

When Sleepless Nights Become Dangerous

By Tracy Nelson

Ever woke up in the morning and felt just as exhausted as when you went to bed? For about nine percent of the U.S. population, and up to 25 percent in the elderly, this isn't a one-time occurrence: it's an ongoing reality. These people suffer from a sleep disorder called obstructive sleep apnea. Sleep apnea literally means 'no breath' when sleeping. Sufferers of obstructive sleep apnea experience temporary and repeated blockages of the throat resulting in snoring, choking, shortness of breath and frequent awakening. In the morning, these individuals complain of tiredness and excessive sleepiness.

A group of researchers at the University of California, San Diego (UCSD) Medical Center is currently conducting a four-year study of sleep apnea and is actively looking for participants. The purpose of this study is to examine the medical, psychological and social effects of sleep apnea.

Pattie Krohn is the study coordinator and staff research assistant for this project. "These people are very ill," said Pattie. "It's scary because they're falling asleep on the phone and while driving. We want them to get better."

Dr. Wayne Bardwell, an assistant professor in the Department of Psychiatry at UCSD, is in charge of the psychosocial aspect of the study. Commenting on obstructive sleep apnea, Dr. Bardwell stated: "Some people experience a collapse of the airway multiple times an hour, some people over a 100 times an hour, so consequently they don't drop down into the deeper,

restorative stages of sleep.” According to Dr. Bardwell, this lack of sleep can lead to depression, anxiety, fatigue, and anger and hinder a person’s ability to function and carry out duties.

According to Dr. Jose Loreda, director of the UCSD Sleep Medicine Center and co-investigator on this research study, other effects of sleep apnea include memory problems, social and work related problems, and more motor vehicle accidents.

But sleep apnea can have greater effects on a person than just emotional and social difficulties. It can result in serious health problems such as high blood pressure, heart disease and stroke.

Sleep apnea is most common among males, the obese, the elderly, those who snore, and those who are hypertensive. People who carry weight in their upper body and neck area are also at risk because the extra weight increases the chances of the airway collapsing while they sleep. African Americans and Hispanics may be at a higher risk of developing sleep apnea because of obesity and other factors currently under study.

“This sickness is more prevalent in people of color,” said Dr. Loreda. “We want to awaken the community to this important issue.”

Though the study doesn’t focus primarily on the risks among African Americans and Hispanics, it is looking at how minority status might be associated with different levels of symptoms, according to Dr. Bardwell.

“It’s not a clinical trial,” said Pattie Krohn. “We already know how to treat sleep apnea.” The study deals more with how the treatment prevents the complications of sleep apnea. Currently, the most effective treatment for sleep apnea is called Continuous Positive Airway Pressure (CPAP). This treatment consists of a mask that fits over the nose, connected to a small

machine that forces air at pressure into the lungs to keep the throat from collapsing. CPAP is worn every time the patient sleeps to prevent obstruction of the airway.

Volunteer participants in this research study receive an overnight home sleep screening test to make sure they have obstructive sleep apnea and if they otherwise qualify for the study. If they meet the criteria, they are admitted to the hospital for three days where they undergo a series of psychological and physiological tests. Then, after using CPAP during sleep at home for three weeks, they report back to the hospital for two days of follow-up testing. The whole study lasts about 4-5 weeks including the screening and preparation time.

“It’s really interesting because it’s a treatment study, and thus of direct benefit to the participant” said Bardwell. “In addition, participants get a stipend for participating in the study, and, for the first time in many years, many experience a good night’s sleep.”

The group is still looking for people to participate in the study. Participants must be non-smokers, suspected of having sleep apnea because of snoring or daytime sleepiness, between 30-65 years old and not currently taking any medications. Normal participants without sleep apnea are also needed. For more information or questions about eligibility contact Pattie Krohn at pkrohn@ucsd.edu or (619) 543-3468.

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