RTs Up All Night

by Kris Williams, BA

Humans weren't intended to be nocturnal creatures — although that hasn't stopped us from cramming all night for final exams, partying until 4 a.m., dancing until the next day, or watching TV until there's nothing on but B movies and infomercials. Neither has it stopped respiratory therapists from having to work round-the-clock shifts because, even in the wee hours, ventilators need adjusting, patients need suctioning, neonates and babies need specialized monitoring, aerosolized therapies must be given, and trauma patients need tending.

However, working and playing for all those extra hours can lead to serious health issues, sleep deprivation, accidents, injuries, and, in extreme cases, death. For many, the newest indulgences or luxuries are sleep, power naps, and good ol' R and R. So how do others handle it?

Odd hours: A blessing and a curse

Tony Schmidt, RRT, Evansville, IN, experienced first-hand the health issues of working too many nights while pushing the envelope on his daytime hours. "My first seven years [of working night shift], I finished my bachelor's and part of a master's degree. So I was up not only working all night, I was up during the day going to school."

Now married and the father of three, he adds that his heavy schedule really took a toll physically. "One night, about three o'clock in the morning, I experienced chest

Ken Lizzi

pain. I was rushed to the ER." There Schmidt says that the physicians thought he had a mild myocardial infarction, diagnosed eventually as arrhythmia.

Even though Schmidt had a traumatic experience and deals with the long-term health issues of night-shift work, he still says that "working night shift is the opportunity of a lifetime. The experience you gain is tenfold to whatever you can get any other place."

Ken Lizzi, MPH, RRT, Rocksprings, WY, echoed Schmidt's feelings. "I do prefer the night shift," Lizzi says, "because many times you can be more independent."

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The nightlife beat: Circadian rhythms

"The superchiasmatic nucleus of the hypothalamus is generally considered by many to be the pacemaker for the human circadian rhythms," says Mike Zachary, PhD, RPSGT, RRT, DABSM, FCCP, a sleep disorder specialist from Jacksonville, FL. "These rhythms," he says, "oscillate daily and control body temperature, hormonal secretion, and the sleep-wake cycle. It is the body's ability to entrain or coordinate these rhythms that is so interesting," he adds.

The *Intelihealth* electronic newsletter(www.intelihealth.com) recently cited an article from the *Johns Hopkins Health Insider* that suggests that the internal clock is set by light and that the circadian rhythms may be reset by changes in the timing or duration of light exposure. Working the night shift or having to answer call in the wee hours of morning can play havoc with your sleep-wake cycle's natural rhythm by reducing your exposure to bright light.

To deal with the changes in his sleep-wake cycle, Lizzi, who works night shift during the summer months and teaches respiratory care during the rest of the year, goes home and sleeps for two or three hours, rises for two or three hours, and then sleeps again for a few hours before work. While he's awake, he says, "I'll go to the swimming pool, or I'll exercise, or I'll go for a walk or shopping or whatever. I find that if I sleep in just short periods like that, I'm sleepy enough in the afternoon to go back to sleep for a nap of a couple of hours."

Richard Williams, RRT, St. Petersburg, FL, on the other hand, participates in neonatal and pediatric transport, a job he does over and above his normal day shift. He gets awakened at all hours of the night. He relies on a positive attitude and a regimen of good nutrition and regular exercise, as does Jeff Whitnack, RRT, RPFT, Palo Alto, CA. Furthermore, Williams says that developing a mental acceptance that this is part of your life is beneficial.

Whitnack's approach is to work his exercise regimen into his commute. By outfitting himself with a good bicycle and backpack, Whitnack cycles to work one hour each way. "I know that isn't an option for everybody," he says, but adds, "That's how I de-stress from work." Once he's at work, Whitnack insists that the lights be turned up bright. Another habit of Whitnack's is to sleep in a room that's as dark as possible.

Jeff Whitnack

While these approaches work best for these individuals, respiratory therapists who work the night shift may need to spend some time getting to know themselves and developing their own techniques for making it through the toughest shift hours. Dr. Zachary recommends:

• Try to sleep the same time each day for the same length of time.

Richard Williams

Shift workers tend to sleep one and a half to two hours less than day workers and tend to split their sleep periods, which for some may create a circadian adjustment problem.

- Enlist the support of your family and friends. Those who impose on your sleep time can cause disruption to your rhythms. Let them know that if they disturb you in the middle of the day, it's the equivalent of you calling them at 3 a.m.
- Watch your diet and exercise regularly. Shift workers tend to eat more fatty diets with frequent snacks and excess caffeine intake. If you would exercise while working the day shift, do so while working the night shift.
- Spend as much time in the sunlight as possible soon after you wake up. Bright light therapy is very effective. Some companies offer visors and sun lamps that may help.
- Ensure that your sleep environment is dark and quiet. Make sure the temperature is comfortable and the alarm is set. Be consistent!

Making the schedule

If you're a respiratory care manager or supervisor assigned the task of making the work schedule, then you might want to consider these tips and risks from Dr. Zachary.

When creating the work plan, try to avoid scheduling an individual to work:

- More than five third shifts in a row without days off
- More than four 12-hour night shifts in a row
- Earlier than 7 a.m. for a first shift
- Rotating hours that change once per week
- Excessive overtime
- Backwards rotation, that is, first to third to second shift
- 12-hour shifts involving critical monitoring tasks
- 12-hour shifts involving a heavy physical workload or excessive workload
- With no shift breaks.

Remember to plan for at least 48 hours off-time after a run of night-shift work and to avoid complicated schedules that make it difficult for respiratory therapists to plan ahead.

You may also want to consider the individuals and their particular coping habits and health status when planning the schedule. For example, is the employee:

- More than 50 years old?
- Commuting a long distance?
- Working a second job?
- A morning-type person or a "lark"?

Does the employee:

- Have a history of sleep disorders, psychiatric illness?
- Have a history of drug or alcohol abuse?
- Have a medical history of gastrointestinal complaints, epilepsy, diabetes, or heart disease?

For more information, read "Sleep Thieves" by Stanley Coren and review your sleep medicine books or the chapters on sleep medicine in your respiratory care texts.

Before you try to catch your Zs, listen to audio interviews of some of the RTs in this story on the Web at **www.aarc.org**. While you're there, check out the Amazon.com connection on the AARC web site and look for books that can help you get the most out of your snooze time.

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EDITOR'S NOTE

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