Sonno e patologie somatiche nell’anziano

Renzo Rozzini
Di cosa voglio parlare

- Sonno e anziani (riepilogo)
- Come cercare i problemi del sonno: lo screening
- Noi (GRG) il sonno e la letteratura
- Patologia del sonno
  - Alterazioni del ritmo circadiano
  - Eccessiva sonnolenza diurna
  - Parasonnie
  - Restless legs syndrome
  - Mioclonio notturno
  - Sleep apnea
- Sonno e patologie
  - Disturbi muscoloscheletrici
  - Malattie cardiovascolari
  - Malattie respiratorie
  - Malattie gastrointestinali
  - Malattie nefrologiche
  - Disturbi neurologici
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  - Malattie chirurgiche
- Sonno e ACOVE
- Sonno e igiene del sonno (AP, INEUM)
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Insomnia: Difficulty in falling asleep or in staying asleep. Causes include virtually any medical disorder and many drugs. Stress may cause a form of insomnia called adjustment sleep disorder, which may occur in otherwise fair to good sleepers. Insomnia may be transient, short-term, or chronic. Psychiatric disorders, most commonly depression, can cause insomnia. Winter or seasonal depression (seasonal affective disorder) is characterized by annual recurrent symptoms of depression, daytime fatigue, and increased sleep. The underlying mechanism for this disorder is unknown. Several aspects of institutional living can contribute to insomnia. In nursing homes, residents are usually required to go to bed based on nursing home routine rather than based on their needs or preferences. This scheduling may not be conducive to good sleep. In hospitals, patients often are awakened throughout the night (e.g., to be checked or given drugs), and many find it difficult to resume sleep without a hypnotic. Other factors that can contribute to insomnia in these settings include noise, lack of privacy, uncomfortable beds, rooms that are too warm or too cold, inactivity, lack of daytime light exposure, and excessive daytime napping. After hospital discharge, patients may inappropriately continue taking hypnotics. Thus, sleep hygiene plays an important role in insomnia in the elderly, particularly in these settings.
Symptoms and Diagnosis

Symptoms of insomnia often include the inability to maintain sleep and early morning awakening, which is particularly common in depression. Other symptoms include difficulty falling asleep, frequent nocturnal awakenings, daytime fatigue, irritability, and problems concentrating or performing under stress. In adjustment sleep disorder, the stress may be a negative or even a positive event, and patients experience similar symptoms. Diagnosis of the underlying cause of the insomnia should be determined via the history, by asking about the timing and amount of sleep; use of drugs (prescribed and over-the-counter [OTC]); use of hypnotics, alcohol, and tobacco; current illnesses; degree of stress; mood; and level of physical activity.
Sleep Disorders: Disorders that affect the ability to fall asleep or stay asleep, that involve sleeping too much, or that result in abnormal sleep-related behavior.

Up to 50% of elderly persons complain about their sleep, especially difficulty falling and staying asleep. As a result, hypnotic use is more common among the elderly than among younger persons. There are some age-related changes in sleep. However, sleep disorders in the elderly may be caused by psychologic stressors (eg, bereavement, posttraumatic stress, forced retirement, social isolation, lack of community involvement), medical disorders, psychiatric disorders (eg, anxiety, dementia, depression), or the adverse effects of drugs. Several of these conditions may coexist.

A National Institutes of Health Consensus Statement on sleep disorders in the elderly recommends that health care practitioners ask the following questions during screening:
- Is the person satisfied with his or her sleep?
- Does sleep or fatigue intrude on activities?
- Does the bed partner or other persons notice unusual behavior (eg, snoring, interrupted breathing, leg movements) by the patient during sleep?
Characteristics of Sleep

Many characteristics of sleep change with age.

However, experts disagree on which changes are normal.
The timing and amount of sleep change with age. The elderly tend to fall asleep earlier and awaken earlier and to be less tolerant of shifts in the sleep-wake cycle (eg, due to jet lag).
Reported changes in the duration of sleep with age appear variable. Although many studies indicate that the elderly sleep less, others report no change or increased sleep time.
Daytime napping may compensate for poor nocturnal sleep, but it may also contribute to poor nocturnal sleep.

Sleep efficiency (time asleep vs. time in bed) decreases from 95% during adolescence to < 80% during old age. Nocturnal sleep latency (time to fall asleep) may be prolonged in the elderly.
Elderly

- Earlier wake times (~1.3 hours)
- Go to bed earlier (~1.1 hours)
  - Secondary to advanced circadian pacemaker, increased sensitivity to light
- Modified circadian rhythm:
  - Body temperature changes, misaligned melatonin, cortisol and other hormone secretion
- More nocturnal awakenings
  - Loss of protective measure, decline in homeostatic sleep pressure & circadian pacemaker
- Reduction in total sleep time, slow-wave sleep and REM sleep
- Decrease ability to maintain sleep
Changes in sleep with age. NOTE: Time (in minutes) for sleep latency, amount of time spent awake after initially falling asleep (WASO), rapid eye movement (REM), non-rapid eye movement (NREM), stages 1, 2, and slow-wave sleep (SWS). Carskadon & Rechtschaffen 2005
Normal Sleep and Normal Aging: Sleep Efficiency

Changes with age

![Graph showing changes in sleep efficiency with age for men and women.](image)
Sleep structure describes the stages and cycles during sleep. Sleep can be categorized as nonrapid eye movement (NREM) or rapid eye movement (REM) sleep.

NREM sleep has four stages, ranging in depth from stage 1 (the lightest level, during which waking the sleeper is easy) to stage 4 (the deepest level, during which waking the sleeper is difficult). Stages 3 and 4 are often referred to as slow-wave or deep sleep. The time spent in stage 1 sleep may increase from 5% in younger adults to 12 to 15% in the elderly, perhaps because the elderly wake more often during the night.

The number of transient arousals (2- to 15-second awakenings due to alpha-wave intrusions into sleep) increases with age.
Stage 2 sleep is characterized on EEG by sleep spindles and K complexes; both of these features may decrease with age. The background EEG in stage 2 sleep shows relatively low-voltage mixed-frequency activity.

High-voltage slow (delta)-wave activity, which is characteristic of stages 3 and 4 sleep, decreases with age, possibly beginning as early as age 20; it may cease in extreme old age. Slow-wave activity may be better preserved in elderly women than in elderly men. Normally, NREM and REM sleep alternate throughout the night in five or six cycles.

REM sleep produces characteristic low-voltage mixed-frequency activity on EEG. Bursts of rapid eye movements are a key feature.

During REM sleep, the rate and depth of breathing increase, and muscle tone is lower than that during stage 4 NREM sleep.

At least 85% of dreaming occurs during REM sleep. Some studies report a decrease in REM sleep time with age; others report no appreciable change.

