

## Aging Well with Post-Polio Syndrome and Sleep Problems

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One of the first things that people notice as they grow older is a change in their sleeping patterns. The older they get, the less they sleep; or they just feel less rested when they wake up. Most people are not sure why they do not feel rested, nor are they always sure how to improve their sleep. Adding post-polio syndrome into this equation can lead to more confusion about what exactly is causing the sleep problem and, perhaps more importantly, how to deal with it.

People aging with the effects of polio are not alone in dealing with sleep problems. In 1995, Mellinger and colleagues found that 25% of people between the ages of 65 and 79 reported serious insomnia as compared to only 14% of people between the ages of 18 and 34. In addition to asking generally about insomnia, researchers evaluate 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.

All of these factors change as a person gets older. Aging people increasingly wake up during the night, spend more time in lighter sleep stages and spend less time in deeper sleep stages, and spend less total time asleep.

Talk about sleep problems leads to one question: What's the big deal? While sleep problems can be annoying and lead to feeling sluggish and less energized throughout the day, some researchers, such as Al Lawati and colleagues in 2009, Bradley and colleagues in 2009, and King and colleagues in 2008, have found that poor sleep can lead to heart disease, diabetes and stroke. The fact is that

sleep problems are important and should not be ignored.

What can and should people do to improve sleep? The answer depends on the type of sleep problem. In general, there are four reasons why people who had polio may have trouble sleeping. Physical issues can cause breathing problems (such as sleep apnea) that can interrupt sleep or reduce the quality of sleep.

A second cause is anxiety or a "racing mind." Both of these issues can cause trouble falling asleep as well as a shorter amount of total sleep time.

A third reason is due to medications (commonly taken by individuals with post-polio syndrome) that disrupt the sleep cycle and lower the quality or amount of sleep.

And, people with post-polio syndrome report pain problems, and pain can contribute to problems in sleeping.

One reason why the research that we do at the University of Washington is so important is that it can lead to interventions and solutions that actually work. Once the cause of sleep problems is known, each cause has its own set of management solutions. In four future columns, we will discuss each sleep problem category in depth, and we will offer strategies and solutions for dealing with them. ▲

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