Social inequalities and the wellbeing of family caregivers across European care regimes

Martina Brandt¹, Christian Deindl¹, Ginevra Floridi², Robert Heidemann¹, Judith Kaschowitz³, Nekehia T. Quashie⁴, Ellen Verbakel⁵, & Melanie Wagner⁶

¹ TU Dortmund University, ² University of Edinburgh, ³ Federal Office for Building and Regional Planning (BBR), ⁴ University of Rhode Island, ⁵ Radboud Universiteit Nijmegen, ⁶ Munich Center for the Economics of Aging (MEA)

Address correspondence to: Martina Brandt, TU Dortmund University, Department of Social Sciences, Emil Figge Str. 50, 44227 Dortmund (Germany). Email: martina.brandt@tu-dortmund

Abstract

Objective: In Europe`s ageing societies, informal care is increasingly critical for fulfilling the care needs of older people. Social inequalities in informal care are, however, still poorly understood, and the (differential) wellbeing consequences of caregiving remain unclear.

Background: To this end, we provide an overview of empirical results, methodological challenges, and open questions originating from our research project IN-CARE (2019-22) that set out to assess inequalities in care and wellbeing in different care regimes. In this article, we focus on social gradients in informal care and its impact on wellbeing across European care contexts from the perspective of caregivers.

Method: Based on the data from the Survey of Health, Ageing and Retirement in Europe (SHARE) and the English Longitudinal Study (ELSA) we applied different regression techniques and estimated fixed-effects models.

Results: We find a socio-economic gradient in informal care and wellbeing. Yet, we do not find socio-economic differences in the effects of caregiving on caregivers` wellbeing across European countries with different LTC policies. Also, we observe strong gender differences in the association of caregiving with caregivers` wellbeing within the population of 50+, which depend on different care arrangements and care regimes.

Conclusion: We conclude that gender is still the central inequality dimension in informal caregiving, linked to many other inequality dimensions, and strongly dependent on different care contexts. Thus, when designing social policies, multiple cross-level interactions and path dependencies should be considered.

Key words: gender, care relations, SES, Europe, later life, SHARE, ELSA
1. Introduction

Europe’s societies are ageing rapidly. The growing individual chances of healthy ageing across the globe are a remarkable accomplishment of mankind, however, they also bring about fundamental socio-political and societal challenges (see, e.g., Harper, 2014). Among these is a growing demand for care alongside (unequally) declining informal and formal care potentials due to low fertility, growing mobility, and welfare state cuts, especially in high-income countries (Broese van Groenou & De Boer, 2016; United Nations, 2016). At the same time, the availability of and access to (in)formal care is unevenly distributed across different societies and social groups (Albertini & Pavolini, 2017) – leading to different regional „(no) care zone’s”, and differences in individual „care poverty” and „caregiver burden” (Kröger et al., 2019; Liu et al., 2020; Wallace, 1990). Our research project set out to assess such inequalities in care and their wellbeing outcomes in different care regimes, focusing on both care receivers and caregivers. In this overview article, we summarise the main theoretical framework and empirical results of our research on the (unequal) wellbeing effects of informal caregiving in Europe and conclude with an outlook on important open questions and future research topics.

2. Empirical and theoretical background

Prior research suggests that informal caregiving can be detrimental to the wellbeing of the caregiver, especially when it encompasses demanding within-household support (Kaschowitz & Brandt, 2017). Yet, the wellbeing consequences of informal caregiving also differ across social contexts. In countries and regions with more public alternatives to family care, the negative (mental) health effects of caregiving are diminished partly due to the utilization of formal support services, and thus differential selection into (intensive) caregiving, but also due to perceived alternatives to family care that are linked to a higher sense of control (Verbakel, 2014; Wagner & Brandt, 2018). Furthermore, research shows that gender is an important axis of inequality and intensive family support is predominantly provided by women, especially in Southern, family-based welfare regimes (Schmid et al., 2012). Research to date, however, has been less attentive to how different social inequalities (e.g., socio-economic status SES, gender) interact with caregiving and with the wellbeing consequences caused by informal caregiving in different care contexts. To assess these questions, we use three central theoretical frameworks on the macro-, meso-, and micro-level, which will be briefly introduced below. This is followed by ideas on how they may affect inequalities in informal care provision and its wellbeing consequences, forming the basis for our hypotheses.