Thus, although the proportion of REM sleep time may be preserved in the elderly, the absolute amount may decrease as a result of reduced total nocturnal sleep time.
Il sonno con movimenti rapidi degli occhi (Rapid Eye Movement -REM) compare ciclicamente durante la notte ogni 90-120 minuti.

Lo stadio 1 occupa dal 2 al 5% del tempo; lo stadio 2 dal 45 al 55%; lo stadio 3 dal 10 al 15%; e il sonno REM dal 20 al 25%.

Brevi risvegli sono possibili normalmente durante la notte, specialmente alla fine di ogni ciclo del sonno.
Figure 1. Adjusted sleep stages according to age for men and women. The distribution of sleep stages was significantly associated with age for men (all $P < .05$). Age was significantly associated with Stage 2 and rapid eye movement sleep but not with Stage 1 and slow-wave (Stage 3 to 4) sleep in women ($P > .05$). Figure adjusted for race, use of hormone replacement therapy, smoking history, sleep apnea, and chronic health conditions.
In sintesi... nell’anziano

- Diminuzione della continuità e della profondità del sonno.
- Aumento del numero dei risvegli transitori
- Riduzione del sonno profondo e, seppure in misura meno rilevante, del sonno REM.
- Riduzione dell’efficienza del sonno
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The following 12 questions can serve as the initial assessment regarding sleep.

(1) What time do you normally go to bed at night? What time do you normally wake up in the morning?
(2) Do you often have trouble falling asleep at night?
(3) About how many times do you wake up at night?
(4) If you do wake up during the night, do you usually have trouble falling back asleep?
(5) Does your bed partner say (or are you aware) that you frequently snore, gasp for air, or stop breathing?
(6) Does your bed partner say (or are you aware) that you kick or thrash about while asleep?
(7) Are you aware that you ever walk, eat, punch, kick, or scream during sleep?
(8) Are you sleepy or tired during much of the day?
(9) Do you usually take one or more naps during the day?
(10) Do you usually doze off without planning to during the day?
(11) How much sleep do you need to feel alert and function well?
(12) Are you currently taking any type of medication or other preparation to help you sleep?
If symptoms of a sleep complaint are suggested in this initial screening, further questions may be appropriate to ask when taking a sleep history.\textsuperscript{35}

1. Do you have the urge to move your legs or do you experience uncomfortable sensations in your legs during rest or at night?
2. Do you have to get up often to urinate during the night?
3. How much physical activity or exercise do you get daily?
4. Are you exposed to natural outdoor light most days?
5. What medications do you take and at what time of day and night?
6. Do you suffer any uncomfortable side effects from your medications?
7. How much caffeine (e.g., coffee, tea, cola) and alcohol do you consume each day and night?
8. Do you often feel sad or anxious?
9. Have you suffered any personal losses recently?
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Sonno e patologie somatiche nell’anziano

Prevalence and Comorbidity of Insomnia and Effect on Functioning in Elderly Populations

Sonia Ancoli-Israel, PhD*† and Jana R. Cooke, MD†

A good night’s sleep is often more elusive as we age, because the prevalence of insomnia in older people is high. Insufficient sleep can have important effects on daytime function by increasing the need to nap, reducing cognitive ability including attention and memory, slowing response time, adversely affecting relationships with friends and family, and contributing to a general sense of being unwell. However, rather than aging per se, circadian rhythm shifts, primary sleep disorders, comorbid medical/psychiatric illnesses, and medication use cause sleep difficulties in older people, which psychosocial factors may also affect. Clinicians should ask elderly patients about satisfaction with sleep. Any sleep complaints warrant careful evaluation of contributing factors and appropriate treatment. J Am Geriatr Soc 53:S264–S271, 2005.

Key words: insomnia; elderly; comorbidity; circadian rhythm shifts
Sleep Disturbances and Frailty Status in Older Community-Dwelling Men

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OBJECTIVES: To test the hypothesis that sleep disturbances are independently associated with frailty status in older men.

DESIGN: Cross-sectional analysis of prospective cohort study.

SETTING: Six U.S. centers.

PARTICIPANTS: Three thousand one hundred thirty-three men aged 67 and older.

MEASUREMENTS: Self-reported sleep parameters (questionnaire); objective parameters of sleep–wake patterns (actigraphy data collected for an average of 5.2 nights); and objective parameters of sleep-disordered breathing, nocturnal hypoxemia, and periodic leg movements with arousals (PLMAs) (in-home overnight polysomnography). Frailty status was classified as robust, intermediate stage, or frail using criteria similar to those used in the Cardiovascular Health Study frailty index.

RESULTS: The prevalence of sleep disturbances, including poor sleep quality, excessive daytime sleepiness, short sleep duration, lower sleep efficiency, prolonged sleep latency, sleep fragmentation (greater nighttime wakefulness and frequent, long wake episodes), sleep-disordered breathing, nocturnal hypoxemia, and frequent PLMAs, was lowest in robust men, intermediate in men in the intermediate-stage group, and highest in frail men (P-for-trend ≤ .002 for all sleep parameters). After adjusting for multiple potential confounders, self-reported poor sleep quality (Pittsburgh Sleep Quality Index > 5), multivariable odds ratio (MOR) = 1.28, 95% confidence interval (CI) = 1.09–1.50), sleep efficiency less than 70% (MOR = 1.37, 95% CI = 1.12–1.67), sleep latency of 60 minutes or longer (MOR = 1.42, 95% CI = 1.10–1.82), and sleep-disordered breathing (respiratory disturbance index ≥ 15, MOR = 1.38, 95% CI = 1.15–1.65) were each independently associated with higher odds of greater frailty status.


Key words: sleep disturbances; frailty; aging
Sleep Duration and Mortality According to Health Status in Older Adults

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OBJECTIVES: To examine the association between usual sleep duration and mortality according to physical and mental health status in older adults. 

DESIGN: Prospective study conducted from 2001 to 2008. 

SETTING: Community-based study. 

PARTICIPANTS: Cohort study of 3,820 persons representative of the noninstitutionalized population aged 60 and older in Spain. 

MEASUREMENTS: Sleep duration was self-reported at baseline. Analyses were performed using Cox regression and adjusted for the main confounders. The analyses were then stratified according to numerous indicators of health status. 

RESULTS: During follow-up, 897 persons died. Mortality was higher in those who slept 8 hours (relative risk (RR) = 1.34, 95% confidence interval (CI) = 1.02–1.76), 9 hours (RR 1.48, 95% CI = 1.12–1.96), 10 hours (RR 1.73, 95% CI = 1.30–2.29) and 11 hours or more (RR 1.66, 95% CI = 1.23–2.24) than in those who slept 7 hours (P for trend <.001). The association between long sleep duration (≥10 vs 7 hours) and mortality was observed even in persons with good health status: optimal perceived health, good cognitive function (Mini-Mental State Examination score >27), no depression, quality of life better than the cohort median (Medical Outcomes Study 36-item Short Form Survey Physical Component Summary score ≥46 and Mental Component Summary score ≥52), and without disability in instrumental activities of daily living. Sleeping 6 hours or less was not associated with higher mortality than sleeping 7 hours in persons with good health status. 

