*Stick*ing out for the Old: The Impact of Law in Securing Family Support for Elderly Parents

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Introduction

Family plays a central role in providing old-age security to the elderly in India. In the absence of a well penetrated formal social security schemes and low retirement savings, many older people turn to their family for support, especially their sons (Allendorf, 2020; MOSPI, 2019). Around 80% of the older adults in India live with their extended family and only 20% live alone or with their spouse (MOSPI, 2021). However, familial support may not be all utopian. Incidents of abuse and neglect at the hands of ones' own family is well known, if not well reported (IIPS et al., 2020; Jamuna, 2003). The genesis of such behaviour lies in the changing traditional family norms on account of urbanization, industrialization, and out-migration of children (Muhammad et al., 2021; Sathyanarayana et al., 2014).

The government of India, in recognition of this change in familial dynamics, introduced the Maintenance and Welfare of Parents and Senior Citizens Act (MaWoPaSCA) in 2007. This law empowered the parents and senior citizens to seek financial support from their children to be able to lead normal a comfortable life (Bakshi & Chakravarti, 2024). However, pragmatic issues like low awareness, administrative hurdles and social stigma impair the effectiveness of this act (Issac et al., 2021). Against this backdrop, we attempt to evaluate the effectiveness of this act in securing the welfare of the older members within the family. In our knowledge, there has not been any empirical analysis of the effectiveness of this act and our results will offer insight into the effectiveness of legal intervention in securing social norms (Posner, 1997).

Data and Methodology

We use the panel data of India Human Development Survey (IHDS), panels I and II for the analysis. The maintenance law was enacted by the centre in 2007 but the implementation across all the states did not happen immediately. This difference in timing of the implementation generates the conditions of a quasi-natural experiment that we use in a

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Difference-in-Difference (DiD) set-up. Since the act was implemented in between the period of the two surveys – 2004-05 and 2011-12 respectively, we get a perfect data scenario for computing the effecting difference from the act. We restrict to two states- Jharkhand and Bihar, as our treatment and control group, respectively. The act was implemented by 2009 in Jharkhand while in Bihar it took more than four years to get introduced. The two states also provide a common cultural set-up, primarily since these two states were split from the single state of Bihar as recently as 2000 (Bihar Reorganization Act, 2000).

Our main dependent variable is the absolute per-capita medical expenses, both in-patient and out-patient, incurred within the household. Additionally, we take another dependent variable as the proportion of medical expenses out of the total consumption in the household. The use of medical expenses as a measure of the welfare of the older members can be justified on the grounds that medical expenses typically more than double with age (Mutchler et al., 2015). The use of a direct measure of welfare like the consumption of the elderly members is not feasible due to absence of intra-household data on consumption.

To ensure comparability of treatment and control observations, we use a propensity score matching technique using only the data within the common support for our analysis (Dehejia & Wahba, 2002; Rosenbaum & Rubin, 1983). Robustness checks are done by conducting the analysis only on the matched sample. Our empirical specification, regressing the (log of) medical consumption per capita, C_i on other variables as below:

$$C_i = \alpha + \beta T_i + \gamma P_i + \delta(T_i P_i) + \theta Z_i + \epsilon_i \qquad (1)$$

The variable T_i is an indicator variable if the household is in a treated cohort, that is, Jharkhand (=1). This indicator would be the fixed difference between the households in the states that are static over time – example, cost of accessing healthcare, attitude towards illness and general fitness level among people across states. The variable P_i controls for the time effect- conditions that change over time for both control and treatment groups; some of these could be the changes over time in general health of people applicable for all and medical advancements and their corresponding costs. Our main parameter of interest is δ (DiD estimate) which shows the effect of the act on medical expenditure. Z_i represents the set of household level controls used. We use a fractional regression for the dependent variable, proportion of medical expenses (Papke & Wooldridge, 2008).

Results

Post the implementation of the act, the medical expenses in the household per elderly capita, after controlling for inflation, increase by 1.1%, significant at 5% levels, for treatment versus control group. The results are robust to addition of critical covariates like income, health, and morbidity levels within the household. The effect on proportion of medical expenses, while positive, had higher standard errors. The results are hence indicative that the act might have been able to bring about some incremental welfare, but might not have resulted in a re-allocation of resources within the household. Refer to table 1 for the main results.

There is a risk of confounding with the Rashtriya Swasthya Bima Yojana (RSBY), a scheme meant to ensure the in-patient expense of families below the poverty line implemented in 2008. While research suggests the scheme might not have been very effective (Karan et al., 2017), we address the confounding by running the DiD exclusively for the families above the poverty line for the out-patient expenses only. The results shown in table 2 indicate that our results continue to remain significant. Additional robustness tests on matched data and for wider regions underway.

Table 1: Main results from DiD Regression

Variables	(1) DV: Log of Per-capita medical expenditure	(2) DV: Log of Per-capita medical expenditure	(3) DV: Proportion of medical expense	(4) DV: Proportion of medical expense
Post-period X Jharkhand	1.132**	1.013**	0.013	0.010
	(0.526)	(0.504)	(0.018)	(0.017)
Post-period	-0.103	-0.145	0.008	-0.002
	(0.225)	(0.244)	(0.008)	(0.010)
Jharkhand (Ref. Bihar)	-2.349***	-2.197***	-0.033**	-0.024
	(0.397)	(0.398)	(0.014)	(0.014)
Controls	No	Yes	No	Yes
Observations	860	860	859	859
R-squared	0.070	0.167		

Source: Author's computation. Coefficient and robust standard errors shown in columns (1) and (2). For column (3) and (4), standard errors from delta method and marginal effects are shown.

