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research article

Determinants of the social risk of caring

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This article offers a framework to examine the determinants of the 'new' social risk of caring. It distinguishes the primary risk of being called upon to provide care and the secondary financial, health and social risks. Building on Dahlgren and Whitehead's social determinants of health model, it shows how characteristics of the potential care dyad interact with their living and working conditions, networks, public policies and services, and social norms to produce highly unequal risks. Framing caring as a socially determined risk could stimulate thinking about 'upstream' influences on where caring responsibilities fall and the distribution of their material and non-material consequences.

Keywords social risk • social determinants • inequalities • caring

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Introduction

A core function of welfare states is to manage social risks. Whether formally through social insurance or less explicitly through tax-financed services and wider social policies, welfare systems reduce individuals' exposure to adverse events, such as ill health or unemployment, and mitigate their consequences. Revenue is collected from people in the 'good times' when they are most able to contribute, typically when they are in employment, and benefits, either in cash or in kind, are paid out in the 'bad times', if and when adverse circumstances arise for them (Hills, 2017). Such is the theory. However, only some kinds of social risk are taken into account in the design of welfare systems, and the risk that you will need to provide significant care for an adult relative or close friend is, in most contexts, catered for only partially by means of carers' benefits and other entitlements, or else not at all. Indeed, some countries explicitly require adult children to provide care for parents without assistance from the state (for example, Korea), while in others, that is the default assumption (for example, Poland) or normatively reinforced in policy documents (for example, Australia) (Bettio and Verashchagina, 2010; Cash et al, 2013; Zarzycki et al, 2023a).

The second section of this article explores the identification of caring as a social risk, which I suggest has been under-theorised. In particular, the distinction between the primary risk of finding oneself with responsibility for becoming a carer and the secondary risk of the consequences of taking on the caring role has not been clearly drawn. The latter is explored in the third section, including the personal, social and economic disadvantages to which high-intensity caring can give rise. The fourth section addresses the primary risk of being called upon to provide care and, building on the Informal Care Model (Broese van Groenou and De Boer, 2016), identifies three major determinants: whose relatives and close friends develop a need for care; who is held responsible for ensuring that care is provided; and who can access formal alternatives (public or private). These determinants are socially, culturally and economically patterned, giving rise to unevenly distributed risks. The fifth section offers a conceptual framework that brings together the individual, familial and institutional elements that combine to shape the primary and secondary risks of caring. The framework takes inspiration from the social determinants of health (SDOH) model developed by Dahlgren and Whitehead (1991), but rather than treating caring as an input to health outcomes, the proposed framework treats caring and its consequences as the outcomes of interest. Finally, in the sixth section, the conclusion reflects on how the proposed framework could stimulate further research on caring as a social risk and encourage the design of upstream policy interventions that recognise that the incidence and consequences of caring are not random but have strong social determinants themselves.

In what follows, I use 'carer', unless otherwise specified, to mean a family member, neighbour or friend who provides practical and/or emotional support to an adult who has additional needs for help with day-to-day living and who provides this support not as part of their paid employment. Other forms of caring – for example, for children or as a worker – are equally important but are not the focus of this article. Geographically, the article aims to develop a conceptual framework with potential application to a broad range of contexts and is not specific to a given country or region. However, most of the examples and discussion of institutional arrangements relate to long-standing welfare states in rich countries; this is a limitation to which I return in the final section of the article.

Caring as a social risk

In the absence of insurance, the full cost of bad luck falls on the unlucky few. When insurance works well, the risks are pooled: everyone faces some cost (premiums or contributions), but everyone is also protected (payouts or benefits if the insured event occurs). Private insurance markets require certain conditions to function efficiently – for example, the absence of asymmetric information, adverse selection and externalities[1] – and these conditions typically do not obtain for risks like unemployment, ill health or retirement (Barr, 2020), nor for caring. Partly for this reason, public (often called 'social') insurance has developed in many welfare systems around the world to protect citizens against shocks to their standard of living from these 'social risks'.

The insurance principle is most readily observable in social security, but the same idea extends to many public services. Indeed, in many countries, healthcare is provided through social health insurance. During a period of ill health, social security provides some replacement of lost earnings in the form of sickness benefits, and social health insurance provides access to treatment. Entitlement to services free (or nearly free) when needed is made possible through pooling the risk and combining payments through some collective mechanism, such as taxation or earnings-related contributions. This is also a cornerstone of developed welfare systems.

However, the articulation and recognition of social risks are historically contingent. When unmet needs in the population interfere significantly with the supply or reproduction of labour, states may move to expand social protection; in other instances, organised labour and other popular movements, including successive waves of feminism, have won recognition of needs through struggle (Fraser, 1989). However, as Dean (2002) observes, even once risks are identified, the translation into corresponding entitlements is partial, conditional and sometimes exclusionary, necessitating further claims for recognition to be articulated.

In the 1990s and early 2000s, welfare state scholars began to discuss 'new social risks' emerging as a result of the rapid increase in women's employment, changing family structures, technological shifts and labour market casualisation (Esping-Andersen, 1999; Taylor-Gooby, 2004). They included, among other things, the risk of encountering unmet needs for childcare and for the care of disabled or elderly relatives (Bonoli, 2005). Where mothers, wives and daughters were previously assumed to be available to provide the care that was needed, full-time if necessary, they were now expected to be in employment and were facing an increasing tension between their paid and unpaid responsibilities, inadequately recognised or supported by social security, paid leave entitlements or services. The extent to which this tension constitutes a genuinely 'new' social risk is debatable, of course: working-class women have always had to navigate their dual economic and domestic roles. However, the comparatively rapid changes in the demographic context and labour markets of the late 20th century extended the range of women experiencing the 'work–care' dilemma and gave it new prominence.

Theoretical and empirical studies of caring as a social risk have followed. Morgan (2018) identifies some risks that are recognised but only partially addressed (for example, poverty through increased expenditure and loss of earnings, barriers to continuing in paid employment, and pension penalties), some which are recognised but barely addressed at all (increased risk of injury and psychological harm), and others that are not yet recognised (lack of discretionary time). Moreover, she argues that the responses to some of these risks, in turn, create further risks; for example, the way in which support for carers is fragmented between different schemes and agencies requires a greater investment of scarce carers' time to access their entitlements and produces greater chances of their needs falling between the cracks.

