

Women are on greater risk for Alzheimer's disease: Report

17 April 2014 | Analysis | By BioSpectrum Bureau



Singapore: Carrying a copy of a gene variant called ApoE4 confers a substantially greater risk for Alzheimer's disease on women than it does on men, according to a new study by researchers at the Stanford University School of Medicine.

The scientists arrived at their findings by analyzing data on large numbers of older individuals who were tracked over time and noting whether they had progressed from good health to mild cognitive impairment - from which most move on to develop Alzheimer's disease within a few years - or to Alzheimer's disease itself.

The discovery holds implications for genetic counselors, clinicians and individual patients, as well as for clinical-trial designers. It could also help shed light on the underlying causes of Alzheimer's disease, a progressive neurological syndrome that robs its victims of their memory and ability to reason. Its incidence increases exponentially after age 65. An estimated one in every eight people past that age in the United States has Alzheimer's. Experts project that by mid-century, the number of Americans with Alzheimer's will more than double from the current estimate of 5-6 million.

The number of women with Alzheimer's far exceeds that of men with the condition. That's partly because women on average live longer than men. But greater longevity explains only part of women's increased susceptibility to Alzheimer's. "Even after correcting for age, women appear to be at greater risk," said Dr. Michael Greicius, assistant professor of neurology and neurological sciences and medical director of the Stanford Center for Memory Disorders.

The ApoE gene is a recipe for a protein important for shuttling fatty substances throughout the body. This is particularly important in the central nervous system, as brain function depends on rapid rearrangement of such fatty substances along and among nerve cell membranes.