Recognizing and treating sleep disorders in general practice

Presenter

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disclosure

Speaker has no conflict of interest

Learning Objectives

1. Explore the cardio-metabolic consequences of untreated obstructive sleep apnea (OSA) and insomnia
2. Learn about the less obvious symptoms of sleep apnea and insomnia that patients present to their general practitioner
3. Review treatment options for these sleep disorders

Why focus on obstructive sleep apnea and insomnia?

- They are the most prevalent of the sleep disorders
- Insomnia is often present in patients with OSA
- Coexistence of the two disorders is associated with increased cumulative morbidity and overall greater illness severity

ELSEVIER

Sleep Medicine Reviews

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sleepmedicine REVIEWS

Clinical Review

Prevalence of obstructive sleep apnea in the general population: A systematic review

Chamara V. Senaratna [a, b], Jennifer L. Perret [a, c], Caroline J. Lodge [a], Adrian J. Lowe [a], Brittany E. Campbell [a], Melanie C. Matheson [a], Garun S. Hamilton [d, e] [1], Shyamali C. Dharmage [a, 1]

AHI ≥ 5 events/h : 1) 9% to 38% and was higher in men.
2) with increasing age as high as 90% in men and 78% in women

AHI ≥ 15 events/h: 1) 6% to 17%,
2) with increasing age as high as 49%

Insomnia Definition

- At least 31 minutes of unwanted wakefulness
- At least 3 times per week
- At least 3 months duration
- Difficulty falling asleep
- Difficulty staying asleep
- Difficulty getting back to sleep
- Daytimes consequences/distress

Need to distinguish insomnia from short-term stress

Prevalence of Insomnia

- approximately 6% to7% of adults in the US and European populations endorse chronic insomnia symptoms and
- more than 30% of the general population may experience at least one insomnia-related symptom

Berry et al., 2012; Shepertycky et al., 2005

Prevalence of Comorbid Insomnia and OSA

- Approximately 50% of individuals with OSA report insomnia
- Our own recent studies of older adults showed that 76% of OSA patients endorsed difficulty initiating or maintaining sleep (DIMS) .
- The combination of Insomnia and OSA was found to be present in more women (35%) than men (19%)

Bailes et al. 2016; Cho et al., 2016; Luyster et al., 2010

Cardio-metabolic Consequences of Untreated OSA

- Multiple cardiovascular (CVD) morbidities
- Increased mortality.
- Metabolic syndrome
  - obesity,
  - hyperlipidemia,
  - hypertension,
  - diabetes
- This association may be bidirectional and has been well documented

Nieto et al., 2009; Kasai T, et al., 2012

Comorbidity of Insomnia and OSA

Associated with increased cumulative morbidity and overall greater illness severity:

- higher rates of cardiovascular disease ,
- increased risk of mortality
- lower quality of life,
- worse daytime sleepiness and depression

There is still considerable controversy regarding management decisions in this group of patients.

Javaheri et al., 2018; Cho et al., 2018

Recognizing Sleep Disordered Patients

- Given the important health risks associated with OSA and insomnia, identification and treatment of those with these disorders is a critical issue in primary care.
- Routine screening for OSA is not carried out as it is for diabetes, hypertension or cardiopulmonary diseases. Physicians must be able to identify and refer those most at risk

Accurate referrals from primary care

- In Canada, most referrals to sleep medicine clinics with suspected OSA come from primary care settings, particularly family medicine
- Referring family doctors are doing their part to keep sleep clinics busy, with an impressive 80% hit rate for apnea and/or periodic limb movement disorder diagnosis
- But sleep disorders are **still** under-recognized, particularly in women

The question is: How many patients are missed and why?

Bailes et al., 2009; Fuhrmanet al., 2012; 2009;Mold et al., 2011

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Sleep disorder symptoms are common and unspoken in Canadian general practice

Sally Bailes[a], Marc Baltzan[b,c], Dorrie Rizzo[a], Catherine S Fichten[a,c,d], Roland Grad[e,c], Norman Wolkove[b], Laura Creti[a], Rhonda Amsel[f] and Eva Libman[a,c,g]

Bailes S, Baltzan M, Rizzo D, Fichten CS, Grad R, Wolkove N, Creti L, Amsel R and Libman E. Sleep disorder symptoms are common and unspoken in Canadian general practice.*Family Practice* 2009; **26**: 294–300.

