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6 Myths & 6 Secrets to Better Sleep

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Objectives

- Review different ways people have problems sleeping
- Identify some misconceptions/myths surrounding sleep problems & how believing these myths may worsen sleep problems
- Reveal the secrets to better sleep
- Discuss when we should seek professional help

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O sleep! O gentle sleep!
Nature's soft nurse,
how have I frighted thee,
that thou no more wilt weigh my eyelids down
and steep my senses in forgetfulness?

~William Shakespeare
2 Henry IV

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Myth #1: When it comes to sleep one size fits all

(or I'm supposed to get 8 hours a night, right?)

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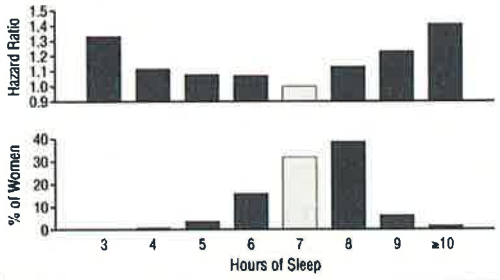
The JAMA Network

From: Mortality Associated With Sleep Duration and Insomnia

Arch Gen Psychiatry. 2002;59(2):131-136. doi:10.1001/archpsyc.59.2.131



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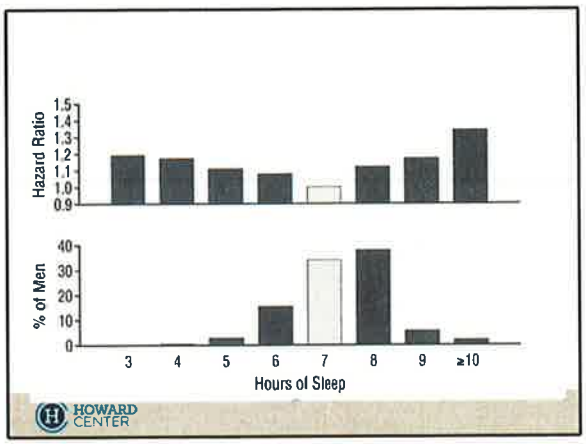

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Sleep: How much is enough?

- 6-7 hours per night have longest life expectancy
- 5 hours per night associated with ***longer*** life expectancy than sleeping 8 hours
- 3.5 to 4.5 hours had same risk of death as 8 hrs
- Insomnia ***not*** associated with increased health problems

Kripke et al. 2002.

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Take-Home Points

- "A recent population sampling found that short sleep durations were not related to impaired health-related quality of well-being...
- [I]nsomnia was associated with no excess mortality hazard whatsoever, once sleeping pill use and other comorbidities were controlled." [emphasis added]

Kripke et al. 2002.

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Take-Home Points

- Moreover, some studies indicate that primary insomnia causes no substantial impairment of function. For example, patients with insomnia may have no demonstrable loss of daytime alertness."

Kripke et al. 2002.

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Take-Home Points

"Although there may be risks in depression, anxiety, heart disease, cancer, lack of exercise, sleep apnea and other conditions in which insomnia is often present, patients with insomnia without underlying comorbidities can be reassured that there appears to be no survival risk, as long as the patients refrain from long-term use of sleeping pills." [emphasis added]

Kripke et al. 2002.

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Sleep Changes as We Age

- Neurobiological changes inevitable
- Advanced sleep phase ("Early to bed, early to rise")
- ↑ time to sleep
- ↑ fragmented sleep
- ↓ sleep efficiency (more time awake in bed)
- ↓ slow wave (restorative) sleep
- ↓ REM sleep
- ↑ sleep disorders (e.g. sleep apnea)

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Myth #2: Diagnosing insomnia is an objective process

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How do we assess insomnia?

- Ideally, diagnosis would be objective
- Quantity of sleep alone does not constitute insomnia
- Diagnosis of primary insomnia is a subjective clinical diagnosis
- Referral to sleep specialist reserved for special cases

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Myth #3: Insomnia comes in one flavor

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The Primary Insomnias

- Idiopathic insomnia (starting in childhood)
- Psychophysiologic Insomnia (conditioned response often generalized from an event causing acute insomnia)
- Paradoxical Insomnia (marked mismatch b/w subjective/objective measures)

