

Adult Children and the Risk of Nursing Home Admission following spousal Loss.

Claire Noel-Miller

The aging of the baby boom generation and the projected substantial increase in the size of the older population, particularly those above age 85, is expected to result in an unprecedented surge in demand for long-term care to the elderly over the next few decades. Although informal caregivers remain the primary source of assistance to frail elderly (Wolff and Kasper 2006; National Alliance for Caregiving and AARP 2004), formal long-term care arrangements are critical, particularly to severely disabled elderly. Formal long-term care is provided by a variety of institutions and arrangements, including home health care, assisted living facilities, and residential nursing home facilities. Among these, nursing home care has a unique importance because it generally caters to severely disabled elderly who suffer from chronic long-term disabilities associated with old age and require extensive medical assistance as well as assistance with their basic daily needs. Furthermore, nursing home care is the most expensive form of long-term care. Expenditures for nursing home care alone account for more than one tenth of medical expenditures in the US (OECD 1998), over one half of which are financed by public medical assistance programs, primarily Medicaid (Norton 1995).

Given its critical role in providing care to the elderly disabled population, the family, broadly understood as a person's set of living relatives, is an important determinant of the risk of nursing home admission (Freedman 1996; Wingard, Jones, and Kaplan 1987). Spouseless elderly have been found to have an elevated risk of nursing home use, even after adjusting for health and disability status (Nihtilä and Martikainen 2008). Furthermore, there is mounting evidence that living adult children strongly reduce the risk of nursing home use amongst the elderly (Freedman 1996; Wingard, Jones, and Kaplan 1987; Cutler and Sheiner 1994; Garber and MaCurdy 1990). For instance, based on data from the Established Populations for Epidemiologic Studies of the Elderly (EPESE), Freedman (1996) finds that having at least one daughter reduces the likelihood of institutionalization by about one fourth. Similarly, Aykan (Aykan 2003) finds that childlessness is an important risk factor for older women's use of nursing home services.

An important limitation of the empirical research examining the effects of family structure on the risk of nursing home use is the failure to recognize the hierarchical nature of informal caregivers' assistance. Although spouses and adult children together represent the vast majority of informal caregivers to the elderly, research has documented variations in the extent of spouses' and children's involvement. In particular, when a spouse is present, they typically bear the primary responsibility for their partner's care. Spouses tend to provide more personal care, with less assistance from secondary caregivers, and for longer periods of time than other caretakers (Tennstedt, McKinlay, and Sullivan 1989; Stoller 1992). Adult children's role as informal caregivers becomes particularly critical when an elderly parent no longer has a spouse to rely upon.

Using panel data from the Health and Retirement Study (HRS), this paper examines the relationship between the availability of adult children and older Americans' risk of nursing home admission following the death of a spouse, when the elderly face a heightened risk of institutionalization and reliance on adult children is greatest. Based on a life-course perspective, we follow married partners over time and we investigate whether the effects of spousal loss on the risk of nursing home admission are smaller amongst those who have living children. This approach has the advantage of placing adult children's role in reducing the risk of elderly parents' institutionalization within a changing family context. Based on previous research, the paper examines the relative importance of children with particular gender, marital status and employment characteristics in buffering a widow(er)'s risk of institutionalization.

The analytical sample consists of married couples where both partners were aged 65 or older at the time of the 1998 HRS interview (N=1,229 couples). Using retrospective questions from HRS biennial data concerning the number, timing and duration of nursing home stays, we reconstitute monthly histories of nursing home admissions between 1998 and 2006. We conduct separate survival analyses of the timing of the first observed nursing home admission that occurred to husbands and wives.

Monthly data on the timing of a spouse's death was obtained from the HRS interview conducted with proxy respondents or from linked National Death Index (NDI) data when proxy data was not available. Our analytical strategy is to adopt the month during which a respondent turned exact age 65 as the point of origin for the proportional hazard models (Freedman 1996). We therefore estimate Cox hazards models with delayed entries. For husbands and for wives, we examine the effect of having a deceased spouse on the risk of institutionalization. We further examine the interaction effect between spousal death and child availability to investigate whether adult children influence the risk of nursing home use following spousal loss. Following previous research, we measure child availability as a husband or a wife's number of living biological children. Additional models distinguish between sons and daughters, married and unmarried sons and daughters, as well as employed and unemployed sons and daughters. For each partner, the proportional hazards models control for possible confounding effects on the risk of nursing home use, including race/ethnicity, SES (education, net worth), own and spousal health and disability status (self-rated health, cognitive level, ADL and IADL disabilities) and insurance coverage (Medicaid and long-term care insurance). Because the models estimate the effect on the first observed institutionalization, we control for a respondent's possible prior use of a nursing home.

Preliminary results indicate that the death of a spouse substantially increases one's risk of nursing home use. Consistent with the previously documented gendered distribution of care-giving roles within the married couple, the increase in the risk of institutionalization following spousal loss is greater amongst husbands than amongst wives. We find that daughters buffer the increased risk of nursing home use amongst widows. However, sons, rather than daughters, are found to reduce husband's risk of institutionalization after

spousal loss. Married sons and daughters as well as working sons and daughters play less of a role in reducing the risk of nursing home use once a parent has lost their spouse.

References

1. Aykan, Hakan, "Effect of childlessness on nursing home and home health care use," *Journal of Aging and Social Policy* 15 (1): 33-53 (2003).
2. Cutler, David M. and Sheiner, Louise M. Policy options for long-term care. Wise, David A. *Studies in the Economics of Aging*. 94. Chicago, University of Chicago Press.
3. Freedman, Vicki A., "Family structure and the risk of nursing home admission," *Journal of Gerontology: Social Sciences* 51B (2): S61-S69 (1996).
4. Garber, Alan. M. and MaCurdy, Thomas. E. Predicting nursing home utilization among the high risk elderly. Wise, David A. *Issues in the Economics of Aging*. 90. Chicago, University of Chicago Press.
5. National Alliance for Caregiving and AARP. *Caregiving in the U.S.* 2004. Washington, DC.
6. Nihtilä, Elina and Pekka Martikainen, "Institutionalization of older adults after the death of a spouse," *American Journal of Public Health* 98 (7): 1228-1234 (2008).
7. Norton, Edward C., "Elderly assets, Medicaid policy, and spend-down in nursing homes," *Review of Income and Wealth* 41 (3): 309-329 (1995).
8. OECD. *OECD Health Data 98: A Comparative Analysis of 29 Countries*. 98. OECD Electronic Publications.
9. Stoller, Eleanor P. Gender differences in the experiences of caregiving spouses. Dwyer, Jeffrey W. and Coward, Raymond T. In *Gender, Families, and Elder Care*. 92. Newbury Park, Sage.
10. Tennstedt, Sharon L., JB McKinlay, and LM Sullivan, "Informal care for frail elders: The role of secondary caregivers," *The Gerontologist* 29 (5): 677-683 (1989).
11. Wingard, D. L., D. W. Jones, and R. M. Kaplan, "Institutional care utilization by the elderly: A critical review," *The Gerontologist* 27 (2): 156-163 (1987).
12. Wolff, Jennifer L. and Judith D. Kasper, "Caregivers of frail elders: Updating a national profile," *The Gerontologist* 46 (3): 344-356 (2006).