International Journal of Care and Caring • vol XX • no XX • 1–19 • © Authors 2025 Print ISSN 2397-8821 • Online ISSN 2397-883X • https://doi.org/10.1332/23978821Y2025D000000104 Accepted for publication 30 January 2025 • First published online 24 February 2025



This article is distributed under the terms of the Creative Commons Attribution 4.0 International license (http://creativecommons.org/licenses/by/4.0/).

research article

# Understanding the characteristics of unpaid carers living in financial hardship: risks and vulnerabilities

Javiera Cartagena-Farias<sup>®</sup>, j.f.cartagena-farias@lse.ac.uk Nicola Brimblecombe<sup>®</sup>, N.S.Brimblecombe@lse.ac.uk London School of Economics and Political Science, UK

Providing care for longer hours is associated with detrimental effects on carers' employment and earnings. However, very little is known about carer financial hardship, especially from an intersectional perspective. This study makes use of the UK Household Longitudinal Study to investigate associations between providing care and poverty. Findings show that unpaid carers are more likely to face poverty than non-carers and that this gap has become wider over time. Employment and older age seem to be protective characteristics associated with a lower likelihood of poverty. These findings support the recognition of the many challenges faced by unpaid carers.

Keywords unpaid/informal carers • poverty • deprivation • inequalities

To cite this article: Cartagena-Farias, J. and Brimblecombe, N. (2025) Understanding the characteristics of unpaid carers living in financial hardship: risks and vulnerabilities, *International Journal of Care and Caring*, Early View, DOI: 10.1332/23978821Y2025D000000104

# Introduction

Unpaid caring responsibilities may bring benefits to those providing care, such as fulfilment and pride (García-Mochón et al, 2019; Greenwood et al, 2019), as well as a sense of purpose, the opportunity to learn new skills and social connections (Martire et al, 2003; Schulz and Sherwood, 2008). Nevertheless, most evidence suggests that carers face many challenges in their role, from difficulties finding jobs with flexible working patterns to the deterioration of their own health and well-being (King and Pickard, 2013; Kaschowitz and Brandt, 2017; Brimblecombe and Cartagena-Farias, 2022). This is particularly true for those who provide more intensive care (Bauer and Sousa-Poza, 2015; Brimblecombe et al, 2020; Robison et al, 2020). In this regard, providing care for longer hours has been associated with early retirement, the reduction of working hours, moving to part-time jobs and the acceptance of lower-paid jobs as a result of losing bargaining power in the search for more flexible work arrangements (Colombo et al, 2011; Pickard et al,

2015; Van Houtven, 2015; Skills for Care, 2021). Having caring responsibilities may also involve additional out-of-pocket expenses, such as transportation, parking and buying special food for those they care for, among other things (Van Houtven, 2015; Carers UK, 2022a; House of Lords, 2022).

These circumstances all put unpaid carers in a position of risk and vulnerability to income-related poverty, precarity and deprivation, and the research that exists tends to show that carers do experience financial difficulties. For example, the New Policy Institute made use of the Family Resource Survey (FRS) in 2016 and reported that poverty levels among carers were 4 per cent higher than for non-carers and that this varied by age and hours of unpaid care provision, as well as the type of relationship to care recipients (Aldridge and Hughes, 2016). More recently, a survey carried out by Carers UK shows that three quarters of unpaid carers worried about their energy bills and that a third were worried that they would have to use a foodbank (Carers UK, 2022b), but the survey did not include non-carers for comparison purposes. Along the same lines, a report by the Joseph Rowntree Foundation (2024) has recently highlighted a link between unpaid care and poverty: 28 per cent of unpaid carers live in poverty compared to 20 per cent of non-carers. The consequences of living with financial hardship are many; for example, poverty may reduce the ability of unpaid carers to cope with the difficulties and challenges associated with their role, limit their ability to access health services themselves, reduce their choice in accessing paid services like respite, and increase social isolation (Joseph Rowntree Foundation, 2022). In addition to the risks of income poverty, unpaid carers may also be more likely to live in material deprivation, not be able to save money and unavoidably end up in debt due to being unable to afford their bills (Hulme et al, 2016). Not surprisingly, then, findings from the Census 2021 in England and Wales show that the proportion of unpaid carers is higher in the most deprived areas (ONS, 2023a). The constant fear of not being able to afford basic needs may also play a role in the deterioration of carers' outcomes. Financial difficulties may be cushioned by the welfare system and its support networks; however, at least in the UK, benefits aimed to alleviate the lower (or lack of) income faced by unpaid carers have been flagged as insufficient. For instance, in England, Carer's Allowance - the main welfare benefit to help carers - is the lowest of its kind, and many carers are excluded because it is restricted to those providing more than 35 hours a week and on very low incomes (The Health Foundation, 2023).

Thus, carers experience higher levels of poverty than non-carers, with associated stresses and limits to their lives, and there is some evidence of inequalities within this. However, not much research looks at which carers are most at risk of living in poverty, and the scarce quantitative evidence available on unpaid carers and poverty mostly relies on descriptive analysis based on cross-sectional data, which makes it difficult to understand patterns over time, or has no comparison group. In addition, previous analysis has mainly treated unpaid carers as a homogeneous group, without exploring characteristics that may exacerbate the challenges they face. Our study aims to: (1) describe recent trends in unpaid carer poverty, material deprivation and related difficulties, such as carers' ability to keep up with bills; (2) identify the risk factors for unpaid carers associated with living in financial hardship; and (3) investigate whether these risk factors change across subgroups (by gender, ethnicity, age group and intensity of care).

# Poverty, deprivation and social exclusion

Influenced by the work of Townsend (1979), in most developed countries, and European countries in particular, the concept of poverty is understood as not only low income but also lacking the ability, due to the lack of financial resources, to participate in what is considered common daily activities in society, which includes having limited (or being denied the) opportunity to work, study or live healthy lives (Townsend, 1979; Gordon, 2006). These issues are associated with not having enough financial resources (Nolan and Whelan, 2011) and the concept of social exclusion (Burchardt et al, 1999). The design and implementation of social policies rely on an accurate measure of those living in disadvantage. In many countries, identifying those living in poverty has taken most of the attention and has focused on establishing the most pertinent threshold to distinguish those living with low income (Atkinson, 1987; Brian and Whelan, 2011). In this regard, income-based measures have always been considered useful but imperfect and are much in need of complementary indicators, including deprivation and social exclusion measures (Ringen, 1988; Gordon et al, 2000; McKnight et al, 2024). The nature and dynamics of poverty have also been incorporated into this debate; how long individuals or families have been poor, whether they can escape poverty, and the depth of poverty have been matters of interest (Edmiston, 2022). Moreover, an extra layer of complexity has been added to the debate, including non-income-related measurements, which may help to capture the multidimensional nature of poverty, deprivation and social exclusion and how it can be embedded in all aspects of life (Tomlinson et al, 2008; Alkire et al, 2015; Sevinc, 2020; Lloyd et al, 2023).

