



# Survival Among Veterans With Parkinson's Disease

Donna L. White, PhD, MPH,<sup>1,2</sup> Suzanne Moore, BA<sup>1</sup>, Eugene C. Lai, MD, PhD,<sup>1,2</sup>

<sup>1</sup>Parkinson's Disease Education Research and Clinical Center (PADRECC) at the Michael E. DeBakey Veterans Affairs Medical Center, Houston, Texas,

<sup>2</sup>Department of Neurology, Baylor College of Medicine, Houston, Texas



## INTRODUCTION

The Veterans Health Administration (VHA) is the U.S.'s largest integrated health care system. Veterans Affairs (VA) Medical Centers in the U.S. treat over 40,000 unique patients with ICD code (332.0) for parkinson's disease (PD) each year. Yet the epidemiology of PD among veterans is not well characterized.

## OBJECTIVES

- Assess the validity of data sources, including medical records, death certificates and the Social Security Death Index (SSDI) used in this cohort

## METHODS

- An incident cohort of veterans with idiopathic PD (diagnosed between 1998-2000 and treated in neurology and general medical clinics at a large regional VA medical center in Texas) was defined by a combination of methods (ICD code searches, expert medical record review, etc.).
- In Fall 2004, the incident cohort study database was linked with the SSDI, Texas' electronic death certificate database (1998-2003), and the local VA electronic medical records to determine vital status.

## RESULTS

100 incident cases of PD were identified (mean age at diagnosis = 72.8 years (s.d. 8.12), 96% male, 81% White).

By November 2004, a total of 38 of the incident cases (38%) had died (mean age at diagnosis = 75.8 years (s.d. 5.6), 92% male, 84% White). PD was coded on only 8 of 29 (28%) death certificates.

Review of VA medical records and databases failed to identify 8 decedents (21%) (see figure 1). These 8 had slightly greater mean age at diagnosis and at death compared to the 30 decedents identified by searches of VA records and databases (mean ages at diagnosis=78.8 years (s.d. 2.8) and at death= 82.7 years (s.d. 2.9) versus mean ages at diagnosis=74.9 years (s.d. 5.9) and at death= 77.5 years (s.d. 5.9) ).

Median survival from diagnosis among the 38 decedents overall was brief (2.83 years). Survival among age-specific sub-groups is presented in Figure 2.

Figure 1. Sources of Vital Status Ascertainment for Incident Cohort of Veterans with PD

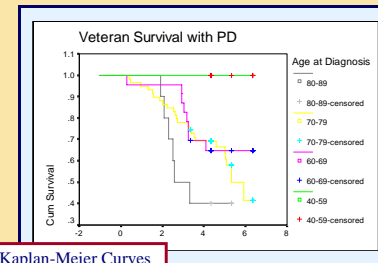
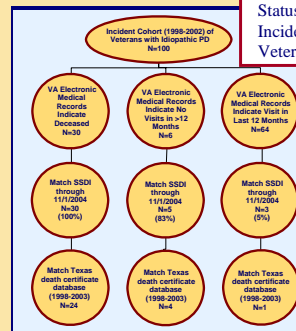


Figure 2. Kaplan-Meier Curves of Survival Time from Incident PD Diagnosis in Years

## CONCLUSIONS

- Early mortality among this incident cohort of veterans with PD was high (38%). Likely this is largely an effect of the later age at which this veteran cohort was diagnosed. On-going research is being performed to describe other factors (including comorbidities) that influence survival.
- Sole reliance on VA medical data sources in the study of mortality among veterans using the VA system results in biased estimates because of selective under-ascertainment of mortality among older veterans. Supplementation with SSDI and death certificate databases is needed to accurately describe mortality in this cohort.



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