This is an instructive analysis. However, one could extend the framework further back to include the risk of becoming a carer in the first place. In what follows, I refer to the risk of acquiring caring responsibilities as the primary risk and the risks of loss of earnings, ill health and social isolation consequent upon intensive caring responsibilities as the secondary risks (the latter are intended to include the long-term consequences and the fallout from policy responses for carers identified by Morgan [2018]). The analogy with how premiums are calculated in insurance may be helpful: when I purchase flood insurance for my home, the insurer estimates the likelihood that my home will be flooded and the costs if it does. Here, we apply this to caring: the likelihood that I will be called upon to provide care (primary risk) and the financial, health and social costs if I do (secondary risks). It is useful to identify primary and secondary risks separately because different policy responses are relevant to each.

Eggers and Grages (2023) explore four main policy levers in relation to managing the social risk of family care for older people: paying family carers; extending social security entitlements to carers as if they were employed; additional leave entitlements and protection against dismissal; and offering publicly financed formal care as an alternative. The first three mainly address secondary risks (in my terminology), while the fourth may reduce the necessity of providing unpaid care (primary risk), or reduce its intensity, and thereby mitigate secondary risks. Of the five European countries Eggers and Grages assess, they evaluate Germany and Norway as giving the best protection against the primary risk, followed by England and Italy, and finally Estonia. Norway also provides superior protection against secondary risks; Germany a little less so, though still ahead of Italy. England and Estonia slip further behind.

Earlier reviews of policies to support carers across 35 European countries identified similar categories of policy levers (Spasova et al, 2018) and characterised the Nordic countries as having the most highly developed schemes for carers. These were followed by a large group of countries from across the rest of Europe in which there was some specific support for carers but most of the effort went towards provisions for the person with care needs and, finally, by a similarly large group of mostly Southern and Eastern European countries where little specific support for carers could be identified (Bouget et al, 2016). The highly variable policy responses across countries underline Dean's (2002) contention that the comprehensive treatment of social risks does not automatically follow from their recognition.

The next section reviews the evidence on the secondary risks of caring, especially intensive caring: what they are, on whom they fall and whether policies are effective in reducing them. The fourth section returns to the question of the primary risk of acquiring caring responsibilities and its social and economic determinants.

Secondary risks incurred through caring

Caring should not be construed entirely negatively (Veltman et al, 2002; Kraijo et al, 2012). Some carers speak about their role as part of a loving relationship and about the sense of purpose and fulfilment that being able to care can bring (Salin and Astedt-Kurki, 2007; Horsfall et al, 2016). From this perspective, framing care as a 'burden' is inappropriate. However, even carers in the most favourable circumstances typically articulate some adverse consequences, and many carers are not in favourable circumstances, for example, due to caring continuously or for a higher number of hours than they would choose or with inadequate support.

Two main types of adverse consequences have been identified, financial and health related, though social impacts are also important, for example, strains on relationships in the care dyad or wider family and the risk of social isolation. Financial consequences arise from the loss of or reduction in the carer's earnings and from additional costs associated with caring. Providing a high (20 or more hours per week) or even a moderate (10–19 hours) intensity of care has been shown to be associated with reductions in paid work (Carmichael et al, 2008), and this holds for both male and female carers. Young carers may be unable to move into employment (Hutchings et al, 2024). Carers in work may have to reduce their hours or move to another less-well-paid role in order to accommodate their caring responsibilities (Lane et al, 2020). There are also less obvious effects, for example, missing out on promotion (Keating et al, 2014) and the slower accumulation of occupational and state pension entitlements (Morgan, 2018).

Additional expenditures include housing (for example, adaptations), services (for example, respite), supplies (for example, equipment) and transport (for example, additional journeys or needing to use more expensive forms of transport, such as taxis) (for a review, see Keating et al, 2014). These costs overlap with and are difficult to disentangle from estimates of the extra costs of disability, but where the carer and the person with needs are co-resident, the additional costs are borne by the same household income in any case. For lower-income households, these additional expenditures can be a significant burden.

Aspects of the financial risk associated with caring have been recognised through a range of different policy instruments. Employment retention can be supported through enhanced rights to leave or flexibility for carers juggling paid and unpaid work. However, workers may hesitate to press their entitlements (Hoogenboom et al, 2024), especially if they are in lower-skilled occupations (Oldenkamp et al, 2018) where work may be more precarious. Longer-term leave is often unpaid, which puts it out of reach for employees in households without alternative sources of income.

Providing access to formal care services for the person with needs can help to reduce the time demands on carers and hence support their continuation in paid employment. A number of countries have introduced long-term care social insurance, but evaluations have indicated that, as currently constituted, the schemes do not achieve positive impacts for carers to the extent that might have been anticipated. For example, in Jamaica, Govia et al (2021: 9) found that, 'compulsory insurance and social protection schemes appear to exacerbate rather than narrow socioeconomic inequalities in long-term care', and in Japan, Fukahori et al (2015) found no impact of the introduction of long-term care insurance on the employment probability of new-onset carers.

Loss of earnings can be mitigated through entitlement to supplementary benefits for carers, though entitlement is often tightly constrained. For example, in England, Carer's Allowance is payable only to carers providing care for 35 hours per week or more, but the weekly amount is equivalent to only seven hours' pay at the minimum wage (in April 2024). The loss of pension accrual can be offset by 'crediting' carers under contributory state pension schemes, but these are typically less valuable than the occupational pensions to which carers lose access when they are obliged to exit employment.

Turning to the health-related consequences of caring, a recent review of systematic reviews of evidence for carers of older people without dementia concluded that there was a case to be made for 'caring' to be considered a social determinant of health (Spiers et al, 2021). The social determinants framework has been instrumental in drawing attention to the role that living and working conditions play in shaping health outcomes and is discussed in more detail in the fifth section. For Spiers et al (2021), caring is a specific kind of living condition and (unpaid) work, which is associated with increased stress, anxiety and depression. Among carers of people with dementia, a meta-analysis found the prevalence of depression to be as high as 31 per cent (Collins and Kishita, 2020). Physical health can also be affected. Analysis of survey data on carers aged 45 or over in England found that carers were 16 per cent more likely to have two or more long-term health conditions than non-carers, controlling for age, gender, ethnic group and local area deprivation (PHE, 2021).