# Data and methods

Our study makes use of eight waves of the UK Household Longitudinal Survey (UKHLS) covering a period of time between 2014–16 (Wave 6) and 2021–23 (Wave 13) (University of Essex, 2023a; 2023b). The UKHLS is a UK nationally representative sample. It includes information about caring responsibilities, the intensity of the care provided and income. Measures of material deprivation and the ability of individuals to keep up with utility bills are also included as part of the data collection. Socio-demographic characteristics, such as age, gender, ethnicity, level of education and employment status, are also found in the data set. A total of around 3,000 unpaid carers in each wave were included in the analysis.

# Outcomes

The main outcomes of interest included in this analysis are poverty (low-income measure), poverty depth ('deep poverty'), material deprivation (including the capacity of households to save) and the ability of carers to keep up with their bills ('financial distress'). All of these relate somewhat to the capacity to consume or access the minimum levels of services and goods that are considered fundamental in society and to being able to have a safety net during challenging times (Burchardt et al, 1999). These are also among the most commonly used indicators of material poverty within current poverty analysis in European countries (Hick, 2014).

## Income-related poverty

In this measure, households are considered to be poor (that is, below the UK poverty line), or households below average income (HBAI), if their income is below 60 per cent of the median household income after housing costs for that year (House of Commons, 2022). To classify unpaid carers as poor and non-poor, we have made use of income information available in the UKHLS. In particular, the UKHLS includes information on the net household monthly income. This is the household disposable income - or total gross income after taxes and national insurance contributions and less council tax liability and any council tax reduction - which includes net labour income, investments, pensions and social benefit income. Net monthly income was also adjusted for Housing Benefit reported in the household questionnaire (Fisher et al, 2019). Moreover, in this estimation, net household income adjusted by housing costs corresponds to an equivalised version of the total financial resources available to households or consumption or savings. Equivalisation is needed to make households comparable; therefore, it adjusts not only for household size but also for its composition, including the number of children that are members of the household. For this, we make use of an equivalence scale (the 'OECD-Modified Scale') available in the UKHLS, which was developed by the Organisation for Economic Co-operation and Development (OECD) and has been adopted in official UK income distribution statistics (Department for Work and Pensions, 2018). The OECD equivalence scale applies a weight of 1 for the first adult in a household, 0.5 for each additional adult and 0.3 for each child. Total net household income is then divided by the sum of the weightings to yield equivalised income (OECD, 2013). Following the same procedure, households are also classified as living in deep poverty if their net equivalised income is below 50 per cent of the median equivalised household income after housing costs (Social Metrics Commission, 2020).

## Material deprivation

The UKHLS allows for the study of several aspects of material deprivation. We focused on four main indicators: (1) whether the individuals have enough money to keep their house in a decent state of repair (answers: yes = 0/no = 1); (2) whether a small amount of money can be spent each week on individuals themselves (not on their family) (answers: yes = 0/no = 1); (3) whether individuals can keep up with bills and regular debt repayments (answers: yes = 0/no = 1); (4) whether individuals can afford to take holidays (answers: yes = 0/no = 1); and (5) whether individuals have enough money to make regular savings of  $\pounds 10$  a month or more for rainy days or retirement (answers: yes = 0/no = 1). A material deprivation summary score was not created due to the few questions available and the inability to obtain the variability needed across individuals for analysis.

The consumption activity of households is an important indicator of whether individuals can consume at least some basic goods and services that allow them to interact as members of society (Townsend, 1979; Mack and Lansley, 1985); as such, material deprivation is a key component of social exclusion. Savings, on the other hand, allow individuals to consume in the future when there are difficulties or loss of employment; thus, it is also an important indicator of the safety nets available to households and individuals (Burchardt et al, 1999). Material deprivation information was available in Waves 6, 8, 10 and 12 only.

#### Financial distress: not being able to pay household bills

The inability of individuals to consume services and goods is also reflected in their capacity to afford their household bills. Here, we made use of information available in each wave of the UKHLS in which respondents were asked whether they were up to date with all their household bills, such as electricity, gas, water rates, telephone and other bills. Responses were coded (yes = 0/no = 1) to capture financial distress.

## Analysis

Our analysis includes an estimation of the proportion of carers living in poverty and in deep poverty over time. For this, we utilise sample weights, so that the results are nationally representative. To analyse the risk factors associated with being poor, we estimate a logit random effect (RE) model. This will identify whether a change in carer poverty status can be linked to a change in carer characteristics or circumstances. We performed a similar analysis to address factors associated with financial distress, but we left out outcomes associated with material deprivation, as they were not collected in all waves analysed.

In order to investigate whether certain carers face exacerbated inequalities, we explore intersectionality effects when running the RE models mentioned earlier for different subsamples. We focus on three main characteristics: gender, ethnicity and age.

The UKHLS protocols and research programme have been scrutinised by a number of research ethics committees to ensure that ethical and legal obligations are fulfilled at all times. This includes obtaining consent from participants, maintaining the confidentiality of responses in the end user licence (EUL) data and sharing agreements with qualified researchers. In accessing the data, we agree to adhere to these requirements. Authors are also experienced in data manipulation, identifying issues with data quality and establishing protocols to challenge positionality concerns when coding variables and interpreting results.

# Results

Our analysis indicates that poverty levels – based on household equivalised net income after housing costs – have been kept, more or less, constant over time for carers, from 26 per cent in 2014–16 to 25 per cent in 2021–23 (see Figure 1). Nevertheless, it is clear that carers exhibit much higher levels of relative poverty than non-carers (19 per cent in 2014–16 and 20 per cent in 2021–23). Relative poverty among carers has also had a small increase in the last data point available for analysis, from 22 per cent in 2020–22 to 25 per cent in 2021–23, which may be associated with the most recent 'cost-of-living' crisis affecting the country.

