TITLE: Long-Term Care of the Disabled Elderly: Spouses and Children

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How do adult children affect the care that their elderly parents provide to each other? We develop two models in which children act as an incentive for elderly parents to provide more care for their disabled spouses than they otherwise would. Our first model is based on a "demonstration effect" -- adult children learn from a parent's example that family caregiving is appropriate behavior. The demonstration effect provides not only a mechanism for the intergenerational transmission of caregiving norms but, because wives far outnumber husbands as primary caregivers to their spouses, for the transmission of gendered caregiving norms. Our second model is based on a "punishment effect" -- if the nondisabled spouse fails to provide care for the disabled spouse, then the children may retaliate by not providing future care for the nondisabled spouse when she needs care. Both models assume that the nondisabled elderly parent recognizes that her caregiving behavior will affect her children's willingness to provide for her in the future. Both the demonstration effect and the punishment effect increase the likelihood that nondisabled spouses will provide care for disabled spouses if they have children or, more precisely, if they have joint children.

Thus far the long-term care literature has neglected the care that elderly spouses provide for each other, focusing instead on the willingness of adult children to provide care for disabled elderly parents. (For references to this literature, see Pezzin and Schone [1999], Engers and Stern [2002], and Pezzin, Pollak, and Schone [2004].) Yet spouses remain the largest group of primary caregivers to the disabled elderly in the U.S. (Spillman and Pezzin 2000).

Both the demonstration effect and the punishment effect imply that joint children act as a commitment mechanism, increasing the probability that elderly spouses will provide care for one another. Stepchildren, we argue, provide weaker incentives for spousal care.

The demonstration effect postulates that "parents teach children the desired behavior by setting an example" (Stark [1995]). The traditional specification of the demonstration effect involves three generations. For example, adult children care for their elderly parents in order to teach their own offspring that children should care for their parents. We propose a two-generation version of the demonstration effect: nondisabled

elderly spouses provide care for their disabled spouses to teach their own children that family members should take care of each other. That is, the nondisabled parent "models" appropriate behavior by caring for the disabled parent; the adult child, observing the parent's caregiving behavior, infers the appropriateness of family caregiving. The nondisabled parent, recognizing that the child will learn from her example, provides more care than she otherwise would in order to teach the adult child the importance of family caregiving.

The demonstration effect may also provide a plausible explanation for why daughters are more likely than sons to provide long-term care to their disabled parents. Because wives are more likely than husbands to be the caregiving spouse -- women have a longer life expectancy than men and are typically younger than their husbands -- the lesson drawn by the adult children may be not only that caregiving is a family responsibility but that caregiving is a female responsibility. That is, the demonstration effect provides not only a mechanism for the intergenerational transmission of caregiving norms but for the transmission of gendered caregiving norms.

Punishment always raises issues of credibility. The punishment effect assumes not only that the adult child already knows that family members are supposed to care for one another, but also that the adult child is willing to punish the nondisabled spouse for violating this norm. Both in real and in experimental situations, individuals often expend their own resources to punish others who have violated behavioral norms in situations in which the punisher derives no apparent self-interested advantage from punishing. For example, responders in ultimatum games frequently reject "ungenerous" or "insultingly low" offers. (Roth [1995] provides a discussion and references to the experimental literature.) Such behavior is often termed "altruistic punishment" to indicate that the punisher incurs material costs that outweigh the material benefits from punishing. From a revealed preference standpoint, it is a tautology that for a punisher the total benefits (i.e., material + psychic) of punishing outweigh the costs, or else the punisher would not punish. Some have speculated that the willingness of some individuals to punish others for violating norms, even when such punishment is costly to the punisher, may have been a crucial factor in the evolution of human cooperation. (Carpenter [2002] provides a discussion of the altruistic punishment of free riders. In a recent article in Science, de Quervain et al. [2004] identify a neural basis for altruistic punishment.)

The possibility of altruistic punishment makes credible the

threat that a child will retaliate if a nondisabled spouse fails to care for a disabled spouse. More specifically, we assume that the nondisabled spouse knows that, if she fails to provide care for the disabled spouse, then the children, with some probability, will retaliate by refusing to provide care for her when she becomes disabled. Thus, a crucial parameter of the model is the nondisabled spouse's perception of the effect of her failing to provide care on the probability that the children will provide future care for her.

Both the demonstration and the punishment effects predict that spouses in couples without children will be less likely to provide care for each other than spouses in couples with joint children. This prediction, it should be emphasized, is not a consequence of selection, although selection complicates empirical work.

We next consider a couple with no joint children. In both the demonstration effect and the punishment effect models, the analysis depends on whether the nondisabled spouse is the child's biological parent or the stepparent and, if the nondisabled spouse is the stepparent, on the strength of their attachment. The extreme case in which the stepchild has no attachment to the stepparent is straightforward. In that case, if the disabled spouse is the biological parent, then the nondisabled spouse has no expectation of receiving care from the stepchild and, hence, a stepchild provides no additional incentive to care for the disabled spouse. If, on the other hand, the nondisabled spouse is the biological parent of the child, then the nondisabled spouse has an incentive to provide care for the disabled spouse as a demonstration of expected behavior towards family members. A stepchild with some concern for the wellbeing of the nondisabled parent provides incentives between those provided by a joint child and those provided by a stepchild with no attachment to the stepparent.

Data for this analysis are drawn from the fourth (and most recent) wave of the Assets and Health Dynamics of the Elderly (AHEAD) survey. The AHEAD component of the Health and Retirement Survey (HRS) follows a nationally-representative sample of individuals who were age 70 and older in 1993. Along with basic demographic data, AHEAD collects detailed information on each elderly respondent's health status, family characteristics, and economic resources, as well as hours of paid and unpaid care.

For the purpose of our analysis, we limit our sample to married couples in which one of the respondents is disabled. (A respondent is defined as disabled if he or she reports difficulty with at least one basic activity of daily living (ADL) --

transferring, dressing, bathing, toileting, eating, or walking across a room -- or at least one instrumental activity of daily living (IADL) -- grocery shopping, preparing meals, taking medications, using a telephone, or managing household finances.) We estimate the care received by three groups of married disabled elderly: those with joint children; those with stepchildren but no joint children; and those with no children. In particular, we focus on both the probability and intensity of "nuclear family" care, that is, care received from spouses and joint children and stepchildren and on the proportion of total care (i.e., care received from all sources, including paid formal care) provided by spouses and by children. Our measure of care is the number of hours per month provided by spouses and children to the disabled respondent for ADL or IADL assistance. In addition to the main variable of interest for our analysis (i.e., whether the disabled elderly respondent has joint children; stepchildren but no joint children; or no children) we also include variables to control for respondent and family-specific attributes that may affect care receipt. (Selection is, of course, a problem: family structure, joint children, and stepchildren are the result of past choices made by the parents.)

Marginal effects derived from the multivariate models suggest no significant differences in spousal caregiving behavior between couples without children and those with joint children. Spouses who do not share joint children with their disabled elderly partners, however, are significantly less likely to provide spousal care (67.4% vs. 49.2%) and also provide a lower proportion of the disabled spouse's total care than spouses in couples with joint children (47.3% vs. 64.4%). This analysis highlights the need to take account of spousal behavior, parental marital disruption, and family structure when forecasting the supply of family-provided long-term care.

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