

## Mortality by Alzheimer's disease as any condition of mortality in the United States in 2006

Abstract: (Neuroepidemiology, dementia)

Alzheimer's disease (AD) is a degenerative neurological disease, which leads to cognitive degeneration (includes memory loss, deterioration in language, comprehension, calculation, learning, and mental functions). Alzheimer's is one of the leading causes of mortality in the elderly in the U.S. Currently, the National Center of Health Statistics (NCHS) ranking of AD as leading cause of mortality is based on an analysis of AD reported as the first diagnosis, that causes death. In 2005 NCHS found that 71,599 died of AD, ICD10 G 30, which was 2.9 percent of the deaths, a crude death rate of 24.2 per 100,000. This was an increase of five percent from 2004 (Kung et al 2008). This study broadens and updates this analysis by using the death certificates in the U.S. in 2006 to determine the extent of mortality by AD as the underlying cause of mortality. The dependent variable used is AD listed as one of the up to twenty possible underlying causes of mortality listed on the U.S. death certificate.

Methodology:

Data used are the National Center for Health Statistics (NCHS) death certificates in the U.S. in 2006, Multiple Cause of Death Files.

Logistic regressions are used to analyze the likelihood of dying of AD versus dying of something else, and to examine the associations between co-morbidity with other top leading chronic and infectious diseases that are causes of mortality and AD.

The dependent variable was AD as any condition. Further analyses used the independent variables of age, ethnicity, marital status, education level, place of death, and metropolitan

residence. For ease of interpretation, the percent change in odds ratio was used instead of the logit coefficient.

Finding show increased rates of mortality by AD, indicating that projections for the aging population with dementia need to consider dementia as any condition for mortality.

Kung HC, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports; vol 56 no 10. Hyattsville, MD: National Center for Health Statistics. 2008.

Submitted by:

Mary Ann Davis, Ph.D.

Assistant Professor of Sociology

Sam Houston State University

P O Box 2446

1901 Avenue I, Suite 270 N

Huntsville, TX 77341-2446

mad011@shsu.edu

936-294-4083

936-294-3573 (fax)