

Care poverty and sources of care: formal services, informal care or a combination

*Jiby Mathew Puthenparambil, Lina Van Aerschot
and Teppo Kröger*

Introduction

With the changes in health that old age brings, and a diminishing ability to do certain things, come increasing demands for care (for example, [Sandberg et al, 2012](#); [Döhl et al, 2016](#)). Care needs can be met formally (through public, private or third sector care services), informally (via a spouse, children, in-laws, family or friends), or through any combination of these; yet all forms of support depend not only on their affordability and accessibility, but also whether such services are even available. In some cases, it might be the kind of welfare state an older person lives in that is more likely to shape the way they use formal care, while in others it is more likely to depend on family or friends willing and able to provide informal care. Combining both formal and informal forms of support becomes more common as care needs increase.

In Finland, older people are entitled to public care based on a needs assessment (Social Welfare Act 2014). Public services for older people in their own home focus on health-related needs and personal care and also provide support with daily activities like laundry, meals-on-wheels or transportation. Residential care is only available for the frailest; a recent study showed that most older people now going into residential care in Finland are more impaired and in worse health than before ([Korhonen et al, 2023](#)). Public authorities also provide support for informal – usually family – carers to provide care at home ([FIHW, 2023](#)).

Social care services for older people in Finland have undergone significant changes in recent decades, due to a number of factors that include stricter targeting and marketisation (see [Kröger, 2019](#); [Rostgaard et al, 2022](#)). Targeting involves allocating public services more specifically to older people with intensive care needs by tightening the eligibility criteria. Needs-tested publicly funded care services are currently targeted at those older people

that have particular physical or cognitive impairments and, in most cases, personal care needs, also known as Activities of Daily Living (ADLs). Older people with a need for help with other, more practical tasks – also known as Instrumental Activities of Daily Living (IADLs) – have to either purchase the services from the private market or receive care informally.

Although family members in Finland are not legally obliged to provide or pay for the care of older people, informal care does play a very important part (Verbakel, 2018; Eurocarers, 2023). Many older people with personal care needs receive a mixture of both publicly provided home care services and informal care, but the greater proportion is informal (Finne-Soveri et al, 2014). The tightening of criteria used in needs-testing has increased the importance of informal care and led to a situation in which care policies are predicated on the assumption that practical (IADL) assistance will be provided by informal carers together with social and emotional support (Kröger, 2019; Rostgaard et al, 2022). Informal care is encouraged by state support (Act on Support for Informal Care 2005), formalised through a commission agreement between public authorities, the older person and the caregiver that ensures a caregiver allowance, leave and additional assistance. However, such support is available only for caregivers who provide intensive continuous care. In a comparative study across 19 European countries, Verbakel (2018) found that Finland has the highest percentage of informal caregivers (44 per cent) providing care for older people – primarily offering support for less intensive care needs.

Older people frequently have difficulties getting their care needs met, often because they are complex, and also because care support may not be available, accessible or affordable (Brimblecombe et al, 2017; Vlachantoni, 2019; Kröger, 2022; Rostgaard et al, 2022). Not all older people have family or other informal networks willing or able to care for them; eligibility to public services (at least in the Finnish context) is complicated by the strict needs-assessment process; and using private services is often out of the question if people have low incomes (Mathew Puthenparambil, 2019).

People who find themselves ineligible for public services, with no informal care network available and unable to afford private care, thus risk being in the situation of not having all their care needs met – also known as ‘care poverty’. Care poverty is a ‘situation where, as a result of both individual and structural issues, people in need of care do not receive sufficient assistance from informal or formal sources, and thus have care needs that remain uncovered’ (Kröger et al, 2019). In his book on the subject, Kröger (2022) looks extensively at the various individual and societal factors that affect care poverty among older people. Like others (LaPlante et al, 2004; Allin and Masseria, 2009; Casado et al, 2011), he notes that these unmet care needs can be attributed to insufficient quality of care or mismatched services (Kröger, 2022). Factors such as long waiting lists, being denied treatment

or services due to stricter eligibility criteria, and bureaucratic red tape, not to mention the shortage of long-term care workers, may also increase the risk of care poverty occurring.

To better understand how care poverty arises, we need to look more closely at how older people arrange care for themselves – often from more than one source – and to what extent their care needs remain unmet. In this chapter, we thus ask:

1. whether older people get their care from formal care services, informal care or a combination of both;
2. the extent to which care poverty is present within each of these three user groups; and
3. what the individual and societal factors may be that contribute to care poverty in each user group.

By analysing data collected from a survey in Finland, we hope to better identify how care poverty has developed among service users and broaden our understanding of how older people's unmet care needs differ according to individual requirements and the availability of different kinds of care and support.

