For Elderly, Hour-Long Napping Helps Brain Function, Study Says

By Erik Lief — January 5, 2017

China, with one of the largest – if not the largest – elderly population on Earth, has a strong incentive to learn how to support or improve cognitive function for its older citizens. And as people all around the world live longer, understanding how to slow mental impairment and dementia has become an ever-growing concern.

That's in part what has led a multinational research team to look for ways to mitigate cognitive degeneration. And a new, interesting study focusing on post-lunchtime napping for the elderly is helping shed light on this important issue.

In their paper published today [2] online in the Journal of the American Geriatrics Society, this group of Chinese and American researchers sought to learn if mid-day napping was beneficial – and if so – when it was best to do, and for how long to achieve optimal results.

They concluded that for Chinese adults 65 and older, one-hour naps after lunch helped them perform "better on the mental tests compared to the people who did not nap." Those tests included doing basic math problems, recalling words and answering questions about the date and season of the year.

What's more, this group did better than those who slept for both shorter and longer periods: "Between-group comparisons showed that moderate nappers had better overall cognition than nonnappers or extended nappers." While the participants' naps ranged from a half-hour to 90 minutes, the mean length for this group was 63 minutes.
To be considered for the study, "respondents needed to be aged 65 and older and have complete data on age, sex, education, body mass index (BMI), postlunch napping duration, and cognition measures." For inclusion, 4,776 "Chinese community-dwelling residents" were originally eligible, but after final screening and exclusions due to missing data, the cohort that was studied was reduced to 2,974 elderly Chinese citizens. Nearly 60 percent of participants napped after lunch; "circadian dip period (1:00–4:00 p.m.) is the most common and preferred time for naps."

Starting out with the hypothesis that naps would provide the most benefit in the middle of the day, and would also least effect nighttime sleep patterns, researchers focused on afternoon naps, which they wrote were "more restorative than naps in the early morning and evening."

Those who chose not to nap, as well as those who "took shorter or longer naps, experienced about the same decline in their mental abilities that a five-year increase in age would be expected to cause," according to HealthinAging.org [3], which tracked the study.

One factor of note was that researchers relied on the participant's self-reporting of their naps, but for a retrospective study of this size another approach appeared to be impracticable.

Today, China has roughly 200 million citizens over the age of 60, with the figure estimated to reach 400 million by 2050, according to the researchers. And globally, "nearly two billion people across the world are expected to be over 60 years old by 2050," states the World Health Organization [4], "a figure that’s more than triple what it was in 2000."

As for the share of elderly in any one country, 26.3 percent of Japan's population is 65 and older, making it the highest in the world. Rounding out the top five countries in this category are Italy
(22.4%), Greece (21.4%), Germany (21.2%) and Portugal (20.8%). Given far higher populations in China, India and the United States, the percentages of those countries’ elderly populations don’t even crack the Top 25.