

## Aging with Muscular Dystrophy and Sleep Problems

By researchers at the University of Washington's Aging Rehabilitation Research and Training Center

One of the first things that people notice as they grow older is a change in their sleeping patterns. People often say that the older they get, the less they sleep. Older adults also feel less rested when they wake up. For the most part, people are not sure why they do not feel rested, nor are they always sure how to improve their sleep. Adding Muscular Dystrophy into this equation can lead to more confusion about what exactly is causing the sleep problem in the first place and perhaps more importantly, how to deal with it.

People aging with Muscular Dystrophy are not alone in dealing with sleep problems. In fact, researchers have found that 25% of people between the ages of 65 and 79 reported serious insomnia compared to only 14% of people between the ages of 18 and 34 (Mellinger and colleagues, 1995). In addition to studying insomnia, researchers evaluated sleep quality by asking about the number of times a person wakes up after they've fallen asleep, the amount of time someone spends in the lighter stages of the sleep cycle (so called "Stage 1" and "Stage 2" sleep), and the total amount of time a person spends asleep. These sleep patterns have all been shown to change as a person gets older. Older individuals also commonly deal with other sleep problems, such as greater number of times waking up during the night, more time spent in lighter sleep stages, less time spent in deeper sleep stages, and less total time spent asleep.

**What's the big deal?** While sleep problems can be annoying and lead to feeling sluggish and less energized throughout the day, some researchers have found that poor sleep can lead to health problems (Al Lawati and colleagues in 2009, Bradley and colleagues in 2009, and King and colleagues in 2008). These problems include heart disease, diabetes, and stroke. This research points to the fact that sleep problems are important and should not be ignored.

**What can people do to improve their sleep?** The answer depends on the type of sleep problem. In general, there are four reasons that people with Muscular Dystrophy may have trouble sleeping.

- 1.) The first is physical issues that interrupt sleep or reduce the quality of sleep. These issues include breathing problems ("sleep apnea" for example). Pain is another common problem in patients with Muscular Dystrophy, and pain can contribute to problems in sleeping.
- 2.) A second cause of sleep problems is anxiety or a "racing mind." This issue can cause trouble falling asleep as well as a shorter amount of total sleep time.
- 3.) A third reason people have trouble with sleep is medications. Some common medications taken by individuals with Muscular Dystrophy disrupt the sleep cycle and can lower the quality or amount of sleep you get in a night. Examples of these medicines include: Valium, Xanax, and Ambien.
- 4.) A fourth reason of disrupted sleep is specific to patients with myotonic muscular dystrophy (DM). Patients with DM often have excessive daytime sleepiness that can affect quality of life, employment, and can be disabling. Researchers believe that the sleep regulatory "circuits" of the brain are affected by the disease process in DM patients.

**Is there any good news?** Our team at the University of Washington is conducting research and trying to "summarize" all relevant medical literature about sleep problems. This research is important and may lead

to interventions and solutions that actually work. In future columns, we will discuss each of the four sleep problem categories in depth and list strategies and solutions for dealing with them. Working closely with your local doctor and better understanding the cause of your sleep problems may lead to better treatments and strategies to more restful sleep. Each of the categories above has their own set of management solutions that can help you to get better sleep. We will address several of these strategies in future columns and welcome your feedback on how to sleep more soundly.

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