Individual and societal factors contributing to care poverty

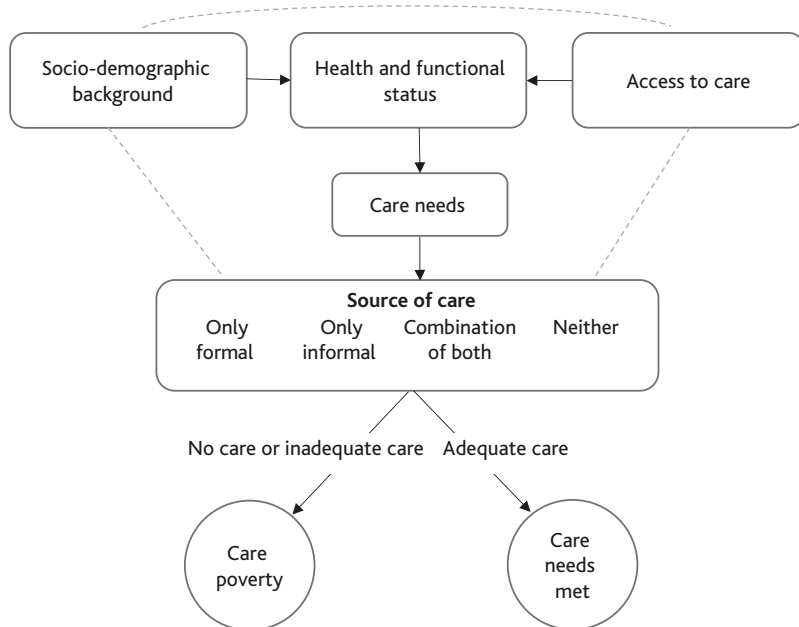
We consider there to be three dimensions to the individual and societal factors contributing to care poverty among older people (Vlachantoni et al, 2015; Kröger, 2022). These are:

1. the individual's health and functional status;
2. their socio-demographic background; and
3. their access to care.

Taken together, these dimensions will determine an individual's care needs, the care services they use and the extent to which care poverty is present (Figure 7.1).

Perhaps the most essential dimension to understanding the extent of care poverty among old people is their *health and functional status* (Kröger et al, 2019; Vlachantoni, 2019; Aaltonen and Van Aerschot, 2021). These impact the level, amount, type and source of the care support received (Blomgren et al, 2008; Sandberg et al, 2012; Sigurdardottir and Kåreholt, 2014; Døhl et al, 2016). With age, the increasing likelihood of developing a chronic health condition, having severe impairments or experiencing functional limitations will mean older people's care needs inevitably multiply (Blomgren et al, 2008; Sandberg et al, 2012; Døhl et al, 2016). An individual's health

Figure 7.1: Framework for care poverty and sources of care



and functional status will also be influenced by the other two dimensions of their socioeconomic background and their access to care (for example, Matthews et al, 2005; Darin-Mattsson et al, 2017).

The *socio-demographic dimension* takes into account the background characteristics of individuals, such as their gender, age, level of education and household income (Figure 7.1) as these have been found to play a crucial role in shaping where care resources come from and how they are used (Blomgren et al, 2008; Sigurdardottir and Kåreholt, 2014; Døhl et al, 2016; Enroth et al, 2018; Chang et al, 2019; Brändström et al, 2022).

Finally, ‘*access to care*’ refers to living arrangements (living alone or with someone), the area of residence, informal networks outside the household, and the affordability of care services. Each factor may play a role in determining whether individuals can access and use care resources (Geerlings et al, 2005; Sigurdardottir and Kåreholt, 2014; Døhl et al, 2016) and consequently whether some care needs go unmet. For example, an older person may be living alone without adequate social support or they may be living in a rural area with limited access to services. Finding adequate support may thus result from any number of factors linked to geographic location, cultural and social practices or a lack of financial resources to cover care costs when necessary (Eichler and Pfau-Effinger, 2009; Szebehely and Trydegård, 2012).

All three of the aforementioned dimensions – health and functional status, socio-demographic background, and access to care – are interconnected and together determine an older person's care needs, their access to care services and how they will use different sources of care. However, when any care needs are left unmet, it can lead to care poverty.

Data and methods

The research questions were examined using a nationwide survey dataset called DACO (Daily Life and Care in Old Age, or *Arki, apu ja palvelut* in Finnish). The survey was conducted between October and December 2020 among older people aged 75 or over living in their own homes or service housing across Finland.¹ Before this chapter (and [Chapter 11](#) of this volume), findings from the 2020 wave of the survey have been reported in only one article ([Chou et al, 2024](#)). Results from previous (2010 and 2015) waves of the survey have been published earlier (see, for example, [Kröger et al, 2019](#)).

