

In the news

DEMENTIA PREVENTION HITS THE HEADLINES AT AAIC17

A record-breaking number of attendees gathered at this year's Alzheimer's Association International Conference (AAIC), held in London, UK, from 16–20 July 2017. Over 5,600 delegates arrived from around the globe to discuss the latest advances in dementia research. Plenary topics ranged from clinical biomarkers of Alzheimer disease (AD) and new insights into glial cell-mediated pathogenic mechanisms, to the benefits of big data in dementia research and beyond.

New research into lifestyle changes to prevent dementia hit the world news headlines at the meeting. A provocative new report was presented by [The Lancet Commission on Dementia Prevention, Intervention and Care](#), which claimed that more than one-third of dementia cases around the world might be preventable through interventions targeting key lifestyle risk factors such as smoking, hypertension and lack of education. This conclusion was in contrast to a more-conservative report from the [US National Academies of Sciences, Engineering and Medicine](#) that was also presented at the conference, which recommended that stronger evidence supporting the efficacy of lifestyle interventions to prevent cognitive decline was required before a public health campaign could be considered.

Several other groups highlighted links between dementia and factors such as [lack of sleep, poor diet, hearing loss and poor verbal fluency](#). In addition, The Alzheimer's Association announced the launch of [POINTER](#), a new USD\$20 million clinical trial to investigate the effects of lifestyle interventions targeting multiple risk factors for dementia.

Numerous speakers at AAIC discussed results on the racial and socioeconomic [disparities](#) in dementia incidence, research and treatment. Notably, investigators reported that dementia frequency is twofold higher in people of African American ethnicity and 1.5-fold higher in people of Hispanic ethnicity than in people of white ethnicity. Speakers remarked on the lack of inclusion of these high-risk populations in clinical dementia studies, despite these disparities. During the meeting, the US National Institute on Aging announced new funding for projects examining health disparities in diverse patient cohorts.

The AAIC also saw heated debate of the core hypotheses underpinning AD. In one of the plenary sessions, Denis Selkoe deconstructed the various criticisms that have been levelled against the amyloid cascade hypothesis. A panel discussion was also held in which experts debated the current lack of success in amyloid- β ($A\beta$)-targeting therapies, the shortcomings of current animal models of AD, and the prospects for personalized treatment strategies, among other topics. Panellist Karl Herrup criticized the disproportionate focus on $A\beta$ and tau pathology in dementia research, and the lack of attention to factors such as inflammation, ageing and metabolism. However, other panellists maintained that the protein pathologies are central to our understanding of the disease. "You will never ever be able to get away from plaques and tangles," panellist Virginia Lee remarked. "They define the disease."

Charlotte Ridler