Study Finds Typical Patterns of Brain’s Progression to Dementia

How the brain progresses from mild cognitive impairment (MCI) to Alzheimer’s-type dementia has been an enigma for the scientific community. However, a recent study published in the *Journal of Alzheimer’s Disease* has shed light on this progression by showing the typical patterns of the brain’s progression to dementia.

For the study, the team compared changes that occurred over many years in individuals with stable MCI with changes in those for whom MCI progressed to a diagnosis of Alzheimer’s disease. The study showed that different cognitive areas (e.g., language, inhibition, visuospatial processing, working memory, executive functions) do not change in a uniform way. Cognitive decline does not occur in a linear fashion; instead, the path to dementia is complex and may sometimes be characterized by periods of stability followed by accelerated decline 1 or 2 years before diagnosis.

Access to Palliative Care Remains Highly Variable

“America’s Care of Serious Illness: 2015 State-by-State Report Card on Access to Palliative Care in Our Nation’s Hospitals” in the *Journal of Palliative Medicine* demonstrates that access to palliative care remains highly variable and depends more on accidents of geography and hospital ownership than on the needs of patients with serious illness.

 Millions of ill Americans and their families living in the south of the United States, as well as in Alaska, Kansas, New Mexico, and Wyoming, still have inadequate access to palliative care teams.

Barriers to palliative care access remain in three key areas: (a) a workforce that is too small to meet current and projected demand, (b) an underdeveloped knowledge base to provide the highest quality of care, and (c) a lack of payment models linked to quality measures.


Adults Have Misperceptions of Parents’ Misuse of Alcohol and Prescription Medications

Many American adults are not involved with their parents’ health issues or knowledgeable about symptoms of substance use disorders, according to findings from a new national survey by Caron Treatment Centers. The online survey polled >1,000 U.S. adults ages 35 to 50 with a living parent, step-parent, or parent-in-law 60 and older who they regularly contact and revealed alarming misperceptions about their parents’ behavior and the consequences of drinking alcohol and taking prescription medication.

In early 2015, Caron developed an older adult program after observing the specialized needs of the population. Experts at Caron with extensive experience working with older adults created a personalized treatment approach to encompass several factors, including low motivation, lifestyle changes, and unique triggers (e.g., retirement, death of a spouse, limitations to
Frailty Varies by Region and Race Among Older Adults

A large-scale survey of older Americans living at home or in assisted living settings found that 15% are frail (i.e., a diminished state that makes individuals more vulnerable to falls, chronic disease, and disability) and another 45% are pre-frail (i.e., at heightened risk of becoming physically diminished).

The study, published in the Journals of Gerontology, Series A, Biological Sciences and Medical Sciences, found frailty to be more prevalent in older adults and more common among women and the poor. In addition, the study found wide regional differences in the United States, with older adults in central Southern states more than three times as likely to be frail than those in Western states. Researchers also found significant racial differences, with Black and Hispanic individuals approximately twice as likely than White individuals to be frail.

Researchers analyzed interviews drawn from Medicare records of 7,439 participants in the 2011 National Health and Aging Trends Study, a longitudinal study of individuals 65 and older. Participants, who resided either at home or in an assisted living facility, completed a 2-hour, in-person interview that assessed frailty using several criteria: exhaustion, weakness, low physical activity, shrinking, and low walking speed. Participants were also asked about their medical history and ability to perform daily tasks, such as meal preparation and other household activities. Researchers assessed probable dementia with a combination of questions and cognitive tests.

Researchers hope clinicians will develop recommendations that specifically address risks associated with frailty, such as having individuals engage in strengthening activities before major surgery. Such recommendations, if adapted by older adults who have not yet slipped into advanced frailty, could help delay or even prevent its onset.


Gene Variant Associated With Alzheimer’s Disease in Women Causes Decrease in Body Mass Index

A study published in the Journal of Alzheimer’s Disease has shown that women with a gene variant (APOEe4 allele) associated with
Alzheimer’s disease experience a steeper decline in body mass index (BMI) after age 70 than those without the version of the gene regardless of whether they go on to develop dementia.

Women tend to evidence a U-shaped relationship between age and BMI. From middle age to approximately 70, adults gain weight on average. After age 70, weight tends to decrease on average. This weight change may be due to aging, changes in body composition, energy metabolism, sensory changes, and changes in the brain related to regulation of basic body processes. However, among adults who develop dementia, the life course of BMI differs. Studies have shown that being more overweight or obese in mid-life may increase risk for dementia. Studies have also shown that after age 70, adults who develop dementia may lose weight more rapidly compared to those who do not develop dementia and that if one is a bit more overweight in later life, it is protective for dementia and death.


Older Adults Becoming Virtual Shut-Ins Need Assistance With Technology

Adults 80 and older yearn to be connected but many are not, causing more than one quarter of them to become “virtual shut-ins.” Although a new survey shows use of social technology is linked to better well-being for individuals in this age group and demonstrates its potential for combating isolation, it also reveals their frustration and need for assistance in becoming part of the digital world. The findings are from a “Rewiring Aging” survey conducted by Kelton. It is the first in-depth study of how online social networking and similar tech-based activities affect the quality of life among America’s fastest-growing demographic segment.

Fifty-eight percent of older adults surveyed believe technology can improve communication with family and friends. Respondents who indicated they interact with loved ones through social technology reported having higher life satisfaction and health and being more likely to attain life goals than those who do not use social technology. However, few surveyed respondents actually experienced these benefits. Only one third of respondents used a personal computer at least once per month and fewer than one in five used text messaging. Twenty-seven percent of respondents may be considered virtual shut-ins who do not use any technological devices, applications, or programs.

Virtually shut-in older adults reported lower overall life satisfaction, poorer physical health, and greater loneliness than the survey group as a whole. These findings represent cause for concern and reveal the potential for changing for the better.


High Dose of Influenza Vaccine Reduces Hospitalizations of Older Adults

In the largest nursing home study to date on the effect of high-dose flu vaccine, researchers found that shots with four times the strength of standard flu shots significantly reduced the risk of being hospitalized during the influenza season. The group that received the high-dose vaccine had a 19.7% hospital admission rate versus 20.9% in admission for those who received the standard dose.

The study involved >50,000 participants 65 and older from 823 nursing homes in 38 states. Residents were given flu shots to help protect them from influenza during November 2013 to March 2014. Nursing homes were randomly assigned to one of two groups as a care standard for influenza prevention, with either the regular or high dose of the influenza vaccine as the care standard for residents 65 and older.

Whether the higher dose becomes the preferred procedure for nursing homes would be determined by the Advisory Committee on Immunization Practices.


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