A survey questionnaire with a letter of informed consent was sent out to a sample of 6,000 participants, randomly chosen from the Finnish Digital and Population Data Agency and representing the age group from all parts of Finland. The consent letter described why data was being collected, assured recipients that the data would be anonymous, and informed them of their participation rights. In addition, we also included a pre-paid postage envelope to return the filled questionnaire. We received back 2,150 filled questionnaires in the first round of the survey, and after sending out a reminder to those who had not responded, a further 1,129 filled questionnaires came back to us. This meant that a total of 3,279 filled questionnaires were received back, so the overall response rate was 55 per cent. Most of the respondents were female (58 per cent) and many were living alone (42 per cent). The respondents' average age was 81 years (ranging from 75 to 103), and most lived in their own homes (96 per cent).

With our focus on care poverty, we asked the participants about the steps they were taking to manage their personal (ADL) and practical (IADL) care needs. The questionnaire had five items focusing on ADLs: *bathing, getting dressed, eating, getting into and out of bed, and using the toilet*. Meanwhile there were ten items covering IADLs: *cleaning, cooking, moving around inside the home, moving around outside the home, getting home help and other services, grocery shopping, managing bank affairs, minor home repairs and gardening, taking medication and transportation*. For each of the items, respondents could choose one of three responses:

1. I can cope without difficulty (which is equivalent to not having needs);
2. I do not cope by myself but I get enough help; and
3. I do not cope by myself and I need more help.

For the purposes of this chapter, the third option was taken to mean the care need was not being met.

As the focus of this chapter is on care poverty, we have only included those respondents ($n=2,049$) who chose the second or the third option for at least one daily activity – in other words, those who reported having care needs. We then categorised the source of care support for older people into three groups:

1. those using only formal care services;
2. those receiving only informal care; and
3. those receiving a combination of both.

The fourth group of respondents receiving neither formal nor informal support ('neither' in [Figure 7.1](#)) was excluded from the analysis because they were so few ($n=5$).

For the dimension of health and functional status, we used self-reported indicators to describe participants' overall health (good/fair or poor); long-term illness or impairment (none/one or several); the frequency of care received; and the number of care needs ([Table 7.1](#)). The frequency of care received served as a proxy variable and was measured dichotomously as either less frequently (monthly or less) or more frequently (daily or weekly). There were four variables in the socio-demographic dimension ([Figure 7.1](#)): gender was classified as male or female; age as 75–84 years or 85–105 years; education level as with a vocational/higher education or no vocational education; and household income as sufficient or insufficient/barely enough for essential needs.

There were also four variables in the access to care dimension. The first two were (1) living arrangements (alone or shared) and (2) area of residence (a larger city of 100,000 or more residents, including suburbs; a mid-sized town of 20,000–100,000 residents; or a rural area/small town of under 20,000 residents). The other two variables were (3) contact with an informal network, such as someone outside the respondent's household (on an occasional [monthly/less frequently] basis or frequent [daily/weekly] basis); and (4) affordability of user fees for public or private services (affordable or unaffordable). The aim was to see how these four dimensions – and the way they may interact – affect care poverty across the different service user groups.

We employed descriptive statistics, the Chi-Square test, and binary logistic regression to investigate the research questions. However, because the number of respondents who received only formal care was so small, we decided to drop the idea of using multinomial regression. Consequently, we decided to analyse each group separately with binary logistic regression. This resulted in us conducting three models of analysis using logistic regression for:

Table 7.1: Sources of care among participants according to background (column percentage, N=2,049)

	Total respondents in the study (N=2,049)	Source of care			P-values
		Formal care only (n=38)	Informal care only (n=1,026)	Combination (n=829)	
Sociodemographic background					
Gender					
Female	67.4	68.4	68.1	67.2	0.913
Male	32.6	31.6	31.9	32.8	
Age					
75–84 years	69.2	71.1	79.1	57.1	<0.001
85–105 years	30.8	28.9	20.9	42.9	
Education					
With vocational/higher	67.9	63.9	69.2	67.8	0.683
No vocational/higher	32.1	36.1	30.8	32.2	
Household income					
Sufficient	73.7	77.1	74.5	73.2	0.746
Insufficient/barely enough income for essential needs	26.3	22.9	25.5	26.8	
Health and functional status					
Health status					
Good/fair	80.7	81.6	85.4	73.2	<0.001
Poor	19.3	18.4	14.6	26.8	
Long-term illness or disability					
None/one	57.1	58.8	64.4	44.6	<0.001
Several	42.9	41.2	35.6	55.4	
Frequency of care received					
Less frequently	24.7	57.9	20.9	13.9	<0.001
More frequently	75.3	42.1	79.1	86.1	
Number of care needs					
1–3	59.8	73.7	70.8	40.9	<0.001
4–6	18.5	7.9	18.0	22.0	
6 or more	21.7	18.4	11.2	37.2	
Access to care					

