

# The Complex Relationship between Asthma and Sleep

Zimal Anadia\*

Department of Cell Biology, Aga Khan University, Karachi, Pakistan

## DESCRIPTION

Asthma is a chronic respiratory condition that affects millions of individuals worldwide. Characterized by inflammation and narrowing of the airways, it can lead to various symptoms such as wheezing, shortness of breath, coughing, and chest tightness. While its impact on daytime activities is well-documented, the relationship between asthma and sleep is equally significant but often overlooked. This article delves into the complex interplay between asthma and sleep, shedding light on how the condition can influence sleep quality and how sleep patterns can, in turn, affect asthma symptoms.

### Asthma's impact on sleep

Asthma can exert a considerable impact on an individual's ability to obtain restful sleep. The following factors highlight how asthma can disrupt the sleep experience:

**Nocturnal symptoms:** Many asthma sufferers experience worsened symptoms during the night, a phenomenon known as nocturnal asthma. Increased inflammation and bronchoconstriction can lead to nighttime coughing, wheezing, and breathlessness, all of which can severely disturb sleep.

**Sleep disruption:** The presence of asthma symptoms can disrupt sleep continuity. Frequent awakenings due to coughing and breathlessness not only lead to fragmented sleep but also reduce the amount of time spent in the deeper, more restorative stages of sleep.

**Sleep-related anxiety:** The fear of experiencing asthma symptoms during the night can lead to heightened anxiety and difficulty falling asleep. This anxiety cycle can create a vicious loop, where anxiety itself worsens asthma symptoms and sleep quality.

**Medication side effects:** Some asthma medications, particularly bronchodilators, can have stimulant-like effects, making it challenging for individuals to fall asleep or stay asleep.

### Sleep's influence on asthma

Conversely, sleep can also influence the severity and frequency of asthma symptoms. Here's how sleep impacts asthma:

**Circadian rhythms:** Our body's internal clock, or circadian rhythm, affects various physiological processes, including lung function. For asthma sufferers, disruptions in these rhythms can lead to worsened symptoms at certain times of the day, potentially impacting sleep.

**Sleep-induced inflammation:** Sleep has been shown to influence the body's immune response and inflammation levels. Poor sleep can exacerbate inflammation, which may, in turn, worsen asthma symptoms.

**Positional effects:** Sleeping position can influence how asthma symptoms manifest. Individuals who sleep in a position that restricts airflow may experience more pronounced symptoms during the night.

**Sleep apnea:** Asthma and sleep apnea are distinct conditions, but they can coexist. Sleep apnea involves repeated breathing pauses during sleep and can worsen asthma symptoms. Conversely, asthma-related inflammation can potentially worsen sleep apnea symptoms.

### Improving sleep quality for asthma sufferers

Managing asthma-related sleep disturbances requires a holistic approach that addresses both asthma symptoms and sleep quality. Here are some strategies to consider:

**Asthma management:** Proper asthma management, including medication adherence, can significantly reduce nocturnal symptoms and enhance sleep quality.

**Bedtime routine:** Establishing a relaxing bedtime routine can help signal the body that it's time to wind down. Activities such as reading, gentle stretching, or deep breathing exercises can promote relaxation.

**Allergen control:** If allergies trigger asthma symptoms, ensuring a clean sleep environment by using hypoallergenic bedding and regularly cleaning the bedroom can mitigate nighttime disturbances.

**Sleep hygiene:** Practicing good sleep hygiene involves maintaining a consistent sleep schedule, avoiding caffeine and heavy meals close to bedtime, and creating a comfortable sleep environment.

**Correspondence to:** Zimal Anadia, Department of Cell Biology, Aga Khan University, Karachi, Pakistan, E-mail: zimal@ana.ac.pk

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**Consultation with healthcare providers:** Individuals with asthma who experience persistent sleep disturbances should consult their healthcare providers. Specialists can provide tailored advice, conduct evaluations, and, if necessary, recommend interventions to improve sleep quality.

## CONCLUSION

The intricate relationship between asthma and sleep highlights the need for comprehensive care that addresses both conditions.

Recognizing how asthma can disrupt sleep, as well as understanding how sleep quality can impact asthma symptoms, empowers individuals to take proactive steps towards better overall well-being. Through a combination of proper asthma management, healthy sleep habits, and medical guidance, asthma sufferers can aim for restful nights and improved daytime functioning.