However, some previous studies have found better (physical) health outcomes among carers in general than comparable non-carers (O'Reilly et al, 2008), particularly among those caring for fewer hours (Vlachantoni et al, 2016; Li et al, 2023). This underlines the uneven impact that caring may have depending on the carers' circumstances and the extent to which their caring role is enforced through a lack of alternative provision. Public Health England (PHE, 2021) found that higher-intensity carers were disproportionately likely to be living in deprived areas, and Spiers et al (2021) report some evidence that 'carer burden' was, not surprisingly, higher among those with low levels of financial and social support. Carers with lower levels of qualifications had substantially worse employment, financial, mental and physical health outcomes than carers with degrees in Brimblecombe and Cartagena Farias's (2022) study using UK data. There were also some interactions with ethnicity: Asian carers had lower earnings and worse mental and physical health outcomes than their White counterparts, controlling for other socio-demographic and caring characteristics.

A review of the literature on the social exclusion of carers of people with dementia or severe mental health disorders identified stigma, social isolation and the difficulty of engaging in leisure activities as three dimensions of the impact of caring on carers' relationships (Greenwood et al, 2018). A meta-analysis of quantitative studies focusing on carers of people with dementia found that half of carers experienced loneliness and over one third described social isolation (Liao et al, 2024). Social isolation was higher in North American studies than in European studies, and loneliness was higher in European studies than in Asian studies (not all studies covered both outcomes), suggesting that contextual factors, such as social norms, including recognition of the value of caring, and formal support, may be relevant mediators. Rand et al (2019) found that those who were expected to care had worse quality-of-life outcomes than those who described their caring role as chosen, even after controlling for other characteristics and circumstances of caring, and Burridge et al (2007) found, not surprisingly, that relationships were more likely to deteriorate where care was provided 'reluctantly'.

Impacts on finances, health and relationships are likely to compound each other. Material deprivation is a determinant of poor physical and mental health; poor health makes it more difficult to sustain paid work and may itself add to costs. Both financial hardship and ill health add to strain in relationships, and distancing between the care dyad and wider family and friends may make it less likely that they will receive monetary or in-kind support from that network. The consequences of caring are complex and context dependent, which points to the benefits of an integrated conceptual framework. Before developing that, however, we turn to the social risk of becoming a carer in the first place: what determines who is called upon to care?

The primary risk of acquiring caring responsibilities

Profiles of carers consistently find that women are over-represented, especially among those providing higher intensities of care (Verbakel et al, 2017). This holds across age groups until the oldest carers (for example, aged 75 or over), among whom men are over-represented (Dahlberg et al, 2007; Creelman, 2020), which may be because a higher proportion of men than women in that age group have a surviving spouse for whom to provide care. Carers disproportionately have lower educational qualifications, controlling for age (Verbakel et al, 2017), and are concentrated towards the bottom of the income distribution (for Australia, see, for example, Creelman, 2020) and, for high-intensity carers, in more deprived areas (for England, see PHE, 2021). The acquisition of educational qualifications usually pre-dates the onset of caring, so this suggests that people with lower qualifications are more likely to become carers, while position in the income distribution reflects both the economic status of people who become carers and the impact of caring on income through earnings and pension losses, as outlined in the previous section.

We can delineate three processes that influence the social and economic patterning of who acquires caring responsibilities; the first is whose relatives and close friends develop a need for care; the second is the operation of social and cultural norms that determine who is expected to take responsibility for caring when need arises; and the third is the availability of formal (public or private) care alternatives. These three processes align closely with the three 'propositions' at the heart of the Informal Care Model developed by Broese van Groenou and De Boer (2016) to explain who provides informal care, namely: the care receiver's need for care, the disposition of the caregiver, and the community and family context. However, while Broese van Groenou and De Boer's purpose is to provide a behavioural model of individual carers' decisions, our purpose from a social risk perspective is to understand the distribution of the incidence of caring responsibilities, which tends towards a greater focus on social and economic determinants.

The question of whose relatives and close friends develop a need for care has received scant attention in the empirical literature and is taken as a given in the Informal Care Model; however, there is every reason to expect that members of more socially and economically disadvantaged families and people living in more deprived areas are more likely not only to have family members, friends and neighbours with health conditions and impairments that give rise to additional needs for support with day-to-day living but also to do so at a younger age. The rich field of research on the social determinants of health provides ample evidence of higher rates of limiting, long-standing conditions among people with lower incomes, with lower education, in poorer housing and in more deprived areas, including, for example, dementia (Bodryzlova et al, 2023), stroke (Teshale et al, 2023) and falls (Liu and Hu, 2022) – all leading causes of someone needing ongoing care. People with lower socio-economic status develop needs for help with more activities of daily living at a younger age. For example, poor-quality housing has been shown to increase the likelihood of the early onset of care needs among the over-50s (Cartagena Farias et al, 2023). In another study, people in their mid- to late 60s in the lowest fifth of the income distribution in England already had a level of need for help with activities of daily living and instrumental activities of daily living equivalent to the level of need among 85 year olds in the top fifth of the income distribution – a 15- to 20-year socio-economic status 'penalty' (Burchardt, forthcoming).

Co-resident carers share the same household conditions as the person with care needs. Therefore, a socio-economic gradient in care need implies a socio-economic gradient in the risk of being called upon to provide co-resident caring. Non-co-resident carers, especially those providing higher intensities of care, mostly live near to the person they care for as a matter of practicality. We could also expect, therefore, an area-based correlation between the risk of needing care and the risk of being called upon to provide it. More distant non-co-resident carers are typically family members, particularly children. The association between the socio-economic status of parents and adult children is weaker than the association between co-resident household members or neighbours but is nevertheless positive and significant. Parents with lower socio-economic status are more likely to develop needs for care (and at a younger age); hence, their offspring are more likely than offspring of more privileged parents to be called upon to respond. None of these associations is deterministic, but neither are they random. The result is a consistent socio-economic gradient in the incidence of *prima facie* caring responsibilities, in other words, a gradient in whose spouse, parent, close relative, friend or neighbour develops a need for care.

