

Sleep and relaxation increase your resiliency

by Michael T. Grill

Resilient EMS practitioners understand that consistently performing at the highest level requires mastery of both physical and psychological skills. In this article, we examine two key characteristics of resilient people: good sleep habits and learning how to relax. Each requires learning physical skills designed to create a **bridge** to improving psychological well-being – and, therefore, overall resiliency.

EMS practitioner sleep issues

My candle burns at both ends; it will not last the night.
- Edna St. Vincent Millay

Sleep is necessary to our physical and mental well-being – and without it, we will die. For EMS practitioners, interrupted sleep is a way of life – and a recognized source of stress. In one study of more than 700 firefighters, one-third reported that sleep disturbances – disruption, poor quality of sleep, not enough – ranked as a critical cause of stress (IAFC, 2007).

And the relationship between sleep deprivation and decreased performance is well documented. Being awake for 18 hours, for example, produces impairment equivalent to a blood alcohol content (BAC) of .05 (IAFC).

All EMS practitioners have experienced sleepless nights, guzzling coffee and stuffing ourselves with sugary foods, hoping to boost our energy and clear our minds. Although we feel ‘alert’ temporarily, if we continue to be deprived of sleep, we soon experience cognitive impairment – including irritability, impaired judgment and memory lapses. Physical symptoms also occur, including heart rate variability, decreased reaction time, tremors, aches, and an impaired immune system, as well as long-term risks such as heart disease, obesity and diabetes.

One of the great myths surrounding sleep is that “I can take control of my sleep if I increase the number of hours I get.” Sleep experts tell us, however, that sleep quality trumps quantity.

We all have experienced times when we go to bed *hoping* to fall asleep quickly. Tossing and turning, we glance at our clock and realize it’s 3 a.m. Worse yet, we must be up in three hours for what we know will be a 24-hour shift where we probably will not sleep at all.

The bad news? You cannot truly control your sleep... and the more you try, the more you may stay awake. Sleep is about “letting go” and simply letting it happen. The good news? There are steps we can take before sleeping (or upon waking during the night) that improve the prospects of sleep. These include:

- Use your bed primarily for sleep. Don’t read or watch TV in bed.
- Sleep in a room that is cool and dark.
- Practice positive imagery. We all have an imagery system that works like this: Image, thought, feeling... and so forth. When you think of unpleasant events (having to get up in three hours... my partner, who’s really a jerk) brain wave activity increases, scaring off sleep. Conversely, pleasant images slow brain wave activity – which is more conducive to sleep. So one of the things we can do to increase our slow wave activity is to imagine pleasant situations or events.
- Avoid naps, especially in the late afternoon, and limit them to 45 minutes.
- Avoid caffeine, cigarettes and alcohol. The reason for avoiding caffeine is obvious. But many people think having a few drinks before bed helps them get to sleep. Alcohol, in fact, interrupts sleep. Passing out is not the same as sleeping, because the deep beneficial levels of sleep do not occur.
- Make a purposeful effort to slow down 20-60 minutes before bed. Do not watch anything on TV that will agitate you, have a phone conversation that may be upsetting, or study for a test right up until bedtime.
- If you are not asleep within 15-20 minutes of going to bed, get up and watch a boring TV show, read a boring book, play solitaire, or do another non-stressful activity until you become sleepy. Then return to bed. If, after 15-20 minutes, you are still awake, repeat the process. You are, in effect, training or conditioning your mind and body that bed is a place for sleep, not a place to stay awake and be angry about not being able to sleep.
- What happens when you awaken in the middle of the night and glance at your clock? Avoid doing this and remove a potential stressor.
- When possible, get up at the same time every day.

One sleep issue experienced by EMS practitioners is nightmares. Research shows that approximately five percent of the population will suffer from nightmares at any given time, but the rates are 50 to 88 percent higher for those witnessing or surviving trauma. Not only are the nightmares disturbing; they can create harmful sleep habits, such as using excessive amounts of alcohol and drugs in an attempt to “anesthetize” oneself.