Participants: 196 middle-aged and older patients (age 45 and older)

Method:

1. patients were approached to participate in the study in family medicine waiting rooms and in sleep clinic waiting rooms
2. completed questionnaires (the ***Sleep Symptom Checklist***: intended as a symptom survey for use in primary care)
3. underwent an overnight polysomnography test.

(Bailes et al.,2008

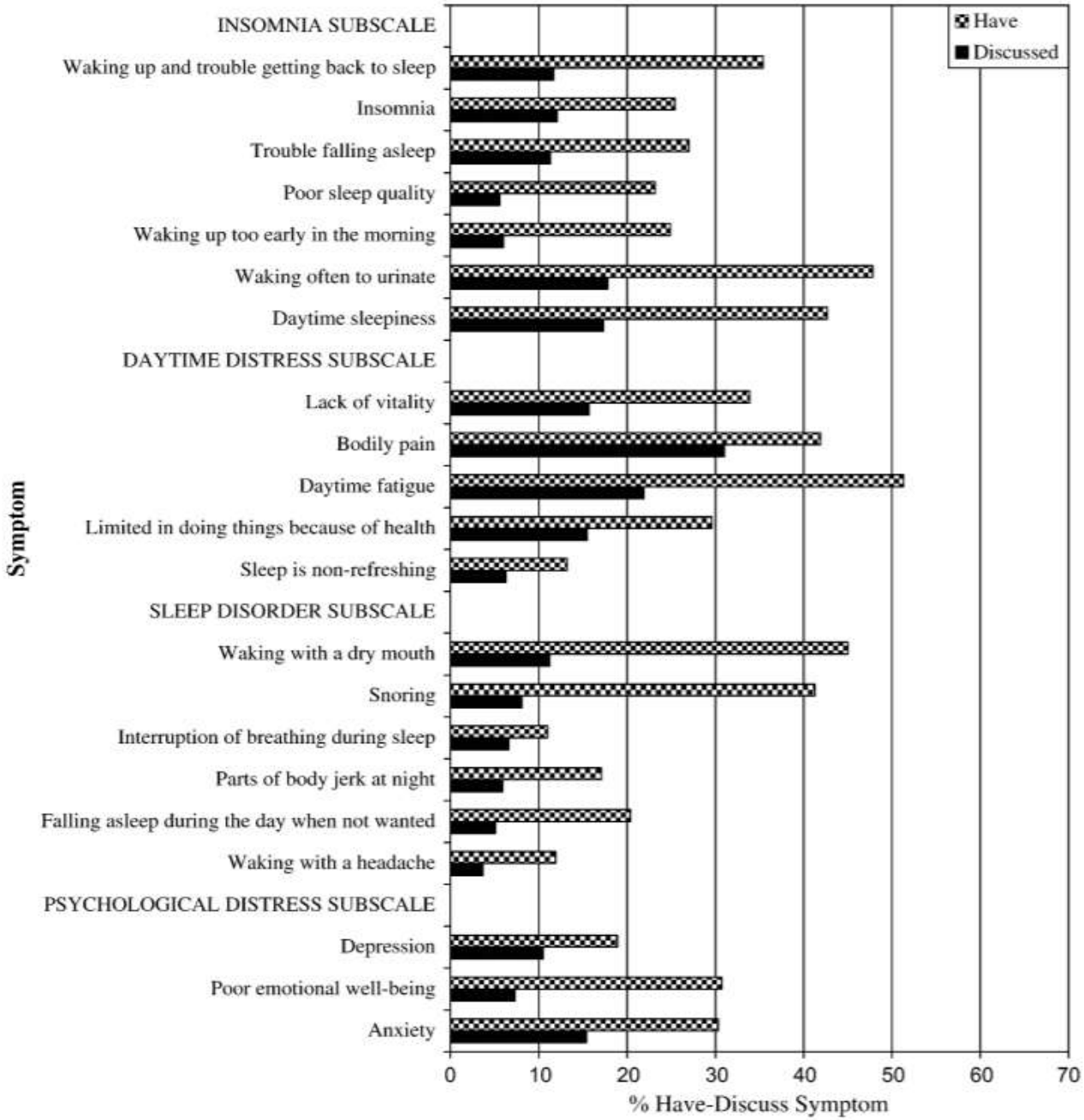


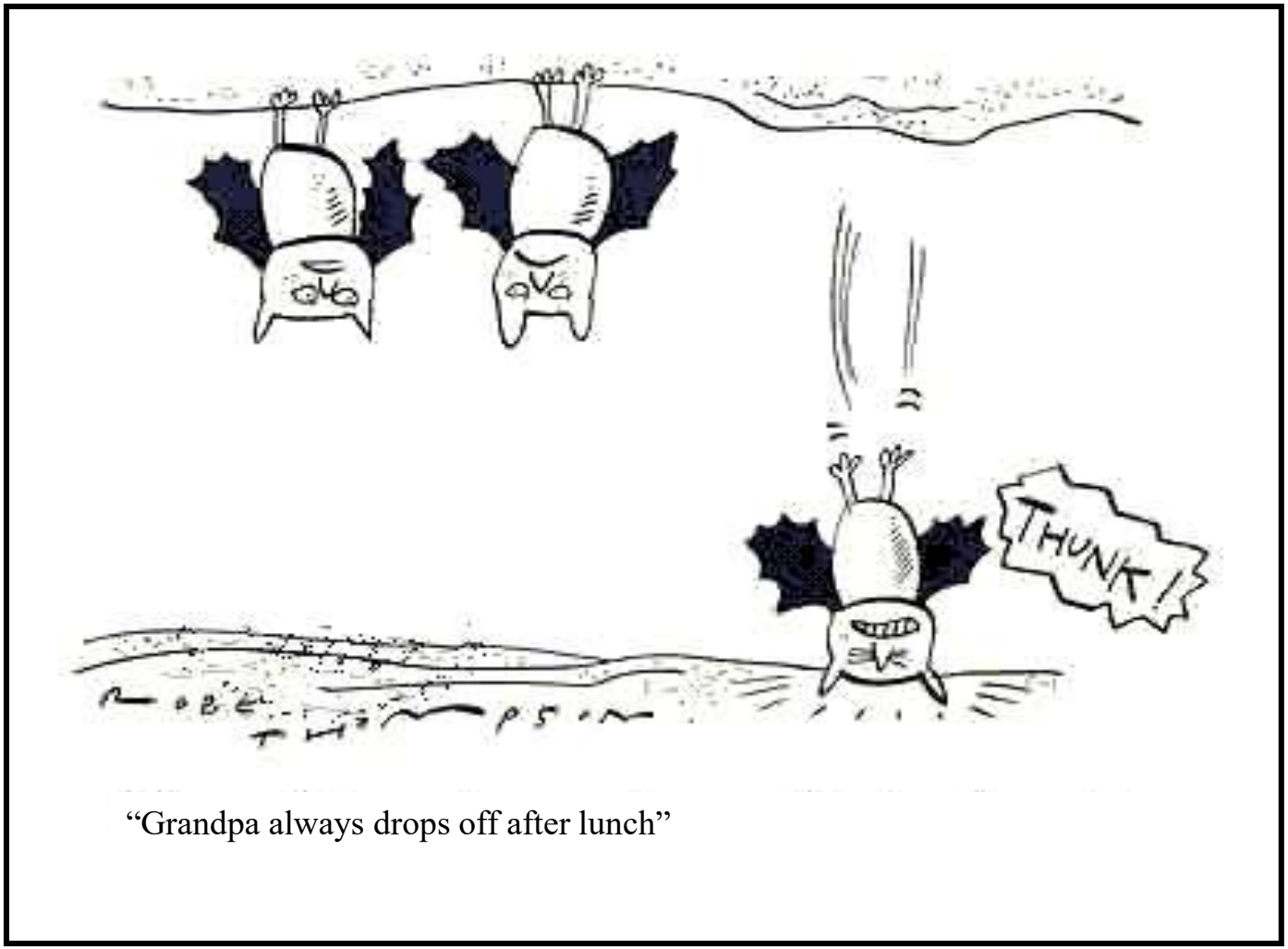
FIGURE 1 *Per cent of participants (Primary care sample, n = 196) who indicated which symptoms they have (checked bars, ordered by subscale) and which they discussed with their primary care doctor (black bars)*