CONCLUSION: Self-reported sleep duration was associated with 7-year mortality in this cohort of older adults, even when adjusted for health status. Further research is needed to determine the mechanisms and clinical implications of these findings. J Am Geriatr Soc 58:1870–1877, 2010. 

Key words: sleep duration; mortality; older adults; cohort study
Self-Reported Sleep and Nap Habits and Risk of Mortality in a Large Cohort of Older Women

Katie L. Stone, PhD,* Susan K. Ewing, MS,† Sonia Ancoli-Israel, PhD,‡ Kristine E. Ensrud, MD,§∥ Susan Redline, MD,∗Douglas C. Bauer, MD,∗ Jane A. Cauley, DrPH,†† Teresa A. Hillier, MD,‡‡ and Steven R. Cummings, MD*†

OBJECTIVES: To determine the association between self-reported sleep and nap habits and mortality in a large cohort of older women.


SETTING: Four communities within the United States.

PARTICIPANTS: Eight thousand one hundred one Caucasian women aged 69 and older (mean age 77.0).

MEASUREMENTS: Sleep and nap habits were assessed using a questionnaire at the fourth clinic visit (1993/94). Deaths during 7 years of follow-up were confirmed with death certificates. Underlying cause of death was assigned according to the International Classification of Diseases, Ninth Revision, Clinical Modification.

RESULTS: In multivariate models, women who reported napping daily were 44% more likely to die from any cause (95% confidence interval (CI) = 1.23–1.67), 58% more likely to die from cardiovascular causes (95% CI = 1.25–2.00), and 59% more likely to die from noncardiovascular noncancer causes (95% CI = 1.24–2.03) than women who did not nap daily. This relationship remained significant in relatively healthy women (those who reported no comorbidities). Women who slept 9 to 10 hours per 24 hours were at greater risk of death from cardiovascular and other (noncardiovascular, noncancer) causes than those who reported sleeping 8 to 9 hours.

CONCLUSION: Older women who reported napping daily or sleeping at least 9 hours per 24 hours are at greater risk of death from all causes except cancer. Future research could determine whether specific sleep disorders contribute to these relationships. J Am Geriatr Soc 57:604–611, 2009.

Key words: naps; sleep duration; mortality; aging
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Circadian Rhythm Sleep Disorders (Circadian Dysrhythmia)

A group of disorders characterized by sleep and wakefulness that are not in phase with conventional environmental periods. These disorders are common among the elderly. The usual cause, which may or may not be obvious, is an alteration in the sleep-wake cycle. Persons > 60 are more affected by circadian rhythm sleep disorders than are younger persons, and they take longer to recover. The increased incidence among elderly persons suggests age-related loss of circadian control of the sleeping process. Persons tend to fall asleep earlier and wake up progressively earlier as they age. However, elderly persons whose sleep is not disturbed may be better able to adapt to external changes in the sleep-wake cycle. Bright light therapy can be effective, especially for jet lag and for an advanced sleep phase syndrome (ie, going to sleep early and waking early). Melatonin has also been reported to be effective for jet lag, but its use is controversial. Short-term therapy with hypnotics may help restore circadian sleep rhythms; these drugs should be tapered after 7 to 10 days. Gradual alteration of bedtime and awakening time may also be effective.
Excessive Daytime Sleepiness
Occasional sleepiness during the daytime is normal, especially among persons deprived of nocturnal sleep.
However, daytime sleepiness that is persistent, excessive, and not easily resolved by increased sleep is abnormal and has been linked to automobile and occupational accidents.
Many disorders that interfere with nocturnal sleep (eg, sleep apnea, periodic limb movements of sleep) lead to daytime sleepiness. In addition, many drugs can cause sedation and daytime sleepiness, including antihistamines, some antihypertensives (eg, \(-\)-blockers, clonidine), antidepressants, antipsychotics, anticonvulsants, and analgesics. Narcolepsy (a syndrome characterized by daytime sleepiness, overwhelming episodes of sleep, and sudden loss of muscle tone) usually begins at a young age; onset is rare in the elderly.
Patients may report fatigue, lethargy, and problems with memory and concentration. Careful evaluation is needed to identify any treatable causes of excessive daytime sleepiness. A short daytime nap can be helpful for some patients.
Parasomnias (movements and behaviors that occur during sleep).

Parasomnias that can occur in the elderly include restless legs syndrome and periodic limb movements of sleep. REM sleep behavior disorder is another parasomnia that occurs in the elderly, particularly men. Patients have vivid dreams and vigorous behaviors during sleep that may cause injury. Other parasomnias, such as somnambulism and night terrors, are more common in children than in adults.
Parasomnia: Restless Legs Syndrome

An uncomfortable sensation in one or both legs (often described as an irresistible urge to move the legs) that is relieved by moving or rubbing the affected limbs. This syndrome usually occurs immediately before bedtime or while the patient is awake in bed. Relief may occur with movement, and symptoms recur when the legs are stationary. The syndrome leads to difficulty falling asleep and, frequently, to insomnia. Restless legs syndrome differs from idiopathic leg muscle cramps, in which calf pain and muscle spasms may occur at night. Other than reassurance, treatment is often not needed, although walking, stretching, or rubbing the legs may help. Carbidopa-levodopa or bromocriptine may relieve chronic symptoms; opioids or benzodiazepines may be as effective but are used only for patients with severe symptoms who do not respond to other drugs.

Sonno e patologie somatiche nell’anziano
Table 1. Four essential questions required to make the diagnosis of RLS [21]

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you experience the urge to move your legs (and/or other parts of your body) accompanied or caused by an uncomfortable and/or unpleasant sensation in the body part affected?</td>
</tr>
<tr>
<td>2</td>
<td>Does the urge to move or the uncomfortable/unpleasant feeling start and/or worsen during periods of rest, relaxation or inactivity?</td>
</tr>
<tr>
<td>3</td>
<td>Is the urge to move or uncomfortable/unpleasant feeling partially or totally relieved by movement?</td>
</tr>
<tr>
<td>4</td>
<td>Does the urge to move or the uncomfortable sensation worsen in the evening or at night (as compared to the daytime), or does it only occur in the evening or at night?</td>
</tr>
</tbody>
</table>
Parasomnia: Periodic Limb Movements of Sleep (Nocturnal Myoclonus).

