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**GENDER AND MENOPAUSAL STATUS CORRELATE WITH SLEEP SURGERY OUTCOME**

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**Introduction:** With recognized anatomic and physiological differences between males and females, it is critical to describe outcomes of sleep surgery with respect to gender. The objective of this study is to compare the subjective and objective outcomes of phase I sleep surgery with respect to gender and age.

**Methods:** This was a retrospective review of adult subjects who presented to a single center for surgical evaluation of OSA from January 2019 to June 2021. Only subjects undergoing phase I surgery (turbinate reduction, septoplasty, nasal valve surgery, DOME, tonsillectomy, preservation palatopharyngoplasty, tongue base reduction, genioglossus advancement, and upper airway stimulation), who also had complete pre and post-operative PSG data were included. Objective measures were post operative apnea hypopnea index (AHI), oxygen desaturation index (ODI), and lowest oxygen saturations (LOS). Subjective outcomes include Epworth Sleepiness Scale (ESS), and Nasal Obstruction and Septoplasty Effectiveness (NOSE) questionnaires. The groups were matched for age and pre-operative BMI.

**Results:** Twenty-six subjects met inclusion criteria, of which 12 were female and 13 were males. Of the females 5 were post-menopausal. The average male pre-operative AHI, ODI, lowest SpO2, and ESS were 34.4±28.7, 30.2±28.3, 80.7±6.6, and 10.3±5.6 respectively. Pre-operative values for females were 31.9±19.2, 18.47±20.4, 82.8±8.4, and 12.5±4.8 respectively. The average AHI reduction in males was 25.5±29.1, and for females it was 8.3±21.0 (p=0.042). Specific to post-menopausal females, Average AHI reduction was 8.3±21.0 and 20.2±16.6 for pre-menopausal females (p=0.01). The average ESS reduction in males was 3.1±3.2 (p=0.22) and for females 5.5±5.4 (p=0.001).

**Conclusion:** In this cohort, pre-menopausal women have higher objective surgical success rate (Sher’s criteria) after phase I surgery as compared to post-menopausal women. Men respond more favorably than women to phase I surgery based on AHI reduction, but not with ESS. Gender and menopause status are important factors in evaluating efficacy of sleep surgery.

**Support (If Any):** NIA F31AG067717 (PI: Zaheed)

**0334**

**THE ROLE OF RACE-GENDER INTERSECTIONALITY IN ASSOCIATIONS BETWEEN INSOMNIA PATTERNS AND LATE-LIFE MEMORY TRAJECTORIES**

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**Introduction:** Difficulty initiating sleep (DIS) may be a stronger predictor of neurodegenerative risk than other insomnia symptoms. This study examined whether longitudinal patterns of DIS are associated with subsequent memory trajectories, and whether associations differ across non-Hispanic Black and White men and women.

**Methods:** 12,565 participants in the Health and Retirement Study (Mage=67.8±9.1, 59.1% women) who self-identified as non-Hispanic Black (14.5%) or non-Hispanic White were included. DIS (“How often do you have trouble falling asleep?”) at three biennial waves (2002-2006) was dichotomized ("never/rarely/sometimes"=0, "often"=1). Participants were categorized into three mutually exclusive groups: low (reference group), persistent, and variable DIS. Episodic memory was assessed using a 10-item word list recall test at five biennial waves (2008-2016). Latent growth curves modeled associations between DIS patterns and subsequent memory level and change, adjusting for sociodemographics (model 1), health conditions (model 2), and depressive symptoms (model 3) in 2002. Stratified models compared associations across White men, Black men, White women, and Black women.

**Results:** Compared to low DIS, persistent (β=-0.03, p<.001) or variable (β=-0.07, p<.001) DIS was associated with worse subsequent memory in models 1 and 2. The effect of variable (β=-0.05, p<.001), but not persistent (β=-0.01, p=.271) DIS remained in model 3. Persistent DIS was most prevalent among White women (5.4% vs. 2.4-4%), and variable DIS was most prevalent among Black women (24.1% vs. 14-22%). Persistent DIS was only significantly associated with memory among White women (β=-0.04, p=.003 vs. β=-0.04, p=.324 for Black Men; β=-0.03, p=.087 for White men; and β=0.01, p=.859 for Black women). Variable DIS was most strongly associated with memory among Black men (β=-0.141, p=.003), followed by White men (β=-0.09, p<.001), White women (β=-0.06, p<.001) and Black women (β=-0.06, p=.064). There were no associations between DIS patterns and memory change.

**Conclusion:** While links between persistent DIS and subsequent memory may reflect negative cognitive effects of depression, variable DIS may presage worse memory above and beyond depression. Race/gender differences in the prevalence and predictive value of DIS patterns for subsequent cognitive function highlight the value of an intersectional lens. Gender disparities in DIS may be more prominent than racial disparities.

**Support (If Any):** NIA F31AG067717 (PI: Zaheed)