Table 2: Robustness check to account for confounding with Rastriya Swasthya Bima Yojana scheme

Variables	(1) DV: Log of Per-capita out-patient medical expenditure	(2) DV: Log of Per-capita out-patient medical expenditure	(3) DV: Proportion of out-patient medical expense	(4) DV: Proportion of out-patient medical expense
Post-period X Jharkhand	1.777**	1.880**	0.003*	0.002
	(0.810)	(0.825)	(0.002)	(0.002)
Post-period	-0.485	-0.601	-0.002**	-0.002**
	(0.403)	(0.442)	(0.001)	(0.001)
Jharkhand (Ref. Bihar)	-1.431**	-1.545**	-0.003**	-0.002
	(0.594)	(0.655)	(0.001)	(0.001)
Controls	No	Yes	No	Yes
Observations	649	649	649	649
R-squared	0.009	0.119		

Source: Author's computation. Coefficient and robust standard errors shown in columns (1) and (2). For column (3) and (4), standard errors from delta method and marginal effects are shown.

Conclusions

The benefits of the act extend beyond the maintenance amount it mandates the erring family members to provide. It empowers the elderly to seek monetary assistance as their lawful right. The punitive elements of the act are a deterrent to potential offenders. The effects that we observe, are hence indicative of (re)alignment of power in the household.

The tension between morality and law in this context is, however, undeniable. While the law is enacted to ensure that parents have a recourse to the law as a right in case of negligence by children, the social stigma around the same is quite high (NPC, 2019). Therefore, while the act may appeal to the government machinery as a mechanism to secure the social norms, its effectiveness will depend largely on its acceptance by the older members of the society.

References

Allendorf, K. (2020). Another Gendered Demographic Dividend: Adjusting to a Future without Sons. *Population and Development Review*, *46*(3), 471–499. https://doi.org/10.1111/padr.12337

Bakshi, K., & Chakravarti, P. (2024). *Cultures of Ageing and Ageism in India*. Routledge India. https://doi.org/10.4324/9780429352560

Bihar Reorganization Act (2000).

Dehejia, R. H., & Wahba, S. (2002). Propensity Score-Matching Methods for Nonexperimental Causal Studies. *Review of Economics and Statistics*, *84*(1), 151–161. https://doi.org/10.1162/003465302317331982

IIPS, National Programme for Health Care of Elderly (NPHCE), MoHFW, H. T. H. C. S. of P. H. (HSPH), & The University of Southern California (USC). (2020). *Longitudinal Ageing Study in India (LASI) Wave-1, 2017-18, India Report*.

Issac, T. G., Ramesh, A., Reddy, S. S., Sivakumar, P. T., Kumar, C. N., & Math, S. B. (2021). Maintenance and Welfare of Parents and Senior Citizens Act 2007: A Critical Appraisal. *Indian Journal of Psychological Medicine*, *43*(5_suppl), S107–S112. https://doi.org/10.1177/02537176211043932

Jamuna, D. (2003). Issues of Elder Care and Elder Abuse in the Indian Context. *Journal of Aging & Social Policy*, *15*(2–3), 125–142. https://doi.org/10.1300/J031v15n02_08

Karan, A., Yip, W., & Mahal, A. (2017). Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare. *Social Science & Medicine*, *181*, 83–92. https://doi.org/10.1016/j.socscimed.2017.03.053

MOSPI. (2019). *Report on All India Debt & Investment Survey - 2019 (NSS 77th Round)*.

MOSPI. (2021). *Report on Elderly in India*. https://mospi.gov.in/web/mospi/reports-publications.

Muhammad, T., Balachandran, A., & Srivastava, S. (2021). Socio-economic and health determinants of preference for separate living among older adults: A cross-sectional study in India. *PLOS ONE*, *16*(4), e0249828. https://doi.org/10.1371/journal.pone.0249828

Mutchler, J. E., Shih, Y.-C., Lyu, J., Bruce, E. A., & Gottlieb, A. (2015). The Elder Economic Security Standard Index™: A New Indicator for Evaluating Economic Security in Later Life. *Social Indicators Research*, *120*(1), 97–116. https://doi.org/10.1007/s11205-014-0577-y

NPC, N. P. C. (2019). *Study on functioning and effectiveness of Maintenance and Welfare of Parents and Senior Citizens Act 2007*.

Papke, L. E., & Wooldridge, J. M. (2008). Panel data methods for fractional response variables with an application to test pass rates. *Journal of Econometrics*, *145*(1–2), 121–133. https://doi.org/10.1016/j.jeconom.2008.05.009

Posner, R. A. (1997). Social Norms and the Law: An Economic Approach. *The American Economic Review*, *87*(2), 365–369.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41–55. https://doi.org/10.1093/biomet/70.1.41

Sathyanarayana, K., Kumar, S., & James, K. (2014). Living Arrangements of Elderly in India: Policy and Programmatic Implications. In G. Giridhar, K. Sathyanarayana, S. Kumar, K. James, & M. Alam (Eds.), *Population Ageing in India* (pp. 74–95). Cambridge: Cambridge University Press. https://doi.org/10.1017/CCO9781139683456.005