Repetitive movements, mainly of the legs, that occur during sleep. The incidence of periodic limb movements of sleep (PLMS) increases with age; these movements may occur in up to 45% of community-dwelling persons > 65. However, most sufferers are unaware of the movements.

Etiology is unknown. An age-related decrease in dopamine receptors has been suggested as a cause, because carbidopa-levodopa decreases the number of leg movements.

PLMS occurs only during sleep. It typically manifests as unilateral or bilateral flexion of the big toe, rapid flexion of the ankle, and partial flexion of the knee and hip. Upper extremities may also move. Movement lasts 2 to 4 seconds and occurs throughout the night, sometimes as often as every 20 to 40 seconds. The movement may arouse patients from sleep (although most patients are not aware of having woken) and can cause insomnia and excessive daytime sleepiness.

PLMS is difficult to diagnose and treat; referral to a sleep specialist may be indicated. Some physicians consider carbidopa-levodopa the drug of choice because, when used in low doses, it is safer than the other drugs used to treat this disorder.

Carbidopa-levodopa is initially given at night but may also be given during the day if limb movement occurs then. If carbidopa-levodopa is ineffective, a benzodiazepine (eg, clonazepam) or bromocriptine may be used. Opioids are less safe than these other drugs and are restricted to patients with severe symptoms in whom other therapies are ineffective.
Sleep Apnea (Sleep-Disordered Breathing)

Sleep apnea, which may be obstructive, central, or mixed, is a temporary interruption of breathing during sleep. Untreated, sleep apnea can cause significant morbidity and mortality.
Obstructive Sleep Apnea

Temporary interruption of breathing during sleep due to obstruction of the airway. Obstructive sleep apnea is the most common type of sleep apnea in the elderly. Airway obstruction is caused by temporary collapse of the oropharyngeal wall. Obstructive sleep apnea tends to occur in those who are moderately or severely obese, especially those who sleep supine, and is more common in men than in women.

Use of alcohol or hypnotics may precipitate or exacerbate this disorder.

Mild obstructive sleep apnea (<= 5 episodes per hour) is common among the elderly; it occurs in 24% of those who live independently, in 33% of those in acute care institutions, and in 42% of those in nursing homes.
Symptoms and Signs

Obstructive sleep apnea is characterized by episodes of partial (hypopnea) or complete (apnea) interruption of respiration during sleep. In a hypopneic episode, breathing becomes abnormally slow and shallow. In an apneic episode, breathing stops for > 10 seconds. During these episodes, patients make persistent diaphragmatic efforts to overcome the airway obstruction; nevertheless, periods of profound oxygen desaturation may occur, possibly with systemic and pulmonary hypertension or cardiac arrhythmias (e.g., tachycardia, bradycardia, atrial arrhythmias, ventricular arrhythmias). Cacophonous snoring and grunting, usually noticeable by the bed partner, may accompany the airway obstruction. To resume normal breathing, patients wake (unknowingly) and spend excessive time in the lighter stages of sleep, causing them to be restless and unrefreshed during the day.
Diagnosis

Questionnaires can be used to screen for obstructive sleep apnea. The patient's sleeping partner and/or relatives should be asked about the patient's snoring and other behaviors during sleep. Diagnosis is strongly suggested by observing one or more apneic episodes while the patient is sleeping. Overnight pulse oximetry can detect hypoxemia during apneic episodes. The diagnosis can be confirmed by overnight polysomnography, which is usually conducted in a sleep laboratory. However, screening with ambulatory (ie, in-home) polysomnography is increasingly available.
Prognosis and Treatment

Obstructive sleep apnea can lead to or exacerbate angina, renal dysfunction, stroke, myocardial infarction, cognitive impairment, impotence, hypertension, and depression. Increased mortality and morbidity occur when episodes are more frequent than 10 times/hour.

Treatment options are complex; treatment begins with common sense measures (eg, weight loss; discontinuation of hypnotics, other drugs, or alcohol use). Nasal continuous positive airway pressure (CPAP) therapy resolves most cases of sleep apnea but must be continued indefinitely. Dental devices to help keep the airway open may be used in some cases.

Tracheostomy, which is reserved for the most severe cases, is the only totally successful measure.

Uvulopalatopharyngoplasty (enlargement of the pharyngeal airspace through removal of excess tissue) helps < 50% of patients and may not be effective long-term. Laser surgery to reduce or obliterate pharyngeal tissue alleviates snoring but may not reduce the number of apneic episodes.
Central Sleep Apnea

Temporary interruption of breathing during sleep due to loss of respiratory effort.

Causes include neurologic disease (eg, stroke), cerebrovascular disease, heart failure, and uremia. Symptoms are typically those of Cheyne-Stokes breathing. The underlying condition should be treated when possible (eg, reducing the severity of heart failure).

Other treatments have had mixed results. Nasal oxygen can reduce accompanying hypoxemia. Acetazolamide (a carbonic anhydrase inhibitor) has also been used. The use of antidepressants (eg, clomipramine) and theophylline has also been described but is not well studied.
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Sleep Disorders Associated with Other Disorders

Many disorders and their drug treatments can adversely affect sleep, and the symptoms of some may worsen during sleep. Drugs can blunt nocturnal breathing, exacerbate or cause apnea, produce unwanted arousals, and otherwise alter sleep physiology.
Musculoskeletal disorders:

Patients with osteoarthritis may awaken with stiffness and pain, then have difficulty falling asleep again. Fibromyositis, polymyalgia rheumatica, recent fractures, and flexion contractures can cause pain and impair sleep. Treatment consists of managing pain with judicious use of analgesics, exercise, and other forms of physical activity. Behavioral techniques may also help.
Characteristics of Chronic Pain Associated with Sleep Difficulty in Older Adults: The Maintenance of Balance, Independent Living, Intellect, and Zest in the Elderly (MOBILIZE) Boston Study

Qian Chen, BSN, RN,* Laura L. Hayman, PhD, RN,* Robert H. Shmerling, MD,†† Jonathan F. Bean, MD, MPH,‡‡ and Suzanne G. Leveille, PhD, RN*‡‡

OBJECTIVES: To evaluate pain severity and distribution in relation to sleep difficulty in older adults.

DESIGN: Population-based cross-sectional study.

SETTING: Community within a 5-mile radius of the study center at the Institute for Aging Research, Hebrew SeniorLife (HSL), Boston.

PARTICIPANTS: Seven hundred sixty-five participants of the Maintenance of Balance, Independent Living, Intellect, and Zest in the Elderly (MOBILIZE) Boston Study aged 64 and older.

MEASUREMENTS: Pain severity was measured using the Brief Pain Inventory (BPI) Pain Severity Subscale. Musculoskeletal pain distribution was grouped according to no pain, single site, two or more sites, and widespread pain (upper and lower extremities and back pain). Three aspects of sleep difficulty were measured using items from the Center for Epidemiologic Studies Depression Scale, Revised (trouble getting to sleep, sleep more than usual, and restless sleep).