The second process that influences for whom caring responsibilities arise is the operation of social and cultural norms, and this has been more thoroughly investigated in the sociological literature, especially through a feminist lens. This has given rise to the concept of 'hierarchies of obligation', according to which those positioned at the top of the hierarchy expect and are expected to take a greater share of responsibility for providing care when the need arises, though Finch and Mason (1990: 174) emphasise that this is treated as 'a resource with which to negotiate rather than as a rule to follow'. The specific content of the hierarchy varies across cultures and evolves over time but commonly places spousal obligations towards the top, followed by daughters, daughters-in-law, sons and then other relatives. Other factors intersect with these obligations and affect the outcome of who actually provides care, including such circumstances as geographical proximity and the employment and health status of the would-be carer, as well as personal factors, such as relationship quality and bonds of affection, and perceptions of reciprocity (Camden et al, 2011; Zarzycki et al, 2023b). The Informal Care Model represents an individual's response as shaped by the answers to three questions: do I want to, do I have to and can I provide care? (Broese van Groenou and De Boer, 2016).

The strength of the felt obligation to provide care directly rather than to arrange for it to be provided through formal services also varies culturally (Cantor and Brennan, 1999). Filial piety grounded in Confucianism remains a strong current in many Asian societies and is carried over to varying extents when families migrate to other countries (Zarzycki et al, 2023a), but similar presumptions about obligations to care for parents are observed among Latinos in the US (Weiss et al, 2005) and, to some extent, in Southern Europe (Verbakel, 2018).

The third process leading to the uneven distribution of the social risk of caring is the extent to which would-be carers can opt out of direct provision through substituting paid care or can access publicly funded alternatives. The ability to pay for formal services, whether in a residential setting or at home, is principally determined by the income and wealth of the carer and the person with needs and therefore reflects directly an economic gradient. For example, in Italy, a country with strong familial norms, the practice of employing care assistants to supplement or substitute informal care was found to be the preserve of the wealthy (Degiuli, 2010). Having the means to pay for care may also interact with the willingness to provide care: several studies find that family members are less likely to provide care if they face higher 'opportunity costs' because the earnings they would forgo are higher (Carmichael et al, 2010; Koreshi and Alpass, 2023).

By contrast, access to publicly funded formal care is typically either unrelated or inversely related to the income and wealth of the person with needs (and, by extension, their carers). In principle, universal or social-insurance-based eligibility for long-term care ensures that alternatives are available to those on whom caring responsibilities would otherwise fall, and means-tested systems prioritise access for the least well-off. However, the generosity of the entitlements and the range and quality of the services matter too: if carers do not feel that the offer will adequately meet the needs of the person, they will continue to provide care instead of or as well as the publicly funded services (Brimblecombe, 2023). Suanet et al (2012) studied variation in informal care by welfare state provision across Europe and found that countries with more fully developed long-term care services reduced the prevalence of care being provided exclusively by unpaid carers, but combinations of formal and informal care were still common.

Pulling together the insights from the preceding two sections, we can construe the social risk of caring as consisting of two parts: the risk of acquiring caring responsibilities and the financial, health and social consequences of taking up those responsibilities. The risk of acquiring caring responsibilities is strongly influenced by economic, social and cultural factors. There is also evidence that the deleterious consequences of caring are concentrated among those already experiencing socio-economic disadvantage. Both parts of the overall social risk may be more or less effectively mitigated by welfare systems and wider social policies. In the next section, I offer a framework that aims to capture these determinants of risk, with a view to prompting further research and policy development.

A model of the determinants of the social risk of caring

We have already touched on the SDOH framework developed by Dahlgren and Whitehead (1991). The SDOH framework seeks to identify the main determinants of the health of a population, 'conveying the message that many are *social* determinants, forming interconnected layers of influence and amenable to organised action by society' (Dahlgren and Whitehead, 2021: 22, emphasis in original). That message remains central to the model of caring as a social risk proposed here. The layers in the SDOH model are often represented as a rainbow. The inner layers relate to individual factors, such as age, sex, genetic make-up and 'lifestyle' characteristics. These are surrounded by social and community networks, followed by living and working conditions (including education, unemployment, sanitation, healthcare services and housing) and, finally, 'general socio-economic, cultural and environmental conditions'.

The key adaptation of the framework proposed here is to replace health as the outcome of interest with the social risk of caring. The framework therefore addresses the following question: what are the main determinants of the social risk of caring? As noted at the end of the preceding section, the social risk of caring comprises two components: the risk of acquiring caring responsibilities and the consequences of caring. This can be thought of in actuarial terms as the likelihood that an event will occur and the cost if it does; multiplying these together gives the expected cost. In the case of caring, the cost is not purely financial but may also be experienced as a cost to physical or mental health, as well as social functioning.

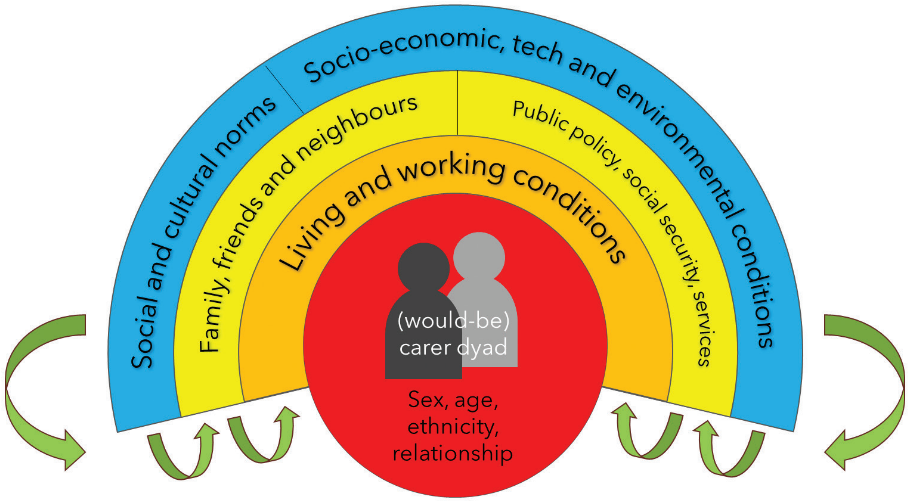
The proposed framework also draws on Bronfenbrenner's ecological systems theory, as applied to young caregivers by Ornstein and Caruso (2024). As those authors explain, Bronfenbrenner (1994) postulated that a person's psychological development was influenced not only by their own characteristics but also by the systems in which they were embedded. Bronfenbrenner described these systems as layers, from micro through to macro, and identified points for intervention in each layer. The final layer, outside macro, is labelled the 'chronosystem', relating to 'socio-historical conditions and patterns of events and transitions over a life course' (Ornstein and Caruso, 2024: 3). This brings in the dynamic perspective, which is less explicit in the SDOH framework and particularly useful in relation to the social risk of caring.

