

Memory Care Monthly

Supporting Healthcare Professionals in Caring for the Aging

March / April 2008

UPDATED FACTS AND FIGURES PUBLISHED ON ALZHEIMER'S DISEASE

2008 Alzheimer's Disease Facts and Figures have been published by the National Alzheimer's Association in *Alzheimer's & Dementia*. New figures show that:

- As many as 5.2 million people in US are living with AD
- 10 million baby boomers (18%) will develop AD
- AD is the 7th leading cause of death
- The direct and indirect cost of AD and other dementia amount to more than \$148 billion a year



Also the new update includes comprehensive statistics on prevalence, mortality, cost of AD care, family care giving, and the lifetime risk of developing AD. The full document is available at the Alzheimer's Association www site: http://www.alz.org/alzheimers_disease_facts_figures.asp

Reaction to a Dementia Diagnosis

The many benefits of an early dementia diagnosis include timely initiation of effective treatment and active participation in the future planning of personal affairs. Although early diagnosis can be helpful to individuals struggling to comprehend emerging cognitive difficulties, many clinicians feel that discussion or disclosure of a possible diagnosis may cause unnecessary distress to patients. Therefore, many clinicians opt to wait for dementia to progress into more serious stages prior to making a definite diagnosis.

A recent study, which examined the psychological effects of receiving a dementia diagnosis, found that reactions to diagnoses were much less severe than what has been feared by clinicians and others involved in impaired patient's lives. In general, rather than increasing in severity, symptoms of depression and anxiety remained stable or even decreased following a diagnosis of dementia. Receiving an official diagnosis gave patients feelings of relief due to the fact that they were now able to address a specific problem. Patients were thus motivated to learn about what treatments were available and how to approach their illness.

These findings provide additional rationale for clinicians to rigorously monitor cognitive health and to strive toward early diagnoses of dementia.

Carpenter BD, et al. JAGS. 2008; 56:405-12.

Research Updates

Prevalence of AD in Adult Children of Persons with AD

A study examining the prevalence of Alzheimer Disease (AD) in persons whose parents both endured the disease found that 22.6% of the adult children, with a mean age of 62 years, had developed AD. In the general population of persons older than 65 years, 6-13% of persons develop AD. Since there is a greater risk for developing the illness after age 65, it is probable that the findings underestimate the actual prevalence of the disease in offspring of two individuals with AD.

Jayadev S. et al. Arch. Neurol. 2008; 65(3):373-378.

Alzheimer's Vaccine Clears Plaque But Has Little Effect On Learning and Memory Impairment

Aged canines (dogs) accumulate human-type β -amyloid ($A\beta$) in diffuse plaques in the brain with parallel declines in cognitive function. Researchers from UC Irvine have studied the effect of a vaccine using aging canines.

The researchers immunized aged beagles (8.4–12.4 years) with fibrillar $A\beta$ 1–42 formulated with aluminum salt (Alum) for 2.4 years (25 vaccinations). Cognitive testing during this time revealed no improvement in measures of learning, spatial attention, or spatial memory. After extended treatment (22 vaccinations), they observed maintenance of prefrontal-dependent reversal learning ability. In the autopsy, plaques had been cleared from multiple brain regions including the entorhinal cortex. However, damaged neurons remained. Dr. Head, the lead researcher, says this result implies that another step is needed to repair these damaged neurons after clearing beta-amyloid plaques from the brain.

Head E. et al. J. Neurosci. 2008, 28(14):3555-66.

Coffee and Its Protective Effect on the Brain

High levels of serum cholesterol and disruptions of the blood brain barrier (BBB) have all been implicated as underlying mechanisms in the pathogenesis of Alzheimer's disease. However, the protective mechanisms of caffeine are not well understood.

Using rabbits, researchers from University of North Dakota School of Medicine and Health Science examined a protective effect of chronic ingestion of caffeine against high cholesterol diet-induced disruptions of the BBB. They gave rabbits 3 mg caffeine each day – the equivalent to one cup of coffee, and rabbits were fed a cholesterol-enriched diet. After 12 weeks, rabbits with caffeine showed significantly more intact the blood-brain barrier (BBB) compared to the one without caffeine.

Chen Z et al. J. Neuroinflamm. 2008, 5:12.

A Large Abdomen In Midlife Increases the Risk of Dementia

Researchers from Kaiser Permanente have evaluated the association between midlife central obesity and risk of dementia three decades later.

A longitudinal analysis was conducted of 6,583 members of Kaiser Permanente of Northern

California who had their sagittal abdominal diameter (SAD) measured between 1964 to 1973. Diagnoses of dementia were based on medical records an average of 36 years later between 1994 and 2006. Cox proportional hazard models adjusted for age, sex, race, education, marital status, diabetes, hypertension, hyperlipidemia, stroke, heart disease, and medical utilization were conducted.

The study found that a total of 1,049 participants (15.9%) were diagnosed with dementia. Compared with those in the lowest quintile of SAD, those in the highest had nearly a threefold increased risk of dementia. Those with high SAD (>25 cm) and normal BMI had an increased risk while those with low SAD (<25 cm) and normal BMI (18.5–24.9 kg/m²). Those who with obese (BMI >30 kg/m²) and with high SAD had the highest risk of dementia.

Whitmer RA, et al. Neurology. 2008: March 26 e-Publication.

Small Vessel Disease Responsible for 1/3 of Risk For Dementia

A large autopsy study of 3400 men and women in the Seattle region have shown that a third of those who become demented before death had evidence of small vessel damage in their brains. This study was presented at the American Society for Biochemistry and Molecular Biology in April 2008.

In the autopsied brains of people who had cognitive decline or demean, 45% of the risk for dementia was associated with pathologic changes of Alzheimer's, and 10% Lewy body disease. One third of the risk for dementia was associated with damage to the brain from small vessel disease. Lead author Dr. Montine and his colleagues believe that this small vessel damage is the cumulative effect of multiple small strokes caused by diabetes and hypertension.

Montine T. et al. ASBMB. April 2008.

Free Patient Brochure

Make sure your patients know that you now offer memory assessment services. We can send you complimentary copies of our educational patient brochure, "About Memory Loss", in English and Spanish. To request copies, please email us at: customerservice@mccare.com and include the address to where you would like the brochures mailed.



Medical Care Corporation
Simple and Accurate Memory Assessment
19782 MacArthur Blvd. #310, Irvine, CA 92612
www.mccare.com • (888) 565-5535