(continued)

Table 7.1: Sources of care among participants according to background (column percentage, N=2,049) (continued)

	Total respondents in the study (N=2,049)	Source of care			P-values
		Formal care only (n=38)	Informal care only (n=1,026)	Combination (n=829)	
Living arrangements					
Alone	47.7	71.1	42.0	55.0	<0.001
Shared	52.3	28.9	58.0	45.0	
Area of residence					
Larger city/suburbs	31.4	44.7	29.5	32.2	0.021
Mid-sized city/town	36.0	28.9	39.6	33.2	
Smaller town/rural	32.6	26.3	30.9	34.6	
Contact with informal network					
Occasionally	8.0	23.7	6.1	7.4	<0.001
Frequently	92.0	76.3	93.9	92.6	
Affordability of user fees					
Unaffordable	21.5	18.4	22.5	22.0	
Affordable	78.5	81.6	77.5	78.0	0.818

Source: Authors' analysis of the DACO survey data.

1. met and unmet practical (IADL) care needs among users of informal care only;
2. met and unmet practical (IADL) care needs among combination users; and
3. met and unmet personal (ADL) care needs among combination users.

We refrained from analysing the unmet care needs of those receiving only formal care, and the personal care needs of those receiving only informal care due to the insufficient number of responses in either group. Prior to analysis, we assessed variables for multicollinearity using the collinearity diagnostics test. The result showed that the Variance Inflation Factor (VIF) fell within the range of 1–2, indicating the absence of collinearity issues in the model. The analyses were performed using IBM-SPSS 26.

Background of the respondents

Out of the total respondents in the study (N=2,049), the most were female (67.4 per cent), aged 75–84 years old (69.2 per cent) and had a vocational or higher education (67.9 per cent) (Table 7.1). Furthermore, a significant

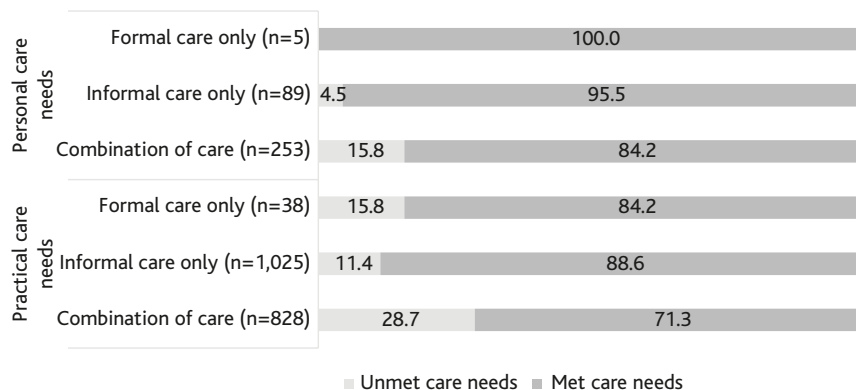
proportion of them reported having a sufficient income (73.7 per cent). Most also saw themselves as having good overall health and functional abilities and receiving care frequently (75.3 per cent). An equal number of respondents reported living alone or with someone else and respondents were equally spread between larger urban, mid-sized and smaller urban/rural settlements. Furthermore, most respondents (92 per cent) had regular informal contact with people outside their households.

When utilising different sources of care, older people who lived alone in larger cities or suburbs mainly used formal care. Those who were using a combination of formal and informal care were more likely to report poor health, multiple long-term illnesses or impairments and more care needs, and this group received more frequent care than the other two groups. Combination users and those who received informal care only also had more frequent contact with their informal network than those relying solely on formal care. All variables related to health status and access to care (except affordability of user fees) showed a statistically significant relationship with different sources of care ($p < 0.05$). However, among the socio-demographic background variables, only age demonstrated a statistically significant result ($p < 0.05$).

Care poverty among different user groups

Most respondents reported having practical (IADL) care needs ($n=1,891$) whereas a smaller proportion reported personal (ADL) care needs ($n=347$) (Figure 7.2). About 2.2 per cent ($n=44$) reported unmet personal care needs, while 17.6 per cent ($n=361$) reported unmet practical care needs. Only a small number of respondents with care needs (2 per cent; $n=38$) rely exclusively on formal care. Very few people ($n=6$) in this group reported

Figure 7.2: Met and unmet personal and practical care needs in different user groups (%)



having unmet practical care needs and none had unmet personal care needs. Older people using a combination of care sources had the highest percentage (15.8 per cent) of unmet personal care needs (n=40) and the highest percentage (28.7 per cent) of unmet practical care needs (n=238), while the group with the highest percentage of practical care needs being met (88.6 per cent) was the group relying on informal care only – indicating that most people rely on informal care for help with IADLs. It is also worth noting that all those with personal care needs also reported having practical care needs, which would suggest that the total number of people with care needs (met or unmet across the different user groups) will be largely reflected in the figures for practical care needs.