The proposed social risk of caring (SROC) framework (see Figure 1) puts the main carer and the person with needs – the 'carer dyad' – at the centre. This reflects the growing tendency to recognise the interdependency of needs between carers and care recipients (Larkin et al, 2019; Sud et al, 2021). Ornstein and Caruso (2024) place the 'caregiving unit' (the care receiver, family carers and paid caregivers) at the centre; however, for the question that the SROC framework aims to address, paid caregiving is a separate potential intervention and is therefore placed in a separate layer (yellow in Figure 1). However, I recognise that a 'dyad' is a simplification; there may be more than one main carer.

The term 'carer dyad' is qualified as a '(would-be) carer dyad' because the framework is intended to capture both the risk that care responsibilities arise and the consequences if they do. For a first take on the framework, let us assume that caregiving has not yet commenced but that the two people at the centre stand in a relationship to one another such that caring responsibility could arise if one of them developed a need. The sex, age and ethnicity of, and the relationship between, the two people are key determinants of the expectations that care will be provided if need arises, as we have seen in the fourth section earlier. However, the influence these characteristics will exert on the social risk of caring can only be understood in the context of social and cultural norms, which feature in the outermost layer of the figure. This is an example of Dahlgren and Whitehead's (2021) observation about the interconnectedness of layers in a model of social determinants.

Some individuals are part of multiple potential carer dyads; how many is itself shaped by the outer layers of the framework. For example, a woman might have a partner, a mother, a father-in-law and a neighbour, for all of whom she would – by virtue of her relationship to them, the prevailing norms in her context and the absence of formal care services – be first in line to provide care should they develop a need. Thus, to fully understand the risk of being called upon to care that a person faces, we need to consider the number of potential carer dyads of which they are part, as well as what would happen if that potential carer relationship became an actual one.

Figure 1: Determinants of the social risk of caring



Source: Author, based on Dahlgren and Whitehead (1991) and Ornstein and Caruso (2024).

In Figure 1, the arc immediately above the central circle features the living and working conditions of both members of the dyad. As described in the fourth section earlier, and elaborated in the SDOH framework, whether a care need arises is strongly influenced by living and working conditions over a lifetime, especially housing, neighbourhood, occupation and income. Living and working conditions also influence the would-be carer's capacity to take on caring responsibilities (for example, their own health and access to transport), as well as the extent to which they have access to private formal care alternatives.

The yellow arc in Figure 1 comprises two components: family, friends and neighbours; and public policy, social security and services. The extent and closeness of the wider social network are influences on both whether care needs arise in the first place and the likelihood that it falls to the would-be carer to provide care if a need does arise. (This also features in the 'microsystem' in Ornstein and Caruso's application). Again, there are important links between the layers: living and working conditions influence and are influenced by social networks, and the significance of the network for the social risk of caring has to be understood in the context of prevailing social and cultural norms.

The public policy, social protection and public services component affects the social risk of acquiring a responsibility to care through the provision of services that reduce or obviate the need to provide unpaid care. The eligibility rules, generosity, availability, quality and appropriateness of services (or cash equivalents) are all relevant considerations. There is also an important dynamic to this component: timely provision of services can prevent or lessen a need for care arising.

Social and cultural norms feature in the outermost layer (and in Ornstein and Caruso's 'macrosystem') and, as already mentioned, interact with the would-be carer dyad's characteristics and with the wider social network to shape the expectations of who will provide care. Also in the outermost layer are wider socio-economic, technical and environmental conditions; these shape the development of care needs and also act as constraints on (or facilitators of) effective policy responses.

Thus far, we have applied the framework to understand the determinants of acquiring a responsibility to care. We can also apply it to examine the influences on the consequences of caring – the health, financial and social costs that may be incurred, which were discussed in the third section earlier. Starting once again in the centre, the characteristics of the care dyad are a key influence on how the consequences of caring are experienced, though not in isolation. Rather, the way in which, for example, the care dyad's ethnicities affect the consequences of caring is inflected by their wider social network (yellow layer), by the cultural appropriateness of any services that are offered (yellow layer) and, of course, by the prevailing social and cultural norms (outermost layer).

The living and working conditions of the dyad are also crucial in shaping the consequences of caring. Is the carer in an occupation that facilitates flexible working? Does the person with needs have accommodation that is well adapted so that the carer does not have to carry out heavy lifting? Is the neighbourhood served by accessible, safe, reliable public transport, making attendance at appointments and engagement in social activities less time-consuming and expensive?

The wider social network is an important resource for the care dyad in reducing the strain on the main carer, with the potential to reduce social isolation, support mental health and reduce the financial costs of caring. However, its ability to function in this way depends on the network's own resources, which, as we saw in the fourth section earlier, are likely to be correlated with the resources of the care dyad. The availability of the right kind of services, either for the carer themselves or for the person with care needs, can improve the carer's physical and mental health and give them time for themselves. Social protection can support carers' standard of living. Wider public policies, for example, employment regulations giving entitlements to paid leave and flexible working, can help to enable carers to continue in employment. These public policy levers are also reflected in Ornstein and Caruso's 'meso' and 'exo' system layers.

The arrows in Figure 1 represent the dynamics of the determinants of the social risk of caring (part of the 'chronosystem'). As Marmot et al (2020) have emphasised, the social determinants of health create an accumulation of risk over a lifetime, and this applies no less to the risks and consequences of acquiring caring responsibilities. Disadvantageous living and working conditions earlier in life worsen the social risk of caring later in life; inadequate social protections and public services exacerbate the chances that needs for care will arise and that the task of caring will be more onerous for the carer's financial, physical and mental well-being, which, in turn, creates greater needs for care, and so on.