2.1 Macro level

Familialism in long-term care can be defined as the extent to which families, as opposed to the state, are considered responsible for the provision of care to older adults (Saraceno, 2016). De-familialisation, on the other hand, indicates the extent to which older individuals can access care independent of their family members (Saraceno, 2016). The varying policies, laws and public measures involved in forming care arrangements can be conceptually placed on a spectrum between the family and the state as the main providers of care (Saraceno, 2016; see Figure 1). Within one country’s context, multiple measures may operate in combination and even contradict or offset each other (Eggers et al., 2020). In addition, markets for privately purchased care interact with both families and the state as care providers, as in the case of family members organising and coordinating private carers, or public subsidies to market services. Accordingly, it is a very complex endeavour to map policy instruments in a comparable way (Verbakel et al., 2022).

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1 In this article, we provide a condensed overview over the main findings of work package 3 on caregiver wellbeing of the IN-CARE project (https://in-care.fk12.tu-dortmund.de/). More details can be found in the related articles we refer to below. We would like to thank all our colleagues for the nice cooperation and their valuable input during the entire project.
Based on different welfare state models and macro indicators for family and old age support as well as care norms, European societies can broadly be categorised into the family- and service-based care regimes (see, e.g., Anttonen & Sipilä, 1996; Kaschowitz & Brandt, 2017).

According to well-known typologies (Eggers & Grages, 2023; Frericks, 2023), countries in Northern Europe are characterised by a universalistic, service-based approach to care. The "conservative-corporatist" model in Western Europe, in contrast, combines extensive provision of formal care with strong support for informal care (Esping-Andersen, 1999; Leitner, 2003). This differs from the familialistic approach in Southern Europe, which leaves caregiving in the responsibility of the family and is characterised by a low availability of formal care (Leitner, 2003). In the post-socialist approach of the countries of Eastern Europe, the care of relatives remains the task of family members; despite the universalistic approach in the socialist past, which in reality shows deficiencies in both availability and quality (Haggard & Kaufman, 2008).

In addition to variation in the availability of services, contextual features also influence gender differences in informal care and labour force participation (Frericks et al., 2014; Saraceno & Keck, 2011; Schmid et al., 2012). Concrete incentives such as care allowances and barriers such as lack of (affordable) care infrastructure in Western and Southern Europe reproduce traditional gender roles and family images and foster inequalities (Bertogg & Strauss, 2020; Leitner, 2003). In contrast, the universalistic approach to long-term care in Northern and partly also in Eastern Europe contributes to smaller gender gaps (Haggard & Kaufman, 2008; Lewis, 1992). Hence, the macro context may influence the likelihood or necessity of taking up informal care, the relative strains of care provision, and how caregivers are supported, and also impact on inequalities in (wellbeing effects of) care (Verbakel et al., 2022).

2.2 Meso and Micro Level

Theoretically, the take up of informal care within different macro contexts can be explained by the "informal care model" (Figure 2). The model posits that the provision of informal care depends on the need for care of the care receiver and the personal disposition of the potential caregiver. Additionally, individuals’ embeddedness into their family and community, their socio-economic circumstances, as well as the socio-political and cultural context in which they live shape their propensities to provide care (Hess et al., 2023;
Jolanki et al., 2023). Thus, whether care is provided not only depends on the individuals but their social context (family, social network, community) in different socio-cultural and political environments.