We calculated care poverty rates for each user group in the form of a ratio representing the percentage of those with a particular care need who did not receive enough help to have that care need met. This follows the logic of measuring ‘the share of those with unmet needs among those with long-term care needs’ (Kröger et al, 2019: 490). Respondents in the user group of those receiving only informal care had the highest personal care poverty rates when it came to eating (16.7 per cent), getting into and out of bed (11.1 per cent) and using the toilet (8.0 per cent) (Table 7.2). With regard to practical care needs, the highest care poverty rates were for getting home help services (17.2 per cent), transportation (13.6 per cent) and moving around inside the home (11.1 per cent). In total, 8.7 per cent of this group had at least one unmet personal care need and the situation was rather the same for their unmet practical care needs (9.4 per cent).

In the group of those that received care from a combination of sources, the care poverty rate in personal care needs was highest for bathing (13.1 per cent), while in practical care needs, the highest care poverty rate was for moving around outside (28.7 per cent) and the lowest was for taking medications (10 per cent). Overall, 9.3 per cent of the combination group had at least one unmet personal care need and 16.2 per cent had at least one unmet practical care need. Notably, those in the combination group had substantially higher care poverty rates than those receiving only informal care in almost all practical care needs. We were not able to work out the care poverty rates for those receiving only formal care due to the small number of responses (n=6).

Logistic regression analysis of unmet care needs across the different groups showed that among those in the combination care user group, insufficient income (OR=3.51; $p<0.05$) and poor health (OR=2.92; $p<0.05$) were the only variables that significantly corresponded to unmet personal care needs (Table 7.3). However, when it came to predicting unmet practical care needs, insufficient income, poor health and number of care needs were significant ($p<0.05$) in both the combination and informal-only user groups. This implies that older people with an inadequate income, poor health, and a greater number of care needs are more likely to experience

Table 7.2: Rates of care poverty for particular care needs within the different care user groups

	Formal care only (n=38) %	Informal care only (n=1,026) %	Combination (n=829) %
Personal care poverty			
Bathing	<1	3.8	13.1
Eating	<1	16.7	8.5
Getting into and out of bed	<1	11.1	8.1
Using the toilet	<1	8.0	9.4
Dressing	<1	4.0	7.6
Total	<1	8.7	9.3
Practical care poverty			
Transportation	<1	13.6	25.5
Moving around inside home	<1	11.1	12.3
Moving around outside home	<1	9.4	28.7
Grocery shopping	<1	6.3	10.7
Getting home help and other services	9.1	17.2	14.7
Managing bank affairs	<1	3.5	10.1
Small home repairs and gardening	13.8	8.3	19.1
Cleaning	7.4	10.4	16.6
Cooking	<1	4.9	14.4
Taking medications	<1	8.9	10.0
Total	3.0	9.4	16.2

Source: Authors' analysis of the DACO survey data.

practical care poverty, regardless of whether they combine both formal and informal care or rely purely on informal care alone.

Among those receiving only informal care, living alone and having less frequent informal contact increased the odds of practical care needs going unmet. In the combination group, unaffordable user fees (OR=1.75; $p < 0.05$) and frequency of care demonstrated significant results. Finally, across all groups, both unmet personal and practical care needs were found to correspond with poorer health and a greater number of care needs.

Discussion

The main focus of this chapter was to gain a deeper understanding of care poverty among older people, particularly when they rely on different sources

Table 7.3: Binary logistic regression: unmet care needs among different care user groups