For both carers and non-carers in poverty, we estimated the proportion of them living in deep poverty. A slightly larger proportion of non-carers live in deep poverty compared to carers, with the high levels of deep poverty for both being a matter of concern, especially when they have been consistently increasing over time (63 per cent of poor non-carers and 59 per cent of poor carers lived in deep poverty in 2021–23 compared to 55 per cent of poor non-carers and 48 per cent of poor carers in 2014–16) (for more details, see Figure 2). We also calculated the proportion of



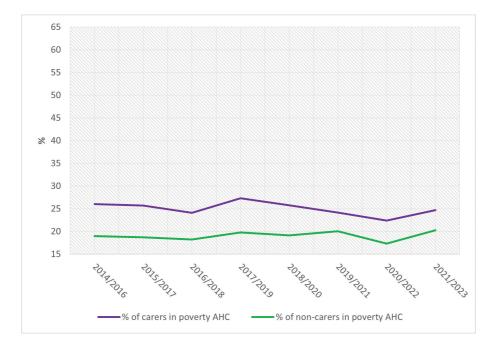
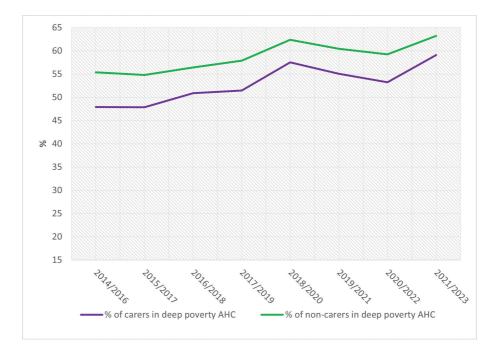


Figure 2: Relative deep poverty levels over time



carers and non-carers living in deep poverty out of the total number of carers and non-carers in our sample, respectively (not only among those living in poverty). We estimated that 14 per cent of carers in 2014–16 were living in deep poverty, while only 4 per cent of non-carers were living under the same circumstances.

In addition, our results show that a larger proportion of carers face financial distress, as indicated by being behind on basic utility bills, compared to non-carers (see Table 1). This gap has significantly increased over time. For instance, in 2014–16, the proportion of carers in financial distress was 8 per cent, while only 4 per cent of non-carers were living in the same circumstances. In 2021–23 the figure for carers doubled, reaching 16 per cent not being able to afford their household bills. The proportion of non-carers also increased, though to a lesser extent (reaching almost 7 per cent in 2021–23).

Material deprivation is also higher for carers than non-carers and has also increased over time: 41 per cent of carers cannot save a small amount of money over a month compared to 18 per cent of non-carers. Carers also seem to struggle more to be able to repair their homes: 33 per cent of carers could not afford home repairs in 2020–22 (compared to 20 per cent in 2014–16). Also, a larger proportion of carers (18 per cent in 2020–22) find it difficult to keep up with their bills compared to non-carers (7 per cent in 2020–22). More than one third of carers do not have money for themselves (37 per cent). This proportion is much higher than for non-carers, with 17 per cent being in similar circumstances. (For more details, see Table 1.)

While the proportion of non-carers who can afford to go on holiday has been constant over time (21 per cent), this has become more difficult for carers. In 2020–22, 44 per cent of carers said that they could not afford a holiday. Table 1 shows the proportion of carers and non-carers living in material deprivation and financial distress over time.

When we explored the characteristics and circumstances of carers that may be associated with being in poverty and financial distress using an RE model, we found that, controlling for other factors, being female reduces the probability of living in relative poverty but not the likelihood of living in deep poverty among carers who are poor. Older carers are less likely to be poor and to be behind on bills. Being married or living with a partner and having a higher education degree reduces the probability of being in poverty and financial distress. Carers living in a rural area are less likely to be living in financial distress. Carers in employment are also less likely to be poor, living in deep poverty if already poor and in financial distress. Those carers providing 35+ or more hours of care are more likely to be poor compared to those who provide less than ten hours a week. Nevertheless, they are less likely to be in deep poverty if already poor; this is also the case for those providing care for more than 20 hours a week. (For more details, see Table 2.)

We also explore factors associated with living in relative poverty across different subgroups of carers. Our results show that older carers are better off and poverty is less likely among older carers that live in a household with a larger number of household members. Being White British reduces the likelihood of being poor among older and younger carers. We also found that higher education and being employed behave as protective factors among older and younger carers.

In addition, our results show that younger carers providing 35 or more hours of care are more likely to be living in poverty, but results are not statistically significant for older carers. Table 3 shows the results from the RE model by age group.

9	<b>^</b>
-	I-Carers
3	ž
	b
7	2
6	2 Q
	Ð
1	ა აი
and and has succeed and another	5
-	Цþ
	E
-	
	200
	istress over time armong carers and
-	
Ï	Ē
	CId
ocutail laisanait ha	Id
ÿ	5
1	Ę
atorial docurrentiated	auon
	VdL
-	Ę,
Ì	Ĕ
-	areriai uepi
400	Id
1. M.	
	e
Ē	q

	%	% Financial					% Material	% Material deprivation				
	dist	distress (debt)	S (can	Savings (cannot save)	Hom (cann	Home repairs (cannot afford)	(canno	Bills (cannot keep up)	Moné (do r	Money for self (do not have)	Hol (cann	Holiday (cannot go)
	Carers	Non-carers	Carers	Non-carers	Carers	Non-carers	Carers	Non-carers	Carers	Non-carers	Carers	Non-carers
2014–16	8.27	4.14	39.58	20.45	20.35	11.45	13.81	5.49	35.28	17.71	38.83	21.58
2015-17	7.39	3.64										
2016-18	8.92	4.21	38.77	21.26	21.17	12.91	12.34	5.09	35.16	16.93	37.13	21.1
2017-19	8.7	5.33										
2018–20	11.19	5.46	43.7	22.16	28.96	15.38	18.04	6.66	36.78	18.63	41.93	21.55
2019–21	11.26	5.41										
2020-22	10.01	5.88	40.97	18.41	33.25	15.92	17.76	6.81	36.93	16.94	43.59	21.22
2021–23	16.15	6.78										