RESULTS: Prevalence of trouble getting to sleep according to BPI severity was 17.8%, 19.7%, 32.0%, and 37.0% for the lowest to highest pain severity quartiles, respectively. Similar relationships were observed across sleep measures and pain severity and distribution. Adjusted for sociodemographic characteristics, chronic conditions, and health behaviors, chronic pain was strongly associated with trouble sleeping (≥1 d/wk) (single-site pain, odds ratio (OR) = 1.77, 95% confidence interval (CI) = 1.10–2.87; multisite pain, OR = 2.38, 95% CI = 1.48–3.83; widespread pain, OR = 2.55, 95% CI = 1.43–4.54, each compared with no pain). Similar associations were observed for restless sleep and sleeping more than usual. For specific pain sites alone or in combination with other sites of pain, only modest associations were observed with sleep problems.

CONCLUSION: Widespread or other multisite pain and moderate to severe pain are strongly associated with sleep difficulty in older adults. Further research is needed to better understand the burden and consequences of pain-related sleep problems in older adults. J Am Geriatr Soc 59:1385–1392, 2011.

Key words: sleep disorders; sleep; pain; aged; epidemiology

Sleep problems are common in older adults; approximately 40% of older adults report having sleep difficulty.¹ Sleep disturbances contribute to a number of health consequences in older adults, including poor cognitive and physical function, interference with family and social relationships, pain, poor self-rated health, and risk of falls.²,³

Sleep problems of older people are often related to other chronic health conditions. Multiple causes such as age-related changes, pain, anxiety, depression, and chronic diseases are associated with sleep disturbances in older adults.⁴,⁵ A 2003 report from the National Sleep Foundation survey revealed that sleep problems seem more often related to comorbidities than normal aging.⁶ In addition,
Cardiovascular disorders:

Heart failure can lead to orthopnea, which interferes with sleep; patients with orthopnea and dementia may be unable to explain their complaint, becoming agitated instead. 
Angina pectoris can prolong sleep latency, reducing the time spent in deep (stages 3 and 4) sleep. This disruption can lead to chronic insomnia and dependency on hypnotics. Improved control of these disorders can benefit sleep.
Pulmonary disorders:

Chronic obstructive pulmonary disease can cause frequent awakenings, increase the amount of time spent in lighter (stage 1) sleep, markedly reduce the time spent in stages 3 and 4 and REM sleep, and decrease total sleep time. Sleep may be improved through better control of the respiratory disease.
Gastrointestinal disorders:

Because acid secretion increases during the night, patients with peptic ulcer disease have difficulty falling asleep or may awaken. Nocturnal use of H2 blockers may help, but some (eg, cimetidine) can penetrate the central nervous system and cause adverse effects.

Gastroesophageal reflux, which can cause discomfort and thereby insomnia, may be prevented by maneuvers such as elevating the head of the bed and avoiding eating within 2 hours of bedtime. Antacids may also help.
Renal disorders:

Patients undergoing renal dialysis experience chronic sleep disturbances. For patients with uremia, long awakenings from all stages of sleep are common, deep sleep time is proportionally decreased, and total sleep time is decreased. Elevated blood urea nitrogen levels correlate with the severity of the disturbance; dialysis alleviates the disturbance, increasing stage 3 and 4 sleep time.
Metabolic disorders:

Hypothyroidism results in daytime sleepiness and decreased functional capacity. Stage 3 and 4 sleep time is reduced significantly but returns to normal with thyroid hormone replacement therapy. Hyperthyroidism increases stage 3 and 4 sleep time to almost 70% of total sleep time (25% is normal), but patients with hyperthyroidism often report insomnia. When the euthyroid state is restored, sleep stages become normal.
Neurologic disorders:

Parkinson's disease compromises initiation and maintenance of sleep. The effects of levodopa on REM and deep sleep depend on dosage, and the drug can cause nightmares. Amantadine increases the amount of sleep.
Nocturnal Hypokinesia and Sleep Quality in Parkinson’s Disease

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OBJECTIVES: To study the relationship between nocturnal hypokinesia and sleep quality in Parkinson’s disease (PD).

DESIGN: Questionnaire study using intergroup analysis.

SETTING: Parkinson Centre Nijmegen, a tertiary university referral center.

PARTICIPANTS: Two hundred forty individuals with Parkinson’s disease.

MEASUREMENTS: Clinical and demographic data were obtained. Nocturnal hypokinesia was assessed using Question 35 of the Parkinson’s Disease Quality of Life Questionnaire and rated on a 5-point Likert scale (1 = all of the time to 5 = never). The Pittsburgh Sleep Quality Index (PSQI) was used to quantify sleep quality, higher scores indicating poorer sleep quality.

RESULTS: One hundred thirty-five of 240 participants had difficulties turning over in bed. Mean PSQI scores were significantly higher in participants with nocturnal hypokinesia (7.7 ± 4.1) than in those without (6.1 ± 3.4, \( P = .001 \)). A regression model correcting for age, disease duration, and Hoehn and Yahr stage showed a significant influence of nocturnal hypokinesia on sleep quality (coefficient of determination = 0.042, standardized-beta = 0.163, \( P = .03 \)). There was a linear relationship between frequency of nocturnal hypokinesia and sleep quality.

CONCLUSION: This is the first study that documents that nocturnal hypokinesia negatively affects sleep quality in PD. Nocturnal hypokinesia therefore merits therapeutic attention, including optimal nighttime dopaminergic treatment and education about turning strategies in bed. J Am Geriatr Soc 60:1104–1108, 2012.

Key words: Parkinsonism; Pittsburgh Sleep Quality Index; hypokinesia; response fluctuations; turning in bed
Postoperative Sleep Disturbance: Influences of Opioids and Pain in Humans

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Study Objectives: To test the hypothesis that opioids and pain contribute independently to postoperative sleep disturbance, 10 women undergoing surgery requiring a low abdominal incision for treatment of benign gynecologic conditions were randomized to receive either epidural opioid (fentanyl) (n=6) or epidural local anesthetic (bupivacaine) (n=4) for intraoperative and postoperative analgesia.

Design: N/A
Setting: N/A
Patients or Participants: N/A
Interventions: N/A
Measurements: Polysomnography was performed in a standard patient room on the preoperative and first three postoperative nights. Pain at rest and with coughing was evaluated using a visual-analogue pain scale each evening and morning.