International Classification of Sleep Disorders

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Types of Secondary Insomnia

- More common than primary insomnia
- Adjustment Insomnia
- Inadequate Sleep Hygiene
- Insomnia due to a Psychiatric Disorder
- Insomnia due to a Medical Condition (e.g. pain, urinary problems, cardiovascular problems)
- Insomnia due to a Drug or Substance

International Classification of Sleep Disorders

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Not Considered Insomnia

- Circadian Rhythm Disorders
- Delayed Sleep Phase Syndrome
- Voluntary Insufficient Sleep Syndrome

International Classification of Sleep Disorders

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Primary Sleep Disorders

- Obstructive Sleep Apnea
- Periodic Limb Movements of Sleep
- Restless Leg Syndrome
- Narcolepsy
- Parasomnias
  - Sleep walking/Night terrors
  - REM sleep disorder

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An Approach to Evaluating Chronic Insomnia (>4 weeks)

- Standard medical/ psychiatric evaluation with focus on sleep related symptoms & history
- Sleep schedule
- Sleep hygiene & bedtime habits
- Sources of increased stress
- Substance use (drugs, caffeine, alcohol, nicotine)
- Prescribed & OTC medications

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Myth #4: Insomnia is really an Ambien Deficiency Syndrome

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Sleep Scheduling Problems

- Going to bed early or sleeping in
- Not having a regular waking time
- Not having a regular bedtime
- Not maintaining a high sleep efficiency
  Napping more than 45 minutes a day outside of 1 p.m. to 4 p.m.

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Sleep Hygiene Problems

- Insufficient bright light in the morning
- Too much bright light later in the day
- Not enough physical activity
- Too much/ ill timed caffeine
- Sugar, liquids or big meals within 2 hrs of bed
- Nicotine use/ alcohol within 2 hrs of bedtime
- Bedroom too noisy/ hot
- Mattress uncomfortable

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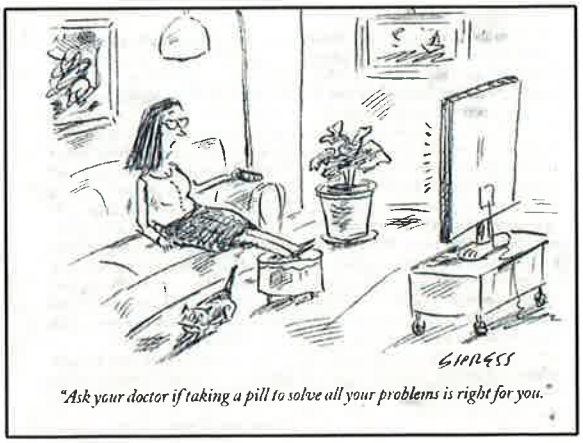

"Ask your doctor if taking a pill to solve all your problems is right for you."

Classes of Sleep Medications

- Gamma-aminobutyric acid (GABA)
- Serotonin
- Histamine
- Melatonin
- Medicinal Plants

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GABA Drugs: Benzodiazepines

- Temazepam (Restoril), clonazepam (Klonopin), lorazepam (Ativan), diazepam (Valium)
- Not very effective
  - **Fall asleep 10 min faster** (20 min subjectively)
  - **Total sleep time 30 min better** (52 min subjectively)
  - **Worsens sleep architecture** (more stage II sleep/less stage IV sleep)
- Side effects
  - Next-day sedation
  - Impaired thinking/Amnesia/Dissociation/Dementia
  - Impaired motor function/coordination
  - Risk of tolerance, withdrawal (rebound insomnia), abuse

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GABA Drugs: Benzodiazepine receptor agonists

- Zolpidem (Ambien, Ambien CR), Zaleplon (Sonata), Eszopiclone (Lunesta)
- Not very effective
  - **Fall asleep 13 min faster** (17 min subjectively)
  - **Total sleep time 11 min better** (31 min subjectively)
  - **Worsens sleep architecture** (more stage II sleep/less stage IV sleep)
- Minimal long term data on safety/efficacy
- Clear risk of tolerance/rebound insomnia
- Unclear as to risk of abuse/dependence

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Serotonin Drugs: Trazodone (Desyrel)

- Most prescribed med for sleep
  - No restrictions on long term prescription
  - Low abuse potential
- It works pretty well
  - **Fall asleep 12 min faster** (7 min subjectively)
  - **Total sleep time 80 min better** (54 min subjectively)
  - **Improves sleep architecture** (more stage III/IV sleep)
- Potential problems include:
  - Not FDA approved for insomnia
  - Several possible side effects: next day sedation, lightheadedness
  - Possible tolerance & rebound insomnia

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Other drugs

- Antihistamines (benadryl, Tylenol PM, etc.): minimal data/rapid tolerance
- Melatonin: weak data for effectiveness except for sleep phase problems
- Valerian: may be helpful over several weeks
- Tryptophan: better to get in food than pills
- Antipsychotics: rarely worth the risk

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Myth #5: They don't work well but at least sleep meds are safe... Right?

