



Sleep hygiene

From Wikipedia, the free encyclopedia

Sleep hygiene is the recommended behavioral and environmental practice that is intended to promote better quality sleep.^[1] This

recommendation was developed in the late 1970s as a method to help people with mild to moderate insomnia, but, as of 2014, the evidence for effectiveness of individual recommendations is "limited and inconclusive".^[1] Clinicians assess the sleep hygiene of people who present with insomnia and other conditions, such as depression, and offer recommendations based on the assessment. Sleep hygiene recommendations include establishing a regular sleep schedule, using naps with care, not exercising physically or mentally too close to bedtime, limiting worry, limiting exposure to light in the hours before sleep, getting out of bed if sleep does not come, not using bed for anything but sleep and sex, avoiding alcohol as well as nicotine, caffeine, and other stimulants in the hours before bedtime, and having a peaceful, comfortable and dark sleep environment.

Sleep hygiene

Intervention

MeSH

D000070263

Contents

- 1 Assessment
- 2 Recommendations
 - 2.1 Sleep schedule
 - 2.2 Activities
 - 2.3 Foods and substances
 - 2.4 Sleep environment
- 3 Effectiveness
- 4 Special populations

- 5 Implementation
- 6 History
- 7 See also
- 8 References
- 9 External links

Assessment

Practice of sleep hygiene and knowledge of sleep hygiene practices can be assessed with measures such as the Sleep Hygiene Index,^[2] Sleep Hygiene Awareness and Practice Scale, or the Sleep Hygiene Self-Test.^[3] For younger individuals, sleep hygiene can be assessed by the Adolescent Sleep Hygiene Scale or the Children's Sleep Hygiene Scale.^[4]

Recommendations

Clinicians choose among recommendations for improving sleep quality for each individual and counselling is presented as a form of patient education.^[5]

Sleep schedule

One set of recommendations relates to the timing of sleep. For adults, getting less than 7–8 hours of sleep is associated with a number of physical and mental health deficits,^[6] and therefore a top sleep hygiene recommendation is allowing enough time for sleep. Clinicians will frequently advise that these hours of sleep are obtained at night instead of through napping, because while naps can be helpful after sleep deprivation, under normal conditions naps may be detrimental to nighttime sleep.^[5] Negative effects of napping on sleep and performance have been found to depend on duration and timing, with shorter

midday naps being the least disruptive.^[5] There is also focus on the importance of awakening around the same time every morning and generally having a regular sleep schedule.^[1]

Activities

Exercise is an activity that can facilitate or inhibit sleep quality; people who exercise experience better quality of sleep than those who do not,^[7] but exercising too late in the day can be activating and delay falling asleep.^[5] Increasing exposure to bright and natural light during the daytime and avoiding bright light in the hours before bedtime may help promote a sleep-wake schedule aligned with nature's daily light-dark cycle.^[8]

Activities that reduce physiological arousal and cognitive activity promote falling asleep, so engaging in relaxing activities before bedtime is recommended.^[1] Conversely, continuing important work activities or planning shortly before bedtime or once in bed has been shown to delay falling asleep.^[9] Similarly, good sleep hygiene involves minimizing time spent thinking about worries or anything emotionally upsetting shortly before bedtime.^[9] Trying purposefully to fall asleep may induce frustration that further prevents falling asleep,^[5] so in such situations a person may be advised to get out of bed and try something else for a brief amount of time.^[9]

Generally, for people experiencing difficulties with sleep, spending less time in bed results in deeper and more continuous sleep,^[5] so clinicians will frequently recommend eliminating use of the bed for any activities except sleep (or sex).^[10]

Foods and substances

A number of foods and substances have been found to disturb sleep, due to stimulant effects or disruptive digestive demands. Avoiding nicotine, caffeine (including coffee, energy drinks, soft drinks, tea, chocolate, and some pain relievers), and other stimulants in the hours before bedtime is recommended by most sleep hygiene specialists,^{[11][12]} as these substances activate neurobiological systems that maintain wakefulness.^[13] Alcohol near bedtime is frequently discouraged by clinicians, because, although alcohol can induce sleepiness initially, the arousal caused by metabolizing alcohol can disrupt and significantly fragment sleep.^[1] Smoking tobacco products before bed is also thought to reduce one's quality of resting by decreasing the time spent in deep sleep, leading to sleep fragmentation and nocturnal restlessness.^[14] Both consumption of a large meal just before bedtime, requiring effort to metabolize it all, and hunger have been associated with disrupted sleep;^[5] clinicians may recommend eating a light snack before bedtime. Lastly, limiting intake of liquids before bedtime can prevent interruptions due to urinations.^[5]