Results: On the first postoperative night, rapid eye movement (REM) sleep was abolished in all patients. On the third postoperative night, the mean±SE REM sleep time increased significantly (p=.003) to 9.8%±3.1% in the fentanyl group, and 12.9%±3.8% in the bupivacaine group. Conversely, light non-REM (NREM) sleep (%stage 1 + %stage 2) was higher on the first postoperative night and significantly lower on the third postoperative night (p=0.011). Between group comparison revealed only that the mean % slow-wave sleep (SWS) in the fentanyl group (6.0%, 2.0%, and 14.7%) was different from the bupivacaine group (7.8%, 9.1%, and 10.6%) in the postoperative period after adjusting for the preoperative night % SWS (p=0.021). Pain was well controlled in all patients, but was slightly better controlled in the fentanyl group than in the bupivacaine group on postoperative night 2 (p=0.024). There was no statistically significant association between pain score and any polysomnographically defined stage.

Conclusion: Postoperative patients suffer a profound sleep disturbance even when opioids are avoided and pain is well controlled.

Key words: Postoperative sleep disturbance; circadian rhythm; sleep; opioid; pain
Figure 1. Diagnostic algorithm for sleep disorders in older persons.
Di cosa voglio parlare

• Sonno e anziani (riepilogo)
• Come cercare i problemi del sonno: lo screening
• Noi (GRG) il sonno e la letteratura
• Patologia del sonno
  – Alterazioni del ritmo circadiano
  – Eccessiva sonnolenza diurna
  – Parasonnie
  – Restless legs syndrome
  – Miocloni notturni
  – Sleep apnea
• Sonno e patologie
  – Disturbi muscoloscheletrici
  – Malattie cardiovascolari
  – Malattie respiratorie
  – Malattie gastrointestinali
  – Malattie nefrologiche
  – Disturbi neurologici
  – Malattie metaboliche
  – Malattie chirurgiche
• Sonno e ACOVE
• Sonno e igiene del sonno (AP, INEUM)
Quality Indicators for the Care of Sleep Disorders in Vulnerable Elders

Jennifer L. Martin, PhD,*† and Constance H. Fung, MD, MSHS†‡

Screening for Sleep Disturbances
1. ALL VEs should be screened annually for sleep problems, BECAUSE sleep-related symptoms are common and underreported, and identification of sleep disorders is a necessary first step to initiating appropriate treatment.
Quality Indicators for the Care of Sleep Disorders in Vulnerable Elders

Jennifer L. Martin, PhD,*† and Constance H. Fung, MD, MSHS†‡

Detailed Sleep History
2. IF a VE reports a sleep problem, THEN a targeted sleep history should be documented within 6 months, BECAUSE a targeted history is necessary to identify factors that may cause or exacerbate the sleep disturbance. These factors should be addressed concurrent with providing treatment of the sleep disturbance.
Sleep Hygiene Education

3. IF a VE has a sleep problem, THEN a discussion of sleep hygiene should be documented within 6 months, BECAUSE targeted sleep hygiene education and sleep schedule modification may reduce sleep disruption, and failure to address these issues may limit the effectiveness of other treatments for sleep disorders.
Referral for Symptoms of SDB

4. IF a VE has daytime sleepiness and observed apneas or loud snoring, THEN he or she should be referred for sleep evaluation within 6 months, BECAUSE untreated SDB (including sleep apnea) can have negative health and quality-of-life consequences.
Quality Indicators for the Care of Sleep Disorders in Vulnerable Elders

Jennifer L. Martin, PhD,*† and Constance H. Fung, MD, MSHS†‡

Treatment of SDB

5. IF a VE has SDB according to polysomnography, THEN a discussion of treatment options should be documented within 6 months, BECAUSE SDB may contribute to risk of cardiovascular and cerebrovascular disease, impair cognitive functioning, and reduce quality of life, and treatment of SDB may reduce these risks.
Quality Indicators for the Care of Sleep Disorders in Vulnerable Elders

Jennifer L. Martin, PhD,*† and Constance H. Fung, MD, MSHS†‡

Periodic Limb Movement Disorder

6. IF a VE has nocturnal limb movements during sleep and frequent awakenings or excessive daytime sleepiness, THEN treatment or referral to a sleep specialist should occur within 6 months, BECAUSE patients with these symptoms and signs may have PLMD.
Avoid Antihistamines for Insomnia

7. IF a VE has sleep problems, THEN he or she should not be treated with sleep aids containing antihistamines, BECAUSE the drugs are associated with anticholinergic side effects and are likely to lose their effectiveness to improve sleep within 1 week, and there is insufficient evidence that they are safe and effective for use by VEs.
Avoid and Taper Antihistamine for Insomnia

8. IF a VE is new to a primary care practice and is chronically (>3 months) taking an over-the-counter sleep aid containing an antihistamine for sleep problems, THEN advice to discontinue the medication should be documented within 6 months, BECAUSE antihistamines are approved only for short-term treatment of insomnia, and these medications have been associated with health risks, including altered mental status, and anticholinergic effects in older people, and discontinuation of these medications can be done safely.
9. IF a VE is new to a primary care practice and is chronically (>3 months) taking a benzodiazepine for sleep problems, THEN advice to taper off and discontinue the medication should be documented within 6 months, BECAUSE benzodiazepines are approved only for short-term treatment of insomnia, withdrawal symptoms after discontinuation may worsen after 3 months of use, and these medications have been associated with health risks, including falls, altered mental status, and mortality in older people, and discontinuation of these medications can be done safely under supervision of a physician.
Quality Indicators for the Care of Sleep Disorders in Vulnerable Elders

Jennifer L. Martin, PhD,*† and Constance H. Fung, MD, MSHS†‡

Nighttime Pain Management

10. IF a VE has pain that disturbs his or her ability to fall asleep or maintain sleep, THEN pharmacological or non-pharmacological pain management should be recommended, BECAUSE pain is a potentially reversible cause of sleep disruption in older adults.
Di cosa voglio parlare

• Sonno e anziani (riepilogo)
• Come cercare i problemi del sonno: lo screening
• Noi (GRG) il sonno e la letteratura
• Patologia del sonno
  – Alterazioni del ritmo circadiano
  – Eccessiva sonnolenza diurna
  – Parasonnie
  – Restless legs syndrome
  – Miocloni notturni
  – Sleep apnea
• Sonno e patologie
  – Disturbi muscoloscheletrici
  – Malattie cardiovascolari
  – Malattie respiratorie
  – Malattie gastrointestinali
  – Malattie nefrologiche
  – Disturbi neurologici
  – Malattie metaboliche
  – Malattie chirurgiche
• Sonno e ACOVE
  • Sonno e igiene del sonno (AP, INEUM)
A Good Night's Sleep

Ever since he retired, Edward dreads going to bed at night. He's afraid that when he turns off his light, he will just lie there with his eyes open and his mind racing. “How can I break this cycle?” he asks. “I'm so tired—I need to get some sleep.”