Conclusion

The social risks recognised by welfare systems as legitimate targets for intervention change over time in response to the demands made by citizens and changing economic and ideological priorities. The phenomenon of family members and friends providing care for one another is by no means new, but its recognition as a social risk has been prompted by a combination of labour market and demographic shifts and feminist advocacy (Bonoli, 2005). A range of policies relevant to managing the social risk of caring have evolved, including rights to flexible working and carers' leave, cash benefits and pension credits, and services for carers and for the people they care for (Bouget et al, 2016). However, these policies have given scant regard to the distribution of the risks people face or to their origins.

This article has construed the social risk of caring as comprising two parts: the risk that it occurs and the cost if it does. The risk that a person will be called upon to provide care was described, building on the Informal Care Model (Broese van Groenou and De Boer, 2016), as shaped by the chance that a close relative or friend develops a need for care, the 'hierarchies of obligation' that form the backdrop of expectations about where responsibility for caring lies and the availability of formal care alternatives, whether public or private. The extensive literature on the costs of caring was surveyed briefly, including the reminder that there may be benefits as well as costs, especially where the role is autonomously adopted and where adequate support for the main carer is in place. Nevertheless, where there are costs – financial, health related or social – their incidence is profoundly unequal.

Examining the determinants of these risks gives rise to the proposed SROC framework. Rather than treating caring as an input to the social determinants of health, as has been done elsewhere (Spiers et al, 2021), the framework considers what influences the risk that the responsibility to care arises and the consequences of undertaking it. It adopts a similar format to the SDOH model, with interconnected layers of influences surrounding the central figure – in this case, the potential care dyad. However, it also builds on Bronfenbrenner's nested socio-ecological model, in particular, incorporating the 'chronosystem': the processes, events and transitions over a life course that make the social risk of caring dynamic rather than static.

The framework is offered at a high level of generality, and to be useful for analysis, it would need to be populated with context-specific factors within each arc, for example, the particular policy environment in question, the most relevant aspects of working conditions in that setting and so on. These differ considerably across countries, and it is a limitation of this article that the examples that have been drawn on have been limited to a small number of European, North American and Australasian countries.

Nevertheless, conceptualising the social risk of caring in this way could stimulate further research in three ways. First, it might sharpen the analytical focus on the interactions between the layers in the framework. For example, how do the kinds of services that are needed to prevent or reduce the requirement for high-intensity caring vary according to cultural context and the ethnicities of the care dyad? What forms of regulation or provision enable carers in lower-paid and precarious work to maintain their connection to the labour market alongside their caring responsibilities?

Second, the framework could be used to highlight and explore where the inequalities in the costs of care fall, with such costs being a result of both the unequal incidence and the unequal consequences of caring responsibilities. Gender inequalities are already widely recognised, but other dimensions, especially socio-economic inequalities, have been less consistently acknowledged. The SDOH model has been instrumental in foregrounding health inequalities in health research and policy. Applying a similar approach to caring could likewise help to bring greater scrutiny to the mechanisms that generate unequal burdens of care.

Third, in order to deepen our understanding of the dynamics of caring, in particular, the process through which caring responsibilities emerge, we need more longitudinal studies that can compare the profiles of people who do and do not face a call to take on caring responsibilities, tracking their decisions and following their experience and interaction with services through their caring trajectories. Existing studies mostly start the clock once caring responsibilities have arisen, but doing so misses a crucial aspect of the unequal exposure to the social risk of caring.

Finally, thinking about the determinants of the social risk of caring could encourage policy on carers to adopt a broader scope. Responding to and mitigating the consequences of providing care, especially at high intensities, is crucial, and the determinants framework suggests that carers with pre-existing social and economic disadvantages may be the highest priority for support. However, we should also think about 'upstream' interventions, tackling inequalities in the conditions that give rise to needs for care and in the responsibility to provide it. Such interventions would have synergies with the health inequalities agenda but could also extend to interrogating whether public policies are expanding the possibilities open to would-be carers or reinforcing social norms and expectations. Policy for carers as a whole should reflect the fact that the social risk of caring is not random; rather, both the incidence of caring responsibilities and its consequences have strong economic, social and cultural determinants.

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Note

[1] Asymmetric information is where the insured person has information about the risks they face that is not available to the insurer, or where the insurer has information about the nature of the risk that is not available to the consumer. Adverse selection is where people who represent a 'bad risk' are more likely to take out insurance than people who are average risks in a way that cannot be regulated by the insurer through price or other exclusions. Externalities, for example, are where the consequences of underinsurance are borne by people in addition to the individual consumer.

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Conflict of interest

The author declares that there is no conflict of interest.

References

Barr, N. (2020) *The Economics of the Welfare State*, 6th edn, Oxford University Press.

Bettio, F. and Verashchagina, A. (2010) *Long-Term Care for the Elderly. Provisions and Providers in 33 European Countries*, EU Expert Group on Gender and Employment, European Commission, doi: 10.2838/87307

Bodryzlova, Y., Kim, A., Michaud, X., André, C., Bélanger, E. and Moullec, G. (2023) Social class and the risk of dementia: a systematic review and meta-analysis of the prospective longitudinal studies, *Scandinavian Journal of Public Health*, 51(8): 1122–35, doi: 10.1177/14034948221110019

Bonoli, G. (2005) The politics of the new social policies: providing coverage against new social risks in mature welfare states, *Policy & Politics*, 33(3): 431–49, doi: 10.1332/0305573054325765

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*, European Commission.

Brimblecombe, N. (2023) The consequences for unpaid carers of unmet need for long-term care services in England, *International Journal of Care and Caring*, 7(1): 114–30, doi: 10.1332/239788222x16546112844546

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

Broese van Groenou, M. and De Boer, A. (2016) Providing informal care in a changing society, *European Journal of Ageing*, 13(3): 271–9. doi: 10.1007/s10433-016-0370-7

Bronfenbrenner, U. (1994) Ecological models of human development, in T. Postlethwaite and T. Husen (eds) *International Encyclopedia of Education*, Elsevier, pp 1643–7.

Burchardt, T. (forthcoming) *Reframing Long-Term Care Policy: From Services to Social Determinants*, Centre for Analysis of Social Exclusion, London School of Economics.

