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article

Care poverty: unmet care needs in a Nordic welfare state

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This article introduces the concept of care poverty, defined as inadequate coverage of care needs resulting from an interplay between individual and societal factors, and examines its level and predictors among the 75+ population in Finland. The data come from a survey conducted in 2010 and 2015. Despite the universalistic goals of the Finnish care system, 26 percent of respondents with limitations in daily activities faced care poverty with regard to instrumental activities of daily living; the activities of daily living care poverty rate was 17 percent. Concerning instrumental activities of daily living, care poverty was associated with income level, health status and living arrangements, while such connections were not found for personal care (activities of daily living).

key words care poverty • unmet needs • care for older people • Finland

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Introduction

For a long time, Nordic welfare states were forerunners in building care provisions for older people. Institutional provisions were modernised from the traditional poor house model soon after the Second World War and home-care services started to develop in the 1950s. Throughout the 1960s, 1970s and early 1980s, the Nordic countries, together with the UK and the Netherlands, offered the largest publicly provided care services for people in old age (for example, [Sipilä, 1997](#); [Pavolini and Ranci, 2008](#)).

Things have changed since. Thatcherism transformed the policy landscape in Britain in the 1980s and led, among other things, to the widespread outsourcing of publicly funded care services to for-profit and non-profit providers. Since the early 1990s, this policy has also been adopted in the Nordic region, especially in Finland and Sweden,

as well as in Denmark to some extent (Anttonen and Häikiö, 2011; Meagher and Szebehely, 2013; Szebehely and Meagher, 2018). Another major change of direction was initiated by Sweden: in the 1980s, it started to target its services considerably more strictly than earlier to those older persons who had the most demanding care needs. Instead of providing ‘a little help to the many’, the Swedish care system started to offer ‘a lot of help to the few’. As a result, the age group coverage rate of Swedish care provisions dropped dramatically during the decade. This policy was followed by Finland in the 1990s and, partly, by Denmark and Norway in the 2010s (Kröger and Leinonen, 2012; Szebehely and Meagher, 2018).

In the five Nordic countries, policy changes regarding the organisation of care services have been most far-reaching in Finland (Kröger and Leinonen, 2012; Kröger, 2019). For-profit long-term care providers barely existed in Finland at the start of the 1990s; yet, by 2014, 21 percent of staff working in care for older people were already employed by for-profit organisations (NIHW, 2018). During the same period, the coverage of publicly funded institutional care dropped from 11 percent in 1990 to 9 percent in 2015, and that of home care from 19 percent to 12 percent, among the Finnish 75+ population (Kröger, 2019). Thus, counted together, while 30 percent of people aged 75 and older received publicly funded care services in Finland in 1990, 25 years later, these services covered only 21 percent.

Despite these substantial changes in the Finnish care system, its normative foundations have remained the same since the 1970s (Anttonen and Sipilä, 2010; Kröger and Leinonen, 2012). Nordic universalism – the principle that anyone who needs support shall receive it, notwithstanding income level, geographical area or any other factor – is still the bedrock of the ideology of the Finnish welfare state (Anttonen, 2002; Kröger et al, 2003; Szebehely and Meagher, 2018). All political parties, including right-wing parties, subscribe to this principle. However, researchers have argued that, in practice, the Finnish care system embodies, at most, only weak universalism: older people do not have clear legal rights to care services; instead, access and availability depend on local policies and professional gatekeepers (Kröger et al, 2003; Szebehely and Meagher, 2018).

The weakness of universalism and recent care policy changes raise the question of whether all older people in need of care currently receive adequate support in Finland. Does social policy deliver what it promises to deliver, that is, are older people’s care needs met? If the needs of all older people are not covered, what issues are connected with the inadequate receipt of care? As well as trying to answer these empirical research questions, this article also aims to introduce the novel concept of ‘care poverty’. Here, care poverty means the deprivation of the adequate coverage of care needs resulting from an interplay between individual and societal factors.

Unmet needs and care poverty

Care systems have regularly been evaluated and compared on the basis of their inputs, such as care expenditures (percentage of gross domestic product [GDP]), or outputs, such as volumes of services provided. Outcomes, that is, whether care provisions manage to achieve their goals, have not often been in the limelight. This has been a major shortcoming as, ultimately, policies need to be assessed not only by the resources they use or how many services they provide, but also by whether they achieve their objectives. In care policy, the key objective is self-evidently to satisfy the care needs

of people. In universalist welfare models, public policy is expected to cover the needs of all population groups, which means that the goal of care policy is to meet the care needs of the whole population (Sipilä, 1997; Szebehely and Meagher, 2018).

