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Sleep Hygiene

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Insomnia is a leading sleep complaint in general practice. It is defined as an inability to obtain adequate sleep. The clinical presentation of insomnia varies from transient to chronic insomnia. The most important concept is that insomnia is a complaint and a symptom, but it is not a diagnosis, except for primary insomnia and sleep state misperception. This sleep symptom is always found secondary to a medical, psychiatric, circadian, sleep, behavioral, or environmental disorder. Detailed history taking including sleep history and all information related to possible causative disorders is essential in clinical assessment of patients with insomnia. The main objective of the treatment plan for is to eliminate the underlying conditions. Pharmacological and non-pharmacological interventions are both beneficial. Various non-pharmacological techniques have been introduced as successful treatments in patients with insomnia which are, namely:

1. stimulus control therapy;
2. relaxation therapy;
3. cognitive therapy;
4. paradoxical therapy;
5. sleep restriction, and;
6. sleep hygiene education.

Sleep hygiene was first described by Nathaniel Kleitman in 1939. Those practices that interfere with normal sleep and contribute to sleep complaints have been increasingly emphasized nowadays. These recommendations are general principles and are not applicable to all patients. When presenting this to the patient, it is usually better to focus on one or two of these principles at a time and to work slowly through the entire list. Data from normal sleepers demonstrate that sleep quality and quantity are adversely affected when certain sleep behaviors are

followed. These data support the assumption that poor sleep hygiene can worsen sleep. There were various investigators introducing different sets of rules which could help patients with insomnia sleep better. The collective instructions of sleep hygiene and some supportive data are as follows:

1. Homeostatic drive for sleep

- a. Avoid naps, except for a brief 10- to 15-minute nap 8 hour after arising. Daytime naps have been shown to decrease the depth of the subsequent major sleep episode and increase latency to sleep onset, likely due to lowered homeostatic pressure leading up to nocturnal sleep onset. However naps can be beneficial in some sleep disorders or in some patients who cannot obtain sufficient quantity of sleep.
- b. Restrict the sleep period to the average number of hours that the patient has actually slept per night in the preceding week. Too much time in bed can decrease quality on the subsequent night.
- c. Get regular exercise each day and finish at least 6 hours before bedtime.
- d. Take a hot bath to raise body temperature within 2 hours before bedtime. A hot drink may help as well. Data show that increased body temperature prior to sleep, or passive body heating, can increase depth of subsequent sleep in both normal sleepers and older insomniacs.

2. Circadian factors

- a. Keep a regular time go to and out of bed everyday. Both processes combine to allow for a relatively constant level of alertness during the day and similarly stable sleep at night.
- b. Do not expose to bright light if wake up at night. Light exposure during the habitual night

can either shift phase later or earlier relative to clock time.

- c. Get at least 30-minute of sunlight within 30 minute after get out of bed. Light exposure is important in switching circadian sleep maintenance zone to wake maintenance zone.

3. Drug effects

- a. Do not smoke to get back to sleep.
- b. Do not smoke after 7 p.m., or quit smoking. Early nicotine withdrawal has been associated with sleep fragmentation.
- c. Avoid caffeine for at least 4 weeks or limit use to no more than 3 cups no later than 10 a.m. Adenosine has been proposed as an endogenous sleep promoting substance. The wake promoting effect of caffeine is thought to be due to the blockade of adenosine receptors.
- d. Avoid alcohol. Do not use alcohol to help in going to sleep. Alcohol can fragment sleep over the second half of the sleep period. Daytime administration also known to decrease sleep latency on subjective assessments such as MSLT.

4. Arousal in sleep setting

- a. Keep the clock face turned away, or put in the drawer, and do not seek out what time it is when wake up at night.
- b. Avoid strenuous exercise after 6 pm.
- c. Do not eat or drink heavily for 3 hours before bedtime. But a light bedtime meal or snack may help.
- d. Keep the room dark, quiet, well ventilated, and at a comfortable temperature throughout the night. Earplugs and eyeshades are helpful.
- e. Practice a bedtime ritual such as reading before lights-out.
- f. Make a worry list before bedtime. Let it go until tomorrow.
- g. Use stress management during daytime.
- h. Avoid unfamiliar sleep environment.
- i. Use comfortable bed and pillow.
- j. Use the bedroom only for sleep. Do not work or do other activities that lead to prolonged arousal. Avoid placing television or computer set in the bedroom in order to prevent those common arousal activities.

- k. Do not try to sleep. Better try to concentrate on pleasant feeling of relaxation. Yoga and meditation may be helpful.
- l. Monitor use of sleeping pill preferably under doctor's supervision. Prolonged use of sleeping pill can lead to tolerance and dependence.

CONCLUSION

Sleep hygiene education is one of the non-pharmacological approaches for insomnia. There are evidences that support the benefit of these recommendations in the treatment of certain type of insomnia. Clinicians should help the patient focus on one or two of these principles at a time and work slowly through the entire list. Careful assessment and elimination of the underlying causes is important in order to help the patients with chief complaint of insomnia.

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