

## How to Bring Sleep Science into Your Practice

As healthcare professionals, we realize the importance of sleep and can see in the literature that sleep science is growing and gaining tremendous well-deserved attention in its importance to our health and wellness. Consider the fact that anti-aging, injury healing, weight management, athletic performance, memory and cognitive faculties, as well as the prevention of heart and blood sugar disorders, are all controlled in part by SLEEP. In looking at this growing list, chiropractic medicine is the perfect healthcare model to expand our knowledge of the human body and emphasize the importance of what I call the perfect trifecta of health: sleep, exercise and nutrition. I suggest we as chiropractors adopt this model in today's world of change and lead the healing community.

As a profession, we can call the essential three elements of health the "Optimization Health Paradigm" or what I'll refer to as "OHP." The reason OHP works so well with chiropractic is that as we know, our healing paradigm revolves around treating the body, mind and spirit and innovation is telling us that this translates into sleep, exercise and nutrition. When we discuss the four stages of sleep, of which we go through four to five cycles every night, we know that sleep is one of, if not the most important, of all three paradigm elements that stabilizes and controls the biochemical balance of our bodies. We are the number one natural healing experts in the field of medicine.

The science of sleep is here to stay and the research continues to grow faster than the speed of sound. Add in manipulation to a foundation of OHP to restore balance, coordinated function, optimized mobility and stability, and you can see that we have the foundation of a profession that is hitting home runs and really helping to heal patients from inside out. We as healthcare professionals should step up, research the effects and educate our patients about the wonderful mystery of sleep and how it actually lies directly in our path of natural healing.

You can have a tremendous impact on healing through your everyday conversations, taking of histories of your new patients, screening through simple questionnaires and finding patterns of sleep disorders and disease. Prevention of disease is a cornerstone of our practice and should continue to be as we move into the new era of preventive medicine and accountable healthcare paradigms. Furthermore, and just as important to our current mantra of natural health, people heal faster when they get quality sleep. Sleep is truly one of the best modalities that you have relating to your practice. It is an imperative initiative for the health of our profession and necessary to form a unified, cohesive, respectable and most importantly, professional organization equipped with the tools that allow us to step up to the plate and make a difference in people's lives.

Here are four simple and sound talking points that you should have with each patient that walks in your clinic.

1. Do you feel that you are not getting quality sleep?
2. Do you feel groggy or have daytime sleepiness during much of the day?
3. Do you feel that you do not have focus or good concentration during the day?
4. Do you wake up with headaches or neck pain?

The goal of your conversation should be to identify if they have potential issues with their health that is manifesting with inadequate amount or quality of sleep. If they answer yes to any of the above, they should have another set of formal questions. I suggest the Epworth Sleepiness Scale or

my favorite and the one I use, the Berlin Questionnaire. You can find both online and they are quite easy to score. The next step is to identify the cause, although the highest probability if they score positive is for obstructive sleep apnea (OSA).

Anxiety and depression are the two most common causes of insomnia, but the primary cause of what is called "sleep disordered breathing" is OSA. Snoring may be a symptom of OSA but the true pathomechanical cause is when a person has a compromised pharyngeal space when muscles of the back of the throat intermittently relax and block the airway during sleep. This causes interruptions of breathing and if they last more than 10 seconds, it is called an "apneic event." Interruptions of at least 50 percent of the airflow are also considered diagnostic for "sleep disordered breathing" and are called hypopnea. An Apnea-Hypopnea Index (AHI), the combination of the two, is the benchmark measurement. An AHI of less than five (per hour) is considered normal, 5 to 15 is considered mild, between 15 and 30 is considered moderate and an AHI over 30 is considered severe. In most cases of moderate to severe OSA, a continuous positive airway pressure (CPAP) machine will be prescribed.

There are several other modalities for the mild to moderate levels of OSA including oral appliances and pillows that are designed for (in these cases) a side lying option pillow to help reduce the mandible from retracting and opening airways. Oftentimes a thoracic elevating wedge will also be helpful. Some of the most likely cofactors of sleep disorders are obstructive sleep apnea (OSA), excessive weight, neck thickness, age greater than 65, sedatives, alcohol and poor sleep hygiene. A complete assessment is necessary as a moderate to severe case of OSA can truly be life threatening and is very treatable if the physician can identify the disordered breathing. It is estimated that there are more than 30,000 cases of OSA that are not diagnosed in the U.S. We need to look for these patients, as this is a serious issue that can be life threatening and take years off a person's life.

Furthermore, sleep disorders in youth are not uncommon and certainly should be addressed especially if there are symptoms of hyperactivity, lack of focus, signs of night terrors, bed wetting, and excessive perspiration at night. With ADD and ADHD children, I believe a sleep study should always be performed to rule out disordered nocturnal breathing.

Being educated and aware of the signs and symptoms are huge steps to coming to the front of the "Optimization Health Paradigm." Giving sound advice to all of your patients about good sleep hygiene will help them understand that you truly care for their entire physiological system. Recognizing sleep disorders and either treating them yourself or diagnosing then sending the patient to a primary care or sleep doctor/specialist in your area can do wonders, not only for the patient, but also for the marketing and integration of your practice in your community.