PTSD associated with higher Alzheimer's/dementia risk; moderate alcohol consumption may lower it

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Though discoveries about Alzheimer's disease risk factors are often in the news, adults do not know about the relationship between Alzheimer's disease risk and heart health, nor that physical activity can be protective against dementia, according to new research reported today at the Alzheimer's Association 2009 International Conference on Alzheimer's Disease (ICAD 2009) in Vienna.

Two additional studies reported at ICAD 2009 show higher Alzheimer's risk in veterans with post-traumatic stress disorder (PTSD), and lower Alzheimer's risk among adults who consume moderate amounts of alcohol.

"Your brain plays a critical role in almost everything you do: thinking, feeling, remembering, working, and playing - even sleeping," said Maria Carrillo, PhD, Director of Medical & Scientific Relations at the Alzheimer's Association. "The good news is that we now know there's a lot you can do to help keep your brain healthier as you age. These steps might also reduce your risk of developing Alzheimer's disease or another dementia."

"There's a strong and credible association between heart health and brain health. If people learn about and do some simple lifestyle modifications, such as being more physically active and eating a brain healthy diet, it could have an enormous impact on our nation's public health and the cost of healthcare," Carrillo added.

Adults Show a Poor Understanding of Alzheimer's Link to Heart Health Risk Factors

Colleen E. Jackson, M.S., a doctoral student in Clinical Psychology at the University of Connecticut, and colleagues conducted an anonymous online survey of 690 adults to measure "dementia literacy," that is, their knowledge and beliefs that may assist in the recognition, management, or prevention of Alzheimer's.

Mean age of the population was 50 years, the range was 30-85 years; 76% of respondents were female. Ninety-four percent (94%) of participants were from the United States, with the remaining 6% from other English-speaking countries. The sample was relatively wealthy, with 18% of respondents making more than $200,000 per year at the peak of their careers, and well-educated, with 87% of respondents having completed at least 1-3 years of college.

The researchers found that 64% of study participants incorrectly indicated no association between Alzheimer's and obesity or high blood pressure. Sixty-six percent (66%) did not know that high stress is a risk factor for dementia, and 34% did not know that physical exercise is a protective factor.

On the positive side, nearly all study participants (94%) correctly indicated that Alzheimer's is not normal aging, and is not completely based on genetics.

"Our data suggest that American adults have limited knowledge and a poor understanding of factors that have been demonstrated to increase risk for Alzheimer's, such as obesity, high blood pressure, and other heart health risk factors," Jackson said. "They also didn't know much about protective factors against Alzheimer's, such as physical exercise, relative to the strength of the available research evidence."

"We need more education programs and opportunities, across all demographic groups, focusing on behaviors that modify your risk for
developing Alzheimer's disease," Jackson added.

PTSD Linked to Nearly Double Dementia Risk in Veterans

Post-traumatic stress disorder (PTSD) is common among veterans returning from combat and there is some evidence that it may be associated with reduced cognitive function. However, no study has yet investigated if PTSD increases the risk of developing dementia.

To address this emerging issue, Kristine Yaffe, MD, Professor of Psychiatry, Neurology and Epidemiology and Associate Chair of Research for the Department of Psychiatry at the University of California, San Francisco, and Chief of Geriatric Psychiatry and Director of the Memory Disorders Clinic at the San Francisco VA Medical Center, and colleagues sought to determine if PTSD is associated with risk of developing dementia among older veterans in the U.S. receiving treatment in veterans' medical centers.

They studied 181,093 veterans aged 55 years and older without dementia (53,155 veterans diagnosed with PTSD and 127,938 veterans without PTSD) using data from the Department of Veterans Affairs National Patient Care Database. Mean baseline age of the veterans was 68.8 years and 97% were male. They followed the veterans from 2001 through 2007, including tracking whether they were diagnosed with Alzheimer's/dementia.

The researchers found that veterans with PTSD in the study developed new cases of dementia at a rate of 10.6% over the seven years of follow-up; those without PTSD had a rate of 6.6%. (Note: This is updated data from the researcher, which is why it differs from the attached abstract.) Even after adjusting for demographics, and medical and psychiatric comorbidities, PTSD patients in this study were still nearly twice as likely to develop incident dementia compared to veterans without PTSD (HR = 1.8, 95% CI 1.7-1.9). Results were similar when they excluded those with a history of traumatic brain injury, substance abuse or depression.

"It is critical to follow patients with PTSD, and evaluate them early for dementia," Yaffe said. "Further research is needed to fully understand what links these two important disorders. With that knowledge we may be able to find ways to reduce the increased risk of dementia associated with PTSD."

Moderate Alcohol Intake Is Associated With Nearly 40% Lower Risk of Dementia

Moderate alcohol intake, especially wine, has been associated with reduced risk of dementia in middle aged adults. It is not known whether this association is also true for older adults or those with mild cognitive impairment (MCI).

Kaycee Sink, MD, MAS, Assistant Professor of Medicine in the Department of Internal Medicine, Section on Gerontology and Geriatric Medicine at Wake Forest University School of Medicine in Winston-Salem, NC, and colleagues sought to determine the relationship between alcohol intake and incident dementia in 3,069 community-living adults aged 75 years and older without dementia who were enrolled in the Ginkgo Evaluation of Memory Study (GEMS), an NIH-sponsored study of ginkgo biloba for prevention of dementia. At the beginning of the study, 2,587 of the participants were assessed to be cognitively normal and 482 had MCI.

Alcohol consumption was self-reported by study participants and categorized by the researchers as none, 1-7 drinks/week (light), 8-14 drinks/week (moderate), and more than 14 drinks/week (heavy). All types of alcohol were counted. The distribution of alcohol consumption per week was 0=42.6%; 1-7=38.2%; 8-14=9.4%; more than 14= 9.8%.

Participants were examined every six months for up to six years for changes in their memory or thinking abilities. If someone was suspected of having developed Alzheimer's or another dementia, they were thoroughly evaluated. There were 523 news cases of dementia during the follow up period of the study.

After adjustment for demographics, smoking, co-morbidities, depression, social activity, and baseline cognition, moderate alcohol intake (1-2 drinks/week) was associated with nearly 40% lower risk of dementia compared to non-drinkers.
drinks per day) was associated with a 37% lower risk of dementia in participants with normal cognition at baseline, but not in those with MCI. (Note: This is updated data from the researcher, which is why it differs from the attached abstract.)

For older adults who started the study with MCI, consumption of alcohol at any amount was associated with faster rates of cognitive decline; and those who were classified in the heavy drinker category (more than 14 drinks per week) were almost twice as likely to develop dementia during the study, compared to non-drinkers with mild cognitive impairment.

"Our findings suggest mild to moderate alcohol intake may reduce the risk of dementia," Sink said. "However, this does not appear to be true for those who already have mild cognitive impairment. Current recommendations not to exceed one drink per day for women and two for men are supported by these results."

Source: Alzheimer's Association


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