Sleep environment

Arranging a sleep environment that is quiet, very dark, and cool is recommended. Noises, light, and uncomfortable temperatures have been shown to disrupt continuous sleep.^{[8][15]} Other recommendations that are frequently made, though less studied, include selecting comfortable mattresses, bedding, and pillows,^[5] and eliminating a visible bedroom clock, to prevent focusing on time passing when trying to fall asleep.^[5]

In 2015, a systematic review of studies on mattresses concluded that medium-firm, custom-inflated mattresses were best for pain and neutral spinal alignment.^[16]

Effectiveness

Sleep hygiene studies use different sets of sleep hygiene recommendations,^[9] and the evidence that improving sleep hygiene improves sleep quality is weak and inconclusive as of 2014.^[1] Most research on sleep hygiene principles has been conducted in clinical settings, and there is a need for more research on non-clinical populations.^[1]

The strength of research support for each recommendation varies; some of the more robustly researched and supported recommendations include the negative effects of noisy sleep environments, alcohol consumption in the hours before sleep, engaging in mentally difficult tasks before sleep, and trying too hard to fall asleep.^[5] There is a lack of evidence for the effects of certain sleep hygiene recommendations, including getting a more comfortable mattress, removing bedroom clocks, not worrying, and limiting liquids.^[5] Other recommendations, such as the effects of napping or exercise, have a more complicated evidence base. The effects of napping, for example, seem to depend on the length and timing of napping, in conjunction with how much cumulative sleep an individual has had in recent nights.^[1]

There is support showing positive sleep outcomes for people who follow more than one sleep hygiene recommendation.^[5]

While there is inconclusive evidence that sleep hygiene alone is effective as a treatment for insomnia, some research studies have shown improvement in insomnia for patients who receive sleep hygiene education in combination with cognitive behavioral therapy practices.^[17]

Special populations

Sleep hygiene is a central component of cognitive behavioral therapy for insomnia.^[18] Sleep hygiene recommendations have been shown to reduce or eliminate the symptoms of insomnia. Specific sleep disorders may require other or additional treatment approaches, and continuing difficulties with sleep may require additional assistance from healthcare providers.^[19]

College students are at risk of engaging in poor sleep hygiene and also of being unaware of the resulting effects of sleep deprivation.^[20] Because of irregular weekly schedules and the campus environment, college students may be likely to have variable sleep-wake schedules across the week, take naps, drink caffeine or alcohol near bedtime, and sleep in disruptive sleeping environments.^[20] Because of this, it is important to have sleep hygiene education on college campuses.^[20]

Similarly, shift workers have difficulty maintaining a healthy sleep-wake schedule due to night or irregular work hours.^[21] Shift workers need to be strategic about napping and drinking caffeine, as these practices may be necessary for work productivity and safety, but should be timed carefully. Because shift workers may need to sleep while other individuals are awake, additional sleeping environment changes should include reducing disturbances by turning off phones and posting signs on bedroom doors to inform others when they are sleeping.^[21]

Due to symptoms of low mood and energy, individuals with depression may be likely to have behaviors that are counter to good sleep hygiene, such as taking naps during the day, consuming alcohol near bedtime, and consuming large amounts of caffeine during the day.^[22] In addition to sleep hygiene education, bright light therapy can be a useful treatment for individuals with depression. Not only can morning bright light therapy help establish a better sleep-wake schedule, but it also has been shown to be effective for treating depression directly, especially when related to seasonal affective disorder.^[23]

Individuals with breathing difficulties due to asthma or allergies may experience additional barriers to quality sleep that can be addressed by specific variations of sleep hygiene recommendations. Difficulty with breathing can cause disruptions to sleep, reducing the ability to stay asleep and to achieve restful sleep.^[24] For individuals with allergies or asthma, additional considerations must be given to potential triggers in the bedroom environment.^[24] Medications that might improve ability to breathe while sleeping may also impair sleep in other ways, so there must be careful management of decongestants, asthma controllers, and antihistamines.^{[24][25]}

Implementation

Sleep hygiene strategies include advice about timing of sleep and food intake in relationship to exercise and sleeping environment.^[5] Recommendations depend on knowledge of the individual situation; counselling is presented as a form of patient education.^[9]

As attention to the role of sleep hygiene in promoting public health has grown, there has been an increase in the number of resources available in print and on the internet.^[1] Organizations running public health initiatives include the National Sleep Foundation and the Division of Sleep Medicine at Harvard Medical School, both of which have created public websites with sleep hygiene resources, such as tips for sleep hygiene, instructional videos, sleep hygiene self-assessments, poll statistics on sleep hygiene, and tools to find sleep professionals.^{[26][27]} A cooperative agreement between the US Centers for Disease Control and Prevention and the American Academy of Sleep Medicine was established in 2013 to coordinate the National Healthy Sleep Awareness Project, with one of their aims being to promote sleep hygiene awareness.^{[28][29]}

History

While the term *sleep hygiene* was first introduced in 1939 by Nathaniel Kleitman, a book published in 1977 by psychologist Peter Hauri introduced the concept within the context of modern sleep medicine.^{[17]:289}^[30] In this book Hauri outlined a list of behavioral rules intended to promote improved sleep.

