SLEEP WELL,
AGE WELL
BABY BOOMERS
HIT PRIME AGE FOR
SLEEP DISORDERS

AVOIDING
LEGAL PITFALLS
IN SLEEP MEDICINE

2006 BEST SLEEP
FACILITY OF THE YEAR

CHALLENGES
AHEAD FOR HOME
OXYGEN USERS
In middle-aged men and women, the prevalence of sleep-disordered breathing is 4 percent to 9 percent; in older adults, it jumps to 45 percent to 62 percent.
BABY BOOMERS HAVE LONG dominated the marketplace, whether they craved hula hoops, vinyl records, or McMansions. Now, the baby boomer engine is revving up and ready to drive the sleep disorders field toward unprecedented growth for decades to come.

With the oldest baby boomers turning 60 this year, many are grappling with sleep troubles that affect their physical health, emotional well-being, cognitive ability, and job performance. Close to half of all adults over 50 get fewer than seven hours of sleep per night, and 25 percent believe they have a sleep disorder, reported a Gallup survey released in November by the International Longevity Center — USA.

“Baby boomers are right on the cusp of sleep medicine,” said Paul Selecky, MD, medical director of the pulmonary department and sleep disorders center at Hoag Memorial Hospital in Newport Beach, Calif. “Sixty-year-olds to 70-year-olds make up the bulk of our practice.”

sleep well, AGE WELL
Difficulty falling and staying asleep

It's a common misconception that older people need less sleep. Most people require seven to nine hours of sleep throughout adulthood. Yet, as people age, changes in sleep architecture, physiology, lifestyle, and medical conditions can make enjoying a restful sleep more elusive.

For example, a study cited by the National Sleep Foundation reported that after age 65, 13 percent of men and 36 percent of women took more than 30 minutes to fall asleep. Several reasons explain why:

Every age group has its share of stress, but many boomers find themselves sandwiched between caring for frail elderly parents at one end and hormonally agitated teenagers at the other. Throw in a mortgage, college loans, and a pressure-filled job with numerous responsibilities, and that's a lot to try to not think about at bedtime.

And chronic illnesses such as arthritis, diabetes, and hypertension start to manifest in late middle age. The discomfort of these conditions and the medications prescribed to relieve them can wreak havoc with sleep.

"We now understand that if you have a chronic medical condition associated with insomnia, even when you effectively treat the condition, the insomnia complaint may persist and may require independent treatment," said Patrick Strollo, MD, director of the University of Pittsburgh Sleep Medicine Center. "The notion in the past was treat the condition and sleep will improve."

It's also common for older people to have more difficulty maintaining sleep than in their younger years, Dr. Strollo said. Baby boomers he treats often report troublesome 3 a.m. awakenings.

"From a biological standpoint, over time there is a loss of nocturnal secretion of growth hormone associated with deeper stages of sleep," Dr. Strollo said. "This happens as women approach menopause, too. This loss may trigger an insomnia complaint and perpetuate it."

Restless legs syndrome or periodic limb movement disorder also can hijack older adults' sleep. These neurological disorders are more prevalent in the elderly and can make them difficult in falling and staying asleep. A central dopamine mechanism is likely involved with these conditions.

Apnea and aging

Of all sleep disorders, obstructive sleep apnea remains the most common among baby boomers. The National Institutes of Health's Sleep Heart Health Study found that the prevalence of apnea increases up to age 65. The prevalence for men is 4 percent to 9 percent; in older adults (over 60 years) it's 45 percent to 62 percent.

Part of the reason why is that as people age, their bodies don't shed weight as easily as the bodies of 20-somethings. Obesity and its associated risk for hypertension and OSA increase in midlife.

"Many patients come here because their blood pressure is creeping up, and they're gaining weight," said Mark Pressman, PhD, director of sleep medicine services at Lankenau Hospital, Wynnewood, Pa.

Surprisingly, though, some epidemiological data suggest that patients under age 55 who are identified with apnea may be at greater risk for cardiac complications like hypertension, atherosclerosis, heart failure, and stroke than older patients.

