Primary Care Management of Sleep Complaints in Adults
(Revised 2004)

Scope

This guideline is for the primary care management of non-respiratory sleep disorders in adults and follows the DSM-IV-TR classification of sleep disorders. It does not address the specific management of circadian rhythm disorders (shift work intolerance and delayed sleep phase syndrome) and the relatively rare parasomnia, REM Sleep Behaviour Disorder.

**RECOMMENDATION 1**

Assessment of complaint

Assess the sleep complaint by a:

- history of the sleep complaint
- sleep diary completed over one week (see insert)
- history from the bed partner, if appropriate
- systems review
- medication and drug history (include over-the-counter medications and recreational drugs)
- psychiatric history with special attention to the family and personal history of mood and anxiety disorders
- focused physical exam
**RECOMMENDATION 2**

### Insomnia

If the problem is insomnia (trouble falling asleep or maintaining sleep), assess the degree of daytime impairment.

If daytime impairment is mild to moderate (little or no impairment in social or occupational functioning and complaints of non-restorative sleep, dysphoria, and tiredness after fewer than half the sleeps):

- ensure that the patient is practicing all the rules of good sleep hygiene — see *A Guide for Patients*
- establish a regular rising time
- commence one of the behavioural interventions below:

  **Stimulus control** re-establishes the association of the bed and bedroom with sleep, rather than with the frustration and anxiety of trying to sleep. The patient should go to bed only when sleepy, and get up at the same time each day regardless of how much he or she slept. The patient should get up, go to another room if unable to fall asleep, or return to sleep, after 15 to 20 minutes (without clock-watching) and return to bed only when drowsy-tired.

  **Sleep restriction** limits the time in bed to the amount of time a patient actually sleeps usually. Estimate the average sleep time from at least three days of a sleep diary. For example, if a patient sleeps an average of six hours a night, the total time in bed is limited to six hours. Ask patients to set their preferred rising time and to retire six hours earlier. They should maintain this bedtime for a few days to induce a mild degree of sleep deprivation — this will help them sleep more efficiently. Then they should go to bed ten minutes earlier every few days until their sleep becomes disrupted. Finally they will set their new bedtime 10 minutes later than the time they went to bed when their sleep became disturbed.

If daytime impairment is severe (significant impairment in social or occupational functioning and complaints of non-restorative sleep, dysphoria, and tiredness after more than half the sleeps):

- ensure that the patient is practicing all the rules of good sleep hygiene — see *A Guide for Patients*
- set a regular rising time
- commence a short course of hypnotics (14 days or less) but do not extend sleeping hours
- prior to discontinuing medication (always taper through a half-dose) limit the time in bed to 30 minutes less than the mean total sleep time on medication to induce a modest degree of sleep restriction
- add 10 minutes to the sleep time every few days until sleep becomes disrupted, then take off 10 minutes to assign the final time in bed

If severe daytime impairment persists after two to three treatment trials refer the patient to an appropriate specialist.

**RECOMMENDATION 3**

### Hypersomnia

If the problem is hypersomnia (excessive sleepiness) and the patient has disruptive snoring and/or witnessed pauses in breathing during sleep, refer to the *Assessment and Management of Obstructive Sleep Apnea in Adults*.

Otherwise:

- ensure that the patient is following all the rules of good sleep hygiene — see *A Guide for Patients*
- ensure patient is getting sufficient sleep
- manage any psychiatric disorders (especially depression or bipolar affective illness)

If the problem persists refer the patient to an appropriate specialist with an interest in sleep disorders.
RECOMMENDATION 4  Parasomnia

If the problem is parasomnia (unusual behavioural or physiological events during sleep caused by activation of the autonomic nervous system, motor system, or cognitive processes, e.g., sleep terror, sleepwalking, sleep talking):

Ensure that the sleeper and bed partner are safe.

If mild (talking/shouting only or physical activity limited to occasional restlessness less than three nights per week):

- ensure practice of good sleep hygiene – see A Guide for Patients
- prevent sleep deprivation
- general stress reduction strategies (time management, exercise, counselling, etc.)
- avoid excessive alcohol intake and recreational drug use.

If moderate to severe (activity places patient and/or partner at risk more than three times per week and/or daytime impairment):

- commence trial of benzodiazepine; clonazepam (0.25-1.5 mg hs) is commonly used but all are likely effective (no studies demonstrate superiority of a single agent)
- effective trials should be continued for a year and slowly tapered with the same safety precautions as for mild parasomnia
- avoid excessive alcohol intake and recreational drug use.

If the problem persists refer the patient to an appropriate specialist with an interest in sleep disorders.

Rationale

This guideline is a revision of the 1999 protocol for the primary care management of sleep disorders in adults. The original protocol provided an evidence-based approach to the common non-respiratory sleep disorders seen by primary care physicians. The protocol took into consideration comprehensive approaches to sleep disorders and placed a high value on patients regaining normal sleep patterns without long-term use of pharmaceutical agents.

This review is based on a search of computerized data bases of the medical literature and comments received from doctors on the original protocol. The current literature confirms the original approach.

The evidence shows that the best assessment tool for a sleep related clinical condition is a detailed history from the patient (and the bed partner when available) augmented by a sleep diary covering a week of sleep-wake function\textsuperscript{2,3}.

