FROM THE ALZHEIMER’S ASSOCIATION INTERNATIONAL CONFERENCE 2017

THE LANCET COMMISSION: ONE THIRD OF DEMENTIA MAY BE PREVENTABLE

- The Lancet releases International Commission on Dementia Prevention, Intervention and Care -
- U.S. NIA shares inaugural research grants on health disparities in Alzheimer’s -

LONDON, July 20, 2017 – In a report presented today at the Alzheimer’s Association International Conference 2017 (AAIC 2017) in London, The Lancet International Commission on Dementia Prevention, Intervention and Care reported that more than one third of global dementia cases may be preventable through addressing lifestyle factors that impact an individual's risk. These potentially modifiable risk factors have been identified at multiple phases across the life-span, not just in old age.

The Lancet Commission's report was simultaneously published in The Lancet and presented at AAIC 2017.

Also at AAIC 2017, the U.S. National Institute on Aging (NIA) announced inaugural research grants to investigate health disparities in Alzheimer’s disease.

“Today’s findings are extremely hopeful,” said Maria Carrillo, PhD, chief science officer at the Alzheimer’s Association. “At an individual level, many people have the potential to reduce their risk of cognitive decline, and perhaps dementia, through simple, healthful behavior changes. At a public health level, interventions based on this evidence could be extremely powerful in managing the global human and economic costs of Alzheimer’s disease and other dementias.”

The Alzheimer’s Association offers 10 Ways to Love Your Brain, including practical guidance to reduce your dementia risk based on the latest research.

The Lancet International Commission on Dementia Prevention, Intervention and Care

The Lancet Commission brings together 24 international experts to consolidate the huge strides that have been made in our knowledge and understanding of dementia risk factors, treatment and care, and the emerging knowledge as to what we should do to prevent and manage dementia. The Commission conducted a new review and meta-analysis; based on which they extended current models of risk by including hearing loss and social isolation. Incorporating potentially modifiable risk factors from across the life-span, they proposed a novel life-course model of risk, highlighting the opportunity for prevention.

Among their key recommendations are:

- Be ambitious about prevention. Interventions for established risk factors may have the potential to delay or prevent one third of dementias.
- Treat cognitive symptoms. To maximize cognition, people with Alzheimer’s dementia or dementia with Lewy bodies should be offered cholinesterase inhibitors at all stages, or memantine for severe dementia.
- Individualize dementia care. Good dementia care spans medical, social and supportive care; and should be tailored to unique individual and cultural needs, preferences, and priorities.
• Care for family carers. Family carers are at high risk of depression. Effective interventions reduce the risk and treat the symptoms, and should be made available.
• Plan for the future. People with dementia and their families value discussions about the future and important upcoming decisions.
• Manage neuropsychiatric symptoms. Management of the neuropsychiatric symptoms of dementia - including agitation, low mood or psychosis - is usually psychological, social, and environmental, with drug treatment reserved for more severe symptoms.
• Consider end of life. A third of older people die with dementia, so it is essential that professionals working in end-of-life care consider whether a patient has dementia as they may be unable to make decisions about their care or express their needs and wishes.

**Focus on Prevention**

The Lancet Commission launched a novel life-span-based model of dementia risk, showing interventions that may maximize cognition, decrease distressing associated symptoms, reduce crises, and improve quality of life. The team estimate the contribution of each of the risk factors to the overall incidence of dementia, at the population level. The combined evidence to date shows that roughly 35 percent of all cases of dementia are attributable to nine potentially modifiable risk factors. Many of the risk factors occur at particular life stages but some, such as smoking and hypertension, are likely to make a difference at all life stages. The nine modifiable risk factors include:

- **Early life** - Education to a maximum of age 15
- **Mid-life** - Hypertension; Obesity; Hearing loss
- **Later life** - Depression; Diabetes; Physical inactivity; Smoking; Low social contact

Risk factors that are more common account for a higher percentage of population risk. For instance, the authors estimate that eight percent (8%) of all dementia cases could be associated with poor early school education; and five percent (5%) could be associated with smoking. While the mechanism linking education, hypertension, diabetes and smoking to dementia is relatively well understood, the recognition of hearing loss as a potential risk factor is still new, and the research is at an earlier stage.

