Good News about Alzheimer’s Emerging

The fiscal year 2014 budget recently signed by President Obama contained an unprecedented $122 million increase for Alzheimer’s disease (AD) research, education, outreach, and caregiver support.

The new federal funding allocated for AD includes:

- A $100 million increase for the National Institute on Aging for AD research, which will be added to what the National Institutes of Health (NIH) estimates will be $484 million in AD research funding across NIH in fiscal year 2013.
- An additional $3.3 million to support AD caregivers.
- An additional $4 million to train health professionals on issues related to AD.
- An additional $10.5 million to expand home and community-based caregiver services.
- An additional $4.2 million for outreach activities to raise awareness.

In addition, the NIH’s BRAIN Initiative will receive $30 million to support brain research that could affect several diseases, including AD.

In related news, people are less likely to experience dementia and AD today than they were 20 years ago, and those who do may be developing it later in life, according to an article published in the New England Journal of Medicine.

Authors examined five recent studies that suggest a decrease in the prevalence of dementia, crediting the positive trend to improve-

Don’t Just Sit There—Take a Stand!

A new study of 93,000 postmenopausal women in the United States found that those with the highest amounts of sedentary time, defined as sitting and resting but excluding sleeping, died earlier than their most active peers. In addition, researchers found that even habitual exercisers are at risk if they have high amounts of idle time. The study was one of the largest and most ethnically diverse of its kind, and its findings were published in the American Journal of Preventive Medicine.

Study participants, ages 50 to 79 at the study’s outset as part of the national Women’s Health Initiative Study, were followed for 12 or more years. Researchers found that women with more than 11 hours of daily sedentary time faced a 12% increase in all-cause premature mortality compared with the most energetic group, or those with 4 hours or less of inactivity. The highly sedentary group also increased their odds for death due to cardiovascular disease, coronary heart disease, and cancer by 13%, 27%, and 21%, respectively.

In related news, people who decrease sitting time and increase physical activity have a lower risk of chronic disease, according to a study published in the journal BMC Public Health.

Researchers studied a sample of 194,545 men and women ages 45 to 106, with data from the 45 and Up Study, which is a large Australian study of health and aging. They found that the twofold approach—sitting less and moving more—is key to improving health. In addition, researchers said taking breaks to stand up or move around can make a difference during long periods of sitting, and even standing throughout the day instead of sitting for hours at a time can improve health and quality of life and reduce the risk for chronic diseases such as cardiovascular disease, diabetes, heart disease, stroke, breast cancer, and colon cancer.

To help those who often sit for long periods of time, researchers suggest using a sit/stand desk as a way to decrease sedentary time and add physical activity into the day. There are even sit/stand desks for children to stand and do homework or projects.


ments in education levels, health care, and lifestyle. Authors pointed to two key factors that may explain the decreased risk of dementia over the last few decades: (a) people are completing more years of school, which helps the brain fight off dementia; and (b) there is more awareness and focus on preventing heart disease, another big risk factor for AD.

A 2008 study was one of the first to suggest a decline in U.S. dementia rates, using information from the U.S. Health and Retirement Study. Researchers found that the decline paralleled the improvement in health care, lifestyle, and education. Since then, several studies in Europe have confirmed this trend, as well as the reasons behind it.

Research has also shown that other factors decreasing risk include early and ongoing education, physical activity, retiring later, educated parents (especially an educated mother), maintaining social activities, and getting treatment for depression.


Dance and Virtual Reality: Promising Treatment for Urinary Incontinence in Older Women

Virtual reality, dance, and fun may help improve urinary incontinence in older women, according to a feasibility study published in Neurourology and Urodynamics. This is the first time virtual reality has been used to treat urinary incontinence.

Researchers added a series of dance exercises via a video game console to a physiotherapy program for pelvic floor muscles. They noted a greater decrease in daily urine leakage among the study’s 24 participants than with the usual program and reported a high weekly participation rate. It should also be noted that no women dropped out of the program.

Researchers said that participants found the dance component to be the most fun and that the socialization aspect was equally important. The dance period also served as a concrete way for the women to apply pelvic floor muscle exercises that are traditionally static, and they now know that they can contract their pelvic floor muscles when performing any daily activity to prevent urine leakage.

The successful feasibility study now opens the door to a randomized clinical trial.


For the 6-month study, researchers used EMR data to identify more than 2,500 patients 60 or older without a documented shingles vaccination. Some participants were randomly selected to receive information about shingles via either a secure e-mail linked to their online personal health record (PHR) or a mailed postcard, while others received no information outside what they may have gotten in a routine doctor visit.

Pharmacists reviewed the EMRs of patients who had received e-mails or mailed information to identify eligible vaccination candidates; they then sent those patients a vaccination prescription via standard mail, along with a pharmacist intervention, markedly improves preventive care of shingles over the current standard.

Pharmacists, EMRs Improve Shingles Vaccination Rate

A new study published in the American Journal of Medicine has reported that older patients who receive written information on shingles were almost three times more likely to get vaccinated than those who did not receive a similar communication. The study is also one of the first to show that using a patient’s electronic medical record (EMR), coupled with

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Researchers to Test Video Game in People at Risk of Alzheimer’s

Akili Interactive Labs Inc. (Akili) has announced that it has entered into an agreement with Pfizer Inc. to test the ability of Akili’s mobile video game platform, Project EVO, to detect cognitive differences in healthy older adults at risk of developing Alzheimer’s disease (AD). The platform technology was featured in the journal *Nature*, and to Akili’s knowledge, this is the first time that a large pharmaceutical company will test the use of a mobile video game as a clinical tool to determine early signs of neurodegenerative disease pathology.

Under the agreement, Pfizer will conduct a clinical trial that will evaluate healthy older adults with and without the presence of amyloid in their brains, as determined by positron emission tomography imaging. Approximately 100 individuals are expected to be enrolled in the study, with their cognitive abilities assessed both at baseline and over the course of 1 month of game play. The goal of the trial is to investigate the Akili game as a biomarker or clinical endpoint for potential use in future AD trials.

The Akili video game platform is designed to quantify and improve the ability of individuals to deal with cognitive interference (i.e., distractions and interruptions), which impacts their ability to pay attention, plan, and make decisions. Because such deficits are common symptoms of many degenerative diseases other than AD, Akili is testing Project EVO in other medical conditions where executive function is impaired, including attention-deficit/hyperactivity disorder, depression, and autism.


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list of local pharmacies that offered the vaccination. Vaccination fulfillment was tracked by reports submitted to the research team by local pharmacists.

Patients with an active PHR who received e-mail information on shingles had the highest vaccination rate of 13.2% compared to a rate of 5.0% for patients with an active PHR who did not receive the e-mail information. For patients who did not have an active PHR but did receive mailed information, the vaccination rate was 5.2% compared to a rate of 1.8% for patients without an active PHR who received no information.

Researchers said that although the numbers of patients vaccinated may seem small, the study was conducted in 2010-2011 when the national vaccination average was actually 6%, which is far lower than today’s average of 15%. Researchers also suggested that despite the overall low vaccination rate, the results challenge the notion that there are too many logistical barriers to this type of effort.

In addition, pharmacists were able to identify a few patients who should not get the vaccination. These patients had their charts updated so the contraindication will now appear for any provider trying to order the vaccination in the future.