**Figure 2:** Informal Care Model

![Informal Care Model](source)

The effects of care provision on the wellbeing of caregivers can be explained by the „caregiver stress process“ model (Figure 3). The underlying idea of this approach is to understand care as a process. The extent to which it is perceived as stressful for the caregiver is determined by three aspects. First, the characteristics of the caregiver determine the potential stress experience. In addition to socio-economic resources, the position within families and the resulting role expectations with regard to caregiving are of importance. Secondly, stressors that occur in the care process contribute to the individual experience of strain. By primary stressors, Pearlin et al. (1990) refer to those aspects that are directly caused by the care needs and the associated challenges. These include, for example, the cognitive state of the patient and the resulting behavioural patterns. Secondary stressors relate to role conflicts that arise because of providing care, whether in terms of the labour market, social participation, or other roles within the family. At the same time, secondary stressors also include intrapsychic stress, which can be expressed in worries about the care situation, one’s own social embeddedness, or the economic situation. The third factor influencing the experience of stress are mediators, which may contain the effects of primary and secondary stressors, including coping strategies and social support.

The factors are not to be regarded as fixed, but may change over time (Pearlin et al., 1990). The characteristics of the caregiver with regard to his or her competencies for the care process may change just as much as the care needs of the care receiver (primary stressor) and the relationship between the caregiver and care receiver (secondary stressor). The support potential can also change during the care process. Especially in care for older persons, rising primary stressors due to rising care needs and intensities are very likely during the process.
2.3 Selected micro-meso-macro-interactions and inequalities

Many of the pre-requisites of care, as well as the stressors and coping resources, depend on socio-economic factors (Tough et al., 2020). It is obvious that contexts do not only matter per se and moderate care burden, but also that welfare state arrangements and care regimes may interact with SES and gender inequalities (Verbakel et al., 2018): Formal care is costly and often not fully covered by public providers and insurance, females take over most informal care and thus more often reduce their labour market involvement (Gomez-Leon et al., 2019; Schmitz & Westphal, 2017), and wellbeing and health are generally poorer with lower socio-economic resources (Bonaccio et al., 2020; Pinquart & Sörensen, 2000).

According to the informal care and caregiver stress process models, care-related stressors and access to external support resources (partly provided by the state or market) contribute to differences in caregiving (strains), which are, however, unevenly distributed between different socio-economic groups. Thus, lower SES groups might not only be more likely to take up informal care but also at higher intensities, due to fewer (formal and informal) alternatives and lower health status of the care recipient as well as initial lower wellbeing of the caregiver, which is altogether linked to higher care burden. To the extent that policies and measures reach or treat socio-economic groups differently, they may also affect the social inequalities in informal care provision and its wellbeing consequences. Derived from this, we hypothesised firstly, that older adults with lower versus higher socio-economic resources are more likely to provide care, and, secondly, that those providing care with lower socio-economic resources experience steeper wellbeing declines relative to their counterparts with higher socio-economic resources.

This might be especially true for females who are often the main “kin keepers” and take over most informal caregiving obligations. As a result of recent long-term care (LTC) reforms that have significantly reduced expenditure on formal care services, informal caregiving responsibilities are increasing across Europe. Hence, much informal care is provided by families, with partners being the most common providers. However, (partner) caregiving responsibilities are typically gendered such that compared to men, women often provide more intensive care (Pinquart & Sörensen, 2006), and are more likely to care alone (Bertogg & Strauss, 2020). Women’s higher caregiving load implies higher exposure to caregiving-related stressors and lower wellbeing. Thus, also gender moderates the association between care and wellbeing as it shapes care responsibilities and expectations, with caregiving roles depending on the context in which care is embedded (Floridi et al., 2022) – in interaction with (gendered) SES inequalities. This could also lead to a
stronger response to welfare state arrangements by women (Schmid et al., 2012) and to greater expectations to (solely) provide partner care than men (Calasanti & King, 2007). Based on this, our third hypothesis was that there are lower gender inequalities in informal care and its wellbeing outcomes in de-familialised contexts, due to more publicly available alternatives to family care.

