

Race apparently a factor in sleep apnea

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A Wayne State University researcher has found that sleep apnea severity is higher among African-American men in certain age ranges, even after controlling for body mass index (BMI).

A study by James A. Rowley, M.D., professor of internal medicine in WSU's School of Medicine, showed that being an African-American man younger than 40 years old increased the apnea-hypopnea index (AHI) by 3.21 breathing pauses per hour of sleep compared to a white man in the same age range with the same BMI.

Obstructive sleep apnea affects at least 4 percent of men and 2 percent of women. It involves repetitive episodes of complete or partial upper airway obstruction occurring during sleep despite an ongoing effort to breathe.

Among participants in Rowley's study ages 50 to 59, being an African-American man increased AHI by 2.79 breathing events per hour of sleep. No differences in AHI were found between African-American women and white women.

"The results show that in certain age groups, after correcting for other [demographic factors](#), the severity of sleep apnea as measured by the apnea-hypopnea index is higher in African-American males than Caucasian males," he said.

Rowley's study, "The Influence of Race on the Severity of Sleep Disordered Breathing," was published in the April 15 issue of the *Journal of Clinical Sleep Medicine*.

Researchers studied 512 patients over three years, comprising 340 African-Americans and 172 Caucasians. The inclusion criteria required that participants were 18 years old, have an AHI of more than five events per night of sleep and be willing to submit to a full-night sleep study.

Researchers examined the association between race and AHI while controlling for the effect of confounders such as gender, age, BMI and

comorbidities.

Rowley said the mechanism for a racial difference in [sleep apnea](#) severity is unclear, but that possibilities include anatomical differences that affect the upper airway mechanics and collapsibility, as well as differences in the neurochemical control of breathing.

Provided by Wayne State University

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