What factors enable mid-life carers to re-enter the labour market in New Zealand?

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Abstract

Substantial care roles during mid-life are typically performed by women and are known to have a negative impact on the probability to be in paid employment. Based on multivariate logistic regression, this article therefore analyses potential factors that enable non-employed carers in New Zealand to return to paid employment. To do so, we use data from participants who responded to the 2012, 2014, 2016 and 2018 waves of the New Zealand Health, Work and Retirement study and were not employed during any of the first three of these waves and caregivers throughout. This corresponds to follow-up data for 489 non-employed caregivers (69 of whom had resumed work at follow-up). Preliminary descriptive results show that those who were in paid employment at follow-up were significantly more likely to be female, tertiary educated, non-Māori and not in a marital or de facto relationship. On the other hand, own health and economic living standards do not appear to play a great role in the probability of going back to work, while the 3.9 year lower age of the employed at follow-up is not statistically significant. Our results suggest that despite New Zealand employment legislation allowing all employees to request flexible working arrangements, clear gender, ethnic and educational differences persist.

Introduction

Population ageing, changing family structures, increasing female labour force participation and the implementation of 'ageing in place' policies to reduce rising health care costs (Means 2007) have created an increased demand for both formal long-term care services and informal (i.e. mainly family) carers. Many families, however, cannot afford, or do not want, to outsource (all of the required) care for a family member. As a result, another family member finds themselves in the position of care provider, often by having to reduce their hours of paid work or give up work completely (Carmichael et al. 2008). Not surprisingly, it is also well-known that caregiving affects personal circumstances, in particular physical and mental health (see Alpass et al. 2017a for an overview of the literature) and employment (Austen and Ong 2010). For instance, for the economically active, becoming a carer because a close relative/friend has fallen ill or become too frail to live an independent life is associated with a reduction in the number of working hours and even the total abandonment of employment (*ibid.*). The effect of caring on employment, however, is also conditioned by the type and duration of care, as well as previous economic conditions and personal circumstances. To illustrate: the increase in expenses (or loss of income) may mean that a carer needs to find ways to keep themselves economically active, especially in the absence of other financial resources (Austen et al. 2015).

However, less-well studied are employment transitions after having provided long-term informal care despite there being many reasons why a caregiver may want or may be forced to try to get back into the workforce once he or she has stopped providing care. This particularly concerns those whose

employment interruption was long and, as a result, had large losses in income and accumulation of pension benefits (Bettio et al. 2013). But not only personal reasons play a role in the decision for some (former) caregivers to try and find work. At the same time that a large proportion of the burden of the care of older parents falls on women who are of late working age (Bracke et al. 2008), governments of industrialised countries have introduced policies aimed to mobilise all available labour to respond to the challenges of population ageing (OECD 2006). Hence, disentangling factors that appear to enable (former) carers to re-enter the workforce is necessary from a policy perspective and therefore an important motivation for our study. Another reason is the scant evidence about the employment experiences of mid-life women, which is partly due to the lack of the necessary data (Austen and Ong 2010). Exceptions include Henz's (2006) and King and Pickard's (2013) examination of the effects of informal care obligations on labour force participation in the UK; Kelle (2018) did the same for Germany; Hanks's (2004) study of the links between German women's reproductive histories and their late-life labour-market behaviour; Spiess and Schneider's (2003) study of the effects of care roles on hours of paid work among European mid-life women; and Austen and Ong's (2010) study on the causal influences of care, health, and other factors on the ability of mid-life women to remain in and re-enter paid work. Regarding the latter study, based on data from the Household, Income and Labour Dynamics in Australia survey (2001-05), results show that substantial care roles (and/or poor health) have a negative impact on the employment chances of mid-life women. Importantly, however, is that no increase in the chances of returning to paid work was found when care roles were reduced (and/or health improved). This denotes that many mid-life women who undertake large care roles face substantial long-term negative consequences for their employment chances and, thus, their retirement and pre-retirement incomes.