Just like Edward, you want a good night's rest. Getting enough sleep helps you stay healthy and alert. But many older people don't sleep well. If you're always tired, it may be time to see a doctor. You shouldn't wake up every day feeling tired.

Sleep And Aging

Older adults need about the same amount of sleep as young adults—7 to 9 hours each night. But seniors tend to go to sleep earlier and get up earlier than when they were younger. Older people may nap more during the day, which can sometimes make it hard to fall asleep at night.

Sleep Problems

There are many reasons why older people may not get enough sleep at night. Feeling sick or being in pain can make it hard to sleep. Napping during the day can disrupt sleep at night. Some medicines can keep you awake. No matter the reason, if you don't get a good night's sleep, the next day you may:

- Be irritable
- Have memory problems or be forgetful
- Feel depressed
- Have more falls or accidents
- Feel very sleepy during the day

Insomnia

Insomnia is the most common sleep problem in adults age 60 and older. People with insomnia have trouble falling asleep and staying asleep. Insomnia can last for days, months, or even years. If you're having trouble sleeping, you may:

- Take a long time to fall asleep
- Wake up many times in the night
- Wake up early and be unable to get back to sleep
- Feel very sleepy during the day

There are many causes of insomnia. Some of them you can control, but others you can't. For example, if you are excited about a new activity or worrying over your bills, you may have trouble sleeping. Sometimes insomnia may be a sign of other problems. Or, it could be a side effect of a medication or an illness.

Often, being unable to sleep becomes a habit. Some people worry about not sleeping even before they get into bed. This may even make insomnia worse.

Some older adults who have trouble sleeping may use over-the-counter sleep aids. Using prescription medicines for a short time might help. But remember, medicines aren't a cure for insomnia. Developing healthy habits at bedtime may help you get a good night's sleep.

Sleep Apnea

Sleep apnea is another serious sleep disorder. A person with sleep apnea has short pauses in breathing while sleeping. These pauses may happen many times during the night. If not treated, sleep apnea can lead to other problems such as high blood pressure, stroke, or memory loss.

You can have sleep apnea and not even know it. But your loud snoring and gasping for air can keep other people awake. Feeling sleepy during the day and being told you are snoring loudly at night could be signs that you have sleep apnea.

Movement Disorders

Restless legs syndrome, periodic limb movement disorder, and rapid eye movement sleep behavior disorder are common in older adults. These movement disorders can rob you of needed sleep.

People with restless legs syndrome, or RLS, feel like there is tingling, crawling, or pins and needles in one or both legs. It's worse at night. Moving the legs brings some relief, at least for a short time. RLS tends to run in families. See your doctor for more information about medicines to treat RLS.

Periodic limb movement disorder, or PLMD, causes people to jerk and kick their legs every 20 to 40 seconds during sleep. Some people have hundreds of these movements each night, which may result in loss of sleep and feeling tired and sleepy the next day. Medication, warm baths, exercise, and learning ways to relax can help.
Rapid eye movement sleep behavior disorder, also known as REM sleep behavior disorder, is another condition that may make it harder to get a good night’s sleep. REM sleep is the most active stage of sleep when dreaming often occurs. During normal REM sleep, your muscles cannot move, so your body stays still. But if you have REM sleep behavior disorder, your muscles can move, and your sleep is disrupted.

Alzheimer’s Disease And Sleep—A Special Problem

Alzheimer’s disease often changes a person’s sleeping habits. For example, some people with Alzheimer’s disease sleep too much; others don’t sleep enough. Some people wake up many times during the night; others wander or yell at night. The person with Alzheimer’s disease isn’t the only one who loses sleep. Caregivers may have sleepless nights, leaving them tired for the challenges they face.

If you’re caring for someone with Alzheimer’s disease, there are steps you can take for his or her safety and that might help you sleep better at night. Try the following:

- Make sure the floor is clear of objects.
- Lock up any medicines.
- Attach grab bars in the bathroom.
- Place a gate across the stairs.

Getting A Good Night’s Sleep

Being older doesn’t mean you have to feel tired all the time. There are many things you can do to help you get a good night’s sleep. Here are some ideas:

- Follow a regular sleep schedule. Go to sleep and get up at the same time each day, even on weekends. Try to avoid napping in the late afternoon or evening, as it may keep you awake at night.
- Develop a bedtime routine. Take time to relax before bedtime each night. Some people watch television, read a book, listen to soothing music, or soak in a warm bath.
- Keep your bedroom dark, not too hot or too cold, and as quiet as possible.
- Have a comfortable mattress, a pillow you like, and enough blankets for the season.
- Exercise at regular times each day but not within 3 hours of your bedtime.
- Make an effort to get outside in the sunlight each day.
- Be careful about when and how much you eat. Large meals close to bedtime may keep you awake, but a light snack in the evening can help you get a good night’s sleep.
- Stay away from caffeine late in the day. Caffeine (found in coffee, tea, soda, and hot chocolate) can keep you awake.
- Drink fewer beverages in the evening. Waking up to go to the bathroom and turning on a bright light breaks up your sleep.
- Remember that alcohol won’t help you sleep. Even small amounts make it harder to stay asleep.
- Use your bedroom only for sleeping. After turning off the light, give yourself about 20 minutes to fall asleep. If you’re still awake and not drowsy, get out of bed. When you feel sleepy, go back to bed.

Safe Sleeping

Try to set up a safe and restful place to sleep. Make sure you have smoke alarms on each floor of your house or apartment. Lock the outside doors before going to bed. Other ideas for a safe night’s sleep are:

- Keep a telephone with emergency phone numbers by your bed.
- Have a good lamp within reach that turns on easily.
- Put a glass of water next to the bed in case you wake up thirsty.
- Use nightlights in the bathroom and hall.
- Don’t smoke, especially in bed.
- Remove area rugs so you won’t trip if you get out of bed in the middle of the night.
- Don’t fall asleep with a heating pad on; it may burn.

Sweet Dreams

There are some tricks to help you fall asleep. You don’t really have to count sheep—but you could try counting slowly to 100. Some people find that playing mental games makes them sleepy. For example, tell yourself it’s 5 minutes before you have to get up, and you’re just trying to get a few extra winks. Other people find that relaxing their body puts them to sleep. You might start by telling yourself that your toes feel light as feathers and then work your way up the rest of the body saying the same words. You may drift off to sleep before getting to the top of your head.

If you feel tired and unable to do your activities for more than 2 or 3 weeks, you may have a sleep problem. Talk to your doctor about changes you can make to get a better night’s sleep.