The Commission’s report delivered recommendations for targeted public health strategies that the researchers expect will significantly lower the global burden of Alzheimer’s and other dementias. For example:

- The authors strongly recommend vigorously treating hypertension in middle aged and older people without dementia to reduce dementia incidence.
- Other recommended interventions include more childhood education, getting regular exercise, maintaining social engagement, stopping smoking, and management of hearing loss, depression, diabetes, and obesity.

The authors stated that, due to lack of data, the study did not include dietary factors, alcohol use, visual impairment, air pollution and sleep.

“While public health interventions will not prevent, or cure all potentially modifiable dementia, intervention for cardiovascular risk factors, mental health, and hearing may push back the onset of many people for years,” said Professor Gill Livingston, MD, from University College London and lead author of The Lancet Commission. “Even if some of this promise is realized, it could make a huge difference and we have already seen in some populations that dementia is being delayed for years. Dementia prevalence could be halved if its onset were delayed by five years.”

According to the Commission’s report, worldwide dementia prevalence could be reduced by more than 1 million cases with a 10 percent reduction in the prevalence of seven principal health and lifestyle factors. An intervention that delayed dementia by a year might decrease the number of people living with dementia globally by 9 million in 2050.
“Overall, there is good potential for prevention and, once someone develops dementia, for care to be high-quality, accessible, and give value to an underserved, growing population. Effective dementia prevention and care could transform the future for society and vastly improve living and dying for individuals with dementia and their families. Acting now on what we already know can make this difference happen,” said Lon Schneider, MD, from the University of Southern California and co-author of the Commission.

**Advancing health disparities research in Alzheimer’s - National Institute on Aging inaugural grants**

According to the Alzheimer’s Association 2017 *Alzheimer’s Disease Facts and Figures*, African-Americans are about twice as likely to have Alzheimer's or other dementias as older whites, and Hispanics are about one and one-half times as likely to have Alzheimer's or other dementias as older whites. Yet, these populations are underrepresented in Alzheimer’s and dementia research.

The NIA has identified a clear need to diversify research cohorts and improve methods and tools for conducting health disparities research related to Alzheimer’s disease and other dementias. Two funding opportunities were created to encourage research that examines disparities in Alzheimer’s disease using diverse cohorts of subjects. At AAIC 2017, NIA will announce the inaugural grant recipients and their projects, and highlight the new information expected to be generated because of these awards.

“Aging research using a framework that incorporate factors at multiple levels needs to be conducted with study populations that have robust demographic diversity,” said Carl V. Hill, PhD, MPH, Director of the NIA Office of Special Populations. “When cohorts are diverse, new pathways that link environmental, sociocultural, behavioral and biological factors can be identified. This is our hope for these research awards.”

According to the funding opportunity announcements, health disparities populations include: Blacks/African Americans, Hispanics/Latinos, American Indians/Alaskan Natives, Asian Americans, Native Hawaiians and Other Pacific Islanders, Socioeconomically Disadvantaged Populations, and Rural Populations. Additional populations may include: Disability Populations, and Sex and Gender Minorities.

**About Alzheimer’s Association International Conference (AAIC)**

The Alzheimer’s Association International Conference (AAIC) is the world’s largest gathering of researchers from around the world focused on Alzheimer’s and other dementias. As a part of the Alzheimer’s Association’s research program, AAIC serves as a catalyst for generating new knowledge about dementia and fostering a vital, collegial research community.

AAIC 2017 home page: [www.alz.org/aaic/](http://www.alz.org/aaic/)

AAIC 2017 newsroom: [www.alz.org/aaic/pressroom.asp](http://www.alz.org/aaic/pressroom.asp)

**About the Alzheimer’s Association**

The Alzheimer’s Association is the leading voluntary health organization in Alzheimer's care, support and research. Our mission is to eliminate Alzheimer’s disease through the advancement of research, to provide and enhance care and support for all affected, and to reduce the risk of dementia through the promotion of brain health. Our vision is a world without Alzheimer’s. Visit alz.org or call +1 800.272.3900.

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- Gill Livingston, MBChB, PhD; Lon S. Schneider, MD, MS. The Lancet International Commission on Dementia Prevention and Care. (Funder(s): University College London, Alzheimer’s Society UK, Economic and Social Research Council, Alzheimer's Research UK)
- Carl V. Hill, PhD, MPH and Rachel Whitmer, PhD, chairs. Advancing Health Disparities Research with the National Institute on Aging (NIA). (Funder: U.S. National Institute on Aging)