

Relative Mortality Trends in the First 2 Years among Incident Hemodialysis Patients

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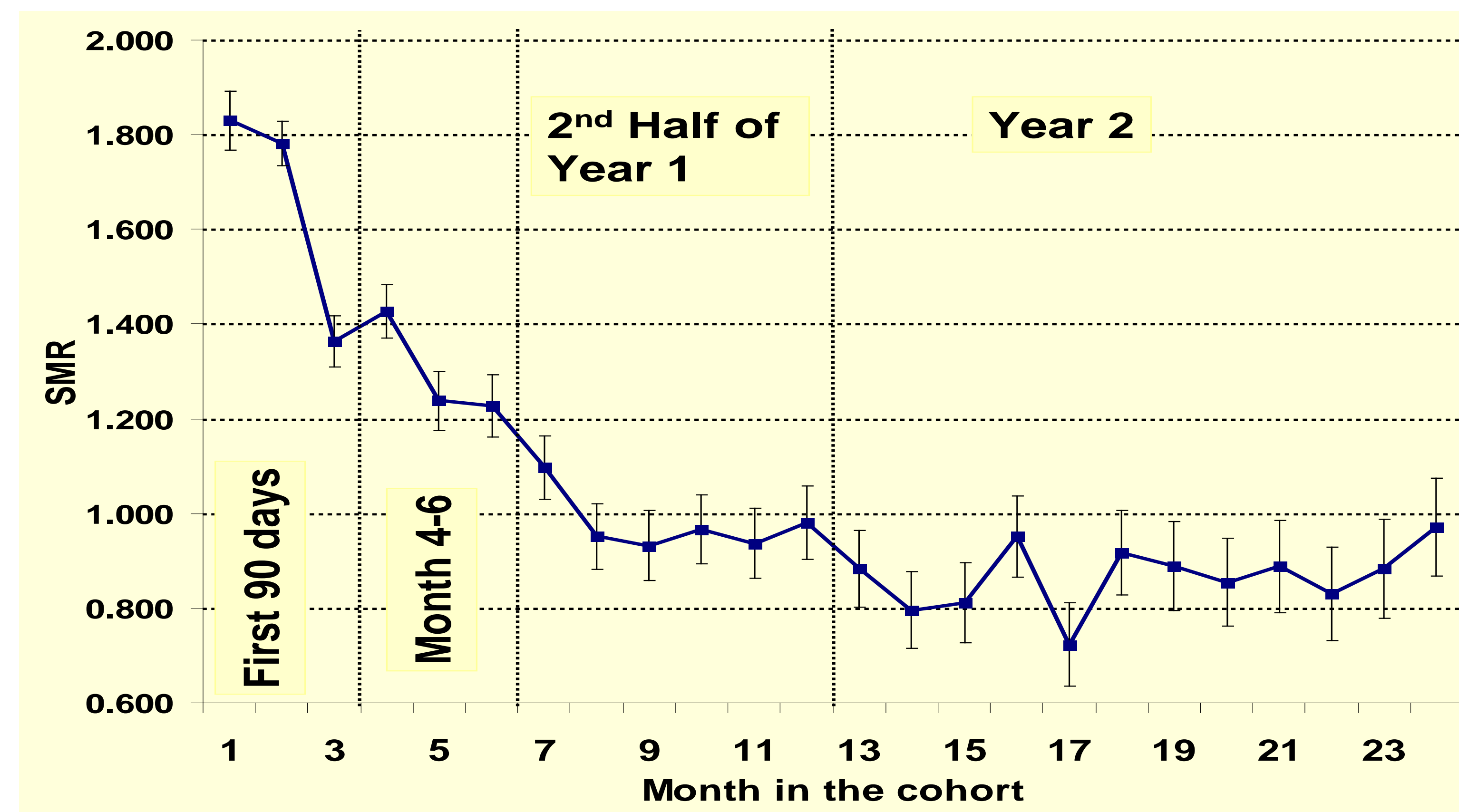
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INTRODUCTION

- All-cause mortality among maintenance dialysis patients is relatively high, currently ~20% per year in the United States.
- Maintenance hemodialysis (MHD) patient mortality is even much higher during the first year of initiation of MHD treatment than in subsequent years.
- We examined the mortality trends during the first 24-months among a group of incident (new) MHD patients from a large dialysis organization (DaVita Inc.).
- Standardized mortality ratio (SMR) [and 95% confidence intervals] were used to examine the mortality rates in incident MHD patients.
- We standardized the mortality rate to age, gender, race (whites vs. non-whites), and diabetes status.
- We hypothesized that the highest mortality ratios would be for the first 90 days after dialysis initiation which would then gradually decrease and stabilize by the end of first year.

METHODS & RESULTS

- SMRs for the 24 months were calculated for 21,772 incident MHD patients starting MHD between 7/2001 and 6/2006 in a DaVita clinic using the entire DaVita MHD cohort over the same period (140,000 MHD patients) as the reference group.
- The incident MHD patients had a mean age of 62.53±5.9 years and included 45% women, 24% African Americans and 14% Hispanics.
- The highest SMR was in the first month [1.82 (1.74 -1.91)], followed by Months 2, 3 and 4 with SMRs of 1.77 (1.69 -1.86), 1.36 (1.27-1.44), and 1.42 (1.37-1.51) respectively. The SMRs for months 12 and 24 were similar and close to unity, i.e., 0.98 (0.89-1.06) and 0.97 (0.88-1.05), respectively.



CONCLUSIONS

- Among incident MHD patients, mortality was up to 80% higher in the first few months of the study period.
- The mortality rate then appeared to decline over the subsequent 6 to 8 months after starting dialysis and reached a steady state by the end of first year.

KEY LEARNINGS

- ✓ Among incident MHD patients the highest mortality rates are observed for the first 90 days after initiating dialysis treatment.
- ✓ The rates started to decline after month 6 and stabilized by the end of first year.
- ✓ Interventions to improve outcomes during the first several months need to be examined.

We thank the patients who participated in this study and DaVita Clinical Research® (DCR) for grant funding and support in preparing this poster. DCR is committed to advancing the knowledge and practice of kidney care.



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