Prior studies on the impact of caregiving in New Zealand

A longitudinal investigation of the impact of caregiving in New Zealand was recently done by Alpass et al. (2017b) with respect to the health of older adults who provide informal care to friends and family. The authors of this study compared mental and physical health trajectories of caregivers and non-caregivers over a ten year period. Results indicated no impact of the caregiving role on health status over time but instead indicated that adults with poor mental health were more likely to take up caregiving roles, supporting models of a health-selection bias into caring and the adaptation hypothesis to caregiving burdens over time. However, no study has yet been conducted in New Zealand that investigates factors that facilitate re-entry into the workforce after an episode of caring for someone. Moreover, previous research has focused on the impact of care on different outcomes have been criticised as limited due to its cross-sectional nature and focus on caring cessation (Alpass et al. 2017b; Lyons et al. 2015; Rafnsson et al. 2017). The aim of this study is therefore to identify enabling factors for non-employed caregivers to become employed on the basis of longitudinal data.

Method

Sample

Data come from the Health, Work and Retirement (HWR) study. The HWR is an ongoing population-level study that started in 2006 and whose aim is to characterize health and wellbeing of randomly selected non-institutionalised older adults in New Zealand and to identify key determinants of these experiences. Its sampling frame for recruitment of new cohorts is the New Zealand national electoral roll and approximately 97.6% of eligible voters aged over 50 years are enrolled (New Zealand

Electoral Commission 2016). Based in the social sciences, the study is designed to facilitate evaluation of major theoretical frameworks for ageing research, including a capabilities approach to ageing (Stephens et al. 2018) and life course perspectives (O'Rand 2006; Settersten 2003). Measures and design are selected to facilitate cross-cultural comparisons of models with other major studies of ageing internationally and to acknowledge the unique environmental, cultural and social conditions of New Zealand. For detailed information on study design, criteria, samples and response rates see Allen et al. (2019), Alpass et al. (2007), Towers and Stevenson (2014) and other technical reports on the HART website http://hart.massey.ac.nz/.

Participants

Participants were recruited to the study from multiple random samples drawn from the New Zealand electoral roll in 2006, 2009, 2014 and 2016. Participants who responded to waves 4 (2012), 5 (2014), 6 (2016) and 7 (2018) of HWR's longitudinal survey[1] and were not employed during any of the first three of these waves were included in the present study, corresponding to follow-up data for 489 non-employed caregivers (69 of whom had resumed work at follow-up). Earlier waves were not analysed due to a change in the care questions from 2012 onwards[2]. Where multiple occurrences of concurrent non-employment and caregiving were observed, the first observation with complete follow-up data was selected as the baseline observation. Caregiving status of participants at each survey was determined by the participants' responses to questions regarding their caregiving status under the instruction: 'These questions are about providing care for someone with a long-term illness, disability or frailty. By 'providing care' we mean practical assistance for at least 3 hours a week'. Participants who indicated that they had provided care for someone with a long-term illness, disability or frailty within the last twelve months were categorised as caregivers.

Measures

Dependent variable: *Current Employment Status [CE].* CE (full time, part time, or no paid work) was derived from responses regarding current paid employment and hours in paid employment.

Independent variables: Predictors of employment include: caregiver sociodemographics and health status and care-related variables (baseline number of people to whom the respondent provided care, care recipient age and relationship to caregiver, caregiver's co-residence status, care frequency, long-term condition(s) for which care is provided and follow-up care status).

Regarding the sociodemographics, these include age, gender, ethnicity (non-Māori/Māori), educational attainment (none/secondary school/post-secondary and trade/tertiary), partnership status (married or de facto/other), prefers employment (yes/no) and employment industry (professional/non-professional) and socioeconomic status. Socioeconomic status was assessed using the Economic Living Standards Index Short Form (Jensen et al. 2005). This measures asks participants to rate their material wealth in terms of their levels of consumption and personal possessions. Scores range from range 0 – 31 and higher scores indicate better living standards, with scores categorised as indicative of 'hardship' (0 - 16), 'comfortable' (17 - 24), and 'good' (25 - 31) living standards.

The health status measures are:

[1] Multiple modes of data collection are used to achieve objectives of the HWR study and include: a longitudinal survey, face to face cognitive interviews, linkage to national mortality and health record databases, and life course history interviews.
[2] The time frame changed from regular/current care to care in the past 12 months, and items regarding the nature of care also shifted to be explicitly about the care and characteristics of the person they had cared for the longest.