	Poverty after housing costs	Deep poverty after housing costs	Financial distress: behind bills
Controlling for:	Coefficient	Coefficient	Coefficient
Gender: female	-0.219**	0.079	0.117
Age	-0.029***	-0.007**	-0.059***
Household size	-0.025	-0.136***	0.066
Ethnicity: White British	-0.836***	-0.709***	0.053
Married or in partnership	0.132	-0.104	-0.251*
Higher education	-0.784***	-0.301	-0.647**
Rural household	-0.103	-0.193	-0.619***
Employed	-1.398***	-0.194*	-0.315***
Intensity of care 10+ hrs (ref < 10hrs)	0.027	-0.074	0.454***
Intensity of care 20+ hrs (ref < 10hrs)	0.138	-0.232*	0.714***
Intensity of care 35+ hrs (ref < 10hrs)	0.237***	-0.376***	0.921***
_cons	1.054***	1.920***	-1.597***
Number of observations	12,613	3,188	12,596
Number of groups	4,485	1,833	4,481

Table 2: Overall results on poverty.	, deep poverty and financial distress: care	rs (RE model)
ruble 2. o verall results on poverey,	, deep porer cy and initialient distress, eare	10 (112 1110 000)

*Notes*: \*\*\* Represents *p*-values < 0.01 (99 per cent confidence level), \*\* *p*-values < 0.05 (95 per cent confidence level) and \* *p*-values < 0.1 (90 per cent confidence level).

Table 3: Poverty, deep poverty and financial distress among carers (subsample analysis by
age group; RE model)

	Poverty after housing costs	Poverty after housing costs
	16–65	65+
Controlling for:	Coefficient (std)	Coefficient (std)
Gender: female	-0.220**	-0.383**
Age	-0.014***	0.008
Household size	-0.014	-0.406***
Ethnicity: White British	-0.762***	-0.992***
Married or in partnership	0.047	0.321
Higher education	-0.599***	-2.194***
Rural household	-0.159	0.036
Employed	-1.503***	-1.395***
Intensity of care 10+ hrs (ref < 10hrs)	0.040	-0.007
Intensity of care 20+ hrs (ref < 10hrs)	0.127	0.102
Intensity of care 35+ hrs (ref < 10hrs)	0.228**	0.094
_cons	0.594**	-1.171
Number of observations	9,160	3,453
Number of groups	3,411	1,241

*Notes*: \*\*\* Represents *p*-values < 0.01 (99 per cent confidence level), \*\* *p*-values < 0.05 (95 per cent confidence level) and \* *p*-values < 0.1 (90 per cent confidence level).

Potential differences in risk factors were also analysed across male and female carers and are presented in Table 4. Here, similar factors were found to be important for both groups, but being married or living with a partner (other factors being equal) statistically increases the probability of being in poverty among male carers, though it does not have the same effect among female carers. In addition, providing more than 35 hours of care is more detrimental for female carers, as it increases their likelihood of living in poverty. Table 5 shows differential risk factors associated with White British carers and non-White British carers. Overall, both groups of carers have similar risk factors, but being married or living with a partner (other factors being equal) statistically increases the probability of being in poverty among non-White British carers.

Table 4: Poverty, deep poverty and financial distress among carers (subsample analysis by gender; RE model)

	Poverty after housing costs	Poverty after housing costs
	Male	Female
Controlling for:	Coefficient (std)	Coefficient (std)
Age	-0.037***	-0.027***
Household size	-0.009	-0.035
Ethnicity: White British	-0.957***	-0.798***
Married or in partnership	0.771***	-0.131
Higher education	-0.543**	-1.073***
Rural household	-0.249	0.021
Employed	-1.850***	-1.167***
Intensity of care 10+ hrs (ref < 10hrs)	0.049	0.001
Intensity of care 20+ hrs (ref < 10hrs)	0.113	0.149
Intensity of care 35+ hrs (ref < 10hrs)	0.121	0.289***
_cons	1.214***	0.848***
Number of observations	5,150	7,463
Number of groups	1,900	2,587

*Notes*: \*\*\* Represents *p*-values < 0.01 (99 per cent confidence level), \*\* *p*-values < 0.05 (95 per cent confidence level) and \* *p*-values < 0.1 (90 per cent confidence level).

# Discussion

Consistent with the still scarce other research on unpaid carers and poverty in the UK context (Joseph Rowntree Foundation, 2024), our study shows that many unpaid carers live in poverty and that this is higher than for non-carers, though rates are high across the whole population. The proportion of carers in poverty has fluctuated over the last ten years, with an overall declining trend but a peak in 2017/18, a dip in 2020–22 and an increase since then (2020–22 to 2021–23). This overall declining trend with an increase since 2020–22 is observed for non-carers too. Our results are not perfectly aligned with other research on UK overall poverty trends, which shows that levels of relative poverty have been stable over time. Nevertheless, the same dip in 2020–22 is also observed in official figures published by the Department

	Poverty after housing costs	Poverty after housing costs
	White British	Non-White British
Controlling for:	Coefficient (std)	Coefficient (std)
Gender: female	-0.185*	-0.324*
Age	-0.030***	-0.030***
Household size	-0.078*	0.010
Married or in partnership	-0.078	0.598***
Higher education	-1.151***	-0.260
Rural household	-0.083	-0.089
Employed	-1.386***	-1.144***
Intensity of care 10+ hrs (ref < 10hrs)	-0.078	0.319*
Intensity of care 20+ hrs (ref < 10hrs)	0.164	0.091
Intensity of care 35+ hrs (ref < 10hrs)	0.168*	0.451***
_cons	0.633**	0.581
Number of observations	9,525	3,088
Number of groups	3,222	1,283

Table 5: Poverty, deep poverty and financial distress among carers (subsample analysis by ethnic group; RE model)

*Notes*: \*\*\* Represents *p*-values < 0.01 (99 per cent confidence level), \*\* *p*-values < 0.05 (95 per cent confidence level) and \* *p*-values < 0.1 (90 per cent confidence level).

for Work and Pensions (DWP) (House of Commons Library, 2024). The reasons for this difference may include the use of a different sample for analysis, as well as trends being published for the overall population, without distinguishing between carers and non-carers. Nonetheless, the differential between carers and non-carers remains.