^[30] Similar concepts are credited to Paolo Mantegazza who published a related original book in 1864.^[30] The 1990 publication of the *International Classification of Sleep Disorders* (ICSD) introduced the diagnostic category Inadequate Sleep Hygiene.^[30] Inadequate sleep hygiene was a subclassification of Chronic Insomnia Disorder in the ICSD-II published in 2005; it was removed from the 2014 ICSD-III along with two other classifications, because "they were not felt to be reliably reproducible in clinical practice."^[31]




Specific sleep hygiene recommendations have changed over time. For example, advice to simply avoid sleeping pills was included in early sets of recommendations, but as more drugs to help with sleep have been introduced, recommendations concerning their use have become more complex.^[5]

See also

- Chronotype
- Circadian rhythm
- Dark therapy

References

1. Irish, Leah A.; Kline, Christopher E; Gunn, Heather E; Buysse, Daniel J; Hall, Martica H (October 2014). "The role of sleep hygiene in promoting public health: A review of empirical evidence". *Sleep Medicine Reviews*. doi:10.1016/j.smrv.2014.10.001. PMID 25454674.
2. Mastin, David; Jeff, Bryson; Corwyn, Robert (2006). "Assessment of Sleep Hygiene Using the Sleep Hygiene Index". *Journal of Behavioral Medicine*. **29** (3): 223–7. doi:10.1007/s10865-006-9047-6.

3. Cho, Sungkun; Kim, Gye-Seok; Lee, Jang-Han (2013). "Psychometric evaluation of the sleep hygiene index: a sample of patients with chronic pain". *Health and Quality of Life Outcomes*. **11** (1): 213. doi:10.1186/1477-7525-11-213. 
4. Lewandowski AS, Toliver-Sokol M, Palermo TM (August 2011). "Evidence-based review of subjective pediatric sleep measures". *J Pediatr Psychol*. **36** (7): 780–93. doi:10.1093/jpepsy/jsq119. PMC 3146754 . PMID 21227912.
5. Hauri, P. (2011). Sleep/wake lifestyle modifications: Sleep hygiene. In Barkoukis TR, Matheson JK, Ferber R, Doghramji K, eds. *Therapy in Sleep Medicine*. Elsevier Saunders, Philadelphia, PA. pp. 151–60.
6. Luyster, Faith S.; Strollo, Patrick J.; Zee, Phyllis C.; Walsh, James K. (1 June 2012). "Sleep: A Health Imperative". *Sleep*. doi:10.5665/sleep.1846.
7. Driver, Helen S.; Taylor, Sheila R. (August 2000). "Exercise and sleep". *Sleep Medicine Reviews*. **4** (4): 387–402. doi:10.1053/smrv.2000.0110. PMID 12531177.
8. Czeisler, C. A.; Gooley, J. J. (January 2007). "Sleep and Circadian Rhythms in Humans". *Cold Spring Harbor Symposia on Quantitative Biology*. **72** (1): 579–97. doi:10.1101/sqb.2007.72.064.
9. Stepanski, Edward J; Wyatt, James K (June 2003). "Use of sleep hygiene in the treatment of insomnia". *Sleep Medicine Reviews*. **7** (3): 215–25. doi:10.1053/smrv.2001.0246. PMID 12927121.
10. Morin, CM; Bootzin, RR; Buysse, DJ; Edinger, JD; Espie, CA; Lichstein, KL (November 2006). "Psychological and behavioral treatment of insomnia:update of the recent evidence (1998–2004)". *Sleep*. **29** (11): 1398–414. PMID 17162986.
11. Sin, Celia WM; Ho, Jacqueline SC; Chung, Joanne WY (January 2009). "Systematic review on the effectiveness of caffeine abstinence on the quality of sleep". *Journal of Clinical Nursing*. **18** (1): 13–21. doi:10.1111/j.1365-2702.2008.02375.x. PMID 19120728.
12. Jaehne, Andreas; Loessl, Barbara; Bárkai, Zsuzsanna; Riemann, Dieter; Hornyak, Magdolna (October 2009). "Effects of nicotine on sleep during consumption, withdrawal and replacement therapy". *Sleep Medicine Reviews*. **13** (5): 363–77. doi:10.1016/j.smrv.2008.12.003. PMID 19345124.
13. Boutrel B, Koob GF (September 2004). "What keeps us awake: the neuropharmacology of stimulants and wakefulness-promoting medications". *Sleep*. **27** (6): 1181–94. PMID 15532213.
14. Barlow, David; Durand, Mark (2012). *Abnormal Psychology: An Integrative Approach* (6th ed.). Belmont, CA: Wadsworth. p. 301. ISBN 9781111343620.
15. Xie H, Kang J, Mills GH (2009). "Clinical review: The impact of noise on patients' sleep and the effectiveness of noise reduction strategies in intensive care units". *Crit Care*. **13** (2): 208. doi:10.1186/cc7154. PMC 2689451 . PMID 19344486.