- *Physical and mental health* – This was assessed using the SF-12 (version 2) Australian and New Zealand form. All items contributed to the calculation of two factor scores: Physical Component Score (PCS: positive weights for items assessing: physical functioning, role physical, pain, and general health items) and Mental Component Score (MCS: positive weights for items assessing: vitality, social functioning, relationships and mental health items). Scoring utilized normative subscale scores for New Zealand population (Frieling et al. 2013).
- *Health conditions*: Participants were asked whether they had ever received a diagnosis of having any of the following 10 conditions: arthritis or rheumatism; cancer; diabetes; high blood pressure; heart trouble (e.g., angina or heart attack); respiratory condition (e.g., bronchitis, asthma); stroke disorder of the neck or back (e.g. lumbago, sciatica, chronic back or neck pain, vertebrae or disc problems); sleep disorder; or disability. If 2 or more health conditions were reported it was considered that the respondent had a health condition.

The care-related variables include *care number,* based on the question "In total, how many people with a long-term illness, disability or frailty do/did you regularly provide care for?" (categorised into one person/two or more persons). Caregivers were asked to indicate the characteristics of the person they had provided care for the longest:

- Age of care recipient (in years)
- Frequency of care or assistance (every day/several times per week/once a week or less often)
- Care recipient-care giver relationship (spouse/parent/other)
- Caregiver's co-residence status (yes/no)
- *Long-term condition(s) for which care is provided* (frailty in old age/cancer/mental health problem/Alzheimer's disease or dementia/respiratory condition/stroke/severe arthritis or rheumatism/visual impairment/intellectual disability or handicap/other condition)
- Current (i.e. follow-up) care status (yes/no)

Analysis

All statistical analyses were conducted using SPSS. Regarding the method of analysis, we first compare the sample characteristics of carers who remained without work with those who found employment at follow-up. Subsequently, we conduct a multivariate logistic regression of the same variables to ascertain the independent effect of each factor on the propensity to have found employment.

Results

Sample description

Of the *n* = 4,846 participants who responded to 1 or more survey waves 2012-2016, *n* = 1431 (29.5%) identified as caregivers at 1+ surveys. Of these, *n* = 638 (44.5%) identified as being concurrently non-employed and providing care. 489 (76.7%) of these provided data at biennial follow-ups (2014-2018) of whom 266 (54%) were aged between 55 and 71 at follow up and thereby form our target population. Older caregivers were discarded due to the remote likelihood of returning to the workforce. As Table 1 shows, about half of caregivers were retired or not in paid work at both baseline and at follow up. Others were not working at baseline due to a health or disability issue (21.4%) or because they were full-time homemakers (9.0%). Nevertheless, of those who found paid employment between waves a quarter had been out of the workforce because they were

(pre)retired, 22.7% were so due to health reasons and 20.5% had been unemployed and actively seeking work. If we turn to the descriptive statistics in Table 2, those who were in paid employment at follow-up were more likely to be female, not married or in a de facto relationship, have tertiary education and better physical health as well as mental health at follow up. On the other hand, ethnicity, health and economic living standards do not appear to differ between those who remained without employment and those who found a job (interestingly, however, is that respondents were financially better off at follow-up than at baseline).

Table 3 considers the opposite. It provides the probability of going back to work according to the personal, health and care characteristics of the caregivers. The results do not reveal any significant differences among the categorical variables, with the exceptions of having a preference for being employed. To better disentangle independent effects of potentially explanatory variables we therefore performed a multivariate analysis where we also added several of the continuous variables in Table 2 (age of the caregiver and care recipient, physical and mental health and the economic living standards at time T0 and T1 (thus replacing the two categorical variables). Results show that baseline living standards is positively associated with being employed at follow-up but living standards at follow-up is negatively associated. Good physical health is important at baseline when getting a job, while mental health at baseline is negatively associated (but at follow-up positively associated) with employment. Finally, perhaps the most important discriminatory variable is having a preference for being employed.

Discussion

In the full paper we will dive more into possible mechanisms, but it appears that the desire to work is an important determinant for current caregivers to be employed. However, financial need and health status at baseline are also important predictors. Gender and ethnicity, however, aren't and neither the relationship to the person being cared for.

Table 1 Self-reported employment status at baseline of caregivers and follow up by employment outcome (T1).