Gerontological research, however, has attended to whether older people receive adequate care. Isaacs and Neville (1976: 81) were among the first to use the concept of ‘unmet need’ (mentioned already by Bradshaw (1972: 73)), which they defined as a situation in which an older person has ‘insufficient care to fulfil his basic requirements for food, warmth, cleanliness or security’, and for a situation where ‘care was provided only at the cost of undue strain of relatives’. Since the late 1990s especially, many gerontological studies have analysed the ‘unmet needs’ of people with impairments and chronic health conditions, particularly in the US (for example, Desai et al, 2001; Lima and Allen, 2001; Gibson and Verma, 2006), but increasingly also in countries like the UK (for example, Vlachantoni et al, 2011; Brimblecombe et al, 2017; Vlachantoni, 2019), Spain (for example, García-Gómez et al, 2015) and China (for example, Zhu, 2015). Definitions of the concept of unmet (long-term care) needs differ slightly, but the formulation of Williams et al (1997: 102) is widely used: ‘Unmet need occurs in long-term care when a person has disabilities for which help is needed, but is unavailable or insufficient.’ Methods of analysing unmet needs have varied, but long-term care needs have most often been measured based on the functional limitations of disabled and older persons, while ‘unmetness’ has been recognised either by a total absence of any informal or formal care, or by the self-reported insufficiency of available care (Lima and Allen, 2001).

The term ‘unmet (long-term care) needs’ has been developed and used in close connection to a parallel concept, ‘unmet health care needs’. ‘Unmet health care needs’ has become a key indicator of access to health care, and is used regularly by international organisations such as the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU) in their periodic evaluations of national health care systems. Unmet health care needs are measured in a variety of ways, but the availability of a medical doctor, waiting times for health care and the number of visits are among the usual operationalisations. Research on unmet health care needs primarily evaluates the functioning and problems of formal service provisions, and does not address informal care (for example, Allin and Masseria, 2009). In contrast, the notion of ‘unmet (long-term care) needs’ takes informal care into account. In fact, ‘unmet needs’ is not about user dissatisfaction with formal long-term care, but rather about inadequate receipt of any kind of care. The term focuses on the gap between needs and received support, and this support includes formal as well as informal sources.

As already noted, in analysing the inadequacy of care, we use here a novel concept: ‘care poverty’. Care poverty means 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 (cf Kröger, 2010). In addition to the term ‘unmet needs’, care poverty comes close to the concepts of ‘care gap’ (Redfoot et al, 2013; Pickard, 2015) and ‘care deficit’ (Knijn, 2000). These terms usually refer either to the decreasing number of potential family carers in the population or to an inadequate supply of formal care services or other support measures due to tightening social policies. While ‘unmet needs’ measures the situation of individuals, the notions of ‘care gap’ and ‘care deficit’ direct attention to the lack of care at the societal and population level. The concept of care poverty aims to combine these two perspectives. Care poverty takes a bottom-up approach

to the lack of care, starting from the everyday lives of older people, but, at the same time, it interprets the problems of individuals in the context of societal structures, in particular, of welfare state policies.

Unlike ‘unmet needs’, the notion of care poverty connects studies on inadequate care to social policy and welfare state research, as well as to discussions of inequality. The level of social protection and welfare services considered essential for health and well-being is defined by social policy. The extent to which the state protects its citizens from social risks, the ways in which equal opportunities are enhanced and to what extent inequalities are evened out is politically defined (Miller, 2004; Brady, 2009). Inequality is about a disparity that permits some people to make choices, either material or related to their health, education, use of services and such like, while other individuals are denied the very same choices (Bauman, 1998: 37; Lister, 2004: 13). Inequalities arise from different factors, such as the inequality of opportunities or outcomes, access or entitlement, and the unequal distribution of power, and they can be examined by looking at whether people have equal rights and access to social protection and public services, whether the outcomes of social policy are equal, and whether people have possibilities to fulfil their potential (Platt, 2011: 1, 7).