	Practical care needs				Personal care needs	
	Unmet among receivers of informal care only (Ref: met care needs, n=893)		Unmet among receivers of combination care (Ref: met care needs, n=716)		Unmet among receivers of combination care (Ref: met care needs, n=214)	
	OR	95% CI	OR	95% CI	OR	95% CI
Socio-demographic background						
Male (Ref: female)	0.74	0.42–1.29	0.94	0.61–1.46	1.46	0.58–3.68
85–105 years (Ref: 75–84 years)	1.21	0.68–2.15	0.90	0.59–1.37	1.93	0.79–4.71
No vocational education (Ref: vocational/higher education)	0.70	0.41–1.18	0.70	0.45–1.08	1.39	0.60–3.21
Insufficient or barely enough income for essential needs (Ref: sufficient income)	1.90	1.13–3.20*	2.11	1.39–3.22**	3.51	1.51–8.16**
Health and functional status						
Poor health (Ref: good or fair health)	2.44	1.43–4.15**	2.46	1.60–3.78***	2.92	1.23–6.98**
Several long-term illnesses or disabilities (Ref: no/one illness)	2.09	1.24–3.51**	1.18	0.76–1.83	1.09	0.40–2.93
Frequency of care: more frequently (Ref: less frequently)	1.26	0.61–2.59	0.42	0.21–0.86*	(a)	(a)
4–6 care needs (Ref: <4 care needs)	3.50	1.96–6.25***	4.48	2.36–8.53***	(a)	(a)
6 or more care needs (Ref: <4 care needs)	6.35	3.26–12.4***	10.51	5.54–19.97***	(a)	(a)
Access to care						
Living with someone (Ref: living alone)	0.42	0.24–0.73**	0.96	0.62–1.48	1.18	0.47–2.93
Midsized city/town (Ref: larger city/suburbs)	0.63	0.35–1.13	0.73	0.45–1.19	0.94	0.35–2.57
Smaller urban area, town or rural area (Ref: larger city/suburbs)	0.89	0.5–1.60	0.79	0.49–1.27	1.02	0.37–2.77
More frequent contact outside household (Ref: less frequent)	0.34	0.15–0.76**	0.71	0.34–1.46	(a)	(a)
User fees unaffordable (Ref: affordable)	1.43	0.84–2.44	1.75	1.11–2.77*	0.88	0.36–2.16

Source: Authors' analysis of the DACO survey data. Significance levels: *** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$; All models have Omnibus test < 0.05 ; Hosmer and Lemeshow test > 0.05 . (a) Excluded because there were less than five responses in a cell.

of care. Among the participants with care needs (N=2,049), approximately 2.2 per cent reported personal care needs going unmet, and 17.6 per cent reported unmet practical care needs (Figure 7.2). This is in line with findings from a previous study conducted in two Finnish cities (Kröger et al, 2019) and would seem to indicate that unmet care needs among Finnish older people have remained relatively consistent. Furthermore, only a small percentage (n=38; <2 per cent) relied exclusively on formal care services and, remarkably, this group reported having all their personal care needs met. Nevertheless, caution is needed when drawing conclusions from this due to the small sample size.

Older people who require a high level of personal care often rely on a complex network of both informal and – where possible – formal support. When it comes to practical care needs, however, informal care seems to play a predominant role. Turning towards informal care for one's practical needs is not surprising, given that these needs tend to be less demanding and can be managed with less frequent support. Another contributing factor is that such care is nowadays only very rarely available from formal public services in Finland. The result corresponds with findings elsewhere (Sigurdardottir and Kåreholt, 2014; Vlachantoni et al, 2015; Chang et al, 2019), which indicate that older people turn to different sources of support according to the level of care required.

One interesting finding to emerge from this chapter, which holds true across all user groups, is that a poorer status of health and a greater number of care needs correspond with both personal and practical care needs not being met. Previous research has also demonstrated the close relationship between income and care poverty (for example, Kröger et al, 2019; Vlachantoni, 2019). The cost of care poses a considerable challenge for lower-income older people. Without sufficient formal public services, those from lower economic backgrounds face difficulties in covering the expenses which their personal and practical care otherwise require. Furthermore, even with public support, lower-income groups often struggle to afford the user fees for the services (Ilmarinen et al, 2024).

The affordability of services plays a pivotal role in determining people's access to care. We observed that those who considered user fees to be unaffordable in the combination care group were more likely to experience unmet care needs. Interestingly, however, we found no association between user fees and unmet personal care needs. In the Finnish context, the public sector no longer meets the practical care needs of older people, and they need to pay for care services offered by private for-profit providers (Mathew Puthenparambil, 2019) or use informal support. Unlike the less well-off, those older people with sufficient income are better positioned to afford services from private providers, often with tax reductions, which can even make them more affordable than paying the user fees for public services.

Yet it is disconcerting to observe that unmet care needs persist even among those using a combination of formal and informal sources of care. Formal and informal care may not be direct substitutes, especially for those with higher needs (Bonsang, 2009). Furthermore, inadequacies in the quantity or quality of care, as well as issues related to accessibility or affordability of services, may also be contributing factors.

The results from the regression analysis (Table 7.3) support some of these assumptions. Older people relying on a combination of formal and informal care, particularly those with less money and in poorer health, are clearly more likely to suffer from care poverty. Due to limited data regarding personal care needs, the results of this chapter primarily address the issue of unmet practical care needs. While several studies have focused on this subject, only a few have looked at the impact of these practical needs going unmet, even though practical care clearly has a very real impact on the everyday well-being of older people (see, however, Chapter 8). Both Allen et al (2014) and Beach et al (2018), for instance, conclude that when older people cannot get help with cleaning or with moving around when they are out, or with grocery shopping, their quality of life is seriously compromised.

