

Social Stratification in the Time-use of Informal Caregivers for Older Individuals

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Abstract

In ageing societies, the increasing share of older adults places significant care burdens on family members, who experience negative consequences on psychological and physical health, and social isolation. These adverse effects are connected with time use restrictions due to prioritizing caregiving. Caregivers often cut on labour market involvement, sleeping, and social activities. Despite extensive research, the socioeconomic disparities in caregiver experiences remain under explored. Our study, using data from the SHARE survey, investigates how health shocks to a partner (i.e., exogenous shocks leading to increasing demands for informal caregiving, such as the onset of dementia, hip fracture, or stroke) influence the caregiver partner's daily activities, and how socioeconomic characteristics moderate this relationship. Results show that care responsibilities influence the caregiver's time expenditure, with heterogeneity across socio-economic status. The most affected by a partner's health shock are individuals at the bottom of the income, wealth and education distributions, significantly increasing time devoted to providing care to the partner. The "currency" utilized to pay for this caring time is leisure time among low-educated women, whereas it is mainly a reduction in paid work among highly educated women. Old European low-educated women are at risk of time poverty when their partners' health deteriorates.

Introduction

Older individuals' position in the stratification system relates to a series of outcomes, for instance overall income inequality and lower position in the income distribution are associated with an increase in depression symptoms (Sanchez-moreno et al. 2021)

In ageing societies, the increasing quota of older and frail individuals creates unprecedented needs for care (Colombo et al., 2011) that usually fall on the shoulders of family members, particularly partners (usually wives) (Broese van Groenou & De Boer, 2016). The 'caregiver burden' is common in the literature, the multifaceted strain the caregiver perceives from caring for a family member and/or loved one over time (Liu et al., 2020). The care load can negatively affect various outcomes, mainly psychological and physical health (Labbas & Stanfors, 2023), leading to caregiver social isolation (Hajek et al., 2021).

The adverse effects of caregiving on caregivers' well-being have to do – among various factors – with restrictions on their time use and, thus, potentially conflicting time demands from work or other (younger) family members' needs (Albertini et al., 2024). Because of the time priority required by caregiving, caregivers often cut on labour market involvement (Carmichael et al., 2008), sleeping and resting (Urwin et al., 2023), social activities and relationships they previously enjoyed (Rokicka & Zajkowska, 2020), a phenomenon known as 'social withdrawal'.

Despite the extensive study of the caregiver burden, the socio-economic heterogeneity of its effects remains under-researched. For example, the effect could be stronger for more disadvantaged individuals, with limited possibilities to 'buy time for themselves' by purchasing services on the market and fewer resources and skills to cope with the psychological demands associated with caregiving.

In the present study, we aim to uncover socioeconomic differences in the caregivers' time use using the Survey of Health, Aging, and Retirement in Europe (SHARE, 2020). Operationally, we leverage health shocks experienced by the partner, such as heart attacks, strokes, and hip fractures, to estimate the effect of an exogenous shock leading to increasing demand for informal caregiving on a range of caregiver's daily activities. Our study aims to shed light on the fact that not all caregivers are equal, and we may expect the consequences of informal caregiving on time to be moderated by key individual/household characteristics connected with social stratification – such as education, income, and wealth.

Data & methods

To explore how a partner's health shock influences an individual's time use, we employ the time expenditure module collected by the Survey of Health, Ageing, and Retirement in Europe (SHARE) in 2020 (wave 8 and 9, before the onset of COVID-19). SHARE is a survey that covers several key areas of life of people aged 50 or older from 28 European countries and Israel (Börsch-Supan et al., 2013).

We select individuals between 50 and 90 years old who live with a partner. The final sample amounts to almost 53,452 observations.

In the time expenditure module, respondents are asked how many minutes they devoted to a range of activities yesterday. Thus, as dependent variables, first, we select a measure of caregiving, i.e., the minutes spent helping the partner; second, we select activities concerning respondents' housekeeping:

minutes spent on chores and taking care of family finances administration; third, we select social activities: minutes spent in leisure activities and voluntary work; fourth, we measure respondents' time in self-care: minutes spent in their care, resting and napping, and sleeping at night; finally, we measure the minutes that the respondent spent on paid work.

Our main independent variable measures whether the respondent's partner has experienced a health shock one or two years before the present interview. In the survey, respondents are asked whether and when they were diagnosed by a doctor with a specific condition from a list (17 items) and/or whether they have experienced such health problems between the current and the previous SHARE wave. The list includes, among many others, heart attacks, strokes, cancer, hip fractures, Alzheimer's disease and dementia, Parkinson's disease, and osteoporosis. Since our dependent variables are only collected in wave 8 and 9, measuring health shock is a strategy to single out a sudden change in the respondent's daily routine that cannot be affected by reverse causality.