The reasons for the sharp increase in carers in relative poverty in 2017–19 from the previous year are unclear. However, the decrease seen for carers in 2020–22 may be related to the pandemic measures in England. Furlough and more flexible working-from-home arrangements for some workers meant that carers could provide care at home without it affecting their employment so much, though greater isolation was often the corollary (Onwumere et al, 2021). In addition, welfare benefits were more generous during the COVID-19 pandemic (ONS, 2023b), meaning less poverty for all, though maybe even more so for carers and the disabled or older people they care for, who may be more reliant on welfare benefits. Since then, the COVID-19 uplift to selected benefits has been removed, and earnings from paid employment have not kept up with inflation (Bell and McCurdy, 2023). Meanwhile, the so-called 'cost of living' crisis has seen an increase in basic living costs, such as fuel and food (Brown et al, 2023). This may have amplified the extra costs of disability, which often include fuel for both heating the home and transport. All these trends may go a long way to explaining the increase in relative poverty since 2020–22 seen in our study.

Our study also found that the majority of those living in poverty lived in deep poverty, that is, had a household income under 50 per cent of the median income. For both carers and non-carers in our study, this has increased over the last ten years, consistent with Edmiston's (2022) research, which shows an increasing depth of poverty in the UK since 2010. Interestingly for our study, rates of deep poverty among carers are slightly lower than among non-carers, and this is consistent over time. This may be because the welfare system (carer benefits and disability benefits) may slightly protect carers and their households at the extreme end of the poverty distribution. In supplementary exploratory analysis (available on request), we found that the association between low income and material deprivation is weaker for carers than non-carers, that is, having a low income increases the likelihood of not being able to afford basic necessities for everyone but slightly more so for non-carers, giving some support for this hypothesis. That deep poverty has still increased for carers over time may reflect the aforementioned decrease in the real-term value of welfare benefits plus the wider austerity context. Lastly, material deprivation, a more capability-based measure of poverty that covers its multidimensional nature (McKnight et al, 2024), is again higher for carers than non-carers, as is debt, with one in six carers in our study experiencing debt in 2021/23 (up from one in ten the year before). A total of 40 per cent of carers had no savings (twice as many as non-carers), nearly one in five struggled to keep up with bills, and a third were unable to afford home repairs. A survey by Carers UK (2022b) similarly found that a quarter of carers worried about their energy bills.

While widespread poverty and financial distress are not experienced equally. In our study, female carers were less likely to experience relative poverty but had the same likelihood as men of experiencing deep poverty. This is perhaps surprising given that female carers are more likely to leave paid employment and to experience greater income penalties from caring (Brimblecombe and Cartagena-Farias, 2022). Minority ethnic carers were more likely than White British carers to be poor or deeply poor. Minority ethnic carers can face additional barriers to getting support, both for themselves and for the people they care for (Greenwood et al, 2015; Zygouri et al, 2021). Consistent with work by Aldridge and Hughes (2016) using 2013/14 data, caring for higher hours is associated in our study with higher rates of poverty and being behind with bills. The reason for this may include that care hours are highly related to the likelihood of leaving employment (Carers UK, 2024). That caring for 35 or more hours a week - the eligibility criteria for Carer's Allowance in the UK – was associated with lower rates of deep poverty in our study may give further support for the partly protective role of this benefit and disability benefits (which the care recipient has to receive for the carer to be eligible) in reducing poverty for carers at the extreme end of the scale. However, it is not keeping carers caring for 35 hours a week out of poverty overall, and many carers caring for that many hours are also still in deep poverty. Caring for more than 35 hours is more detrimental for female than male carers and for minority ethnic carers compared to white carers. For female carers, this may be to do with the greater likelihood of leaving employment as care hours rise (King and Pickard, 2013); for minority ethnic carers, this may be to do with additional barriers to accessing support and/or because to get Carer's Allowance, you need to identify or be identified as a carer, and this identification is lower among minority ethnic carers (Banks, 2022).

## Implications for policy and practice

That poverty levels are high among carers and recently increasing and that deep poverty is also increasing argue for, at the least, higher and more easily accessible welfare benefits to prevent so many carers from experiencing deep and high levels of poverty. England's

Carer's Allowance is set at very low levels, reducing its ability to ameliorate poverty (Brooks et al, 2017). Its conditions penalise even very small increases in paid work hours or pay (Brimblecombe et al, 2018), which again undermines its ability to reduce poverty. The process for claiming Carer's Allowance is difficult to understand, and the benefit is difficult to access, meaning that not everyone who is entitled and needs the benefit receives it; improving these aspects of the benefit and widening the eligibility criteria could contribute towards reducing the risk of carer poverty. Disability benefits are similarly hard to access (Paddison and Crellin, 2022), meaning greater poverty among disabled people (The Health Foundation, 2024) and their households, which in many cases include an unpaid carer. Not being in paid employment increases the risk for carers of being in poverty in our study. This is not helped by it being harder for carers to remain in employment than non-carers (Carers UK, 2019). Flexible work practices for carers may enable them to remain in employment. Paid care leave can also help (Ikeda, 2017). While the new right to five days of carers' leave in the UK increases employment rights for carers and does protect in some cases against leaving work (see, for example, Colombo et al, 2011; Skira, 2015; Bouget et al, 2016), it is unpaid, meaning a cut in income for carers while they take that leave. In addition, most carers care for many years; five days will not cover that situation, and the finding that so many carers are in debt in our study may be because existing savings get used over the sometimes long duration of caring. Policy measures that could be taken are to extend flexible working and care leave and for the latter to be paid.

However, because some jobs are less amenable to flexible working and the need for care can extend for longer than care need can cover, what may therefore be needed to reduce poverty among carers linked to their lack of paid employment is other sources of care for the person with care needs; this 'replacement care' has been shown to reduce the risk of leaving work among unpaid carers (Pickard et al, 2015). In the context of cuts to local authority funding, there has been an increase in the number of carers providing high levels of care (ONS, 2023a); care at this level carries a higher risk of leaving employment (King and Pickard, 2013) and potentially subsequently relying on inadequate welfare benefits. Even though being in employment reduced the risk of being in poverty in our study, it did not remove it. Carers are more likely to work part-time (Brimblecombe et al, 2018), which is also associated with greater in-work poverty (All Party Parliamentary Group on Poverty, 2022). There has been a great deal of work on in-work poverty, and suggestions for action in this domain will also help unpaid carers. They include minimum and living wage increases and better in-work protections, for example, from job insecurity, as well as action to address the structural barriers to being in well-paid work. An additional issue for carers is that the conditions of Carer's Allowance in the UK act as a disincentive to increasing work hours or pay (Brooks et al, 2017). Finally for policy is our finding that some carers are more at risk of poverty, deep poverty and/or material deprivation than others. This includes minority ethnic carers, carers caring for more than 35 hours a week and carers subject to the intersection of ethnicity or gender and higher care hours. This suggests the need for action to remove some of the barriers to financial and social care support for carers more at risk, as well as to address the issue of carer poverty overall. Actions could include simplifying systems, more accessible information about social care and benefits, support with accessing financial and social care support, de-stigmatisation around welfare benefit receipt, and the greater availability of goodquality and culturally appropriate social care services.

