

Alzheimer's patients show intense emotional reactions to 9/11

Just because patients with Alzheimer's disease are impaired in some aspects of cognition—mainly memory—doesn't mean other aspects aren't intact when they witness a highly emotional event, such as the Sept. 11, 2001, terrorist attacks, according to a recent study in the April issue of the APA journal, *Neuropsychology* (Vol. 18, No. 2).

In fact, Alzheimer's patients report levels of Sept. 11-related emotional intensity—in terms of sadness, anger, fear, frustration, confusion and shock—similar to that of healthy older adults, according to the study. In other words, Alzheimer's patients may be able to overcome perceptual and cognitive deficits when processing their emotions and still report normal emotional intensity to such events, says principal investigator Andrew E. Budson, MD, the lead researcher and an assistant professor of neurology at Harvard Medical School and neurologist at Brigham and Women's Hospital in Boston.

Researchers, via telephone interviews, investigated emotional responses and memory of the Sept. 11 terrorist attacks in 22 patients with Alzheimer's disease, 21 patients with mild cognitive impairment and 23 healthy older adults in the days following the event and compared their responses three to four months later. Also contributing to the study were psychologists Jon S. Simons, PhD, and Daniel L. Schacter, PhD, both at Harvard University; Paul R. Solomon, PhD, of Williams College and Southwestern Vermont Medical Center; and researchers Alison L. Sullivan, Jonathan S. Beier, Leonard F. Scinto, PhD, and Kirk R. Daffner, MD.

The researchers found that memory-impaired older adults—especially patients with Alzheimer's disease—remember distorted information more often than non-impaired older adults when asked to recall what they were doing when they heard the news about the attacks. However, researchers also found that older healthy adults showed distortions, misremembering personal details about the terrorist attacks 25 percent of the time.

"We all have the intuitive sense that our memory for certain pieces of information for what we were doing on Sept. 11 is very vivid, and because of that vividness, we believe it's accurate," Budson says. "One of the big take-home messages from this study, though, is that it may not be as accurate as we thought [for older adults]. For patients with Alzheimer's disease, it may even be less accurate."

Among the study's findings:

- Patients with Alzheimer's disease were less likely to remember factual information than personal information about the attacks.
- On a scale that used "five" as perfect memory, Alzheimer's patients rated themselves, on average, as a "four" when asked to judge how well their memories of the event would be a few months to a year later.
- Participants with mild cognitive impairment reported the lowest emotional intensity from the attacks.

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