As EMS practitioners, we will be exposed to traumatic events that can upset our sleep. But we can develop bridge behaviors to maintain good sleep habits that will help us

remain resilient. We can, when desired, follow up with more aggressive treatment to address nightmares and other sleep disorders. While an actual traumatic event is horrifying, terrifying or both, a dream is a series of images, either of still pictures or something akin to a movie. The good news is we can learn to control these images in our heads.

Various cognitive behavioral approaches can be used to treat nightmares and include Exposure, Relaxation and Rescripting Therapy (ERRT) and Imagery Rehearsal Therapy (IRT). These treatments typically are completed in three sessions. The components of the treatment typically involve education about post-traumatic stress disorder (PTSD) and nightmares; learning relaxation and proper breathing techniques; and recalling the events that generate nightmares and then “rescripting” the nightmare.

Relaxation and breathing techniques

Another bridge behavior important to maintaining resiliency is learning to “listen” to our bodies and relax. In the EMS profession, stress is inevitable. Our training focuses on “keeping it together” and encourages us to ignore signals our bodies send us to tell us we are in distress. Yet, ignoring these body cues of stress causes actual physical harm.

Why? The human body is not designed to lie. If you cut a finger, your brain is alerted that there is a problem. But when we force or train ourselves to ignore these messages, our body in effect lies. Those who suffer with tension headaches are good examples. Their bodies give them cues that they are under stress. When they ignore these cues, the body continues to tighten the muscles in the neck and shoulders until a headache occurs. It’s the body’s way of saying, “Listen to me... I’m not happy.”

In some people, stress might show as stomachaches or high blood pressure. In short, the body always tells us when it is under stress. If we learn to listen to our bodies, we can identify early on when stress is building and prevent it from escalating. We may not be able to change the source of stress, but we can reduce the amount of stress we endure by learning skills to return our body to a state of homeostasis, or balance.

One of the most basic of life-giving behaviors the body does is breathing. It is a simple act: Breathe in and breathe out. There’s nothing much to it, but without it, we die. Unfortunately, many of us do not breathe correctly and do not effectively use our lung capacity, or we adversely alter our breathing in potentially stressful situations. Have you ever watched a

sleeping baby breathe? That’s how we should breathe: from our “stomach,” using our diaphragm. Done correctly and purposefully, breathing can help us to relax.

Several skills can help us be more mindful of our breathing.

One is called *diaphragmatic breathing* and requires us to set or lay with one hand on our chest and the other on our stomach. Done correctly, the hand on your chest will move minimally, while the hand on the stomach will rise and fall as you inhale and exhale. Try practicing a slow breath release on the exhale.

Another technique is called *alternate nostril breathing*. This is a breathing technique that the Chinese have used for centuries. Take your thumb and index finger and place your thumb on one

nostril, closing it. Now breathe in through the open nostril, and when you have taken in a full breath, release your thumb from the nostril, close the other nostril with your index finger, and exhale. Do this slowly five times. Then reverse the process.

Progressive Muscle Relaxation (PMR) is another skill that can help us become more aware of our bodies and learn to breathe correctly. It is also a skill that we can use in a variety of situations to help us relax. It is a practical example of classical conditioning or associative learning, where two stimuli become associated – made famous by Pavlov and his dog experiment. Rather than pairing a ringing bell with food, in PMR we pair the word “relax” with the relaxation of your muscles. Go through your entire body, starting with your head or toes, tensing and relaxing all of the major muscle groups while associating the word “relax” with each muscle group as it begins to relax.

Like all skills, these behaviors involve practice. Rather than making them be things we “try” to do, they are behaviors to which we can commit ourselves to help us improve our ability to cope with the stress and demands of our work. While we always will be confronted and challenged by stressful situations, using these behaviors helps us put crucial coping mechanisms within our control.

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This is the third in a series of four articles to help you in your life and on the job. In the next issue: Cognitive skills we can use to foster resiliency.