## Strengths and limitations

Our research and analysis are based on a large longitudinal sample of carers (and non-carers) and, as such, provide invaluable insights into their financial hardship and the potential barriers they face to being active participants in society. In this regard, our analysis includes not only relative poverty income measures but also material deprivation and inability to keep up with utility bills. It also sheds light on how carers may face challenges from different perspectives; here, the intersectionality of risk factors to living in poverty is also explored, something that has not previously been done in other studies. Nevertheless, we faced a few limitations. For instance, subgroup analysis has been limited by the size of the sample, and while the UKHLS includes information on several ethnicity categories, they have been grouped as a binary variable.

While our results are only applicable to the UK context, our findings may provide evidence to other nations seeking to protect and support their most vulnerable population. Nevertheless, it may be interesting to investigate the characteristics of unpaid carers living in financial hardship in countries with different policy and welfare contexts than the UK. This spans from providing the legal frameworks necessary for carers to keep working to the development of a compassionate welfare benefits system that provides financial safety nets when needed. Future research may also focus on the temporary aspect of caring, identifying risk factors associated with entering into poverty or the characteristics of carers who are able to leave poverty. This may also include investigating the effect of shocks (such as unemployment or illness) among carers and potential poverty traps.

# Conclusions

Our study has contributed to the literature by showing not only how carer poverty is higher than non-carer poverty, all other things being equal, but also that some carers are more at risk. Looking at deep poverty reveals different relationships between caring and poverty, as well as differential changes over time compared to relative poverty, and the relationship between caring and higher material deprivation shows some of the aspects and nuances of financial deprivation. We conclude that it is important to consider not only carer poverty overall, though action is much needed to address that, but also the heterogeneity within poverty levels, deprivation and carers' characteristics. This is crucial not only for research but also for long-term care, carer and welfare policy.

#### **ORCiD** IDs

Javiera Cartagena-Farias <sup>b</sup> https://orcid.org/0000-0002-5984-0317 Nicola Brimblecombe <sup>b</sup> https://orcid.org/0000-0002-6147-5726

#### Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

#### Acknowledgements

We would like to thank the UK Data Service, which made the UKHLS data available to us, and the researchers who collected those data.

# **Conflict of interests**

The authors declare that there is no conflict of interest.

## References

- Aldridge, H. and Hughes, C. (2016) *Informal Carers & Poverty in the UK: An Analysis of the Family Resources Survey*, New Policy Institute, www.npi.org.uk/files/2114/6411/1359/Carers\_and\_poverty\_in\_the\_UK\_-\_full\_report.pdf (Accessed: 16 May 2024).
- Alkire, S., Foster, J., Seth, S., Santos, M.E., Roche, J.M. and Ballon, P. (2015) *Multidimensional Poverty Measurement and Analysis*, Oxford University Press.
- All Party Parliamentary Group on Poverty (2022) In-work poverty, July, www. appgpoverty.org.uk/wp-content/uploads/2022/07/APPG\_Poverty\_in\_work\_poverty\_FINAL.pdf (Accessed: 22 May 2024).
- Atkinson, A.B. (1987) On the measurement of poverty, *Econometrica*, 55(4): 749–64, doi: 10.2307/1911028
- Banks, T. (2022) Experiences of Unpaid Carers from Black and Minority Ethnic Communities Report, Carers Trust Wales, https://carers.org/downloads/carerstrust-report-final.pdf (Accessed: 22 May 2024).
- Bauer, J.M. and Sousa-Poza, A. (2015) Impacts of Informal Caregiving on Caregiver Employment, Health, and Family, IZA Discussion Paper 8851, Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor.
- Bell, T. and McCurdy, C. (2023) Wages are flatlining, Spotlight, March, www. resolutionfoundation.org/publications/wages-are-flatlining/ (Accessed: 22 May 2024).
- Bouget, D., Spasova, S. and Vanhercke, B. (2016) *Work-Life Balance Measures for Persons of Working Age With Dependent Relatives in Europe. A Study of National Policies*, Brussels: European Commission.
- Brimblecombe, N. and Cartagena-Farias, J. (2022) Inequalities in unpaid carer's health, employment status and social isolation, *Health & Social Care in the Community*, 30(6): e6564–76, doi: 10.1111/hsc.14104
- Brimblecombe, N., Fernández, J.L., Knapp, M., Rehill, A. and Wittenberg, R. (2018) Review of the international evidence on support for unpaid carers, *Journal of Longterm Care*, 0(0): 25–40, doi: 10.31389/jltc.3
- Brimblecombe, N., Knapp, M., King, D. and Cartagena Farias, J. (2020) The high cost of unpaid care by young people: health and economic impacts of providing unpaid care, *BMC Public Health*, 20: 1115, doi: 10.1186/s12889-020-09166-7
- Brooks, J., Mitchell, W. and Glendinning, C. (2017) Personalisation, personal budgets and family carers. Whose assessment? Whose budget?, *Journal of Social Work*, 17(2): 147–66, doi: 10.1177/1468017316638554
- Brown, R., Wilson, C. and Begum, Y. (2023) The price we pay: the social impact of the cost-of-living crisis, *Society Watch*, National Centre for Social Research, https:// natcen.ac.uk/sites/default/files/2023-07/Society%20Watch%202023\_The%20 Price%20We%20Pay\_the%20social%20impact%20of%20the%20cost%20of%20 living%20crisis.pdf (Accessed: 20 May 2024).
- Burchardt, T., Le Grand, J. and Piachaud, D. (1999) Social exclusion in Britain 1991– 1995, *Social Policy & Administration*, 33: 227–44, doi: 10.1111/1467-9515.00148
- Carers UK (2019) Carers' employment rights today, tomorrow and in the future, https://www.carersuk.org/media/hiekwx0p/carers-uk-crd-employment-report-2023\_final.pdf.