Results

- A wide-range of symptoms reported
- Few had discussed these with their doctor
- None of the 196 participants were referred for further sleep evaluation by their doctor
- Primary care Completers did not differ from Sleep clinic patients on the number of **insomnia symptoms** discussed.
- However, Primary care Completers discussed significantly fewer symptoms than Sleep clinic patients on the **Sleep disorder** subscale.
- **Daytime sleepiness and snoring**, were well represented in this sample but were **discussed by fewer than half** of these patients

Presenting complaints

- Rather than more recognizable sleep disorder signs (e.g. obesity, snoring), some Primary Care patients with significant OSA complain of **insomnia and daytime symptoms**
- Lack of vitality
- Bodily pain
- Daytime fatigue



"Grandpa always drops off after lunch"

The stereotypical candidate for sleep apnea is a sleepy, obese, older male who snores.

What hinders patient identification and referral?

- Clinical presentation of apnea is variable and not always obviously related to the condition
- Patients are usually unaware of disordered breathing during their sleep and
- Are more likely to report poor-quality sleep, daytime sleepiness, fatigue, or even psychological malaise.
- These symptoms may be reported in the context of other complaints, and the primary care practitioner needs to evaluate a wide range of physical systems.

Bailes et al., 2009; Quintana-Gallego et al., 2004; Ye et al., 2009

Gender discrepancy in reported incidence of OSA

Data from sleep disorder centers underestimate the prevalence of OSA in women as compared with men:

sleep disorder centre	and	community estimates
1 woman vs 5-8 men		1 woman vs 2-3 men

Gender discrepancy decreases after age 65, especially in women who do not use HRT

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OXFORD

Health Service Research

The challenge of identifying family medicine patients with obstructive sleep apnea: addressing the question of gender inequality

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Gender representation in a community sample (Bailes et al. 2017)

- similar numbers of men (85%) and women (75%) had diagnosed OSA, with similar severity.
- the approach used in the study appears to have offered older women an uncommon opportunity for OSA testing, resulting in near parity with men in case finding
- no significant gender differences: age and BMI, four SSC subscales, presence of metabolic syndrome disease

Gender differences in symptom presentation of OSA

- Other studies have suggested that:

  Men report more ***sleepiness and snoring***

  Women report more ***fatigue and depression***

- The present study, found little evidence of differences in sleep and sleep disorder symptoms reported by men and women: Modest evidence:

  Women reported ***worse daytime symptoms***

- Gender differences in symptom presentation and associated diseases tend to diminish with older age and with severity of OSA

Bixler et al., 2012; Young et al., 2005; Shepertycky et al., 2005; Eliasson et al., 2015;Ye et al., 2009

Conclusion

- Many more patients with moderate to severe OSA will be identified if screening is offered routinely to older patients in family medicine
- This approach is particularly effective for women
- The ability to identify older individuals with OSA would improve overall health care and help in management of associated diseases and conditions.

What to do when we recognize possible sleep disorder

- OSA:
  - overnight PSG in a sleep laboratory
  - home testing
- Insomnia: Refer for CBT-I:
  - individual therapy
  - group therapy
  - web-based modules
  - self-help books

OSA: Treatment Options

PAP therapy:

- improves daytime functioning and perceived quality of life
- reverses structural abnormalities and impaired heart function caused by sleep apnea
- reduces mortality from cardiovascular disease

Other treatment strategies:

- Weight loss
- Sleeping on one's side
- Oral appliances
- Surgery

Aydin et al., 2004; Doherty 2005; Montserrat 2001; Shivalkar 2006; Sin 2002

Tips for the Medical Practitioner

- Lookout for less obvious indications of sleep apnea, especially in older patients and in women: symptoms may include insomnia, daytime fatigue and nonrefreshing sleep
- Distinguish insomnia from short term stress
- For chronic insomnia refer to a psychologist
- For short term stress prescribe (short-term) sedative.

"Insomnia is very common. Try not to lose any sleep over it."

Questions?

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