

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?

Collapse of the upper airways during sleep that leads to ineffective respiratory efforts, intermittent hypoxia, and sleep disruption.

- 2) How does the distribution of comorbidities differ between men and women?

Diabetes and ischemic heart disease is more prevalent in men with OSA. Hypertension and depression is more prevalent in women with OSA.

- 3) Name 10 common comorbidities often present in OSA patients.

- a. . **Systemic hypertension**
- b. . **Cardiovascular events and/or death**
- c. . **Arrhythmias**
- d. . **Cerebrovascular disease**
- e. . **Metabolic syndrome**
- f. . **Diabetes**
- g. . **Renal disease**
- h. . **COPD**

- i. . **Asthma**
- j. . **Cancer**

- 4) The best studied cardiovascular comorbidity in OSA is **systemic hypertension**.
- 5) What arrhythmia is especially prevalent in OSA patients?

Atrial fibrillation, but literature on ventricular arrhythmias is scarce and heterogeneous.

- 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 arterial disease, diabetic retinopathy, and diabetic nephropathy**.
- 8) The association between OSA and chronic obstructive pulmonary disease is known as what?
The association between OSA and COPD is known as 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.