Our main moderating variables concern three stratification dimensions. First, the respondent's position in the country- and year-specific distribution of household equivalent disposable incomes, proxied by the income tercile in which she is located. Second, with the same procedure, we calculate per-capita household wealth terciles. Finally, we measure the respondent's highest educational level - primary education (ISCED 0, 1, 2), secondary education (ISCED 3, 4), and tertiary education (ISCED 5, 6). For the sake of brevity, this last set of results (wealth, education) is not shown as displaying similarities with the evidence about household income. All the three variables are included simultaneously in our models, while their interactions with their partner's health shock are introduced one at the time.

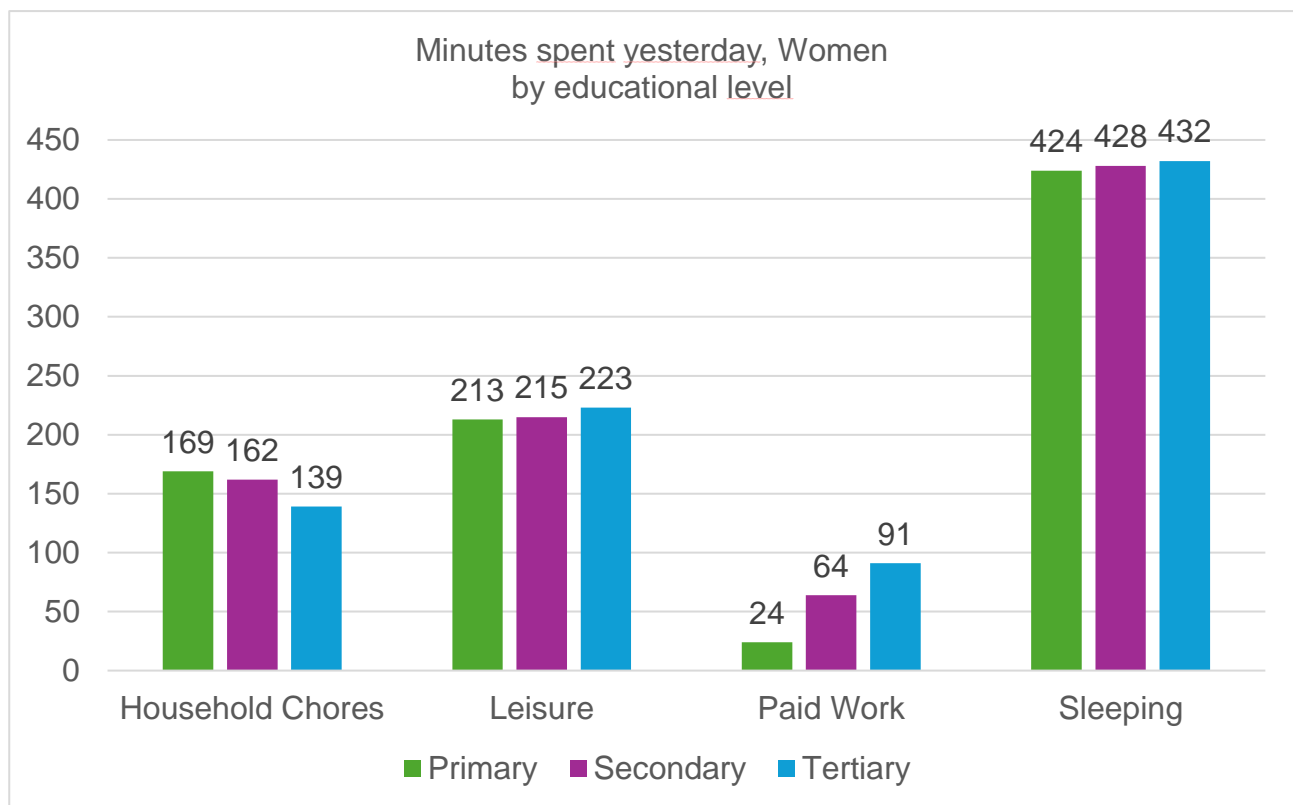
As controlling variables, we add to our models the age of both the respondent and their partner, the number of grandchildren (to control for competing care obligations), the number of limitations with (instrumental) activities of daily living (both ADL and iADL) and a set of dummies for the country of residence. Furthermore, as the dependent variables on time use refer to yesterday's day, we control for it being a weekday or weekend and a typical or unusual day.

Given the continuous nature of the dependent variables, a set of linear regression models is estimated separately by respondents' sex, including an interaction term between the partner's health shock and each stratification variable (income, education, and wealth). Models include survey-provided calibrated weights to correct for non-response.

Preliminary results

Clear and well-known differences emerge between men and women and across social strata; for example, women devote more time to household *Chores* than men, who, in turn, spend more time in *Paid Work*. Also the differences along the social stratification dimension follow the expected patterns. Thus, for instance, highly educated women spend more time than low educated ones in paid work, the opposite gradient is observed, instead, for time devoted to household chores (see figure 1).

