

Sleep Apnea Assignment

(Online Content 1H)

Unit Objectives:

- Understand the relationship(s) between obstructive sleep apnea and cardiovascular risk. (1,2,6,7)*

In order to receive full credit (1H class time) for this assignment, it must be completed in its entirety by 2/27/2025 at 0800. Any assignment not completed in its entirety will result in missed class time.

You may have to copy and paste this link to your browser.

<https://link.springer.com/article/10.1186/s40248-019-0172-9>

Refer to the above article and fill in the blanks for the following questions. Submit to the Sleep Apnea Dropbox by 0800, 2/27/2025. If you are unable to ctrl/click to open the article, copy and paste the link in the address box.

- 1) What is obstructive sleep apnea (OSA) characterized by?
It is characterized by a collapse of the upper airway during sleep with ineffective respiratory efforts, intermittent hypoxia and sleep disturbances.
- 2) How does the distribution of comorbidities differ between men and women?
Men have a higher prevalence of diabetes and ischemic heart disease with obstructive sleep apnea. Women have a higher prevalence of hypertension and depression with obstructive sleep apnea.
- 3) Name 10 common comorbidities often present in OSA patients.
 - a. Systemic hypertension
 - b. Cardiovascular events
 - c. Arrhythmias
 - d. Cerebrovascular disease
 - e. Metabolic disease
 - f. Cancer

- g. Diabetes
 - h. Renal disease
 - i. COPD
 - j. Asthma
- 4) The best studied cardiovascular comorbidity in OSA is **systemic** hypertension.
 - 5) What arrhythmia is especially prevalent in OSA patients? **Atrial fibrillation**
 - 6) Highly prevalent in OSA patients, the metabolic syndrome is a pre-diabetic state associated with central obesity and increased cardiovascular risk.
 - 7) Untreated OSA in diabetic patients is associated with increased prevalence of neuropathy, peripheral artery disease, diabetic retinopathy, and diabetic nephropathy.
 - 8) The association between OSA and chronic obstructive pulmonary disease is known as what? **Overlap syndrome**
 - 9) Sleep studies confirmed that OSA is more common in asthmatics than in controls, and the combination of OSA and asthma had a higher frequency of asthma exacerbations.
 - 10) Careful assessment of comorbidities should become standard clinical practice for OSA patients.