Insomnia Management in the Digital Age

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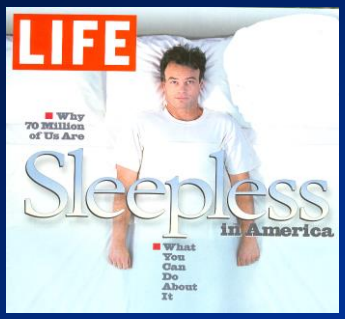
Insomnia: Assessment and Overview of Management



TALK OUTLINE

- definition
- evaluation
- non drug therapy
- drug therapy

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Insomnia

- Transient – less than 1 week
- Acute – less than 1 month
- Chronic – longer than 1 - 3 months

- Difficulty initiating or maintaining sleep in 33-50% of an elderly population
  (Olsen LG Aust NZ J Public Health 1996)

Chronic Insomnia: DSM - V

- Any of the following symptoms for ≥ 3 months
  - difficulty falling asleep
  - difficulty remaining asleep
    - frequent awakenings or cant re-sleep or EMA
- significant distress or impairment in social, occupational, educational, academic, behavioural, or other important areas of functioning
- The sleep difficulty occurs at least 3 nights per week.

Patient Symptoms

- Trouble falling asleep at night
- Waking several times during the night
- Lying awake for long periods of time
- Waking up early unable to get back to sleep
- Not feeling refreshed after sleeping
- Feeling fatigued or sleepy during the day
- Having difficultly focusing on a task
- Feeling irritable

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DSM - V

- The sleep difficulty occurs despite adequate opportunity for sleep
- The insomnia is not better explained by & does not occur exclusively during the course of another sleep-wake disorder
  - e.g., narcolepsy, a breathing-related sleep disorder, a circadian rhythm sleep-wake disorder, a parasomnia
- The insomnia is not attributable to the physiological effects of a substance (e.g, a drug of abuse, a medication)
- Coexisting medical conditions do not adequately explain the predominant complaint of insomnia

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Chronic Insomnia – "subtypes"

- Psychophysiological insomnia
  - insomnia arising from some maladaptive conditioned response to an acute stressor where the bed environment is a place of heightened arousal
- Paradoxical insomnia (sleep-state misperception)
  - insomnia characterised by a mismatch between an individuals sleep report & objective polysomnographic findings or actigraphy

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Medications causes of insomnia

- CNS stimulants: sympathomimetics, ephedrine, phenytoin
- antidepressants: bupropion, SSRI's, venlafaxine
- decongestants: pseudoephedrine
- bronchodilators: theophylline
- cardiovascular: b-blockers, diuretics
- antihypertensives: clonidine, methyldopa
- corticosteroids

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Evaluation of insomnia

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Insomnia History – defining the scope of the problem

- The patient's normal bed and sleep routine, including specific times
  - helps to characterise the pattern of insomnia
  - might identify unhelpful behaviours (eg. lying in bed for long periods awake, watching television in bed)
  - very variable sleep routine may be identified at this stage
  - a sleep diary over a two-week period is often useful
- The impact on daytime function (fatigue, sleepiness, quality of life, etc).
  - primary insomnia patients experience more 'fatigue' than 'sleepiness' per se.
  - if falling asleep frequently during the day, consider OSA

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Insomnia History – perpetuating factors

- Whether the patient is undertaking behaviours known to interfere with sleep
  - lying in bed awake for long periods
  - bed activities: TV, radio, reading, work, phone
  - clock watching
  - caffeine, alcohol, nicotine or other drugs
  - timing of any exercise
  - daytime naps (if excessive, can reverse sleep-wake cycle)
  - no wind down time
  - being available for work or family 24 hours a day

Insomnia History - evaluating for secondary causes

- other sleep disorders:
  - obstructive sleep apnoea
  - restless legs syndrome
  - sleep-phase syndromes
  - shiftwork sleep disorder
- other medical (eg pain) conditions
- psychiatric conditions
- substance abuse, especially alcohol
- medications

Treatment of insomnia

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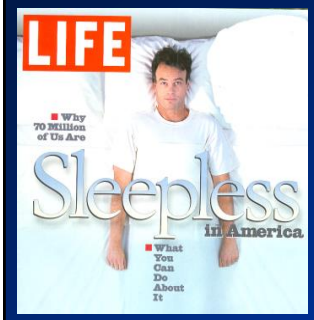
Insomnia Management

- treat exacerbating or co-morbid factors
  - depression, RLS, OSA, sleep phase issues, pain, nocturia
  - adjust medications
- basic behavioural counselling about sleep hygiene & stimulus control
- for patients who continue to have insomnia:
  - CBT therapy, medication, or both
  - CBT and medication: medication for six to eight weeks, then taper the medication or prn while continuing CBT
- the use of medication prior to the initiation of behavioural therapy appears to be less effective

Common Sleep Aids: 2005 Sleep in America Poll



- alcohol (beer and wine): 11%
- OTC products: 9%
- prescription drugs: 7%
- eye masks/earplugs: 3%
- OTC melatonin: 2%

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Prescription hypnotics

- benzodiazepine receptor agonists
  - classic benzodiazepines
  - non-benzodiazepine receptor agonists ("Z" drugs)
- melatonin agents
- orexin receptor antagonists

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Rational pharmacotherapy for insomnia

- five basic principles:
  - use lowest effective dose
  - short term prescribing
  - consider intermittent dosing
  - gradual discontinuation to reduce rebound insomnia
  - use drugs with shorter half lives to minimise daytime sedation
- appropriate administration is acute, short term use (less than 2-3 weeks) in combination with behavioural therapy
- if long term use, avoid nightly, but give in response to symptom occurrence

