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Dementia Rate Is Found to Drop Sharply, as Forecast

By **GINA KOLATA**

A new study has found that dementia rates among people 65 and older in England and Wales have plummeted by 25 percent over the past two decades, to 6.2 percent from 8.3 percent, a trend that researchers say is probably occurring across developed countries and that could have major social and economic implications for families and societies.

Another recent study, conducted in Denmark, found that people in their 90s who were given a standard test of mental ability in 2010 scored substantially better than people who had reached their 90s a decade earlier. Nearly one-quarter of those assessed in 2010 scored at the highest level, a rate twice that of those tested in 1998. The percentage of subjects severely impaired fell to 17 percent from 22 percent.

The British study, published on Tuesday in *The Lancet*, and the Danish one, which was released last week, also in *The Lancet*, soften alarms sounded by advocacy groups and some public health officials who have forecast a rapid rise in the number of people with dementia, as well as in the costs of caring for them. The projections assumed the odds of getting dementia would be unchanged.

Yet experts on aging said the studies also confirmed something they had suspected but had had difficulty proving: that dementia rates would fall and mental acuity improve as the population grew healthier and better educated. The incidence of dementia is lower among those better educated, as well as among those who control their blood pressure and cholesterol, possibly because some dementia is caused by ministrokes and other vascular damage. So as populations controlled cardiovascular risk factors better and had more years of schooling, it made sense that the risk of dementia might decrease. A half-dozen previous studies had hinted that the rate was falling, but they had flaws that led some to doubt the conclusions.

Researchers said the two new studies were the strongest, most credible evidence yet that their hunch had been right. Dallas Anderson, an expert on the epidemiology of dementia at the [National Institute on Aging](#), the principal financier of dementia research in the United States, said the new studies were “rigorous and are strong evidence.” He added that he expected that the same trends were occurring in the United States but that studies were necessary to confirm them.

“It’s terrific news,” said Dr. P. Murali Doraiswamy, an Alzheimer’s researcher at Duke University, who was not involved in the new studies. It means, he said, that the common assumption that every successive generation will have the same risk for dementia does not hold true.

The new studies offer hope amid a cascade of bad news about Alzheimer’s disease and dementia. Major clinical trials of drugs to treat Alzheimer’s have failed. And a recent [analysis](#) by the RAND Corporation — based on an assumption that dementia rates would remain steady — concluded that the number of people with dementia would double in the next 30 years as the baby boom generation aged, as would the costs of caring for them. But its lead author, Michael D. Hurd, a principal senior researcher at RAND, said in an interview that his projections of future cases and costs could be off if the falling dementia rates found in Britain held true in the United States.

Dr. Marcel Olde Rikkert of Radboud University Nijmegen Medical Center in the Netherlands, who wrote an editorial to accompany the Danish study, said estimates of the risk of dementia in older people “urgently need a reset.”

But Maria Carrillo, vice president of medical and scientific relations at the Alzheimer’s Association, an advocacy group, was not convinced that the trends were real or that they held for the United States.

The studies assessed dementia, which includes Alzheimer’s disease but also other conditions that can make mental functioning deteriorate. Richard Suzman, the director of the division of behavioral and social research at the National Institute on Aging, said it was not possible to know from the new studies whether Alzheimer’s was becoming more or less prevalent.

The British researchers, led by Dr. Carol Brayne of the Cambridge Institute of Public Health, took advantage of a large study that tested 7,635 randomly selected people, ages 65 and older, for dementia between 1984 and 1994. The subjects lived in Cambridgeshire, Newcastle and Nottingham. Then, between 2008 and 2011, the researchers assessed a similar randomly selected group living in the same areas.

“We had the same population, the same geographic area, the same methods,” Dr. Brayne said. “That was one of the appeals.”

But Dr. Carrillo questioned the data because many subjects had declined to be assessed: the researchers assessed 80 percent of the group it approached in the first round and 56 percent of those approached in the second. Her concern is reasonable, Dr. Brayne said, but the researchers addressed it by analyzing the data to see if the refusals might have skewed the results. They did

not.

In the [Danish study](#), Dr. Kaare Christensen of the University of Southern Denmark in Odense and his colleagues compared the physical health and mental functioning of two groups of elderly Danish people. The first consisted of 2,262 people born in 1905 who were assessed at age 93. The second was composed of 1,584 people born in 1915 and assessed at age 95. In addition to examining the subjects for physical strength and robustness, the investigators gave them a standard dementia screening test, the mini-mental exam and a series of cognitive tests.

The investigators asked how many subjects scored high, had scores indicating dementia and were in between. The entire curve was shifted upward among the people born in 1915, they discovered.

Dr. Anderson, of the National Institute on Aging, said the news was good.

“With these two studies, we are beginning to see that more and more of us will have a chance to reach old age cognitively intact, postponing dementia or avoiding it altogether,” he said. “That is a happy prospect.”

This article has been revised to reflect the following correction:

Correction: July 16, 2013

An earlier version of this article misspelled the name of the medical center where Dr. Marcel Olde Rikkert works. It is the Radboud University Nijmegen Medical Center in the Netherlands, not Nigmegen.