	Overall		**Not employed at T1**		**Employed at T1**	
Detailed Employment status T0	n obs	%	n obs	%	n obs	%
Retired, no paid work	133	50.0	122	55.0	11	25.0
Full-time homemaker	24	9.0	19	8.6	5	11.4
Full-time student	2	0.8	1	0.5	1	2.3
Unable to work due to health or disability issue	57	21.4	47	21.2	10	22.7
Unemployed and seeking work	17	6.4	8	3.6	9	20.5
Other	33	12.4	25	11.3	8	18.2
Total	*266*		*222*		*44*	
Detailed Employment status T1	n obs	%	n obs	%	n obs	%
Full-time paid employment, including self employment	9	3.4	.	.	9	20.5
Part-time paid work, including self employment	35	13.2	.	.	35	79.5
Retired, no paid work	143	53.8	143	64.4	.	.
Full-time homemaker	23	8.6	23	10.4	.	.
Full-time student	1	0.4	1	0.5	.	.
Unable to work due to health or disability issue	38	14.3	38	17.1	.	.
Unemployed and seeking work	5	1.9	5	2.3	.	.
Other	12	4.5	12	5.4	.	.
Total	*266*		*222*		*44*	

Source: New Zealand Health, Work and Retirement (HWR) study. Note: Proportions may not sum to 100% due to rounding.

Table 2. Descriptive statistics of the sample according to employment outcome at T1

	Overall (SE)		1. Not employed at follow up (T1) (SE)		2. Employed at follow up (T1) (SE)		Sig. t-test for equality mean[a]
Total n	n obs		n obs		n obs		
Personal factors of carer							
Age T0 (mean, SD)	266	63.1 (3.5)	222	61.7 (3.4)	44	63.9 (4.0)	0.004
% Female	266	70.7	222	69.8	44	75.0	
% Maori	266	39.1	222	38.7	44	40.9	
% Married or de facto (T0)	265	63.8	*221*	65.6	44	54.5	
Qualification	266	.	*222*	.	44		
% None		17.3		17.6		15.9	
% Secondary school		21.8		21.6		22.7	
% Post secondary/trade		38.3		40.1		29.5	
% Tertiary		22.6		20.7		31.8	
Economic Living Standards of carer							
Economic Living Standard T0 (mean, SD)	263	20.3 (8.9)	220	19.9 (9.1)	43	21.7 (8.0)	
% Hardship		31.6		33.2		23.3	
% Comfortable		24.7		23.2		32.6	
% Good		43.7		43.6		44.2	
Economic Living Standard T1 (mean, SD)	262	21.3 (8.4)	219	21.4 (8.4)	43	20.5 (8.4)	
% Hardship		24.4		24.2		25.6	
% Comfortable		29.8		29.2		32.2	
% Good		45.8		46.6		41.9	
Health of carer							
Physical Health T0 (mean, SD)	258	42.4 (11.9)	214	41.6 (12.0)	44	46.3 (10.9)	0.017
Physical Health T1 (mean, SD)	258	41.8 (12.0)	216	40.9 (12.4)	42	46.7 (8.1)	0.004
Mental Health T0 (mean, SD)	258	45.3 (12.5)	214	45.2 (12.2)	44	46.0 (13.7)	0.695
Mental Health T1 (mean, SD)	258	45.8 (11.8)	216	45.3 (11.9)	42	48.7 (10.8)	0.083
2+ health conditions T0	266	65.8	222	65.3	44	68.2	
2+ health conditions T1	266	65.0	222	64.4	44	68.2	
Care characteristics							
Number cared for % Two or more	204	19.6	171	18.7	33	24.2	
Age of primary care recipient (mean, SD)	262	68.6 (23.2)		68.9 (22.5)		67.0 (26.8)	0.612
Frequency of care	262	.	218		44		
% Every day		56.9		58.3		50.0	
% Several times per week		21.4		20.2		27.3	
% Once a week or less		21.8		21.6		22.8	
Relationship to carer	265	.	221		44		
% Spouse		26.4		27.6		20.5	
% Parent (in-law)		39.3		38.9		40.9	
% Other		34.4		33.4		39.7	
% Living with carer	266	41.0	222	41.9	44	36.4	
Care provided due to condition (s):	266	.	222		44		
% Frailty in old age		43.6		42.8		47.7	
% Cancer		19.9		19.8		20.5	
% Mental health problem		19.2		20.3		13.6	
% Alzheimer's disease or dementia		18.4		18.0		20.5	
% Respiratory condition		14.3		14.4		13.6	
% Stroke		12.0		11.3		15.9	
% Severe arthritis rheumatism		13.2		13.5		11.4	
% Visual impairment		11.3		11.7		9.1	
% Intellectual disability or handicap		5.6		6.3		2.3	
% Other condition		32.7		31.5		38.6	
Care status (T1)	262	.	219		43		
% Yes		53.1		53.0		53.5	

Source: New Zealand Health, Work and Retirement (HWR) study. Note: Proportions may not sum to 100% due to rounding.

