

Rising prevalence of sleep apnea in US threatens public health

September 29 2014



New studies highlight destructive nature of obstructive sleep apnea and benefits of continuous positive airway pressure therapy. Credit: AASM

Public health and safety are threatened by the increasing prevalence of obstructive sleep apnea, which now afflicts at least 25 million adults in the U.S., according to the National Healthy Sleep Awareness Project. Several new studies highlight the destructive nature of obstructive sleep apnea, a chronic disease that increases the risk of high blood pressure,

heart disease, Type 2 diabetes, stroke and depression.

"Obstructive sleep apnea is destroying the health of millions of Americans, and the problem has only gotten worse over the last two decades," said American Academy of Sleep Medicine President Dr. Timothy Morgenthaler, a national spokesperson for the Healthy Sleep Project. "The effective treatment of sleep apnea is one of the keys to success as our nation attempts to reduce health care spending and improve chronic disease management."

Data previously published in the *American Journal of Epidemiology* show that the estimated prevalence rates of [obstructive sleep apnea](#) have increased substantially over the last two decades, most likely due to the obesity epidemic. It is now estimated that 26 percent of adults between the ages of 30 and 70 years have sleep apnea.

Findings from new studies emphasize the negative effects of sleep apnea on brain and heart health; however, these health risks can be reduced through the effective treatment of sleep apnea with continuous positive airway pressure therapy:

- A neuroimaging study in the September issue of the journal *Sleep* found that participants with severe, untreated sleep apnea had a significant reduction in white matter fiber integrity in multiple brain areas, which was accompanied by impairments to cognition, mood and daytime alertness. One year of CPAP therapy led to an almost complete reversal of this brain damage.
- A study published online ahead of print Sept. 21 in the journal *NeuroImage* found functional and anatomical changes in brainstem regions of people with sleep apnea.
- A study in the October issue of *Anesthesiology* shows that diagnosing sleep apnea and prescribing CPAP therapy prior to surgery significantly reduced postoperative cardiovascular

complications - specifically cardiac arrest and shock - by more than half.

- A study published online ahead of print Sept. 19 in the *Journal of Hypertension* found a favorable reduction of blood pressure with CPAP treatment in patients with resistant hypertension and sleep apnea.
- A Brazilian population study published online ahead of print Sept. 23 found that nocturnal cardiac arrhythmias occurred in 92 percent of patients with severe sleep apnea, compared with 53 percent of people without sleep apnea. The prevalence of rhythm disturbance also increased with sleep apnea severity.

Common warning signs for sleep apnea include snoring and choking, gasping, or silent breathing pauses during sleep. The American Academy of Sleep Medicine, Centers for Disease Control and Prevention, Sleep Research Society and other partners in the National Healthy Sleep Awareness Project urge anyone with signs or symptoms of sleep apnea to visit <http://www.stopsnoringpledge.org> to pledge to "Stop the Snore" and talk to a doctor about [sleep apnea](#).

More information: References:

Peppard PE, Young T, Barnet JH, et al. Increased prevalence of sleep-disordered breathing in adults. *Am J Epidemiol* 2013 May 1;177(9):1006-14. Epub 2013 Apr 14.

Castronovo V, Scifo P, Castellano A, et al. White matter integrity in obstructive sleep apnea before and after treatment. *SLEEP* 2014;37(9):1465-1475.

Lundblad LC, Fatouleh RH, Hammam E, et al. Brainstem changes associated with increased muscle sympathetic drive in obstructive sleep apnea. *Neuroimage* 2014 Sep 21 [Epub ahead of print].

Mutter TC, Chateau D, Moffatt M, et al. A matched cohort study of postoperative outcomes in obstructive sleep apnea: could preoperative diagnosis and treatment prevent complications? *Anesthesiology*. 2014 Oct;121(4):707-18.

Iftikhar IH, Valentine CW, Bittencourt LR, et al. Effects of continuous positive airway pressure on blood pressure in patients with resistant hypertension and obstructive sleep apnea: a meta-analysis. *J Hypertens* 2014 Sep 19 [Epub ahead of print].

Cintra FD, Leite RP, Storti LJ, et al. Sleep Apnea and Nocturnal Cardiac Arrhythmia: A Populational Study. *Arq Bras Cardiol* 2014 Sep 23 [Epub ahead of print].

Provided by American Academy of Sleep Medicine

Citation: Rising prevalence of sleep apnea in US threatens public health (2014, September 29) retrieved 6 May 2024 from

<https://medicalxpress.com/news/2014-09-prevalence-apnea-threatens-health.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--