Burridge, L., Winch, S. and Clavarino, A. (2007) Reluctance to care: a systematic review and development of a conceptual framework, *Cancer Nursing*, 30(2): art E9, doi: 10.1097/01.NCC.0000265298.17394.e0

Camden, A., Livingston, G. and Cooper, C. (2011) Reasons why family members become carers and the outcome for the person with dementia: results from the CARD study, *International Psychogeriatrics*, 23(9): 1442–50, doi: 10.1017/S1041610211001189

Cantor, M. and Brennan, M. (1999) *Social Care of the Elderly: The Effects of Ethnicity, Class and Culture*, Springer.

Carmichael, F., Hulme, C., Sheppard, S. and Connell, G. (2008) Work–life imbalance: informal care and paid employment in the UK, *Feminist Economics*, 14(2): 3–35, doi: 10.1080/13545700701881005

Carmichael, F., Charles, S. and Hulme, C. (2010) Who will care? Employment participation and willingness to supply informal care, *Journal of Health Economics*, 29(1): 182–90, doi: 10.1016/j.jhealeco.2009.11.003

Cartagena Farias, J., Brimblecombe, N. and Hu, B. (2023) Early onset of care needs in the older population: the protective role of housing conditions, *Health & Place*, 81: art 103007, doi: 10.1016/j.healthplace.2023.103007

Cash, B., Hodgkin, S. and Warburton, J. (2013) Till death us do part? A critical analysis of obligation and choice for spousal caregivers, *Journal of Gerontological Social Work*, 56(8): 657–74, doi: 10.1080/01634372.2013.823472

Collins, R. and Kishita, N. (2020) Prevalence of depression and burden among informal care-givers of people with dementia: a meta-analysis, *Ageing and Society*, 40(11): 2355–92, doi: 10.1017/S0144686X19000527

Creelman, D. (2020) *The Value of Informal Care in 2020*, Deloitte.

Dahlberg, L., Demack, S. and Bambra, C. (2007) Age and gender of informal carers: a population-based study in the UK, *Health & Social Care in the Community*, 15(5): 439–45, doi: 10.1111/j.1365-2524.2007.00702.x

Dahlgren, G. and Whitehead, M. (1991) *Policies and Strategies to Promote Social Equity in Health*, Institute for Futures Studies.

Dahlgren, G. and Whitehead, M. (2021) The Dahlgren–Whitehead model of health determinants: 30 years on and still chasing rainbows, *Public Health*, 199: 20–4, doi: 10.1016/j.puhe.2021.08.009

Dean, H. (2002) *Welfare Rights and Social Policy*, Pearson.

Degiuli, F. (2010) The burden of long-term care: how Italian family care-givers become employers, *Ageing & Society*, 30(5): 755–77, doi: 10.1017/s0144686x10000073

Eggers, T. and Grages, C. (2023) Social risks of family carers in the context of welfare state policies, *Journal of Family Research*, 35: 304–25, doi: 10.20377/jfr-890

Esping-Andersen, G. (1999) *Social Foundations of Post-industrial Economies*, Oxford University Press.

Finch, J. and Mason, J. (1990) Filial obligations and kin support for elderly people, *Ageing and Society*, 10(2): 151–75, doi: 10.1017/s0144686x00008059

Fraser, N. (1989) *Unruly Practices*, Polity.

Fukahori, R., Sakai, T. and Sato, K. (2015) The effects of incidence of care needs in households on employment, subjective health, and life satisfaction among middle-aged family members, *Scottish Journal of Political Economy*, 62: 518–45, doi: 10.1111/sjpe.12085

Govia, I., Robinson, J., Amour, R., Stubbs, M., Lorenz-Dant, K., Comas-Herrera, A., et al (2021) Mapping long-term care in Jamaica: addressing an ageing population, *Sustainability*, 13(14): art 8101, doi: 10.3390/su13148101

Greenwood, N., Mezey, G. and Smith, R. (2018) Social exclusion in adult informal carers: a systematic narrative review of the experiences of informal carers of people with dementia and mental illness, *Maturitas*, 112: 39–45, doi: 10.1016/j.maturitas.2018.03.011

Hills, J. (2017) *Good Times, Bad Times: The Welfare Myth of Them and Us*, 2nd edn, Policy Press.

Hoogenboom, M., Yerkes, M. and Kruijswijk, W. (2024) The risks of job flexibility: an analysis of reconciling paid work and informal care across organisations using the capabilities approach, *International Journal of Care and Caring*, 8(4): 708–36, doi: 10.1332/23978821Y2024D000000027

Horsfall, D., Blignault, I., Perry, A. and Antonopoulos, P. (2016) Love stories: understanding the caring journeys of aged Greek-Australian carers, *Health and Social Care in the Community*, 24(2): 194–202, doi: 10.1111/hsc.12206

Hutchings, K., Radford, K., Spencer, N., Harris, N., McMillan, S., Slattery, M., et al (2024) Addressing the challenge of engaging in paid work while undertaking unpaid caring: insights for improving employment inclusion of young carers, *Equality, Diversity and Inclusion*, 43(4): 585–609, doi: 10.1108/EDI-12-2022-0351

Keating, N., Fast, J., Lero, D., Lucas, S. and Eales, J. (2014) A taxonomy of the economic costs of family care to adults, *The Journal of the Economics of Ageing*, 3: 11–20, doi: 10.1016/j.jeoa.2014.03.002

Koreshi, S. and Alpass, F. (2023) Becoming an informal care-giver: the role of work status incongruence, *Ageing & Society*, 43(12): 2912–29, doi: 10.1017/S0144686X21001987

Kraijo, H., Brouwer, W., de Leeuw, R., Schrijvers, G. and van Exel, J. (2012) Coping with caring: profiles of caregiving by informal carers living with a loved one who has dementia, *Dementia*, 11(1): 113–30, doi: 10.1177/1471301211421261

Lane, R., Arunachalam, D., Lindsay, J. and Humphery, K. (2020) Downshifting to care: the role of gender and care in reducing working hours and consumption, *Geoforum*, 114: 66–76, doi: 10.1016/j.geoforum.2020.06.003