Taken together, we expected higher social (SES and gender) inequalities in informal care and its wellbeing outcomes in familialised contexts where the family is the main (and sometimes only) care taker (Kaschowitz & Brandt, 2017; Verbakel et al., 2022). Accordingly, we set out to analyse (1) socio-economic gradients in informal caregiving, (2) socio-economic gradients in the wellbeing effects of informal caregiving, and (3) gendered wellbeing effects of care across European care regimes.

3. Data and methods

Our analyses are based on interviews with persons aged 50 years or older from the Survey of Health, Ageing and Retirement in Europe (SHARE) (Börsch-Supan et al., 2013) and partly from the English Longitudinal Study of Ageing (ELSA) (Steptoe et al., 2013). SHARE and ELSA are conducted biannually and cover a broad range of topics such as socio-demographics, health, employment, social networks and social support.

Due to the special character of this article, which combines central results from different articles, the results are also based on three independent data sets, which were customised and analysed in separate ways. In the subsections of the empirical results, we only briefly refer to the data and methods, detailed information on data and methods can be found in the online appendix.

4. Empirical results

4.1 Socio-economic gradients in caregiving

Our analyses of socio-economic inequalities in informal caregiving based on SHARE and ELSA (cf. Quashie et al., 2022) firmly support our first hypothesis as shown in Table 1. Low levels of education and income were positively associated with caregiving within the household, whereas the opposite was true for higher levels of education and income. In terms of differences in wealth, wealthier households (€50,000 or more) were found to have a lower frequency of caregiving within the household compared to less wealthy households. In short, informal care was more common among those with lower compared to higher SES, and this result held for all SES indicators. Although controlling for further controls such as gender, household size, (I)ADL, and employment status on the individual level (for details see the online appendix) in the third Model M3 weakened the strength of the associations between individual-level socio-economic resources (education, income, and wealth) and household caregiving, it, however, did not change the direction of the relation.

<table>
<thead>
<tr>
<th>Table 1: Multilevel Poisson regressions: SES inequalities in caregiving across Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caregiving</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>Household education (medium)</strong></td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td><strong>Couple income (middle medium)</strong></td>
</tr>
<tr>
<td>Poor</td>
</tr>
<tr>
<td>Low medium income</td>
</tr>
<tr>
<td>High medium income</td>
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<tr>
<td>High income</td>
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</tbody>
</table>
4.2 Socio-economic gradients in wellbeing effects of caregiving

Our second hypothesis was that the provision of informal care is negatively associated with caregivers’ wellbeing across socio-economic groups, expecting greater wellbeing declines in lower socio-economic groups due to lower resources, higher care burden, and lower external support (cf. Brandt et al., 2022). In our analyses of longitudinal data from SHARE waves 2, 4, 5, and 6 we assessed whether household wealth (as an indicator of cumulated and disposable resources) moderated the relationship between care and wellbeing, controlling for other important socio-demographic and health characteristics (for details see the online appendix). As can be seen in Table 2, and consistent with earlier studies on the health consequences of caregiving (Kaschowitz & Brandt, 2017), care provision inside the household was negatively associated with older adults’ self-reported life satisfaction (pooled ordinary least square regression models, POLS), and the uptake of care led to declines in life satisfaction (fixed effects models, FEM). Also, in line with other studies, we found that respondents with higher wealth experienced higher life satisfaction (Jivraj & Nazroo, 2014). However, we did not find evidence that the uptake of caregiving leads to a steeper decline in life satisfaction for lower socio-economic groups. We conclude that different wealth groups may start their “journey” at different levels of wellbeing but, on average, do not react differently to caregiving strains in terms of self-reported life satisfaction. Still, different and potentially off-setting mechanisms which could not be assessed with available data might play a role and will be discussed in the final section.
Table 2: Pooled OLS and fixed effects models: life satisfaction by caregiving and wealth (continued)