In this study, six of our respondents with care needs reported not using any services at all – whether formal or informal – while approximately 150 others gave no information at all about how they received care. Consequently, we had to exclude them all from our analysis. Moreover, it became necessary to recategorise almost all independent variables to optimise the regression analysis. By recoding the categories, we could then increase the statistical power of our study as larger samples were obtained within each category. Although this helped simplify our interpretation of the results, we acknowledge that this approach may have resulted in losing finer distinctions captured by the original categories.

Furthermore, this study lacked adequate representation of participants with personal care needs, as most participants were healthy and required minimal care. This implies a potential exclusion of people with poor health and impairment from the sample pool (non-response rate was 45 per cent). Additionally, some respondents may have misidentified their care needs or responded inaccurately. Notably, approximately 9 per cent reported significant memory issues and around 6 per cent of responses were completed by someone else, which may have affected the accuracy of some responses. Since the data were collected during the COVID-19 pandemic, movement restrictions in Finland may have impacted older people's access to care services.

In a nutshell, the majority of older people with personal care needs use a combination of both formal and informal care, while those with practical care needs generally make do with just informal care. In most cases, however,

even when older people receive care from a combination of formal and informal sources, this user group is the most likely to have unmet care needs.

Note

¹ The survey and the writing of this chapter were funded by the Centre of Excellence in Research on Ageing and Care (CoE AgeCare), financed by the Research Council of Finland (grant no. 352735). CoE AgeCare also supported the Open Access publication of this book.

References

- Aaltonen, M.S. and Van Aerschot, L.H. (2021) 'Unmet care needs are common among community-dwelling older people with memory problems in Finland', *Scandinavian Journal of Public Health*, 49(4): 423–32.
- Allen, S.M., Piette, E.R. and Mor, V. (2014) 'The adverse consequences of unmet need among older persons living in the community: dual-eligible versus Medicare-only beneficiaries', *The Journals of Gerontology: Series B*, 69(Supplement 1): S51–8.
- Allin, S. and Masseria, C. (2009) 'Unmet need as an indicator of health care access', *Eurohealth*, 15(3): 7–9.
- Beach, S.R., Schulz, R., Friedman, E.M., Rodakowski, J., Martsolf, R.G. and James, A.E. (2018) 'Adverse consequences of unmet needs for care in high-need/high-cost older adults', *The Journals of Gerontology: Series B*, 75(2): 459–70.
- Blomgren, J., Martikainen, P., Martelin, T. and Koskinen, S. (2008) 'Determinants of home-based formal help in community-dwelling older people in Finland', *European Journal of Ageing*, 5(4): 335–47.
- Bonsang, E. (2009) 'Does informal care from children to their elderly parents substitute for formal care in Europe?', *Journal of Health Economics*, 28(1): 143–54.
- Brändström, A., Meyer, A.C., Modig, K. and Sandström G. (2022) 'Determinants of home care utilization among the Swedish old: nationwide register-based study', *European Journal of Ageing*, 19(3): 651–62.
- Brimblecombe, N., Pickard, L., King, D. and Knapp, M. (2017) 'Perceptions of unmet needs for community social care services in England: a comparison of working carers and the people they care for', *Health and Social Care in the Community*, 25(2): 435–46.
- Casado, B.L., Van Vulpen, K.S. and Davis, S.L. (2011) 'Unmet needs for home and community-based services among frail older Americans and their caregivers', *Journal of Aging and Health*, 23(3): 529–53.
- Chang, M., Geirsdottir, O.G., Sigurdarsdottir, S.H., Kåreholt, I. and Ramel, A. (2019) 'Associations between education and need for care among community dwelling older adults in Iceland', *Scandinavian Journal of Caring Sciences*, 33(4): 885–91.