For More Information

Here are some helpful resources:

American Academy of Sleep Medicine
2510 North Frontage Road
Darien, IL 60561
1-630-737-9700
www.aasmnet.org

American Sleep Apnea Association
6656 Eastern Avenue, NW
Suite 203
Washington, DC 20012
1-202-293-3650
www.sleepapnea.org
Sonno e patologie somatiche nell’anziano

UN SONNO TRANQUILLO

La domanda "come ha dormito la notte scorsa"? acquista un significato sempre più importante per la salute dell'uomo. La maggior parte delle persone, invecchiando, dorme meno e durante il sonno si sveglia di più. Nonostante questo dato recenti studi hanno dimostrato che diventando vecchi aumenta sia il senso di stanchezza mentale che la sonnolenza; sembrerebbe che invecchiando, più che una riduzione della necessità, si manifesti una riduzione della capacità di dormire. Perché diminuisce la capacità di dormire? Gli scienziati affermano che le cause possono essere più di cento. Una delle più frequenti è certamente dovuta alle modificazioni del controllo della respirazione che avvengono nei centri nervosi del cervello. L'80% degli ultracinquantenni, durante il sonno notturno, non respira per brevi intervalli di tempo; in questi periodi che variano in durata dai dieci secondi al minuto (periodi di "apnea") il soggetto si sveglia senza accorgersene. Per questo motivo il sonno diventa meno riposante. Un altro disturbo del sonno frequentemente osservato nell'anziano è la contrazione degli arti inferiori. Questa evenienza, che può provocare il risveglio è più rilevante se l'individuo fa uso di molto caffè o di altri stimolanti, se fuma o se fa un esercizio fisico superiore al grado di allenamento.

Il disturbo del sonno più frequente nell'anziano è però rappresentato dall'insonnia. Le cause possono essere svariate: da quelle dovute ad un'emozione acuta, a preoccupazioni per problemi familiari, ad uno stato depressivo per la morte di un parente o di un amico, al pensionamento, a quelle dovute all'uso di alcuni medicinali, all'abuso di alcool, a cambiamenti di ambiente, come un ricovero ospedaliero. Un altro aspetto responsabile dei disturbi del sonno potrebbe essere l'allungamento della giornata biologica da 24 a 25 ore. Per esempio, quando persone anziane vengono messe in ambienti privi di riferimenti temporali (stanze senza finestre, illuminate con luce artificiale) si osserva un "ritardo" del sonno: l'anziano si addormenta più tardi del giorno precedente e si sveglia sempre più tardi ogni giorno. È possibile che questo fenomeno possa avvenire anche nelle persone istituzionalizzate, quando i ritmi di sonno e di veglia sono dettati più dalle esigenze organizzative del personale che dal rispetto dei bisogni del paziente, o nelle persone molto vecchie con disturbi della vista.

Problemi di sonno si possono manifestare anche in individui pensionati da poco, la cui giornata era stata scandita dagli orari di lavoro per tutta la vita. L'aspetto più rilevante dei disturbi del sonno riguarda la terapia. Oltre il 40% delle persone che prendono sonniferi sono ultrasessantenni; indagini recenti indicano che il 45% degli anziani ricoverati in ospedale prende un sonnifero. A questi dati non corrisponde però un'adeguata conoscenza della reale efficacia e dei pericoli derivanti dall'impiego dei farmaci.
Sonno e patologie somatiche nell’anziano

UN SONNO TRANQUILLO (cont.)

L'opinione comune sull'innocuità dei composti abitualmente somministrati è il risultato di studi condotti su persone giovani e sante. L'anziano, che in genere assume più farmaci contemporaneamente, può essere predisposto ai rischi di una sedazione eccessiva e di interazioni tossiche con altri medicinali. Nel vecchio la maggior parte dei farmaci per dormire hanno un effetto prolungato e vengono eliminati lentamente; quando sono assunti per lungo tempo, si accumulano e interferiscono con l'attività fisica e mentale. Inoltre l'uso continuato può provocare un aumento, e non una diminuzione, dei disturbi del sonno.

Tutti gli studiosi sono concordi nell'affermare che l'assunzione cronica dei farmaci per dormire non sia realmente utile, e suggeriscono invece alcuni consigli pratici:
- Procurarsi un letto confortevole in una stanza buia e senza rumori e a temperatura normale.
- Non bere alcoolici e caffè e non fare pasti pesanti, né fumare, prima di mettersi a letto. Il latte ed i formaggi, per le sostanze che contengono aiutano le prime fasi del sonno.
- Dormire poco durante la giornata; talvolta è sufficiente ridurre il riposo pomeridiano per migliorare il riposo notturno.
- Una buona attività fisica durante il giorno può essere utile; evitare però lavori pesanti, sia fisici che mentali prima di coricarsi.
- Non preoccuparsi eccessivamente per la propria insomnìa, sia di giorno che di notte. Se non si riesce a prender sonno, evitare di rimanere a letto in preda a pensieri e preoccupazioni. È opportuno alzarsi, impegnandosi in attività rilassanti. "Il sonno è come una colomba: se teniamo le mani tranquillamente aperte essa vi si posa, ma se noi cerchiamo di afferrarla, essa vola via".
- Un effetto calmante e sedativo può derivare da uno spuntino leggero, da un bagno caldo o da un massaggio. Quando si è a letto, per ridurre l'ansia provocata dall'insomnia, può essere opportuno prestare attenzione al battito del proprio cuore, al respiro, o ripetere una serie di numeri o di brevi frasi.
- Prendere farmaci per il sonno (sonniferi, ipninducenti, ecc.) solo sotto stretto controllo del medico e per un periodo limitato, ricordando che è possibile diventare psicologicamente dipendenti da queste medicine. È frequente infatti il caso di persone che non riescono ad addormentarsi se non prendono una "pillola", anche se è chiaro che questa è priva di qualsiasi efficacia.

Fino a quando la conoscenza dei problemi del sonno non sarà completa, e cioè fino a quando non si comprenderà ciò che è da considerarsi normale e ciò che invece deve essere ritenuto malattia, ci si deve avvicinare ai disturbi del sonno guidati dal buon senso, senza abusare dei farmaci. Se i problemi del sonno diventano causa di gravi disagi e ansie, tali da interferire in modo negativo nella vita di ogni giorno, si dovrà consultare il medico.
È però altrettanto importante non permettere ai medici di liquidare il problema con la frase "cosa vuole, quando si è vecchi...".
Table 2. Sleep hygiene rules

1. Do not spend too much time in bed
2. Maintain a consistent sleep/wake time
3. Get out of bed if unable to fall asleep
4. Restrict naps to 30 min in the late morning or early afternoon
5. Exercise regularly
6. Spend more time outside, without sunglasses, especially late in the day
7. Increase overall light exposure
8. Eat a light snack (i.e. milk, bread) before bed
9. Avoid caffeine, tobacco and alcohol after lunch
10. Limit liquids in the evening