<table>
<thead>
<tr>
<th>Life satisfaction</th>
<th>POLS</th>
<th>FEM</th>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>s.e.</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
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<tr>
<td>Caregiving x wealth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gave care x quint II</td>
<td>-0.05</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Gave care x quint III</td>
<td>-0.04</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Gave care x quint IV</td>
<td>-0.05</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Gave care x quint V</td>
<td>0.01</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Constant</td>
<td>7.41***</td>
<td>(0.05)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.1513</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>591.68***</td>
<td></td>
</tr>
<tr>
<td>Likelihood ratio test</td>
<td>2.92</td>
<td>3.28</td>
</tr>
<tr>
<td>Observations/individuals</td>
<td>146,559/76,293</td>
<td></td>
</tr>
</tbody>
</table>

Notes: ***p < 0.001, **p < 0.01, *p < 0.05. SHARE (waves 2,4,5,6), b = coefficient, SE = standard error; clustered at the individual level in POLS models, obs = person-year-data; controls: age, gender, household size, limitations with instrumental activities of daily living, urban-rural residence, country, and wave, own calculations, unweighted.

Source: Brandt et al., 2022.

4.3 Gendered wellbeing effects of caregiving across care arrangements and regimes

Turning to how the association between caregiving and wellbeing compares across care regimes (cf. Floridi et al., 2022), we assessed the gender moderation in the association between partner care arrangements and individuals’ wellbeing, and the extent to which known gender differences vary across European care contexts, again using data from SHARE (wave 6) for 3,465 care couples aged 50+ (for details see online appendix). As depicted in figure 4 we explored gender differences in individuals’ life satisfaction across different partner care arrangements (solo; shared formal; shared informal; outsourced formal; and outsourced informal care) and heterogeneity in the gendered associations across the four different care contexts in our sample: Northern, Western, Southern, and Eastern Europe. As stated in our third hypothesis, we suspected that the negative association between partner care arrangements and wellbeing would be more visible in family-based care regimes in Eastern and Southern Europe, and more gendered (towards females) in the conservative Western and familialised Southern care regimes with high gender role differentiation in care. Negative effects of outsourcing care were thus presumably highest for female caregivers in Southern care regimes with high expectations towards female care and low support by formal providers. As can be seen in Figure 4 by the predicted life satisfaction scores of men and women across care arrangements within different regimes, sharing care with formal providers was indeed associated with lower wellbeing among women than men, with a significant wellbeing penalty among Southern European women with partners in shared formal care. Outsourcing partner care to informal providers was associated with higher wellbeing than other care arrangements for men across care contexts, but with lower wellbeing for women in Southern Europe. These are striking results that hint at the fact that gendered norms and expectations play an important role, and it is the intersection of gender and care regime, which matters for care and wellbeing (also see Herlofson & Brandt, 2020).²

² Compared to the other regions, in figure 4, the confidence intervals for all care arrangements are more pronounced in the North due to the small number of caregivers in this region.
5. Discussion, limitations, and outlook

The presented results from our research project provide an in-depth look into social gradients of informal caregiving and differential effects of care on wellbeing across and within different care contexts—a topic of highest relevance in times of demographic change and rising inequalities and against the background of the “Decade of Healthy Ageing” (WHO, 2021). The findings on caregiver wellbeing summarised here brought about new evidence on socio-economic inequalities in care and wellbeing across Europe, and on gender inequalities of wellbeing effects of care in different care arrangements and regimes. We saw that the uptake of care falls disproportionally on socio-economically disadvantaged populations, which might be partly due to lower financial resources and possibilities to receive formal (public) care. Moreover, in addition to our findings presented above, we found evidence that intra-household care is more likely in countries with higher social inequality (see Quashie et al., 2022). This might be due to lower social cohesion and social contact, poor population health, and other social strains in such contexts (Wilkinson & Pickett, 2009). When assessing the wellbeing effects of informal care, we found that self-reported life satisfaction strongly depends on wealth, however, the wellbeing effects of within-household care seem to be the same for all SES groups (on different baseline levels). It is, however, evident that profound gender inequalities persist in partner care (arrangements) and wellbeing, especially in Southern (familialised) care regimes: women face wellbeing penalties whereas men are better off outsourcing care in such family-based regimes. Social inequalities in different dimensions and at different levels thus seem to interact. Thus, policies to support caregivers’ wellbeing need to be sensitive to the coordination of formal and informal caregiving support for men and women from different SES groups in their respective care contexts.
Even if care leads to the same average wellbeing declines in different groups, this might, as the results on interactions between care, gender, and regime indicate, actually work via different (maybe even offsetting) mechanisms and channels (care intensity/tasks, values and norms, self-fulfilment, external support, etc.) we could unfortunately not directly measure and assess. The relevance of these channels might, again, vary between different contexts. Apart from that, from a methodological point of view, response behaviours might be biased differently across contexts, especially for self-ratings such as wellbeing questions (see Heidemann et al., 2023).

