Gender Disparities in the Diagnosis of Sleep Disordered Breathing

Kenna Haile
Wayne State University, he6710@wayne.edu

Nesrine Ibrahim
Wayne State University

Safwan Badr

Apala Vaishnav
Wayne State University

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

Part of the Internal Medicine Commons, Pulmonology Commons, Sleep Medicine Commons, and the Women's Health Commons

Recommended Citation
Haile, Kenna; Ibrahim, Nesrine; Badr, Safwan; and Vaishnav, Apala, "Gender Disparities in the Diagnosis of Sleep Disordered Breathing" (2023). Medical Student Research Symposium. 238.
https://digitalcommons.wayne.edu/som_srs/238

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.
Gender Disparities in the Diagnosis of Sleep Disordered Breathing

Introduction: Current diagnostic guidelines for sleep disordered breathing (SDB) require that apneas and hypopneas be accompanied by a 4% desaturation for it to constitute a respiratory event (AHI-Accepted). However, the American Academy of Sleep Medicine recommends expanding the diagnostic criteria to include apneas and hypopneas accompanied by a 3% desaturation or a cortical arousal for diagnosis (AHI-Recommended). We hypothesized that a clinical sample of both men and women would demonstrate that women are more likely to be misdiagnosed using the accepted criteria compared to the recommended criteria.

Methods: The clinical sample consisted of all patients receiving a PSG at the Detroit Medical Center Sleep Clinic in 2019. We used t-test calculations to analyze gender, BMI, AHI-R, and AHI-A.

Results: 286 Women and 158 Men were analyzed. For Women, the average AHI-R was 27.0 events/hr (±27.4), and AHI-A was 15.1 events/hr (±21.4). For Men, the average AHI-R was 47.1 events/hr (±35.1), and AHI-A was 32.5 events/hr (±31.9). 19.8% of women had an AHI-A greater than 15 compared to 35.3% of women when using AHI-R (15.5% increase). For men, 20.5% had an AHI-A greater than 15 compared to 27.4% when using AHI-R (6.9% increase).

Discussion: There was a significant difference between men and women when comparing AHI-A to AHI-R. Using the AHI-R criteria resulted in a greater increase in women being diagnosed with severe SDB compared to men. This indicates that using the recommended criteria benefits women to a greater extent than men.