Well-being losses due to care-giving☆

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A R T I C L E   I N F O

A B S T R A C T

This paper estimates the impact of informal caregiving on self-reported well-being. It uses a sample of 23,285 respondents of the first eleven waves of the Household, Income and Labour Dynamics in Australia (HILDA).

We apply a relatively new analytical method that enables us to estimate fixed effects ordered logit to analyse subjective well-being. The econometric estimates show that providing informal care has a negative effect on subjective well-being.

The empirical evidence of our paper could be helpful to inform policy makers to better understand the impact of caregiving and design the appropriate long term care policies and support services.

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1. Introduction

Informal care describes the care provided by family and friends, who are unpaid other than possibly receiving some form of carers' benefit (Van den Berg et al., 2004). While informal care has always been part of the care provided to the sick and disabled, it is becoming increasingly significant with the growing burden of chronic disease, the pressures to reduce acute hospital stays, and the emphasis on dying at home or at least remaining there as long as possible. Informal caregivers are responsible for the major amount of care provided, mostly at home, for people with chronic diseases, the elderly and the terminally ill (Norton, 2000).

Informal care has been largely ignored by economists on the basis that, if carers provided care, the benefits to them must outweigh the costs. This meant that informal carers were seen as a free resource, by economists and policy makers, and providing care at home as cost saving rather than as a redistribution of the costs. However, care-giving often involves considerable time (Van den Berg and Spauwen, 2006), limits the extent to which caregivers can take paid employment (Ettner, 1996; Carmichael and Charles, 1998, 2003; Heitmueller, 2007), or involves lower wages for those carers who are employed (Heitmueller and Inglis, 2007). The existing health economics literature on informal care has mainly focused on valuing this time input (Smith and Wright, 1994; Posnett and Jan, 1996). Most of the discussion has been around the appropriate method of valuation; see McDaid (2001) and Van den Berg et al. (2004) for overviews. Traditionally, economists have suggested valuing informal care using opportunity cost or proxy good (also called replacement cost) methods (Van den Berg et al., 2006). The first uses the foregone earnings of the caregivers as the value of care, and it ignores the (dis)utility that a caregiver might derive from

providing the care. In the proxy good method, the value of informal care is the price of a market substitute, e.g. professional home care. It assumes that informal care and professional care are perfect substitutes, and that professional care is available. This assumption is not realistic. Professional care, however skilled, is not the same as the care provided by someone in the context of an ongoing relationship; and in many circumstances, professional care is not high quality or is simply not available. Carers may also feel a sense of obligation or duty to provide care. Neither method reflects the preferences of the informal caregiver or those of the care recipient. For this reason, Van den Berg et al. (2005a,b,c, 2008) suggest contingent valuation and choice experiments as a more adequate approach to valuing informal care as these methods are preference based and give a total valuation of informal care.

Beyond the economics literature, the impact of care giving on the carer has been well documented. Caregivers have reported negative effects on their physical and mental health, finances, social life and leisure, as well as labour market participation (Pearlin et al., 1990; Kramer, 1997; Hughes et al., 1999; Schulz and Beach, 1999; Dunn and Strain, 2001; Savage and Bailey, 2004; Hirst, 2005; Yamazaki et al., 2005; Kenny et al., 2010). This has lead to another stream of literature which tries to incorporate the so-called quality of life impacts of informal caregiving. Mohide et al. (1988) introduced the term caregiver quality of life in the literature by applying the time trade-off technique to caregiving. In fact the literature that followed simply applied health-related quality of life measures to informal caregiving (see for references Dixon et al., 2006) or valued informal care using best worst scaling (Al-Janabi et al., 2011) or subjective well-being (Brouwer et al., 2006). There is however little conceptual clarity about caregiver quality of life. For instance, it is not clear what aspects of caregiving should be included (Kramer, 1997; Chappell and Ried, 2002). Moreover, the obvious interdependency in utility functions between caregivers and their care recipients is neglected (Van den Berg et al., 2005b).