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Sleep Meds and Mortality

- 21 of 22 studies have found that sleep meds increase mortality
- Retrospective cohort study (n=10,529 casea vs 23,676 controls) followed on average for 2.5 yrs
- Dose response association of sleep meds & mortality
  - HR of 3.6 for use of 1-18 doses
  - HR of 4.43 for uses of 18-132 doses
  - HR of 5.32 for >132 doses
- >132 doses: **HR of 1.35** for cancer

Kripke et al. BMJ Open 2012.

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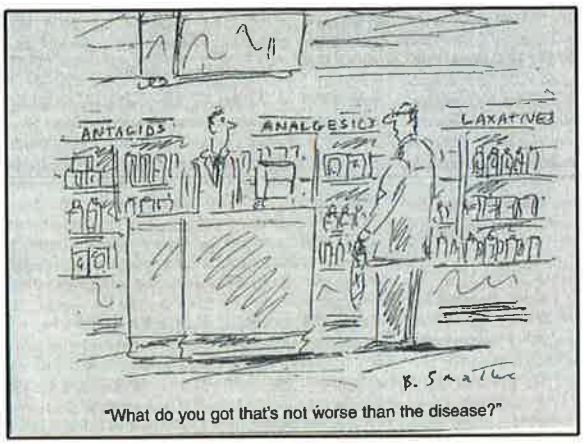

"What do you got that's not worse than the disease?"

Secret #1: Treating Primary Sleep Disorders (or causes of Secondary Insomnia) is extremely important

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Secret #2: Cognitive Behavioral Therapies are the best way to get sleep back on track

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Cognitive Behavioral Therapies for Chronic Insomnia

- American Academy of Sleep Medicine Task Force (1999 & 2003)
  - 80-90% fall asleep faster
  - 50%-70% have better total sleep time, number of awakenings, duration of awakenings, sleep quality
  - 50% become 'normal sleepers'

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Cognitive Behavioral Therapies for Chronic Insomnia

- 'Empirically validated'
  - Sleep Restriction
  - Stimulus Control
  - Progressive Muscle Relaxation
  - Paradoxical Intention
  - **Multifaceted CBT**
- 'Probably Efficacious'
  - Biofeedback

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Multifaceted CBT Model

- Based on "Say Goodnight to Insomnia" by Gregg Jacobs, PhD
- 5 sessions over 6 weeks
- 60 minutes/session
- Track sleep with a weekly sleep-log
- Make changes in thoughts & behaviors
- Discuss concepts, progress & barriers

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Cognitive Behavioral Therapies vs Medications

- Meds may work quicker: placebo effect significant (many people fall asleep before medicine even absorbed)
- Meds &psychotherapy similar at 4-8 weeks, but CBT may be better at getting you to sleep
- Longer term (6- 24 months): CBT better, especially after treatment ends

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Cognitive Behavioral Therapies vs Medications

- Meds appear to interfere with effectiveness of CBT (especially BZDs and BZD receptor drugs)
- CBT may be effective in helping taper meds
- CBT as effective for secondary insomnia as for primary insomnia

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Secret # 3: What you think affects how you sleep

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How does thinking affect sleep?

- Power of Expectation (e.g. placebo effect)
- Negative Sleep Thoughts (NSTs): intensify stress, wakefulness, anxiety, depression
- "Cognitive Restructuring": Positive Sleep Thoughts (PSTs) serve as an "antidote" to NSTs

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3 Areas of Cognitive Restructuring

- The effects of insomnia on health
  - Available evidence: insomnia probably not harmful
  - Sleep need is individualized
- The impact of insomnia on daytime functioning
  - People can function well with limited sleep
  - Concepts of "core" and "optional" sleep
- Subjective estimates of sleep versus objective measurements of sleep
  - Insomniacs overestimate the time it takes to fall asleep by 30 minutes
  - Insomniacs overestimate total wake time at night by 60 minutes

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Secret # 4: When you have problems sleeping, spend *less* time in bed

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Sleep Scheduling Techniques

- Goal: increase sleep drive by increasing prior wakefulness and increasing sleep efficiency
- Limit time in bed: no going to bed early or sleeping in
- Set a regular arising time & get up within 30 min.