- Chou, Y.-C., Mathew Puthenparambil, J., Kröger, T. and Pu, C. (2024) 'Multidimensional care poverty among East Asian and Nordic older adults', *Innovation in Aging*, 8(9): igae076.
- Darin-Mattsson, A., Fors, S. and Kåreholt, I. (2017) 'Different indicators of socioeconomic status and their relative importance as determinants of health in old age', *International Journal for Equity in Health*, 16: Article 173.
- Døhl, Ø., Garåsen, H., Kalseth, J. and Magnussen, J. (2016) 'Factors associated with the amount of public home care received by elderly and intellectually disabled individuals in a large Norwegian municipality', *Health and Social Care in the Community*, 24(3): 297–308.
- Eichler, M. and Pfau-Effinger, B. (2009) 'The "Consumer Principle" in the care of elderly people: free choice and actual choice in the German welfare state', *Social Policy & Administration*, 43(6): 617–33.
- Enroth, L., Aaltonen, M., Raitanen, J., Nosraty, L. and Jylhä, M. (2018) 'Does use of long-term care differ between occupational classes among the oldest old? Vitality 90 + Study', *European Journal of Ageing*, 15(2): 143–53.
- Eurocarers (2023) 'Finland', *Eurocarers*, 2 March [Country profiles]. Available from: <https://eurocarers.org/country-profiles/finland/> [Accessed 19 October 2023].
- FIHW (Finnish Institute for Health and Welfare) (2023) 'Informal care and adult foster care', *Finnish Institute for Health and Welfare*. Available from: <https://thl.fi/en/web/ageing/older-people-services-undergoing-a-change/informal-care-and-adult-foster-care> [Accessed 20 October 2023].
- Finne-Soveri, H., Heikkilä, R., Mäkelä, M., Asikainen, J., Vilkkö, A., Andersson, S., et al (2014) 'Mitä on huomioitava vanhusten laitoshoidon vähennettäessä' [What needs to be taken into account when decreasing residential care for older people], in A. Noro and H. Alastalo (eds) *Vanhuspalvelulain 980/2012 toimeenpanon seuranta: tilanne ennen lain voimaantuloa vuonna 2013* [Monitoring the Implementation of the Act 980/2012 on Services for Older People: Situation before the Act Entered into Force in 2013], Helsinki: Terveystieteiden ja hyvinvoinnin laitos, pp 56–70.
- Geerlings, S.W., Margriet Pot, A., Twisk, J.W.R. and Deeg, D.J.H. (2005) 'Predicting transitions in the use of informal and professional care by older adults', *Ageing & Society*, 25(1): 111–30.
- Ilmarinen, K., Van Aerschot, L. and Kröger, T. (2024) 'Not free at all: home care user fees in a Nordic care system', *Social Policy and Society*, 23(3): 513–28.
- Korhonen, K., Moustgaard, H., Murphy, M. and Martikainen, P. (2023) 'Why is care use declining? Changes in residential long-term care between 1999 and 2018 in Finland', *European Journal of Public Health*, 33(Supplement_2): ckad160.671.

- Kröger, T. (2019) 'Looking for the easy way out: demographic panic and the twists and turns of long-term care policy in Finland', in T.K. Jing, S. Kuhnle, Y. Pan and S. Chen (eds) *Aging Welfare and Social Policy: International Perspectives on Aging*, Cham: Springer, pp 91–104.
- Kröger, T. (2022) *Care Poverty: When Older People's Needs Remain Unmet*, Cham: Palgrave Macmillan.
- Kröger, T., Mathew Puthenparambil, J. and Van Aershot, L. (2019) 'Care poverty: unmet care needs in a Nordic welfare state', *International Journal of Care and Caring*, 3(4): 485–500.
- LaPlante, M.P., Kaye, H.S., Kang, T. and Harrington, C. (2004) 'Unmet need for personal assistance services: estimating the shortfall in hours of help and adverse consequences', *The Journals of Gerontology: Series B*, 59(2): S98–108.
- Mathew Puthenparambil, J. (2019) *Marketisation of Care Within the Nordic Context: Private Care Provision for Older People in Finland*, Jyväskylä: University of Jyväskylä.
- Matthews, R.J., Smith, L.K., Hancock, R.M., Jagger, C. and Spiers, N.A. (2005) 'Socioeconomic factors associated with the onset of disability in older age: a longitudinal study of people aged 75 years and over', *Social Science & Medicine*, 61(7): 1567–75.
- Rostgaard, T., Jacobsen, E., Kröger, T. and Peterson, E. (2022) 'Revisiting the Nordic long-term care model for older people: still equal?', *European Journal of Ageing*, 19(2): 201–10.
- Sandberg, M., Kristensson, J., Midlöv, P., Fagerström, C. and Jakobsson, U. (2012) 'Prevalence and predictors of healthcare utilization among older people (60+): focusing on ADL dependency and risk of depression', *Archives of Gerontology and Geriatrics*, 54(3): e349–63.
- Sigurdardottir, S.H. and Kåreholt, I. (2014) 'Informal and formal care of older people in Iceland', *Scandinavian Journal of Caring Sciences*, 28(4): 802–11.
- Szebehely, M. and Trydegård, G.-B. (2012) 'Home care for older people in Sweden: a universal model in transition', *Health and Social Care in the Community*, 20(3): 300–9.
- 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.
- Vlachantoni, A. (2019) 'Unmet need for social care among older people', *Ageing & Society*, 39(4): 657–84.
- Vlachantoni, A., Shaw, R., Evandrou, M. and Falkingham, J. (2015) 'The determinants of receiving social care in later life in England', *Ageing & Society*, 35(2): 321–45.