Larkin, M., Henwood, M. and Milne, A. (2019) Carer-related research and knowledge: findings from a scoping review, *Health & Social Care in the Community*, 27(1): 55–67, doi: 10.1111/hsc.12586

Li, L., Wister, A. and Mitchell, B. (2023) Examination of the healthy caregiver effect among older adults: findings from the Canadian Longitudinal Study on Aging, *Gerontology*, 69(3): 289–300, doi: 10.1159/000526251

Liao, X., Wang, Z., Zeng, Q. and Zeng, Y. (2024) Loneliness and social isolation among informal carers of individuals with dementia: a systematic review and meta-analysis, *International Journal of Geriatric Psychiatry*, 39(5): art e6101, doi: 10.1002/gps.6101

Liu, H. and Hu, T. (2022) Impact of socioeconomic status and health risk on fall inequality among older adults, *Health and Social Care in the Community*, 30(6): E4961–74, doi: 10.1111/hsc.13908

Marmot, M., Allen, J., Boyce, T., Goldblatt, P. and Morrison, J. (2020) *The Marmot Review 10 Years On*, Institute for Health Equity.

Morgan, F. (2018) The treatment of informal care-related risks as social risks: an analysis of the English care policy system, *Journal of Social Policy*, 47(1): 179–96, doi: 10.1017/s0047279417000265

Oldenkamp, M., Bültmann, U., Wittek, R., Stolk, R., Hagedoorn, M. and Smidt, N. (2018) Combining informal care and paid work: the use of work arrangements by working adult-child caregivers in the Netherlands, *Health & Social Care in the Community*, 26(1): e122–31, doi: 10.1111/hsc.12485

O'Reilly, D., Connolly, S., Rosato, M. and Patterson, C. (2008) Is caring associated with an increased risk of mortality? A longitudinal study, *Social Science & Medicine*, 67(8): 1282–90, doi: 10.1016/j.socscimed.2008.06.025

Ornstein, M. and Caruso, C. (2024) The social ecology of caregiving: applying the social-ecological model across the life course, *International Journal of Environmental Research and Public Health*, 21(1): art 119, doi: 10.3390/ijerph21010119

PHE (Public Health England) (2021) *Caring as a Social Determinant of Health: Findings From a Rapid Review of Reviews and Analysis of the GP Patient Survey*, www.gov.uk/government/publications/caring-as-a-social-determinant-of-health-review-of-evidence (Accessed: 27 June 2024).

Rand, S., Malley, J. and Forder, J. (2019) Are reasons for care-giving related to carers' care-related quality of life and strain? Evidence from a survey of carers in England, *Health & Social Care in the Community*, 27(1): 151–60, doi: 10.1111/hsc.12634

Salin, S. and Astedt-Kurki, P. (2007) Women's views of caring for family members: use of respite care, *Journal of Gerontological Nursing*, 33(9): 37–45, doi: 10.3928/00989134-20070901-07

Spasova, S., Baeten, R., Coster, S., Ghailani, D., Peña-Casas, R. and Vanhercke, B. (2018) *Challenges in Long-Term Care in Europe: A Study of National Policies 2018*, European Commission.

Spiers, G., Liddle, J., Kunonga, T., Whitehead, I., Beyer, F., Stow, D., et al (2021) What are the consequences of caring for older people and what interventions are effective for supporting unpaid carers? A rapid review of systematic reviews, *BMJ Open*, 11: art e046187, doi: 10.1136/bmjopen-2020-046187

Suanet, B., Groenou, M. and Tilburg, T. (2012) Informal and formal home-care use among older adults in Europe: can cross-national differences be explained by societal context and composition?, *Ageing & Society*, 32: 491–515, doi: 10.1017/S0144686X11000390

Sud, D., Maidment, I., Bradley, E. and Tritter, J. (2021) The experiences of the caring dyad: (un)articulated realities of living with cardiometabolic risk, metabolic syndrome and related diseases in severe mental illness, *Health Expect*, 24: 1821–32, doi: 10.1111/hex.13322

Taylor-Gooby, P. (2004) New risks and social change, in P. Taylor-Gooby (ed) *New Risks, New Welfare?*, Oxford University Press, pp 1–27.

Teshale, A., Htun, H., Owen, A., Gasevic, D., Phyo, A., Fancourt, D., et al (2023) The role of social determinants of health in cardiovascular diseases: an umbrella review, *Journal of the American Heart Association*, 12: art e029765, doi: 10.1161/JAHA.123.029765

Veltman, A., Cameron, J. and Stewart, D. (2002) The experience of providing care to relatives with chronic mental illness, *Journal of Nervous and Mental Disease*, 190(2): 108–14, doi: 10.1097/00005053-200202000-00008

Verbakel, E. (2018) How to understand informal caregiving patterns in Europe? The role of formal long-term care provisions and family care norms, *Scandinavian Journal of Public Health*, 46(4): 436–47, doi: 10.1177/1403494817726197

Verbakel, E., Tamlagsronning, S., Winstone, L., Fjaer, E. and Eikemo, T. (2017) Informal care in Europe: findings from the European Social Survey 2014 special module on the social determinants of health, *European Journal of Public Health*, 27: 90–5, doi: 10.1093/eurpub/ckw229

Vlachantoni, A., Robards, J., Falkingham, J. and Evandrou, M. (2016) Trajectories of informal care and health, *SSM – Population Health*, 2: 495–501, doi: 10.1016/j.ssmph.2016.05.009

Weiss, C., González, H., Kabeto, M. and Langa, K. (2005) Differences in amount of informal care received by non-Hispanic whites and Latinos in a nationally representative sample of older Americans, *Journal of the American Geriatrics Society*, 53: 146–51, doi: 10.1111/j.1532-5415.2005.53027.x

Zarzycki, M., Morrison, V., Bei, E. and Seddon, D. (2023a) Cultural and societal motivations for being informal caregivers: a qualitative systematic review and meta-synthesis, *Health Psychology Review*, 17: 247–76, doi: 10.1080/17437199.2022.2032259

Zarzycki, M., Seddon, D., Bei, E. and Morrison, V. (2023b) Why do they care? A qualitative systematic review and meta-synthesis of personal and relational motivations for providing informal care, *Health Psychology Review*, 17(2): 344–76, doi: 10.1080/17437199.2022.2058581