

## The Effect of Childlessness on the Health Status of Elders

A substantial and increasing proportion of American adults has no children by choice or because of infertility problems. In 2006 20.4 percent of women age 40-44 were childless, compared to 10.2 percent in 1976 (U.S. Bureau of the Census, 2008). As these women age, the percent who are childless will rise further because some will outlive all their children.

Childlessness – whether voluntary or not – may have important effects on an elder's health status via several mechanisms. Consider possible positives. Suppose childless elders enjoyed higher personal consumption, including health care, when younger because a significant portion of their income was not devoted to supporting children. Better health care and higher consumption in general when younger may help childless adults enter their older years in better health. If childless elders have more assets and current income, they can afford better health care and health insurance and can more easily pay for household and other services that parents may receive from their children.

Now consider possible negatives. If elderly parents receive assistance from their children that positively affects a variety of health outcomes, childless elders will tend to have relatively poorer health status. For example, children's assistance with household tasks may prevent falls that lead to bone fractures and hospitalization, may delay the time to entering a nursing home, or may prevent the need for care in a nursing home entirely. Children may monitor their parents' health conditions and identify problems while they are still minor and treated more easily and at less cost. If a parent requires hospitalization or other intensive care, children may monitor the quality of care and advocate on their parent's behalf to hospital staff, nursing home staff, other health professionals, and health insurance providers. Last, childbirth and nursing can have both positive and negative effects on women's health.

Such effects may have important implications for public policy. Suppose childless elders, on average, cannot find alternative private sources for the kinds of assistance that many older parents receive from their children. Then childless elders likely will require greater health care and social services from public and non-profit agencies compared to those with children. If childlessness continues to increase, financial pressures on public programs that provide health care and social services for the elderly will expand even faster than the rising ratio of elders to working age adults alone would imply. Among the most important of such programs are Medicaid, Medicare, and social services provided by the Older Americans Act. Private costs for elders' health insurance (beyond what Medicare provides) and health services will also rise more rapidly. Rising private costs may induce some elders to forego health insurance or health care, or generate pressure for more public subsidies.

Alternatively, childless elders may place fewer demands on public programs. This might occur if childless elders have more assets, which would reduce their need for Medicaid and then pay out-of-pocket for some health and social services that otherwise would be publicly financed.

It is also possible that elders' demands for health care and social services are independent of their choices about parenthood. In this case, changes in the prevalence of childlessness would not affect programs' costs and caseloads.

The research community has paid little attention to whether these health effects of childlessness exist and, if so, their magnitudes. This study helps to fill this significant gap in the literature by examining the relationship of childlessness to selected indicators of elders' health status. The findings will provide useful information for policy makers and other

stakeholders concerned about the well-being of elders and long-run financial demands on public programs. The study will also advance basic knowledge about the consequences of childlessness for the well-being of elders and help us understand the importance of childlessness relative to other characteristics that influence elders' health status. The data will be from the Health and Retirement Survey (HRS).

**Previous research:** Despite the explosion of research on aging and the elderly in recent years, few studies directly address the consequences of childlessness for elders' health. Within this sparse literature, most work examines psychological well-being or the availability and provision of instrumental support and care (e.g. Koropecj-Cox 1998 and 2002, Hogan & Eggebeen 1995, Zhang & Hayward 2001, McGarry 1998). Despite reasons to think childless elders will fare worse in both domains, they fare about the same as elders with children (Allen et al. 2000, Zhang & Hayward 2001), other things equal.

Three studies using multivariate statistical methods examine relationships among family structure, social support, and nursing home use (Freedman 1996, Aykan 2003, Lakdawalla et al. 2003). Only two studies use multivariate statistical methods to analyze the relationships between childlessness and elders' use of other health and social services (Aykan 2003, Choi 1994), and they reach opposite conclusions.

As discussed above, there are reasons to think childlessness may be related to a number of health outcomes besides psychological well-being and use of nursing home and home health care. Yet, an intensive literature search uncovered no research evidence on whether such relationships exist.

Some otherwise informative studies of the relationship between a health outcome and characteristics of elders' families use samples restricted to either childless elders or to elders with children. For example, the studies of social support and mental health by Wu & Pollard (1998) and Wu & Hart (2002) restrict the samples to childless elderly persons. On the other side, examples of studies that exclude childless persons include Sasso & Johnson (2002)'s examination of whether informal care from adult children reduces nursing home admissions for the elderly, Silverstein & Bengston (1991)'s analysis of whether the quality of relationships with children affects elders' mortality, Borsch-Supan et al. (1992)'s study of social support for elders, Stern's (1995) study of child characteristics and elders' long term care arrangements, and Checkovich & Stern's (2002) study of child characteristics and caregiving of elders. Either choice, of course, precludes comparison of elderly childless persons to elderly parents.

In the literature that directly focuses on the health consequences of childlessness for the elderly, childlessness is the key explanatory variable. In contrast to this limited body of research is an extensive literature on the socioeconomic factors associated with the dependent variables that this study will examine. In this literature the presence or number of children (or number of daughters and sons) may appear as an explanatory variable, typically as a control variable that is of minor interest in the context of the study. Such studies, with their focus usually directed at important non-demographic explanatory variables, do not explore in detail any relationship between childlessness and the outcome. Representative examples include Börsch-Supan et al. (1992) on social support from children, Cagney & Agree (2005) on long-term care, Wolff & Agree (2004) on depression, Freedman et al. (2004) on home care, Headen (1993) and Cutler & Sheiner (1994) on nursing home use.

Other studies of economic and health outcomes do not even include presence or number of children among the explanatory variables. Representative examples are Hurd et al. (2001) and Portrait et al. (2000) on mortality, Freedman & Martin (1999) on functional limitations,

and Dick et al. (1994) on nursing home use. Given the main questions such studies address, this exclusion may well be of little moment. However, if childlessness is related to the outcome in question, its omission may produce biased estimates.

**Plan of analysis:** Using the HRS, the study will:

1. Develop descriptive data on observed health differences between childless elders and those with children. The main health outcomes to be examined include self-reported general health and indices of limitations on ADL, functional limitations, and mental health.
2. Determine whether there are statistically significant associations between childlessness and the health outcomes, net of other factors, and estimate the magnitudes of the associations. The study will estimate regression models and propensity matching models for all sample members, for men and women separately, and, to the extent sample sizes allow, for other major sub-groups.

Childlessness is likely to be jointly determined with other outcomes of interest because unobservable characteristics of adults may well influence their decision to become a parent and their health outcomes. Though a few studies recognize the importance of this selection issue, none attempt to correct for selection. The study will use instrumental variables methods to take account of the likelihood that there is self-selection into childlessness and compare the results to those from standard regression and propensity matching models.

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