Figure 1: Average time spent the day before the interview in different activities, by educational level. Women, full sample.

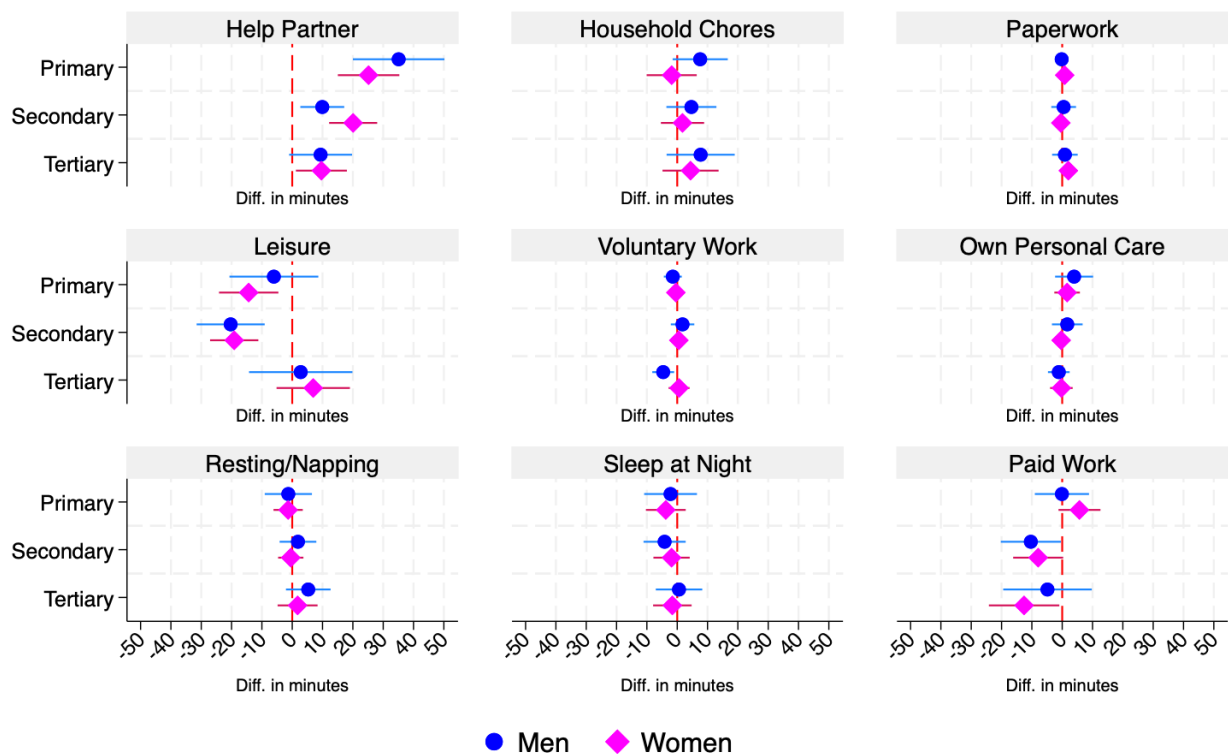


The statistics above display average daily time expenditure – but what happens to individuals’ daily routine when the partner suffers a health shock? Figure 2 shows the results from our multivariate regression. The coefficients must be read as the difference in time (minutes) spent in a particular activity between those respondents whose partner has experienced a health shock and those whose partner did not (reference category, red dotted line), i.e. the multivariate model includes an interaction between respondent’s education and partner’s health shock, while controlling for income, wealth and all of the other controlling variables.

It is clear from these results that there is a negative gradient between the increase in time devoted to providing informal care to the partner and the educational level of the respondent. Nevertheless, as it could be expected, there is a generalized increase in the average number of minutes spent providing care to the partner following their health worsening.

Such an increase in time devoted to informal care, however, seems to be “compensated” in quite different ways across the educational distribution. While among low and intermediate-educated women there is a significant negative difference in the amount of time they devote to leisure, among the highly educated – and despite their presumably higher salaries – a reduction in the time devoted to paid work is observed following the partner’s health deterioration. Similar results are obtained when interacting income or wealth with the partner’s health shock.

Figure 2: Results of multivariate regression model, education



Note: 95% CI. Results from linear regression models, by sex, including an interaction term between partner's health shock and respondents' educational level. Models control for respondents' and partners' age, ADLs and iADLs, self-reported health, number of grandchildren, country of residence; income tercile; wealth tercile; yesterday: day of the week or weekend, unusual/typical day. Calibrated survey weights were applied.

Source: Own calculation based on SHARE survey (wave 8 and 9, 2020).

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