August 2020

Research Findings from AAIC

Last month, the Alzheimer’s Association International Conference® 2020 (AAIC®) was held virtually, highlighting the latest innovative research in dementia care, risk reduction, treatment and support. More than 33,000 people registered from 150 countries. Highlights particularly relevant for the public health community include:

- A new research study to globally track and understand the long-term impact of the novel coronavirus on the brain including cognition, behavior, and functioning will be undertaken by the Alzheimer’s Association, the World Health Organization (WHO) and scientists from over 30 countries. The study will evaluate the short- and long-term consequences of infection from the novel coronavirus on the central nervous system and improve understanding of the lasting impact of the coronavirus on the brain.

- Risk factors for Alzheimer’s may be apparent earlier in life. New studies found:
  - Heart health risk factors in early life — including high blood pressure and diabetes — are associated with worse late-life cognition among African Americans.
  - Higher body mass index (BMI) in early adulthood is associated with higher late-life dementia risk.
  - Individuals who received higher-quality early-life education had a lower risk of late-life dementia than those who received lower-quality education.

- Twelve modifiable risk factors across the life course may account for as much as 40% of dementia cases worldwide, according to the Lancet Standing Commission on Dementia Prevention, Intervention, and Care. This 2020 analysis updates the recommendations from the 2017 report and added three new modifiable factors that may contribute to dementia risk: excessive alcohol consumption, traumatic brain injury and air pollution.
Influenza and pneumococcal vaccinations are associated with a reduced risk of Alzheimer’s disease. New studies on the topic found:

- Having at least one flu vaccination is associated with a 17% reduction in Alzheimer’s prevalence, and receipt of more frequent seasonal flu vaccinations is associated with an additional 13% reduction in incidence.
- Receiving a pneumococcal vaccination between the ages of 65 and 75 is correlated with a reduced Alzheimer’s risk of up to 40%.
- Individuals with dementia and hospitalizations due to viral, bacterial, and other infections have a 6.5 times higher mortality rate than those with no dementia or infection.

Early research shows promise in the use of blood “tests” to measure abnormal versions of the tau protein, a hallmark indicator of Alzheimer’s disease. This research may pave the way for future biomarker tests to improve the early detection and diagnosis of Alzheimer’s.

Disparities and Dementia

Many presentations at AAIC examined disparities associated with Alzheimer’s and dementia. Study findings included:

- Dementia diagnoses among non-Hispanic Black and Hispanic individuals is missed more often than those of non-Hispanic white individuals; and, when they are diagnosed, non-Hispanic Black and Hispanic individuals have more advanced dementia than their white peers.
- Hearing loss is highly prevalent, but generally untreated, among adults with cognitive impairment. Additionally, people with a cognitive impairment, particularly African Americans, are less likely to use hearing aids.
- LGBT women and men aged 45 and older are more likely to report subjective cognitive decline (SCD) than their heterosexual peers. LGBT adults also report greater frequency and higher levels of cognitive difficulty than their heterosexual peers, even when controlling for demographic factors.
- Black and Hispanic veterans have a significantly higher risk of dementia than white veterans.
- The neurocognitive effects of APOE-e4 — one of the strongest genetic predictors of Alzheimer’s — vary among different Hispanic sub-populations, with the most significant effect seen among Cubans.
AAIC registrants may search the meeting app for additional details and studies. All abstracts from AAIC will be published in a forthcoming edition of *Alzheimer’s & Dementia*.

**COVID-19 and Dementia**

Public health agencies nationwide are continuing their response to the evolving novel coronavirus pandemic, and people living with dementia require special considerations in that response. At [alz.org/publichealth-covid19](http://alz.org/publichealth-covid19), public health practitioners can find tip sheets, resources, and guidance on:

- Contact tracing programs and personnel
- Homes and community-based settings
- Emergency departments and hospitals
- Long-term care communities

Stay up to date with the latest information about and for older adults and COVID-19 from CDC at [cdc.gov/aging/covid19](http://cdc.gov/aging/covid19). Find the full CDC library on COVID-19 at [cdc.gov/covid19](http://cdc.gov/covid19).

**Healthy Brain Initiative**

The Healthy Brain Initiative’s (HBI) *State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map* is designed to mobilize the public health community in mitigating the future impacts of Alzheimer’s and other dementias, especially among vulnerable populations. Read the full Road Map, executive summary or get started with the planning guide.

The Healthy Brain Initiative’s *Road Map for Indian Country* is a guide for American Indian and Alaska Native leaders to learn about dementia, educate their communities, and start taking action against Alzheimer’s. Read the full Road Map, executive summary, or the dissemination guide to get started.

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