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Non pharmacological therapy for insomnia

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Cognitive Behavioural Therapy

- CBT alone, drug therapy alone, & combination therapy all improve measures of insomnia (eg, wake time after sleep onset) within weeks of initiating therapy
- CBT increases the likelihood that the medication can eventually be tapered
- CBT provides a sustained benefit after the completion of therapy compared to hypnotics

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Cognitive Behavioural Therapy

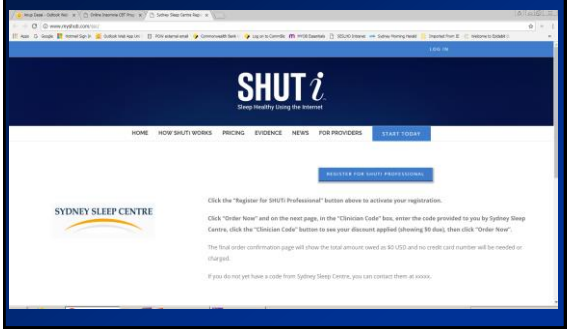
- Face-to-face CBT
  - improves total sleep time & general sleep quality
  - reduces sleep latency times & waking after sleep onset
  - positively alters cognitions about sleep
  - improves insomnia co-morbid with chronic pain, arthritis, migraines, depression, PTSD, cancer
- accessibility
  - limited clinicians with expertise, interest & time

Cognitive Behavioural Therapy

- Computerised & online CBT
  - 6-52 week programs
  - compared to non-CBT treatments or no treatment, superior in improving sleep efficiency, fatigue, mood, and daytime function
  - sustained benefit, not just while completing the program
  - high adherence rate, low cost, easily available
  - inferior to face-to-face CBT
  - useful for mild-moderate cases, some severe cases, scalable
- Group CBT - inferior to face-to-face CBT
- Telehealth CBT – as effective as online, but no comparisons to face-to-face therapy available

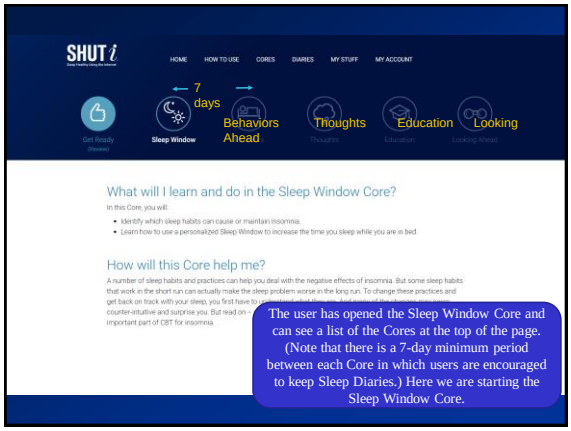
Accessing CBT

Accessing CBT

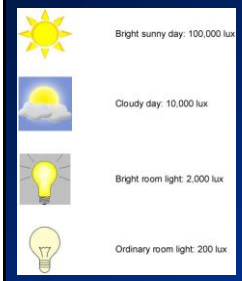


SHUTi
http://www.myshuti.com/ssc/

- 6 Core Learning and Strategy Sessions
  - establishing personal goals for the program
  - sleep restriction
  - stimulus control
  - cognitive restructuring
  - improving environmental and lifestyle habits
  - relapse prevention
- patients spend 30-45 minutes each week completing one of the 6 Cores
- patients submit a Daily Sleep Diary which is analysed
- can be completed in 6 weeks, but the subscription lasts 26 weeks



Resetting the circadian rhythm daily – timed daylight exposure



- get up at the same time every morning
- receive exposure to outside light for at least 30 minutes in the early morning
  - shuts down the production of the night time sleep hormone, melatonin, which allows the individual to function more effectively during the day
  - secretion of melatonin appears to be more effective when it has a definite suppression time each day
  - **no sunglasses, tinted glasses or hats with a brim**

Stimulus Control Therapy

- re-associate the bed & bed environment with successful sleep
  - go to bed only when are drowsy
  - sleep in bed (don't watch TV, listen to the radio, etc)
  - get up if unable to sleep within 15 minutes
    - go to another room and do something non-stimulating
    - need to feel less tense & more ready for sleep before going back to bed
    - keep light levels low
  - repeat the process as many times as necessary

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Sleep Restriction

- most effective component of CBT
- individuals try to make up for poor sleep by spending more time in bed supposedly to increase sleep opportunity
  - more time spent worrying about not sleeping
  - more time in bed awake
  - less consolidated sleep
- restricts time in bed to the reported sleep time
- consolidates fragmented sleep; leads to mild sleep deprivation and increases homeostatic drive for sleep
- caution in bipolar patients and epilepsy

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Sleep Hygiene

- eliminating behaviours known to interfere with sleep
  - caffeine, alcohol, nicotine, daytime napping, late exercise
- ensuring the bed and bedroom is quiet, dark and comfortable
- setting aside some wind-down time prior to sleep

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Cognitive Therapy

- negative (unhelpful or unrealistic) thoughts are believed to contribute to and maintain insomnia
  - "I must have 8 hours sleep in order to be able to function the next day "
- individuals identify these thoughts, then interpret and challenge these unhelpful thoughts; substitute them for more realistic or helpful thoughts
  - "eight hours would be nice, but I have managed to function with less than that in the past"

Other techniques

- Mindfulness meditation
  - mindfulness based stress reduction program
  - mindfulness based therapy for insomnia
  - can help target cognitive factors
- Relaxation strategies
  - focused breathing strategies
  - progressive muscle relaxation
- Hypnosis
- Mental imagery

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Questions ?

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