- Carers UK (2022a) State of caring: a snapshot of unpaid care in the UK, www. carersuk.org/media/ew5e4swg/cuk\_state\_of\_caring\_2022\_report.pdf (Accessed: 16 May 2024).
- Carers UK (2022b) Under pressure: caring and the cost of living crisis, March, www.carersuk.org/media/teyjhcc0/carersukresearchbriefing-underpressure-caringandthecostoflivingcrisis.pdf.
- Carers UK (2024) State of caring 2023 juggling paid employment and unpaid care, January, www.carersuk.org/reports/state-of-caring-2023-juggling-paid-employment-and-unpaid-care/#:~:text=56%25%20of%20carers%20juggle%20 paid,lack%20of%20social%20care%20services (Accessed: 22 May 2024).
- Colombo, F., Llena-Nozal, A., Mercier, J. and Tjadens, F. (2011) *Help Wanted? Providing and Paying for Long-Term Care*, Paris: OECD, www.oecd.org/els/health-systems/ help-wanted-9789264097759-en.htm (Accessed: 16 May 2024).
- Department for Work and Pensions (2018) Households Below Average Income (HBAI) Quality and Methodology Information Report 2016/17, https://assets.publishing.service.gov.uk/media/5ab1179ee5274a3dcb6dceb8/households-below-average-income-quality-methodology-2016-2017.pdf (Accessed: 4 Mar 2024).
- Edmiston, D. (2022) Plumbing the depths: the changing (socio-demographic) profile of UK poverty, *Journal of Social Policy*, 51(2): 385–411, doi: 10.1017/ s0047279421000180
- Fisher, P., Fumagalli, L., Buck, N. and Avram, S. (2019) Understanding Society and Its Income Data, Working Paper Series, No. 2019–08, University of Essex, July, www. understandingsociety.ac.uk/wp-content/uploads/working-papers/2019-08.pdf (Accessed: 4 Mar 2024).
- García-Mochón, L., Peña-Longobardo, L.M., Del Río-Lozano, M., Oliva-Moreno, J., Larrañaga-Padilla, I. and García-Calvente, M.D.M. (2019) Determinants of burden and satisfaction in informal caregivers: two sides of the same coin? The CUIDAR-SE study, *International Journal of Environmental Research and Public Health*, 16(22): art 4378, doi: 10.3390/ijerph16224378
- Gordon, D. (2006) The concept and measurement of poverty, in *Poverty and Social Exclusion in Britain*, Bristol: Policy Press, ch 2, doi: 10.51952/9781447366843.ch002
- Gordon, D., Adelman, L., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., et al (2000) *Poverty and Social Exclusion in Britain*, York: Joseph Rowntree Foundation, https://eprints.whiterose.ac.uk/73358/ (Accessed: 21 Feb 2024).
- Greenwood, N., Habibi, R., Smith, R. and Manthorpe, J. (2015) Barriers to access and minority ethnic carers' satisfaction with social care services in the community: a systematic review of qualitative and quantitative literature, *Health & Social Care in the Community*, 23(1): 64–78, doi: 10.1111/hsc.12116
- Greenwood, N., Pound, C., Brearley, S. and Smith, R. (2019) A qualitative study of older informal carers' experiences and perceptions of their caring role, *Maturitas*, 124: 1–7, doi: 10.1016/j.maturitas.2019.03.006
- Hick, R. (2014) On 'consistent' poverty, *Social Indicators Research*, 118(3): 1087–102, www.jstor.org/stable/24721052. doi: 10.1007/s11205-013-0456-y
- House of Commons Library (2024) Poverty in the UK: statistics, Research Briefings Number 7096, April, https://researchbriefings.files.parliament.uk/documents/ SN07096/SN07096.pdf (Accessed: 17 May 2024).

- House of Lords (2022) A 'Gloriously Ordinary Life': Spotlight on Adult Social Care. Chapter 7: Unpaid Carers: 'We Need Support, We Need Recognition'. Adult Social Care Committee Report of Session 2022–23, House of Lords Paper 99, December, https:// publications.parliament.uk/pa/ld5803/ldselect/ldadultsoc/99/9910.htm (Accessed: 12 Feb 2024).
- Hulme, C., Carmichael, F. and Meads, D. (2016) What about informal carers and families?, in J. Round (eds) *Care at the End of Life*, Cham: Adis, doi: 10.1007/978-3-319-28267-1\_12
- Ikeda, S. (2017) Supporting working carers' job continuation in Japan: prolonged care at home in the most aged society, *International Journal of Care and Caring*, 1(1): 63–82, doi: 10.1332/239788217X14866286042781
- Joseph Rowntree Foundation (2022) Unpaid carers changing the systems that trap them in poverty, Carers Co-Design Project (CCDP), June, www.jrf.org.uk/care/ unpaid-carers-changing-the-systems-that-trap-them-in-poverty.
- Joseph Rowntree Foundation (2024) UK poverty 2023: the essential guide to understanding poverty in the UK, January, www.jrf.org.uk/uk-poverty-2024-the-essential-guide-to -understanding-poverty-in-the-uk#:~:text=Poverty%20has%20increased%2C%20 close%20to%20pre%2Dpandemic%20levels,-More%20than%201&text=8.1%20 million%20(or%20around%202,around%201%20in%206)%20pensioners.
- Kaschowitz, J. and Brandt, M. (2017) Health effects of informal caregiving across Europe: a longitudinal approach, *Social Science & Medicine*, 173:72–80, doi: 10.1016/j. socscimed.2016.11.036
- King, D. and Pickard, L. (2013) When is a carer's employment at risk? Longitudinal analysis of unpaid care and employment in midlife in England, *Health and Social Care in the Community*, 21(3): 303–14, doi: 10.1111/hsc.12018
- Lloyd, C.D., Norman, P.D. and McLennan, D. (2023) Deprivation in England, 1971–2020, *Applied Spatial Analysis and Policy*, 16: 461–84, doi: 10.1007/ s12061-022-09486-8
- Mack, J. and Lansley, S. (1985) Poor Britain, London: Allen and Unwin.
- Martire, L.M., Schulz, R., Wrosch, C. and Newsom, J.T. (2003) Perceptions and implications of received spousal care: evidence from the caregiver health effects study, *Psychology and Aging*, 18: 593–601, doi: 10.1037/0882-7974.18.3.593
- McKnight, A., Bucelli, I., Burchardt, T. and Karagiannaki, E. (2024) *Review of the UK Material Deprivation Measures. Research and Analysis*, Department for Work and Pensions, www.gov.uk/government/publications/review-of-the-uk-material-deprivation-measures/review-of-the-uk-material-deprivation-measures (Accessed: 17 May 2024).
- Nolan, B. and Whelan, C. (2011) Poverty and deprivation in Europe, *Journal of Social Policy*, 42(1): 179–81, doi: 10.1017/S0047279412000682
- OECD (Organisation for Economic Co-operation and Development) (2013) OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth, OECD, www.oecd-ilibrary.org/framework-forintegrated-analysis\_5k455r6grd28.pdf?itemId=%2Fcontent%2Fcomponent %2F9789264194830-11-en&mimeType=pdf (Accessed: 4 Mar 2024).
- ONS (Office for National Statistics) (2023a) Unpaid care by age, sex and deprivation, England and Wales: census 2021, www.ons.gov.uk/releases/unpaidcareandgeo graphynationalandlocalauthoritycomparisonsenglandandwales2021 (Accessed: 20 Feb 2024).