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Sleep Scheduling Techniques

- Use a sleep diary for 1 week to figure out average sleep time, then...
- Add 30-60 minutes to average time, then...
- Count back from arising time and this is new bedtime
- Once sleep efficiency (time in bed/time asleep) reaches 85% for 2 weeks, increase time in bed by 30 minutes
- Nap or relax up to 45 minutes a day between 1- 4 p.m.

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Stimulus Control

- Goal: learn to associate the bed with drowsiness and sleep
- Use bedroom for sleep, sex & relaxation exercises only
- Go to bed only when you feel drowsy

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Stimulus Control

- If you don't fall asleep in 20 minutes don't lie in bed trying to sleep
- Instead, get out of bed and do something quiet & relaxing (such as reading, listening to quiet music, doing RR exercise) until drowsy, then go back to bed
- Stimulus control is not an excuse for clock watching: estimate 20 minutes

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Secret # 5: You can't "make yourself sleep", but you can quiet your mind which makes it easier for you to fall asleep

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"Getting into Nightmind"

- Artificial light is a recent invention and disrupts melatonin cycle
- Bright light in the morning improves sleep (later in day it causes sleep problems)
- Establish a night time ritual: dim lights, turn off screens, light snack, grooming, relaxation activity

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Relaxation Response (RR)

- RR is inborn response that quiets the mind & body & counteracts the stress (fight or flight) response
- Does not occur automatically in response to psychological stress, so we must learn to consciously invoke the RR
- Four components of RR:
  - Quiet and pleasant place
  - Comfortable position
  - Repetitive mental focus
  - Passive disregard of everyday thoughts

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Paradoxical Intention

- "Trying" to sleep increases stress/ causes performance anxiety -> worsens sleep
- Instead, tell yourself "OK, fine, stay up as long as you possibly can."
- Doing so will decrease stress & make it more likely to fall asleep

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Cognitive Refocusing

- Trying to stop thoughts at bedtime, increases those thoughts, increases stress & worsens sleep
- Replacing thoughts with positive or neutral thoughts decreases stress & improves sleep
- Choose 3 categories to think about & return to them any time your mind wanders
- Thoughts should have be:
  - Compelling: you look forward to thinking about them
  - Neutral/slightly positive: not too interesting

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Secret # 6: Working on good sleep starts the moment you wake up

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Sleep hygiene: What to Do

- Exercise: works best about 3-5 hours before sleep (and/or early morning)
- Napping: OK if less than 45 minutes
- A 30 minute bath 1 hour before bedtime
- A small snack of complex carbs & protein 1 hour before sleep
- Cooler temperature
- Comfy mattress
- "Transitional object" (i.e. Teddy Bear)
- Silence (or white noise): turn off distractions

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Sleep Hygiene: What NOT to DO

- Caffeine & metabolites can last up to 12 hours (limit 1-2 cups of coffee before noon)
- Alcohol, marijuana & nicotine
- Sugar, liquids & big meals within 2 hrs of bed
- Bright lights/ screens 1-2 hours before (or while in) bed

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We are such stuff
as dreams are made on,
and our little life
is rounded with a sleep.

~William Shakespeare
The Tempest

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Sleep Resources

Local Sleep Specialists:
- UVM Medical Center Sleep Center 802-847-5338
- Vermont Medical Sleep Disorders Center: 802-878-4445

Self Help Books:
- Say Goodnight to Insomnia by Gregg Jacobs PhD
- The Promise of Sleep by William Dement, MD, PhD

Articles:
- Foods that Help you Sleep http://www.ask-drsears.com/topics/feeding-eating/family-nutrition/foods-for-sleep/foods-help-you-sleep
- Your Screens are Killing You http://www.huffingtonpost.com/2014/12/23/reading-before-bed_n_6372828.html
- The Myth of 8 Hour Sleep: http://www.bbc.com/news/magazine-16964783
- Nightmind Making Darkness our Friend By Rubin Naiman Psychotherapy Networker, March/ April 2008
- Sleepless in America: Making It Through the Night in a Wired World. By Mary Sykes Wylie, Psychotherapy Networker Mar/Apr 2008

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HAPPY SLEEPING!

Questions?
Comments?
Compliments?

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