"It appears younger patients tend to be slightly more vulnerable," he said. "This may reflect increased severity at a younger age. This generation is much more obese than the baby boomer generation on average. Down the line, it may be that obesity will be an important concomitant risk factor in this generation."

At Lankenau Hospital, 90 percent of patients who come in the door will have OSA, Dr. Pressman said. "It may vary in presentation and complaint, although the No. 1 complaint is 'I'm tired, I doze off during the day, I feel worn out.' Men are often dragged in by family members because of their loud, obnoxious snoring. Unless they wake themselves up, loud snorers are the last to know they are ripping the paint off the walls."

However, many boomer-aged women like Mary Ellen Thomas, 55, trumpet at night just as loudly. With her three children grown and independent, Thomas enjoys life as an empty nester immensely. Her waking life, that is. Her sleeping life, well, that has known a few speed bumps.

Thomas decided to have a sleep test in 1999 as a birthday present for her second husband, a light sleeper continually awakened by her snoring. The Bryn Mawr, Pa., native was "floored" to learn she had 150 arousals during that night in the lab. Her oxygen saturation dropped to a concerning 70 percent.

Upon hearing about continuous positive airway pressure therapy, the newly remarried Thomas thought: "How uneasy! I am not wearing that thing for the rest of my life."

Instead, in 2000 she had her tonsils removed.
her soft palate restructured, and her jaw reconfigured to allow for more air space. Eight weeks later, another sleep study confirmed all that surgery wasn’t enough: She still had 25 arousals. “It was an improvement, but I would never get to stage 4 sleep,” Thomas said.

Eventually, tears gave way to a resignation to don the CPAP mask. “I’ve been using (CPAP) every night since 2000, and I sleep like a baby,” Thomas said.

**Older women and sleep**

Habitual snoring reaches its peak when women enter their 50s, a recent Swedish study has found. Surveying 6,800 women about their snoring, these researchers reported total prevalence for snoring was 7.6 percent, with a 14-percent prevalence among women age 50 to 59. Women under age 40 and over age 80 had the lowest prevalence.

Overall, female snorers were significantly older, had a higher mean body mass index, higher neck and waist circumferences, were more often smokers, and were less physically active than female non-snorers.

One middle-aged factor that influences female snoring prevalence is menopause.

“That’s quite an important marker for most women we see,” Dr. Pressman said. “With the initial symptoms of menopause, they can go from snoring a little bit to full-blown sleep apnea. It seems they’ve lost the advantage of certain female hormones that seem to protect them. It’s pretty clear that, once those hormones start disappearing, women begin resembling men in that area.”

Increased snoring and its concomitant increased apnea risk "predominates in men, although snoring occurs in both sexes,” Dr. Selecky agreed, adding that men and women complain differently about sleep deprivation. “Men complain of sleepiness, women of lethargy,” he said.

Estrogen therapy can improve sleep in women, he said, but it can boost the risk of heart disease and cancer.

Meanwhile, women are affected with RLS twice as often as men are affected. Insomnia predominates in females as well, exacerbated by menstrual periods, pregnancy, menopause, and the stress of balancing family, marriage, and career, Dr. Selecky pointed out.

Women do seem at somewhat greater risk for insomnia, but often physicians will see something else, Dr. Strollo said.

"Lots of times women present to a physician’s office with complaints of fatigue or daytime sleepiness and, often, the reaction is the patient must be depressed," he said. "There is some bias to prescribing antidepressants before exploring a sleep disorder possibility."

For better or worse, he said, physicians tend to refer men for sleep studies more than women, on the bias that men are less prone to depression than women.

**Sleep management**

Whether male or female, middle-aged, or...
sleep changes in the oldest old

It was a peaceful image at first: An elderly man was sleeping. But the video soon grew disturbing. First, the man began to twitch. Then, with a frightening suddenness, he became violently active, beating his hands against the bed, sitting up, and gesturing as if fending off an attacker.

Diagnosed with diffuse Lewy body disease, the second most common form of dementia, the man was exhibiting rapid eye movement sleep behavior disorder, frequently associated with dementia.

