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## Education may be tied to fewer "senior moments"

By Joene Hendry

NEW YORK (Reuters Health) - Elderly Americans may be stretching their brains in ways that help them stave off a decline in memory and mental function, also referred to as "cognitive decline," which leads to dementia.

The findings from two nationally representative surveys, conducted in 1993 and 2002, "support the idea that more education is protective against cognitive decline," Dr. Kenneth M. Langa told Reuters Health.

A nearly 30-percent decline in cognitive impairment occurred between the 1993 and 2002 survey, Langa, of the University of Michigan, Ann Arbor, and colleagues report. Importantly, they add, the average education level was nearly one year higher in 2002 than in 1993.

The investigators analyzed medical, lifestyle and demographic information as well as measures of memory, mental processing, knowledge, language, orientation and other indicators of cognitive function from participants in the Health and Retirement Study.

There were 7,406 subjects in the 1993 survey and 7,104 in the 2002 survey. The two groups were primarily white, 40 percent male, an average of 78 years old, and about half were living with a spouse, Langa's group reports in the journal *Alzheimer's and Dementia*.

The investigators identified 12.2 percent of subjects as cognitively impaired in 1993. By 2002, rates of cognitive decline dropped to 8.7 percent.

In addition to achieving more education, the 2002 respondents also reported significantly greater net worth than the 1993 respondents.

"Higher levels of wealth likely lead to more or better educational opportunities and better access to health care," Langa said in an interview with Reuters Health.

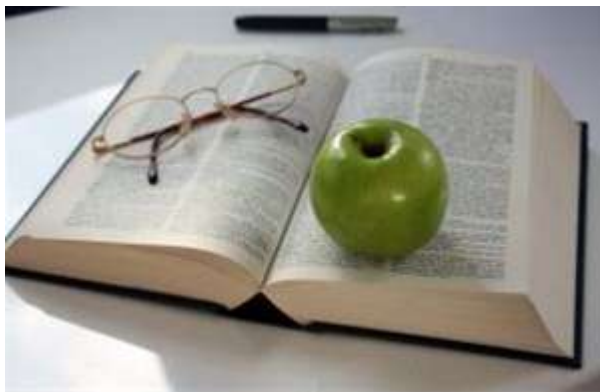
Among individuals with moderate-to-severe cognitive impairment, the researchers noted higher mortality rates in the 2002 group. This implies that education may protect the brain to a point, but once it occurs, the impairment may be more severe and carry a greater risk of death.

The researchers conclude that modest improvements in education and mental stimulation during work and leisure activities may impact public health. They add that further studies should continue to assess the link between mental stimulation and cognitive impairment.

SOURCE: Alzheimer's and Dementia, online February 20, 2008.



## Less Educated May Be Unaware of Early Cognitive Decline



New research suggests people who spend fewer years in school may experience a slight but statistically significant delay in the realization that they're having cognitive problems that could be Alzheimer's disease. Scientists at the Alzheimer's Disease Research Center (ADRC) at Washington University School of Medicine in St. Louis reviewed epidemiological data for over 23,000 Alzheimer's patients from their center and

a collaboration of approximately 30 Alzheimer's disease research centers nationwide.

"We may have a group of people who are at risk for slightly delayed detection of Alzheimer's disease," says lead author Catherine Roe, Ph.D., a neurology research instructor at the ADRC.

"Early detection of Alzheimer's disease is important as we progress toward treatments and cures because those treatments will need to be applied as early as possible to have the maximum possible benefit."

The paper appears in this month's issue of *Archives of Neurology*.

In an earlier study of patients with a form of Alzheimer's disease linked to a genetic mutation, Roe and other Washington University researchers found patients with more years of education were likely to be diagnosed with Alzheimer's disease earlier. This surprised them because higher levels of education have typically been associated with decreased risk of Alzheimer's disease.

The new study confirmed those surprising results, revealing that patients with 12 years or more of schooling were on average slightly younger when diagnosed with Alzheimer's disease than patients with less than eight years of schooling. Age of diagnosis for a group with eight to 11 years of schooling fell in-between the other two groups.

Next, researchers analyzed the severity of patients' dementia when they went to the Alzheimer's disease center for the first time. They found that patients with fewer years of education were likely to be more severely impaired on their first visit.

Alzheimer's disease is cumulatively disabling: The longer one has it, the worse the symptoms become. This suggested to the researchers that those with lower education levels may be slower to notice the early signs of disease, only going to see a specialist after their symptoms become impossible to ignore. Those with more education may be becoming aware of their symptoms while they are still relatively subtle, and seek a specialists' help early on in the disease process.

"People with higher education levels may be more likely to have a job or a hobby that highlights early cognitive impairment as well as better access to medical care," Roe says.

"These could be factors that we need to incorporate into our procedures for screening patients for early signs of cognitive impairment."

Source: [Washington University School of Medicine](#)