While caregiving can impose a considerable burden on caregivers, caregivers also report satisfaction with giving to a significant other, e.g. Jacobi et al. (2003), Andrén and Elmståhl (2005) and Zapart et al. (2007). This implies that the impact of caregiving is complex, involving both positive and negative effects. This suggests that a more sophisticated approach to understanding the caregiving role is required, and that the impact on overall well-being in addition to specific aspects should be assessed. Subjective well-being research measures respondents' own internal judgement of well-being as opposed to social indicators research that measures people's objective circumstances in a given cultural or geographic unit (Diener and Suh, 1997). It can measure people's judgement about their own life as a whole or be limited to specific domains of life, for instance, their job, house or family; for an overview see Myers and Diener (1995). Subjective well-being measures have been used in economics to understand and explore a large range of topics. They include: unemployment, inflation, health, job situation, and income (DiTella et al., 2001; Ferrer-i-Carbonell and Van Praag, 2002; Clark and Oswald, 1994; Easterlin, 2001; Long, 2005; Ferrer-i-Carbonell, 2005). Economists take the answers to well-being questions as a proxy measure of experienced utility; see, e.g., Kahneman et al. (1997), Frey and Stutzer (2002) and Luttmer (2005). On a few occasions, the economics literature goes one step further. It uses the general finding that household income increases self reported well-being to calculate a monetary compensation for cost-benefit analysis. This approach is called the well-being valuation method and has been applied, for instance, to airport noise (Van Praag and Baarsma, 2005) and chronic conditions (Ferrer-i-Carbonell and Van Praag, 2002; Powdthavee and van den Berg, 2011). There is only one paper which has applied this approach

to informal care (Van den Berg and Ferrer-i-Carbonell, 2007)[1]; it demonstrated that the results obtained from the wellbeing valuation method were similar to contingent valuation estimates using two measures of wellbeing. It also showed that providing more informal care, as measured by hours of care, decreased care-giver self reported well-being. Moreover, the effect was stronger for family caregivers (i.e. living in the same household) compared with non-family caregivers. However, the study was limited to a cross sectional sample of caregivers recruited from carers' support centres likely involving self-selection bias. These respondents tended to be older, have an illness themselves, and provide more care than the national average hours of care provided.

This study also uses the wellbeing valuation method, following Van den Berg and Ferrer-i-Carbonell (2007), and extends it in various ways. We use panel data of a nationally representative population sample, the Household Income and Labour Dynamics in Australia (HILDA) data, which has repeatedly interviewed individuals. Thus we are able to examine the results of caregiving on a representative national sample. We compare the subjective wellbeing of caregivers and non-caregivers. The data set also provides income and health-related quality of life data, thus enabling us to compare the effect of care-giving with income and health-related quality of life on well-being. The panel nature of the data allows us to use analytical methods which control for the presence of unobserved individual effects. For example, altruism may be associated with both subjective wellbeing and informal care, and vary across individuals in our sample but is unobserved.

2. Data

2.1. Sample characteristics

We use the first eleven waves of HILDA, a nationally representative sample of the Australian population. The data were collected between 2001 and 2011, by interview and individually completed questionnaires. For more information, see Watson and Wooden (2002). The total household response rate in wave 1 was 66%. Out of 11,693 households, interviews were conducted within 7682 households, comprising 19,917 people, 4790 of whom were under 15 years of age on the preceding June 30 and hence ineligible for interview. This left 15,127 persons of whom 13,969 were successfully interviewed in the first wave (Heady et al., 2006). Subsequent waves include new individuals, due to existing household members turning 16, new household formation, and refreshment of the sample. We restricted our sample to individuals with complete data provided on the variables of interest in any wave. This consists of 23,285 individuals of whom 10,183 indicated that they would provide informal care (defined as any care) during a typical week in one or more waves.

2.2. Survey questions

The major variables of interest (see Table 1) are subjective well-being and the provision of informal care. Individual subjective well-being[2] was elicited by asking respondents to rate their own life satisfaction. We use the life satisfaction question as we believe

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[1] Other papers apply subjective wellbeing measures to informal caregiving but they do not intend to measure caregiver's well-being according to the subjective wellbeing tradition but other concepts, for example process utility (Brouwer et al., 2005) and caregiver quality of life (Brouwer et al., 2006).

[2] The subjective well-being literature uses as interchangeable the terms subjective well-being, happiness, and satisfaction with life (Blanchflower and Oswald, 2004; DiTella et al., 2001; Frey and Stutzer, 1999). The term used is often chosen independently of the exact formulation used in the questionnaire itself. Here we