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Health shocks within couples: effects on labour supply and informal caring

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Headline findings

- If one person in a couple experiences a health shock, we find no evidence that the spouse increases their labour supply.
- Thus, any loss of income that results from the health shock is not directly compensated through informal household mechanisms.
- We do observe a significant increase in time devoted to informal care; a result that holds irrespective of gender. There is a 14-percentage point increase in the probability of the spouse providing informal care in the year of the health shock. Time devoted to care increases by about 3.5 hours per week.

Implications for policy

- Deteriorations to an individual's health may have wider effects on household members, particularly partners who are often viewed as providing 'informal insurance' to mitigate against the economic risks that shocks to health might entail.
- Understanding household responses to health shocks is important for assessing financial and non-financial wellbeing, and the role of informal insurance mechanisms in complementing social insurance provision.
- While labour supply for an individual experiencing a health shock has been found to decrease, we do not find evidence of an adjustment to the labour supply of the spouse.
- We do find a significant increase in time devoted to informal care. This is detected irrespective of affordability of formal care, as proxied by household income.
- This suggests a substitution to personal involvement in caring, at the expense of time devoted to other non-work activities. Policy makers should be mindful of the likely externality of increased caring responsibilities, and the welfare implications of the impacts of health shocks within household.

Background

- An ageing population in Western countries is one of the most significant social transformations of this century. According to the European Commission, the old-age dependency ratio is projected to increase from 29.6% in 2016 to 51.2% in 2070.
- Population ageing has significant implications for increased spending on social insurance and healthcare; and for labour markets, in terms of longer working lives and rising statutory retirement ages.
- As working life increases, so does the risk of experiencing a health shock while still engaged in work. Shocks to health represent a major source of economic risk.
- In theory, the effect of a health shock on spouse's labour supply is ambiguous. The income effect arising from the loss of earnings by the person whose health deteriorates might increase spousal labour supply – termed the Added Worker Effect (AWE).
- In contrast, a health shock might also be expected to reduce the labour supply of the spouse due to additional caring responsibilities. Complementarity of partners' leisure time, enhanced by an increased expectation of shortened lifespan, might also contribute to reducing, rather than increasing, spousal labour supply.
- Previous studies have provided inconclusive evidence on the existence of a health-related AWE. Our study extends the literature by considering both the labour supply and the informal care responses of spouses of individuals who experience an acute health shock.

Findings

- We find no evidence that the labour supply of the spouse of an individual who suffers a health shock increases. This holds irrespective of gender.
- Accordingly, the loss of income, previously estimated to be around 7%, for the individual experiencing the health shock, is not compensated within the household through an AWE, at least in the short-run.
- Partner's significantly increase their involvement in informal care provided to their health affected spouse. This amounts to a 14 percentage point increase in the probability of providing informal care in the year of the health shock; this persists at a reduced level into the second year. The expected number of hours of informal care in the year of the health shock increases by about 3.5 hours a week.
- Results hold irrespective of whether or not the individual experiencing the health shock was working prior to the shock.
- Men are more likely to report an increase in the probability of informal care provision (more than doubles) than women (60% increase); but they have a lower baseline probability.
- A plausible explanation for these findings is the presence of a national healthcare system in the UK, as opposed to an employment-contingent health insurance system, together with the availability of social security coverage in terms of disability-related benefits.

Where does our evidence come from?

- Our estimates come from analysis of the UK Household Longitudinal Study (UKHLS), a nationally representative survey of around 40,000 households who have been interviewed annually since 2009. This survey provides rich information on employment status, health, and home production, as well as other characteristics such as age, gender, education, income and household circumstances.
- We use data on couples (married or living as a couple) from 2009 to 2019 and focus on individuals experiencing a health shock through the onset of a heart attack, stroke or cancer. Interest lies in observing the partners adjustments in terms of their labour supply and hours of caring.

Further points to bear in mind

- Our approach to identifying the impact of a health deterioration on household decisions relies on exploiting unanticipated variation in the timing of the shock. To do so we consider shocks due to heart attack, stroke or cancer. The first two types of health shock are cardiovascular events chosen because they occur suddenly at an identifiable, yet unpredictable, point in time; the third type, cancer, although a progressive condition, is often asymptomatic and typically becomes known upon diagnosis.
- We compare `treated' households, where one of the partners experiences a health shock, with matched observationally equivalent `control' households. Matching is undertaken by considering a broad set of individual and household variables accounting for demographic and socioeconomic characteristics, labour market activity, health risks, past acute health shocks, and lagged outcomes. Identification assumes that conditioning on these variables is sufficient to regard the time-specific health shock as random.

Full details: Macchioni Giaquinto A, Jones AM, Rice N, Zantomio F. (2021). Labour supply and informal care responses to health shocks within couples: evidence from the UKHLS. GLO Discussion Paper, No. 806, Global Labor Organizaton (GLO), Essen.
www.econstor.eu/bitstream/10419/232259/1/GLO-DP-0806.pdf
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