[a] Equal variances assumed.

Table3. Proportion employed at T1 according to predictors of employment and sociodemographics

	n obs	% Employed at follow up (T1)	Chi-2 test
Personal factors of carer			
Sex			
Women	188	17.6	
Men	78	14.1	0.490
Ethnicity			
Maori	104	16.0	
Non-Maori	162	17.3	0.788
Marital status (T0)			
Married or de facto	169	14.2	
Not married or de facto	96	20.8	0.163
Qualification			
None	46	15.2	
Secondary school	58	17.2	
Post secondary/trade	102	12.7	
Tertiary	60	23.3	0.369
Prefers employment			
Yes	82	31.7	
No	102	9.8	**0.000**
Economic Living Standards of carer			
Economic Living Standards T0			
Hardship	83	12.0	
Comfortable	65	21.5	
Good	115	16.5	0.300
Economic Living Standard T1			
Hardship	64	17.2	
Comfortable	78	17.9	
Good	129	15.0	0.845
Health conditions of carer T0			
<2 conditions	91	15.4	
2+ conditions	175	17.1	0.714
Health conditions of carer T1			
<2 conditions	93	15.1	
2+ conditions	173	17.3	0.632
Care characteristics			
Number of people cared for			
One	164	15.2	
Two	29	17.2	
More than two	11	27.3	0.569
Frequency of care			
Every day	149	14.8	
Several times per week	56	21.4	
Once a week or less	57	17.5	0.516
Relationship to carer			
Spouse	70	12.9	
Parent (in-law)	104	17.3	
Other	91	18.7	0.597
Living with carer			
No	157	17.8	
Yes	109	14.7	0.496
Care provided due to condition			
Alzheimer's disease or dementia			
No	217	16.1	
Yes	49	18.4	0.704
Care status (T1)			
No	123	16.3	
Yes	139	16.5	0.950

Source: New Zealand Health, Work and Retirement (HWR) study. Note: Proportions may not sum to 100% due to rounding.

Table 4. Logistic regression on the propensity of carers to have found employment

							95% CI	For EXP(B)
	B	S.E.	Wald	df	Sig.	EXP(B)	Lower	Upper
Baseline Age	-.059	.075	.621	1	.431	.943	.814	1.092
Gender (women)	-.283	.578	.241	1	.624	.753	.243	2.337
Ethnicity (non-maori)	.523	.575	.827	1	.363	1.687	.546	5.212
Baseline Marital status (married or de facto)	.333	.666	.250	1	.617	1.395	.378	5.142
Education (tertiary)	-.162	.598	.073	1	.787	.851	.264	2.745
Baseline Econ. Living Standards Score	.310	.084	13.757	1	**.000**	1.363	1.157	1.606
Followup Econ. Living Standards Score	-.215	.071	9.308	1	**.002**	.806	.702	.926
Baseline SF-12 Physical Component Score	.111	.040	7.726	1	**.005**	1.118	1.033	1.209
Followup SF-12 Physical Component Score	-.040	.041	.977	1	.323	.961	.887	1.040
Baseline SF-12 Mental Component Score	-.072	.034	4.454	1	**.035**	.931	.871	.995
Followup SF-12 Mental Component Score	.085	.037	5.424	1	**.020**	1.089	1.014	1.170
Baseline Age of care recipient	-.022	.014	2.414	1	.120	.979	.952	1.006
Frequency of care (less than every day)	-.080	.666	.015	1	.904	.923	.250	3.404
Relate1 (not spouse)	.367	.753	.237	1	.626	1.443	.330	6.313
Relate2 (not parent or parent in law)	.572	.960	.355	1	.551	1.772	.270	11.639
Living with carer (yes)	-1.776	.977	3.303	1	.069	.169	.025	1.149
Baseline recipient conditon (dementia)	-.841	.706	1.418	1	.234	.431	.108	1.722
Baseline Prefers to Work (yes)	-2.664	.695	14.680	1	**.000**	.070	.018	.272
Follow-up Care Status: (cared for someone last 12 months)	.881	.573	2.370	1	.124	2.414	.786	7.415
Constant	1.714	4.953	.120	1	.729	5.549		

Source: New Zealand Health, Work and Retirement (HWR) study.

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