

Informal Care and Labor Supply Among Japanese Middle Aged¹

Daisuke Moriwaki²

Economic and Social Research Institute (ESRI), the Cabinet Office

Since the introduction of mandatory public Long-Term Care Insurance (LTCD) in 2000, the supply of formal long-term care has grown substantially. Still, informal care by family members plays a major role. One concern with informal care provision is its potentially negative effect on labor supply. Informal care could take up the caregivers' time and prevent them from working. This could impoverish households with frail parents. This paper studies how the provision of informal care to disabled family members affects labor supply by the other family members.

The effect of informal care on labor supply decision in Japan has been studied recently by several authors. However, the result is mixed; some of them report a significant negative effect of informal care on labor supply but the others do not.

The present paper aims to deepen our understanding of care-work relation among middle-aged households in Japan. The three contributions of our paper is as follows.

First of all, we use a dummy variable for informal care provision in the labor supply function, instead of the presence of a dummy variables for parents in need. To deal with the endogeneity concern we use the exact "Care Levels", the degree of care required by parents and parents-in-law, as instruments. This allows us to find the causality from informal care to labor supply rather than from disability of parents to labor supply.

Second, our sample includes both married and unmarried (never married, divorced, or widowed) males and females. By doing so we can draw more general implications from our estimates.

Third, we use objective measures for the health status of parents. The JSTAR datasets report exact "Care Levels" for parents. The Care Levels are determined by a well-developed computer algorithm and experts in municipalities. Thus, the Care Levels are expected to reflect the objective severity of health conditions.

We estimate these relationships using bivariate probit and two-stage least square linear probability models. We find that informal care reduce males' labor supply by 8-12%, but find no effect for females after controlling for endogeneity. We also confirm that females take greater responsibility for care-giving. The impact of disabled parents varies along with their sex and relation to the caregivers.

¹ Full paper is available on <https://sites.google.com/site/dmoriwaki>

² Researcher, ESRI, the Cabinet Office contact: daisuke.moriwaki@cao.go.jp