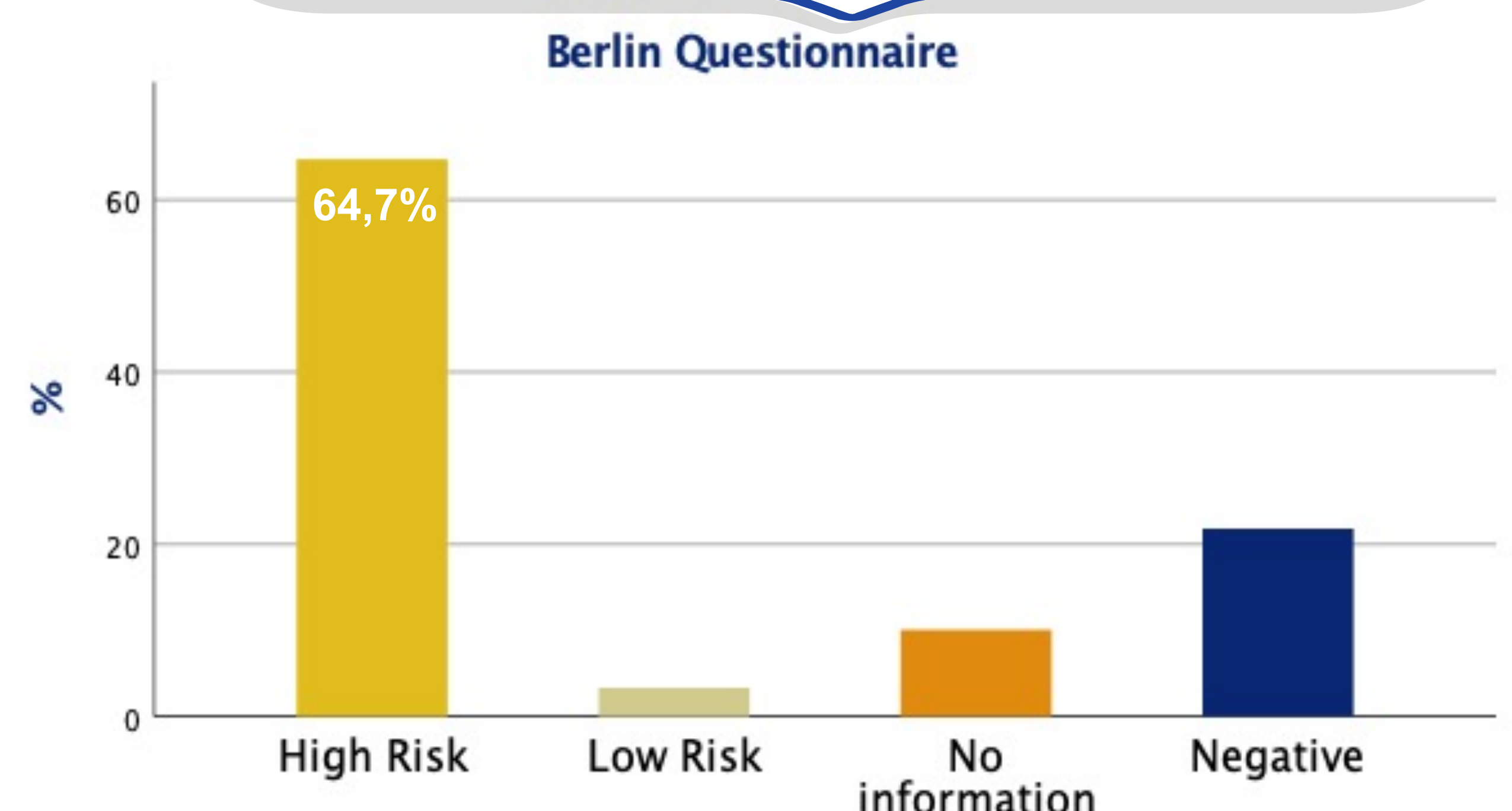
Mean Age		Mean AHI	
Total group	54,2 ± 12,6 years	Total group	20,2/h
Female	54,5 ± 12,8 years	Female	16,8/h
Male	53,9 ± 12,4 years	Male	24,4/h

	Body Mass Index (BMI)	Cervical Circumference
Total group	30,9 ± 6,9 kg/m ²	38,1 ± 3,9 cm
Female	31,5 ± 7,1 kg/m ²	36,2 ± 3,4 cm
Male	30 ± 6,7 kg/m ²	40,6 ± 2,9 cm

	PSG Results n (%)	
	Female	Male
Mild OSA	48 (36,1%)	37 (35,2%)
Moderate OSA	26 (19,5%)	23 (21,9%)
Severe OSA	24 (18%)	33 (31,4%)

Berlin Questionnaire

- 154 patients (64,7%) presented a Berlin Questionnaire with a **High Risk** for OSA.
- 89 women (57,8%) and 65 men (42,2%).



PSG Results

- The average AHI during REM sleep was higher in the female group (29/h) compared to male (25,3/h).
- The average duration of apneas and hypopneas was significantly higher in men (23,3 seconds and 25,8 seconds, respectively) compared to women (13,9 seconds and 15,8 seconds) (p<0,005).
- In women, the mean Total Sleep Time (TST) was 369,5 minutes, while in men it was 345,7 minutes.
- Sleep latency was 25,9 minutes for women and 18,9 minutes for men.
- REM sleep latency was on average 145,3 minutes for women and 143,4 minutes for men, being increased in both groups.

CONCLUSION

In our sample, gender disparities as BMI, cervical circumference, TST and sleep latency and apnea/hypopnea duration were similarly to that reported in the literature, with apnea/hypopnea duration being significantly higher in men. These findings contribute to understanding the distinct characteristics between men and women with OSA, emphasizing the need for tailored management strategies based on gender-specific manifestations.

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