Needless to say, as partly demonstrated above, there are many more influencing factors at the individual level (e.g., personality traits, life course shocks, care trajectories), but also on the meso and macro level (e.g., employer, community, social network, LTC services) on caring and ageing well (e.g., Abel et al., 2013; Broese van Groenou et al., 2016; Schmitz & Brandt, 2022), and their interactions are manifold (e.g. Renyi et al., 2022). To start with, an explicit analysis of the proposed interactions between SES and gender in the wellbeing effects of caregiving would be worthwhile. When trying to link care contexts to individual care and wellbeing (declines), we are in dire need of (comparable) meso and macro indicators across different countries, regions, and social groups over time, but even mapping (de-) familisation in older age care is a very complex issue and the data still insufficient, both in quality and quantity (Eggers et al., 2020; Verbakel et al., 2022). Moreover, when observing individual and family reactions to different contexts and their change, quantitative analyses can only help us to identify average treatment effects. Thus, to understand why people take up and react to care differently in different contexts, qualitative interviews could help to provide a complementary view into differential mechanisms, interactions, and path dependencies. Additionally, care couple interviews and studies of the broader care network can help to shed light on different dimensions of the care relation and network effects.

Thus, taken together, while our results present a leap forward in research on care and wellbeing inequalities across different contexts, there is still a lot to do and find out in a future of constant change. Especially gender inequalities interacting with different care regimes merit further investigation as they present a key to targeted social change based on evidence-based policies.

Acknowledgments

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Data availability statement

The studies referred to use data from SHARE Waves 1, 2, 4, 5, and 6 (Börsch-Supan et al., 2013) and ELSA Waves 2, 3, 4, 6, 7 (Steptoe et al., 2013). The SHARE data collection has been funded by the European Commission through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-13: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982) and Horizon 2020 (SHARE-DEV3: GA N°676536, SERISS: GA N°654221) and by DG Employment, Social Affairs and Inclusion. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN27120130071C) and from various national funding sources is gratefully acknowledged (see http://www.share-project.org). The funding of ELSA is provided by the National Institute of Aging in the United States, and a consortium of UK government departments co-ordinated by the Office for National Statistics (for further details see https://www.elsa-project.ac.uk/).

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3 This is especially unsatisfactory because care intensity (in terms of hours) was measured in earlier waves of SHARE but then dropped.
References


Information in German

Deutscher Titel

Soziale Ungleichheiten und das Wohlbefinden pflegender Angehöriger in europäischen Pflegesystemen

Zusammenfassung

 Fragestellung: In den alternden Gesellschaften Europas spielt die informelle Pflege eine immer wichtigere Rolle für die Deckung des Pflegebedarfs älterer Menschen. Die sozialen Ungleichheiten bei der informellen Pflege sind jedoch noch wenig erforscht, und die (unterschiedlichen) Auswirkungen der Pflege auf das Wohlbefinden sind nach wie vor unklar.


 Schlagwörter: Geschlecht, Pflegebeziehungen, Sozioökonomischer Status, Europa, Alter, SHARE, ELSA