Unfortunately, this disorder and the whole panoply of sleep problems will likely mushroom in the coming decades. Before the “tomb boom” enriches the nation’s funeral directors, the 76-million-member baby boomer generation must first pass through its frail elderly years. That means record numbers of people will suffer serious degradations in their health, including deleterious changes in sleep architecture.

Elderly people experience increased sleep latency, decreased sleep efficiency, more nocturnal awakenings, and less REM sleep, according to Lee Brown, MD, a professor in the internal medicine department at the University of New Mexico School of Medicine, Albuquerque.

“Illness, pain from arthritis and immobility, orthopnea, dyspnea, depression due to bereavement or retirement, and anxiety about financial security” can all lower sleep efficiency in older people, Dr. Brown told delegates at the American College of Chest Physicians 2005 conference in Montreal.

Circadian rhythm changes
Age alters circadian rhythm itself, due to structural changes in the suprachiasmatic (SCM) nucleus of the brain, where circadian rhythm originates, Dr. Brown said, shortly before showing the video of his dementia patient. In fact, the entire SCM region may shrink in size as a person reaches advanced age.

Core body temperature peaks earlier in the day, another sign the body’s internal sleep clock is malfunctioning. A lack of “time cues” presents another hurdle to healthy sleeping, particularly in the case of socially isolated seniors. Lack of regular meal times, inadequate exposure to sunlight, and excessive TV-watching are all “endemic in nursing homes,” he said.

The phenomenon of sundowning, much commented on by nursing home providers, is characterized by agitation, pacing, and restlessness in the evening. It afflicts from 20 percent to half of all elderly patients admitted to acute care hospitals. It’s associated with dementia and the winter months, he said.

Medications taken to relieve chronic medical problems also rob the elderly of sleep, he added. Diuretics cause the purgatorial condition nocturia, while bronchodilators, corticosteroids, decongestants, and calcium channel blockers all disrupt normal sleep architecture.

All told, from 19 percent to as much as 38 percent of the elderly population suffer from insomnia, experts estimate. Risk of obstructive sleep apnea also rises with age, according to findings from the Sleep Heart Health Study.1

“About one-fourth of all independently living and almost one-third of all nursing home residents have OSA,” Dr. Brown said. Other research suggests an intensified association between hypertension and OSA with advanced age.

Curiously, the prevalence of restless legs syndrome first increases with age then declines in the oldest old, Dr. Brown noted. No one has ever explained why. ■

Reference

—Michael Gibbons

younger, “the more stress you carry around with you, the more those apprehensions will interfere with relaxing and falling asleep,” Dr. Pressman noted. The question is how to control it.

“People don’t set aside time after coming home from work to prepare for sleep,” he observed. “You can jump from following the stock market on your computer to sleeping in bed. You need some dedicated control time to slow you down, block out the day.”

Otherwise, sleep failure may become entrenched. “In what we call psycho-physiological insomnia, or learned insomnia, you learn that the bedroom is not a place where you can be comfortable and fall asleep,” he said. “Just walking into the bedroom elicits anxiety.”

Cognitive behavioral therapy and proper sleep hygiene can teach insomniacs “to decrease their total time in bed but increase their sleep time in bed, leading to less frustration,” Dr. Strollo said.

When all else fails, consider medication — but not as an end-all. “The fundamental management error is giving a patient a pill but not really giving additional instruction to manage insomnia or following up,” he said. “Then you’re probably not working in the patient’s best interests. Pills can be helpful and have an impact on quality of life but the patient has to be appropriately managed.”

Lastly, baby boomers need to be realistic. Why are sleeping pills the most common prescriptions in the U.S.?

“Because adults expect to fall asleep perfectly, like they did when they were 12,” Dr. Seledry said. “We educate them to be happy they are alive. We teach them things their mothers would tell them: Don’t eat or drink too much, keep regular bedtime hours, in short, practice sensible sleep hygiene. Many patients say, ‘Thank you. I have a treatment plan in place now.’”

If history has shown us anything, baby boomers won’t take sleep problems lying down.

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