16. Radwan, Ahmed; Fess, Philip; James, Darcy; Murphy, John; Myers, Joseph; Rooney, Michelle; Taylor, Jason; Torii, Alissa. "Effect of different mattress designs on promoting sleep quality, pain reduction, and spinal alignment in adults with or without back pain; systematic review of controlled trials". *Sleep Health*. **1** (4): 257–267. doi:10.1016/j.sleh.2015.08.001.
17. de Biase et al. Sleep Hygiene. Chapter 27 in Sleepiness and human impact assessment. Eds. Garborino LN et al. Springer Milan, 2014. ISBN 978-88-470-5388-5
18. Morin, CM; Bootzin, RR; Buysse, DJ; Edinger, JD; Espie, CA; Lichstein, KL (November 2006). "Psychological and behavioral treatment of insomnia:update of the recent evidence (1998–2004)". *Sleep*. **29** (11): 1398–414. PMID 17162986.
19. Caruso, Claire C (August 2, 2012). "Running on Empty: Fatigue and Healthcare Professionals: The Consequences of Inadequate Sleep". NIOSH: Workplace Safety and Health. Retrieved December 14, 2014.
20. Brown, Franklin C.; Buboltz, Walter C.; Soper, Barlow (January 2002). "Relationship of Sleep Hygiene Awareness, Sleep Hygiene Practices, and Sleep Quality in University Students". *Behavioral Medicine*. **28** (1): 33–8. doi:10.1080/08964280209596396. PMID 12244643.
21. Åkerstedt, T. (1998). Shift work and disturbed sleep/wakefulness. *Sleep Medicine Reviews*, 2(2), 117–28.
22. Doghramji K (2003). "Treatment strategies for sleep disturbance in patients with depression". *Journal of Clinical Psychiatry*. **64**: 24–9. PMID 14658932.
23. Golden, RN; Gaynes, BN; Ekstrom, RD; Hamer, RM; Jacobsen, FM; Suppes, T; Wisner, KL; Nemeroff, CB (April 2005). "The efficacy of light therapy in the treatment of mood disorders: a review and meta-analysis of the evidence.". *The American Journal of Psychiatry*. **162** (4): 656–62. doi:10.1176/appi.ajp.162.4.656. PMID 15800134.
24. Koinis-Mitchell, Daphne; Craig, Timothy; Esteban, Cynthia A.; Klein, Robert B. (December 2012). "Sleep and allergic disease: A summary of the literature and future directions for research". *Journal of Allergy and Clinical Immunology*. **130** (6): 1275–81. doi:10.1016/j.jaci.2012.06.026.
25. Muliol, J; Maurer, M; Bousquet, J (2008). "Sleep and allergic rhinitis". *Journal of investigational allergology & clinical immunology*. **18** (6): 415–9. PMID 19123431.
26. National Sleep Foundation. "National Sleep Foundation". Retrieved 14 December 2014.
27. Division of Sleep Medicine at Harvard Medical School and WGBH Educational Foundation. "Healthy Sleep". Retrieved 14 December 2014.
28. American Academy of Sleep Medicine. "AASM partners with CDC to address chronic sleep loss epidemic". Retrieved 14 December 2014.

29. Centers for Disease Control and Prevention. "National Healthy Sleep Awareness Project". Retrieved 14 December 2014.
30. Gigli, Gian Luigi; Valente, Mariarosaria (30 June 2012). "Should the definition of "sleep hygiene" be antedated of a century? A historical note based on an old book by Paolo Mantegazza, rediscovered". *Neurological Sciences*. **34** (5): 755–60. doi:10.1007/s10072-012-1140-8. PMID 22752854.
31. Bonnet MH, Arand DL. Overview of insomnia. UpToDate, Topic 7684 Version 15.0. Last updated: Sep 02, 2014. Page accessed: Dec 16, 2014

External links

- Healthy Sleep (<http://healthysleep.med.harvard.edu>)
- Australian fact sheet on sleep hygiene, PDF (http://www.sleepoz.org.au/files/fact_sheets/AT09%20-%20Sleep%20Hygiene.pdf)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Sleep_hygiene&oldid=754463136"

Categories: Sleep | Self care | Hygiene

-
- This page was last modified on 12 December 2016, at 20:15.
 - Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.