Sleep disorders can often be improved with sleep hygiene (see insert)\textsuperscript{4}. Sleep hygiene refers to a set of rules that are known to improve sleep. Good sleep hygiene requires the simultaneous execution of all the rules but particularly emphasizes the importance of getting up at the same time each day, seven days a week.

The most common sleep complaint is insomnia\textsuperscript{5}. For mild to moderate insomnia a behavioural intervention is preferred over treatment with hypnotics\textsuperscript{6}. Research and clinical experience indicate that restricting the time spent in bed through techniques known as stimulus control and sleep restriction helps consolidate and deepen sleep and often is the only treatment required\textsuperscript{7,8,9}.
Many sleep disorders can be safely and adequately managed in primary care settings with referrals to sleep clinics being required only when there has been an inadequate treatment response or when further expertise is required.

References


Sponsors

This guideline was developed by the Guidelines and Protocols Advisory Committee, approved by the British Columbia Medical Association and adopted by the Medical Services Commission.

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Effective Date: November 1, 2004

This guideline is based on scientific evidence current at the time of the effective date.

Guidelines and Protocols Advisory Committee
1515 Blanshard Street 2-3
Victoria BC  V8W 3C8
Fax: 250 952-1417  E-mail: hlth.guidelines@gems6.gov.bc.ca
Phone: 250 952-1347  Web site: www.health.gov.bc.ca/msp/protoguides

The principles of the Guidelines and Protocols Advisory Committee are:
• to encourage appropriate responses to common medical situations
• to recommend actions that are sufficient and efficient, neither excessive nor deficient
• to permit exceptions when justified by clinical circumstances.
Mrs B is a 45 year old woman with a lifelong history of difficulty sleeping. She retires between 9 and 10 p.m. and watches the news until 11 p.m. when she turns out her light. As seen from her diary entries (January 4 and 5) she has a variable sleep latency of about 90 minutes but she reports she can be awake all night. Usually she gets up at 8 a.m. as her husband leaves for work. She has no symptoms suggestive of depression or other psychiatric problem but she worries about her health. Despite her sleep loss there is no significant daytime impairment although she feels “lazy and tired” when her sleep is poor. She rests on her bed in the afternoon but does not nap.

Case Example: The Sleep Diary and Behavioural Interventions

<table>
<thead>
<tr>
<th>Date</th>
<th>January 4</th>
<th>January 5</th>
<th>January 6</th>
<th>January 7</th>
<th>January 12</th>
<th>January 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you nap today? When and how long?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Did you exercise today? When and how long?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Time into bed</td>
<td>9:45 p.m.</td>
<td>9:30 p.m.</td>
<td>12:55 a.m.</td>
<td>12:55 a.m.</td>
<td>12:45 a.m.</td>
<td>12:55 a.m.</td>
</tr>
<tr>
<td>Time of “lights out”</td>
<td>11:00 p.m.</td>
<td>11:00 p.m.</td>
<td>12:55 a.m.</td>
<td>12:55 a.m.</td>
<td>12:45 a.m.</td>
<td>12:55 a.m.</td>
</tr>
<tr>
<td>Time to fall asleep</td>
<td>90 mins</td>
<td>100 mins</td>
<td>60 mins</td>
<td>5 mins</td>
<td>60 mins</td>
<td>10 mins</td>
</tr>
<tr>
<td>Number of awakenings</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Longest awakening</td>
<td>5 mins</td>
<td>10 mins</td>
<td>5 mins</td>
<td>0 mins</td>
<td>5 mins</td>
<td>0 mins</td>
</tr>
<tr>
<td>Time of “lights on”</td>
<td>7:55 a.m.</td>
<td>7:45 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
</tr>
<tr>
<td>Time out of bed</td>
<td>8:10 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
<td>8:00 a.m.</td>
</tr>
<tr>
<td>Total sleep time</td>
<td>7 hrs 15 mins</td>
<td>6 hrs 45 mins</td>
<td>6 hrs</td>
<td>7 hrs</td>
<td>7 hrs</td>
<td>6 hrs 55 mins</td>
</tr>
<tr>
<td>Sleep quality (0 - 10) 0 = worst, 10 = best ever</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

A behavioural intervention is appropriate in this case. With stimulus control she would set her alarm for 8 a.m. (her desired rising time) and retire eight hours earlier (at midnight). If unable to fall asleep or return to sleep within 10 minutes after awakening she would get up and go to another room, and only return to bed when drowsy-tired. She would continue this routine until her sleep pattern stabilized.

Using sleep restriction she would be assigned a total sleep time of seven hours (the average total sleep time obtained on January 4 and 5) and asked to get up at the same time each day. By the second day of sleep restriction she is falling asleep more quickly and having less sleep interruption. On January 12, she adds 10 minutes to the total sleep time but this causes sleep disruption so she reverts to and maintains seven hours as her preferred time in bed.
Follow these rules for healthy sleep.

- Get up at the same time each day, seven days a week, to reinforce your body’s internal clock.
- Go to bed only when you are sleepy.
- If you’re not asleep after about 20 minutes, go to another room and do something relaxing. Return to bed when you are drowsy-tired.
- Use your bed only for sleeping or sex. Don’t worry or watch TV in bed so your body learns the bed is for sleeping.
- Keep your bedroom dark and comfortably cool.
- Exercise during the day (three to four hours before bedtime).
- Don’t drink coffee or tea within six hours of bedtime.
- Don’t drink alcohol in the evening. It can make you wake up in the middle of the night.
- Try eating a light carbohydrate snack before bed.

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