Minorities Hardest Hit by Alzheimer's

New research points to a higher burden of Alzheimer's disease among minorities; reveals successful strategies for studying the disease in these populations.

PHILADELPHIA, July 21, 2004 – Alzheimer's disease symptoms begin, on average, almost seven years earlier in U.S. Latinos than they do in non-Latino U.S. whites, according to research reported today at The 9th International Conference on Alzheimer’s Disease and Related Disorders (ICAD), presented by the Alzheimer’s Association.

Another study suggests that African-Americans bear a disproportionate burden of Alzheimer’s disease. Two additional studies presented at ICAD suggest ways to improve the study of Alzheimer's among African-Americans.

“Studies like this should serve as a wake-up call to Congress and the nation,” said James Jackson, Ph.D., a member of the Alzheimer’s Association Medical & Scientific Advisory Council. “Minorities face disproportionate burdens of many diseases, including some that may contribute to Alzheimer's. As minority populations get older, they will see a dramatic rise in their risk of Alzheimer’s disease. This will overwhelm their families and communities unless we take action now.”

Alzheimer symptoms may strike Latinos years before white Americans

A study presented at the ICAD indicates that Latinos in the U.S. develop Alzheimer's symptoms much earlier than their white, non-Latino peers. Christopher M. Clark, M.D., of the University of Pennsylvania School of Medicine in Philadelphia, described the results of study carried out at five National Institute on Aging–sponsored Alzheimer’s Disease Centers. The researchers evaluated 119 Latinos and 55 non-Latino white Alzheimer patients and conducted a standardized interview with a family member to determine when the first symptoms of the disease began.

They found that the first symptoms of Alzheimer’s began 6.8 years earlier in Latinos in the study compared with the non-Latinos, after adjustment for differences between the groups by Center, sex and years of education. Unadjusted mean age of onset for the two groups was 67.6 (Latino) versus 73.1 (non-Latino) years. The authors caution that the study was preliminary, and further research is needed to get a clearer picture of the situation throughout the U.S. Latino community.

“We know that Latinos have high rates of vascular disease, leave school earlier, and are less likely to use medical services or have health insurance than other Americans, all factors that appear to accelerate or increase the risk of Alzheimer's,” said Clark. "Studies are urgently needed in the Latino population to find factors that we can target for prevention or treatment."

Alzheimer’s disease and related dementias are projected to increase more than six-fold among Hispanics in the U.S. during the first half of the 21st century, according to a report released earlier this year by the Alzheimer’s Association. This increase means that 1.3 million Hispanics will have Alzheimer's disease by 2050, compared to fewer than 200,000 currently living with the disease.

South Carolina Registry identifies high rates of Alzheimer's among blacks
A unique study in South Carolina adds to the meager data on racial differences in the risk of developing Alzheimer's disease.

“These results mean that environment must be helping to explain why one twin develops dementia and the other does not,” said Margaret Gatz, Ph.D., of the University of Southern California. Laditka and colleagues found that African-Americans aged 55 to 64 years were more than three times as likely to have Alzheimer's as their European American counterparts. At ages 65 to 84, African-Americans were more than twice as likely to have Alzheimer's. The difference diminishes with age, likely due to greater mortality among African-Americans. But even over the age of 85 African-Americans have an Alzheimer's rate nearly 1.5 times higher. Laditka and colleagues also found that the highest rates clustered in counties where local populations were more likely to be overweight.

“In South Carolina, we may be anticipating what will happen in the rest of the U.S. as the country grows in girth," Laditka said. He noted that South Carolina has greater rates of obesity, diabetes, and related health problems than the rest of the country, especially amongst African-Americans.

**Focused effort helps researchers overcome research stigma**

A concerted effort involving the entire community may be needed to bring African-Americans into studies of Alzheimer's and other diseases, according to researchers from Indiana.

“Due to the historic, unethical treatment of African-Americans in the notorious Tuskegee Institute syphilis study, many African-Americans view medical research with caution,” said Kathleen S. Hall, Ph.D., of Indiana University in Indianapolis. In the Tuskegee study, U.S. Public Health Service researchers studied 399 African-American men in Georgia for decades, never telling them that they had syphilis, nor offering antibiotics when these drugs were developed.

Hall is Principal Investigator of the Indianapolis-Ibadan Dementia Project, which is comparing dementia in an African-American population with participants in the Nigerian town of Ibadan. At ICAD in Philadelphia, Hall described successful methods for attracting African-American study participants by involving the total community.

Among the key steps taken by Hall and her colleagues was to involve African-American community leaders ranging from elected officials to ministers and other prominent private citizens. Consequently, only 11 percent of elderly African-Americans approached to participate in the study declined to do so. After 10 years, only nine percent of the more than 4,000 participants had dropped out of the study.

“We send them a birthday greeting each year, and if they are featured in the newspaper we send them a congratulatory letter,” said Hall. "We also help make referrals for social and health services."

**More accurate screening for early Alzheimer's in African-Americans**

In order to avoid overestimating the number of African-Americans who may have early signs of Alzheimer's disease, screening tests must be adapted to cultural differences, researchers find. Researchers led by Marjorie Marenberg, M.D., of the University of Pennsylvania School of
Researchers at the University of Maryland School of Medicine in Philadelphia are studying the condition called mild cognitive impairment (MCI) in African-Americans. Some, though not all, people with MCI will go on to develop Alzheimer's disease within a few years. Researchers are currently studying whether people with MCI should begin taking drugs used to treat Alzheimer's disease.

The researchers studied 635 people over the age of 60, comparing African-Americans and European Americans on a battery of tests designed to evaluate memory and other mental functions in younger European Americans. Marenberg and her colleagues found that, using current scoring methods, African-Americans scored lower on some of these tests. Even when the researchers used statistical methods that take into account factors such as age or education, 35 percent of African-Americans scored low enough to warrant a diagnosis of MCI, compared to only 15 percent of European Americans.

However, when the researchers applied new, racially sensitive scoring methods they’ve developed, the difference in MCI rates disappeared – 17 percent of European Americans and only 12 percent of African-Americans met MCI criteria, a difference that was not statistically significant.

“In order to accurately identify African-Americans with MCI, we need to develop tools that correct for the fact that many neuropsychological tests are not sensitive to cultural differences. The method we have developed may serve as the first step in that direction,” said Marenberg.

The 9th International Conference on Alzheimer's Disease and Related Disorders (ICAD), presented by the Alzheimer's Association, is the largest gathering of Alzheimer researchers in history. More than 4,500 scientists from around the world will present and discuss the findings of 2,000 studies showcasing the newest treatment advances in Alzheimer's disease and steps toward prevention. ICAD will be held July 17-22, 2004, at the Pennsylvania Convention Center in Philadelphia, Pennsylvania.

The Alzheimer's Association is the world leader in Alzheimer research and support. Having awarded more than $185 million to more than 1,400 projects, the Alzheimer's Association is the largest private funder of Alzheimer research. To sustain the rapid progress, the Association calls for $1 billion in annual federal funding for Alzheimer research. For more information about Alzheimer's disease, visit www.alz.org or call 1.800.272.3900.

- Christopher Clark – Latino Patients with AD Have An Earlier Age of Symptoms Onset Compared to Anglos (P1-041)
- James Laditka – Epidemiology of Alzheimer’s Disease: Race Effects, Area Variation, and Clustering (P3-132)
- Kathleen Hall – Recruitment and Retention Strategies with African-Americans (P2-341)
- Marjorie Marenberg – Racial Differences in Screening of MCI in a Primary Care Population (O4-01-02)