Using Survey Data to Explore the Wellbeing of Unpaid Caregivers Over 50
A cross-sectional analysis of data from the English Longitudinal Study of Ageing
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Background

Unpaid caregiving is increasing

What is the wellbeing of older unpaid carers?

Unpaid caregiving can lead to poorer health

1/5 of unpaid caregivers are aged 50-64 years

Background

**Frailty**
*The reduced reserve to physiological insult experienced by some older people*

Reduced “bounce back”
To infection, falls, stressful life events etc
Not all older people

**Frailty Index**

Number of reported deficits
Number of possible deficits

E.g. a 40 deficit Frailty Index is used for study
Mary has high BP, angina, diabetes and depression
= 4/40
Mary has a FI Score of 0.1
To assess the health and wellbeing of unpaid caregivers over 50 in the ELSA study using a frailty index.

**Dataset**

- The English Longitudinal Study of Ageing (ELSA) is a cohort study which includes a sample of the over 50 population living in England.
- We used the most recent Wave 9 (2019) nurse visit data (n=3,047).

**Aim**

To assess the **health and wellbeing** of **unpaid caregivers** over 50 in the ELSA study using a frailty index.
Methods

• Frailty was calculated using the ELSA-frailty index (Gale and Cooper, 2018)
Frailty Index

Difficulty with walking 100 yards
Difficulty sitting for about two hours
Difficulty getting up from a chair after sitting for long periods
Difficulty climbing several flights of stairs without resting
Difficulty climbing one flight of stairs without resting
Difficulty stooping, kneeling, or crouching
Difficulty reaching or extending arms above shoulder level
Difficulty pulling or pushing large objects like a living room chair
Difficulty lifting or carrying weights over 10 pounds, like a heavy bag
Difficulty picking up a 5p coin from a table
Difficulty dressing, including putting on shoes and socks
Difficulty walking across a room
Difficulty bathing or showering
Difficulty eating, such as cutting up your food
Difficulty getting in or out of bed
Difficulty using the toilet, including getting up or down
Difficulty using a map to figure out how to get around in a strange place
Difficulty preparing a hot meal
Difficulty shopping for groceries
Difficulty making telephone calls
Difficulty taking medications
Difficulty managing money, (e.g. paying bills and keeping track of expenses)
Difficulty doing work around the house or garden
Self-reported general health
High blood pressure or hypertension (self-reported)
Angina (self-reported)
Heart attack (including MI or coronary thrombosis) (self-reported)
Congestive heart failure (self-reported)
An abnormal heart rhythm (self-reported)
Diabetes or high blood sugar (self-reported)

A stroke (cerebral vascular disease) (self-reported)
Chronic lung disease such as chronic bronchitis or emphysema (self-reported)
Asthma (self-reported)
Arthritis (including osteoarthritis, or rheumatism) (self-reported)
Osteoporosis, sometimes called thin or brittle bones (self-reported)
Cancer or a malignant tumor (excluding minor skin cancers) (self-reported)
Parkinson's disease (self-reported)
Any emotional, nervous or psychiatric problems (self-reported)
Alzheimer's disease (self-reported)
Dementia, organic brain syndrome, senility or any other serious memory impairment (self-reported)
Self-reported eyesight (while using lenses, if appropriate)
Self-reported hearing (while using hearing aid if appropriate)
Whether respondent has fallen down at all / last year / last 2 years
Whether respondent has fractured hip ever / in last 2 years
Whether respondent has had joint replacement ever
Identify today's date: day of month
Identify today's date: month
Identify today's date: year
Identify the day of the week?
Immediate word recall (sample organized into quartiles)
Methods

Frailty was calculated using the ELSA-frailty index (Gale and Cooper, 2018)

Unpaid caregivers were identified by:

- Self reporting that they cared for someone in the past week
- OR
- Reported that they receive Carers Allowance

Results

Demographics

<table>
<thead>
<tr>
<th>Carers</th>
<th>Non-carers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: 64.5 ± 10.2 years</td>
<td>Age: 66.7 ± 10.5 years</td>
</tr>
<tr>
<td>Sex 39% 61%</td>
<td>Sex 43% 57%</td>
</tr>
<tr>
<td>Married or cohabit</td>
<td>Married or cohabit</td>
</tr>
<tr>
<td>Lives alone</td>
<td>Lives alone</td>
</tr>
<tr>
<td>Household Wealth</td>
<td>Household Wealth</td>
</tr>
<tr>
<td>Median £20,200</td>
<td>Median £20,200</td>
</tr>
<tr>
<td>IQR £1,600-£85,210</td>
<td>IQR £3,200-£11,600</td>
</tr>
<tr>
<td>In paid work 35.9%</td>
<td>In paid work 36.6%</td>
</tr>
</tbody>
</table>

21 excluded
351 carers
2675 non-carers

91.7% White
94.6% White
Results
Frailty: Caregivers vs non-caregivers

<table>
<thead>
<tr>
<th>Frailty Level</th>
<th>Caregivers</th>
<th>Non-Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit (0-0.12)</td>
<td>69.8%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Mildly Frail (0.12-0.24)</td>
<td>17.1%</td>
<td>54.7%</td>
</tr>
<tr>
<td>Moderately Frail (0.24-0.36)</td>
<td>8.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Severely Frail (&gt;0.36)</td>
<td>4.8%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

- Caregivers were on average less frail and more likely to be non-frail.
- There was a similar proportion of severely frail participants in each group.
Results

Stratified frailty index

Activities of daily living
- Difficulty with walking 100 yards
- Difficulty sitting for about two hours
- Difficulty getting up from a chair after sitting for long periods
- Difficulty climbing several flights of stairs without resting
- Difficulty climbing one flight of stairs without resting
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- Difficulty making telephone calls
- Difficulty taking medications
- Difficulty managing money, e.g., paying bills and keeping track of expenses
- Difficulty doing work around the house or garden

Instrumental activities of daily living

Comorbidities

Mobility
- A stroke (cerebral vascular disease) (self-reported)
- Chronic lung disease such as chronic bronchitis or emphysema (self-reported)
- Asthma (self-reported)
- Arthritis (including osteoarthritis, or rheumatism) (self-reported)
- Osteoporosis, sometimes called thin or brittle bones (self-reported)
- Cancer or a malignant tumor (excluding minor skin cancers) (self-reported)
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- Anemia (self-reported)
- Heart attack (including MI or coronary thrombosis) (self-reported)
- Congestive heart failure (self-reported)
- An abnormal heart rhythm (self-reported)
- Diabetes or high blood sugar (self-reported)
Results
Stratified frailty index

- Proportion with 1+ ADL Difficulty
- Proportion with 1+ IADL Difficulty
- Proportion with 1+ Mobility Difficulty
- Proportion with 2+ Comorbidities

For each frailty category (not frail, mildly frail, moderately frail, severely frail), the graph shows the proportion for caregivers and noncaregivers.
Results

Binary logistic regression models for frailty index domains:

OR (95%CI) for the odds of reporting on each domain for carers compared with non-carers

- Adjusted for age, sex and ethnicity

When frailty group is adjusted for, the odds of a carer scoring (1 or more for mobility, ADL or IALD, 2 or more for comorbidities) on any of the elements in the ELSA-FI was significantly increased.
Conclusions

Unpaid caregivers were younger and less frail than non-caregivers (as expected)

BUT

When we compared caregivers and non-caregivers of equivalent frailty- caregivers reported more difficulties with daily functioning. This couldn’t be accounted for by age, sex or ethnicity differences.

AND

There were a similar proportion of severely frail individuals in the caregiver and non-caregiver groups.