

## Introduction

- One-third of adults will experience insomnia during a given year, and sleep-related complaints are extremely common in both primary care and otolaryngologic practices.<sup>1</sup>
- In a primary care setting, complaints about sleep are the 2<sup>nd</sup> chief complaint overall, and about 20% of Americans participate in nighttime shift work.<sup>2,3</sup>
- Effective patient counseling requires a working knowledge of scientific facts as well as comfort with applying knowledge to patient care.

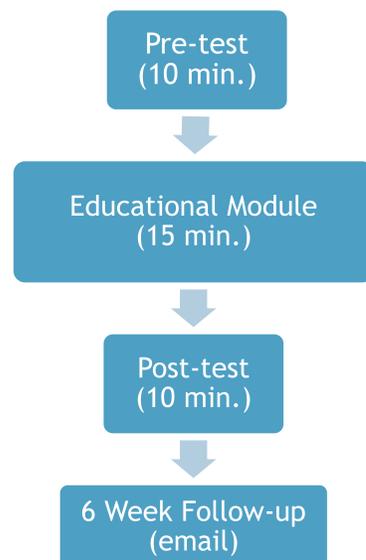
## Objectives

- This study aimed to measure providers' knowledge and comfort level in counseling patients on sleep hygiene and insomnia and determine the effect of an educational module.

### Educational Objectives for participants during teaching program:

At the completion of this module, learners will be able to:

- Identify clinical presentations of insomnia
- Understand underlying pathophysiology of sleep and insomnia
- Learn evidence-based insomnia treatment, including medications and lifestyle practices
- Examine patients' sleep habits and counsel them toward more effective sleep



## Methods and Materials

- A 30-minute presentation on sleep hygiene and insomnia was given to Family Medicine residents and medical students by an otolaryngology-trained sleep medicine physician at an academic medical center.
- A knowledge assessment was administered before and after the educational module to see if scores improved after the presentation (Figure 1)
- Participants' comfort level with sleep hygiene and insomnia counseling was assessed at baseline and after the educational intervention.
- Participants were asked to repeat this assessment approximately 8 weeks later to evaluate long-term benefit.

**Figure 1: Knowledge Based Assessment**

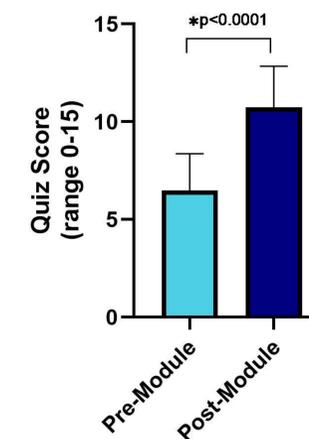
In a primary care setting, complaints about sleep are the ____ chief complaint overall?
In the human circadian rhythm, a normal Tau (τ) is:
The stage of sleep in which sleepwalking most commonly occurs is?
Intrinsic muscle tone is lowest in the stage of sleep when which of the following occurs?
Sleep disruption due to intercontinental air travel (Jet lag) is worst traveling in which direction?
Which of the following is required for a diagnosis of insomnia?
Which of the following changes is normal during sleep as we age?
What percentage of adults in the United States workforce participate in nighttime shift work?
How many hours of sleep are regularly recommended by the AASM for adults?

## Results

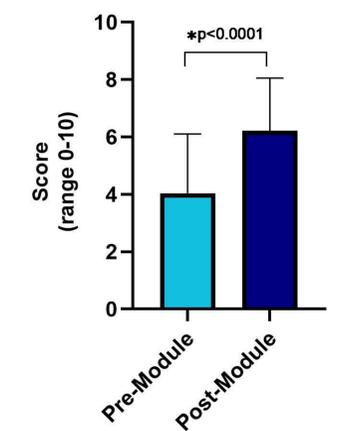
- There were a total of 54 participants in the educational module. All participants were either medical students or residents (family medicine and internal medicine)
  - Longitudinal data from 45 participants was analyzed
- There was a significant increase in the percentage of correct answers from pre-quiz to post-quiz ( $6.5 \pm 1.9$  vs.  $10.7 \pm 2.1$ ,  $p < 0.0001$ ) as a result of the educational module.
- There was also a significant increase in providers' comfort level discussing sleep issues with patients ( $4 \pm 2$  vs.  $6 \pm 2$ ,  $p < 0.0001$ ) in each group.
- This increased level of comfort with patient counseling was retained at 2-month follow-up questionnaire.
- 10 participants responded to follow-up survey

## Results (cont.)

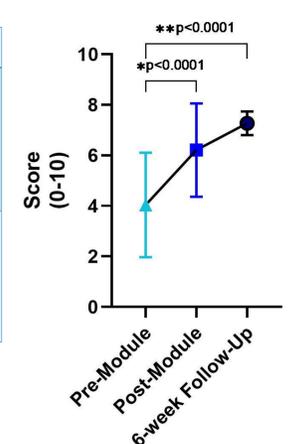
### Quiz Results: All Participants



### Comfort Level: All Participants



### Comfort Level Over Time



Follow-Up Questionnaire	Responses
Have you used any of the information you learned in the lecture on insomnia and sleep hygiene during direct patient care?	Yes: 90% (n= 9/10)
Please rate your level of comfort in counseling your patients about insomnia and sleep hygiene. (On a scale from 0-10)	Mean= 7.3 ± 0.5

## Conclusion

- Our results indicated a significant increase in provider sleep hygiene knowledge after the educational session, as well as a reported increased comfort in counseling patients, which is retained at 6-week follow-up.
- This educational module is an effective tool for education on sleep hygiene and insomnia that can be expanded to other specialties of medicine.
- Health professionals must be educated about sleep disturbances and the utility of taking a sleep history to address the challenges patients may face falling and staying sleeping.

### References:

1. Ohayon MM. Epidemiology of insomnia: what we know and what we still need to learn. *Sleep Med Rev.* 2002;6(2):97-111. doi:10.1053/smr.2002.0186
2. Grandner MA, Malhotra A. Sleep as a vital sign: why medical practitioners need to routinely ask their patients about sleep. *Sleep Health.* 2015;1(1):11-12. doi:10.1016/j.sleh.2014.12.011
3. Price, M. (2011, January). The risks of night work. *Monitor on Psychology*, 42(1). <http://www.apa.org/monitor/2011/01/night-work>