

July 2021

1. NeuRA (Neuroscience Research Australia) are trialling a world-first initiative, an online intervention for people with early-stage dementia with the hope it will improve self-management techniques. The SHAPE (Self-Management and Health Promotion in early-stage dementia with E-learning for carers) trial aims to educate caregivers and help people diagnosed with dementia to manage their condition and subsequent life planning. SHAPE will examine whether online training and support groups, combined with e-learning for carers will help people cope. It is hoped the trial will inform the type and standard of care that families receive following a diagnosis of dementia.
<https://www.miragenews.com/researchers-aim-to-improve-self-management-of-593772/>
2. Scientists in Japan claim they may have found a drug that can boost proteasome activity and halt diseases such as Lewy Body Dementia and Parkinson'. Proteasomes are mechanisms within cells that break down toxic or "bad" proteins. In neurodegenerative conditions, these proteasomes stop working, which leads to a build up of brain cell-damaging proteins. SAK3, a drug trialled in mice, was shown to activate a molecular channel in the membrane of neurons that allows calcium ions to flow into the cells. This flow of calcium ions increases the release of proteasome which, in turn, inhibits the accumulation of beta amyloid plaques. The drug was also found to reduce the decline in motor performance and memory.
<https://www.medicalnewstoday.com/articles/drug-halts-the-progression-of-lewy-body-dementia-in-mice>
3. The way people operate and control a vehicle whilst driving may reveal early signs of cognitive decline, claims a new study from Washington University. The DRIVES study looked at the driving habits of 139 people, around half of which already had preclinical Alzheimer's disease (AD). Notable differences were found in the two groups; those with AD tended to drive more slowly, make abrupt changes, travel less at night, drove to fewer locations and drove less often in general. The researchers say they could predict, with up to 86% accuracy, a person's risk of developing AD.
<https://www.bbc.com/news/business-57670006>
4. A new study from the University of Arizona Health Sciences has revealed women who underwent menopausal hormone therapy for six years or more were 79% less likely to develop Alzheimer's and 77% less likely to develop any neurodegenerative disease. The study also found that natural steroids

estradiol or progesterone resulted in greater risk reduction than synthetic hormones. Route of administration also affected risk; oral therapies resulted in risk reduction of combined neurodegenerative diseases, whilst hormones administered via the skin reduced the risk of dementia.

<https://medicalxpress.com/news/2021-07-advancing-precision-hormone-therapies-alzheimer.html>

5. Older adults, particularly men, who have blood pressure variability (BPV), are more at risk of dementia and cognitive decline, according to findings from the ASPREE (Aspirin in Reducing Events in the Elderly) study, led by researchers from the Monash School of Public Health and Preventative Medicine. Data from over 16,000 participants showed that those in the highest BPV group were shown to have a much higher risk than those in the lowest group, and men, even with other factors taken into account, were at even greater risk. Previous studies have looked at the effects of BPV (experienced in midlife) on older adults; this study is the first to investigate the risk of incident dementia and cognitive decline associated with long-term, visit-to-visit BPV, in adults who have already reached older ages free of major cognitive deficits

<https://www.ahajournals.org/doi/10.1161/JAHA.120.019613>