- Office for National Statistics (2023b) Benefit recipients during the coronavirus (COVID-19) pandemic, England: November 2019 to March 2021. Age-standardised percentages of people who received a social security benefit by health conditions and sociodemographic characteristics, using linked 2011 Census, primary care and benefits data, *Experimental Statistics*, www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/outofworkbenefits/ bulletins/benefitrecipientsduringthecoronaviruscovid19pandemicengland/ november2019tomarch2021, (Accessed: 22 May 2024).
- Onwumere, J., Creswell, C., Livingston, G., Shiers, D., Tchanturia, K., Charman, T., et al (2021) COVID-19 and UK family carers: policy implications, *Lancet Psychiatry*, 8(10): 929–36, doi: 10.1016/S2215-0366(21)00206-6
- Paddison, C. and Crellin, N. (2022) Falling Short: How Far Have We Come in Improving Support for Unpaid Carers in England?, Nuffield Trust Research Report, October, www.nuffieldtrust.org.uk/sites/default/files/2022-10/nuffield-trustunpaid-carers-web-final.pdf (Accessed: 22 May 2024).
- Pickard, L., King, D., Brimblecombe, N. and Knapp, M. (2015) The effectiveness of paid services in supporting unpaid carers' employment in England, *Journal of Social Policy*, 44(3): 567–90, doi: 10.1017/S0047279415000069
- Ringen, S. (1988) Direct and indirect measures of poverty, *Journal of Social Policy*, 17: 351–66, doi: 10.1017/s0047279400016858
- Robison, O.M.E.F., Inglis, G. and Egan, J. (2020) The health, well-being and future opportunities of young carers: a population approach, *Public Health*, 185: 139–43, doi: 10.1016/j.puhe.2020.05.002
- Schulz, R. and Sherwood, P.R. (2008) Physical and mental health effects of family caregiving, *The American Journal of Nursing*, 108(9 Suppl): 23–7, doi: 10.1097/01. NAJ.0000336406.45248.4c
- Sevinc, D. (2020) How poor is poor? A novel look at multidimensional poverty in the UK, *Social Indicators Research*, 149(3): 833–59, doi: 10.1007/s11205-020-02273-3
- Skills for Care (2021) The value of adult social care in England: why it has never been more important to understand the economic benefits of adult social care to individuals and society, www.skillsforcare.org.uk/adult-social-care-workforce-data/ Workforce-intelligence/publications/national-information/Economic-valuereport.aspx (Accessed: 12 Feb 2024).
- Skira, M.M. (2015) Dynamic wage and employment effects of elder parent care, *International Economic Review*, 56(1):63–93, http://www.jstor.org/stable/24517888. doi: 10.1111/iere.12095
- Social Metrics Commission (2020) Measuring poverty 2020, July, https:// socialmetricscommission.org.uk/wp-content/uploads/2020/06/Measuring-Poverty-2020-Web.pdf (Accessed: 4 Mar 2024).
- The Health Foundation (2023) Understanding unpaid carers and their access to support. Long reads and data analysis, April, www.health.org.uk/publications/ long-reads/understanding-unpaid-carers-and-their-access-to-support (Accessed: 12 Feb 2024).
- The Health Foundation (2024) Inequalities in poverty, March, www.nuffieldtrust. org.uk/sites/default/files/2022-10/nuffield-trust-unpaid-carers-web-final.pdf (Accessed: 12 May 2024).
- Tomlinson, M., Walker, R. and Williams, G. (2008) Measuring poverty in Britain as a multi-dimensional concept, 1991 to 2003, *Journal of Social Policy*, 37(4): 597–620, doi: 10.1017/s0047279408002237

Townsend, P. (1979) Poverty in the United Kingdom, London: Penguin.

- University of Essex (2023a) Understanding Society: Waves 1–13, 2009–2022 and Harmonised BHPS: Waves 1–18, 1991–2009: Special Licence Access, 17th edn, Institute for Social and Economic Research, UK Data Service, SN: 6931, doi: 10.5255/UKDA-SN-6931-16
- University of Essex (2023b) Understanding Society: Waves 1–13, 2009–2022 and Harmonised BHPS: Waves 1–18, 1991–2009, 18th edn, Institute for Social and Economic Research, UK Data Service, SN: 6614, doi: 10.5255/UKDA-SN-6614-19
- Van Houtven, C.H. (2015) Informal care and economic stressors, in C.H.Van Houtven, F. Carmichael, J. Jacobs and P.C. Coyte (eds) *Family Caregiving in the New Normal*, Academic Press, pp 105–33, doi: 10.1093/acrefore/9780190625979.013.265
- Zygouri, I., Cowdell, F., Ploumis, A., Gouva, M. and Mantzoukas, S. (2021) Gendered experiences of providing informal care for older people: a systematic review and thematic synthesis, *BMC Health Services Research*, 21: art 730. doi: 10.1186/s12913-021-06736-2