In the context of care, welfare state policies delineate the opportunities available to individuals to cover their care needs. Care services need to be widely available, affordable and of good quality if the care needs of all are to be met. This does not take place automatically, without deliberate policies. Without social policies that provide publicly subsidised care services or cash-for-care benefits, variations in people’s opportunities to either receive informal care or purchase formal care are not evened out and large inequalities remain. It is precisely these societally constructed inequalities in the receipt of care that the notion of care poverty aims to capture.

Care poverty is a question of the unequal outcomes of social policy, an insufficient level of care services and inadequate resources or opportunities in terms of organising care. It is an expression of inequality in the same way as poverty is. However, care poverty is not only a question of scarce financial resources; it may also be caused, for example, by inadequate social services or by the poor availability or affordability of public, non-profit or for-profit care services. Care poverty always results from an interplay of individual factors (such as a lack of close family members) and structural issues (such as poorly developed welfare state provisions).

This new concept is next applied to an empirical study of the availability of care among older people in Finland. Methodologically, the study uses the tools of ‘unmet needs’ studies while the results are interpreted within a social policy framework.

Data and methodology

The data used in this article come from the ‘Everyday life, support and services’ (in Finnish: ‘Arki, apu ja palvelut’) questionnaire study (Van Aerscht, 2014; Mathew Puthenparambil and Kröger, 2016; Mathew Puthenparambil et al, 2017). The study is an independent pooled cross-sectional survey conducted in 2010 and 2015 through a collaboration between research teams from the University of Jyväskylä and the University of Tampere. The study focused on people aged 75+ living at home in the two cities of Jyväskylä and Tampere.

The self-administered 2010 survey questionnaire was prepared on the basis of several Finnish and Swedish national questionnaires (for example, the HYPÄ survey;

see [Moisio, 2007](#)), combining their questions and adding some new ones. The survey questionnaire covered various topics: the everyday life activities of older people; the use of social care; socio-economic and demographic background; and self-reported physical and mental health. The 2015 questionnaire followed the previous one, with minor modifications.

For both surveys, participants' addresses were collected from the population registry, which supplied the researchers with computer-generated randomised lists of participants' addresses. An informed consent covering letter, the 12-page self-administered questionnaire and a prepaid envelope were sent to 1,000 participants in each city, asking them to return the form after completion. Two follow-up letters were sent to non-respondents. This method was executed in both years. In total, 1,436 completed questionnaires were obtained in 2010 (response rate = 71.5 percent) and 1,474 in 2015 (response rate = 73.7 percent). Since our study neither involves the physical integrity of subjects nor deviates from the principle of informed consent, ethical committee approval was not required. However, the guideline of good scientific practice ([TENK, no date](#)) was carefully followed in the study. For example, in the covering letter, the participants were briefed about the purpose of the survey, confidentiality and the anonymity of the collected data.

Care needs are not easy to objectify or measure. Researchers have referred to this difficulty, for example, by speaking about 'the complexity of need at the conceptual level' ([Vlachantoni et al, 2011: 69](#)) or by stating that 'there is no golden standard definition of needs' ([Lagergren et al, 2014: 714](#)). In studies on unmet needs, care needs are usually examined through questionnaires addressed to older people (for example, [Lima and Allen, 2001](#); [Gibson and Verma, 2006](#); [García-Gómez et al, 2015](#); [Vlachantoni, 2019](#)). Typically, they are asked about their activities of daily living (ADLs), which focus on personal care needs such as eating, toileting and getting out of bed, and about their instrumental activities of daily living (IADLs), which focus on practical daily activities like transportation, cleaning and managing medication. The ADL/IADL approach can be criticised, for example, for disregarding social needs and for being based on self-reporting. Nevertheless, it is the most usual framework that is used to assess long-term care needs.

Whether needs are unmet has been determined by researchers in two different ways (for example, [Desai et al, 2001](#); [Lima and Allen, 2001](#); [LaPlante et al, 2004](#); [Sands et al, 2006](#); [Casado et al, 2011](#); [Bieñ et al, 2013](#); [García-Gómez et al, 2015](#)). The first way has been to ask whether people have care needs and whether they receive formal or informal care: those who have needs but receive no help, formal or informal, are categorised as having unmet needs. The second way is to ask respondents with care needs whether they receive adequate support. The first way disregards those who receive some assistance from formal and/or informal sources: a person may receive services or informal help, or both, but the received support may not be enough or suitable. The first operationalisation thus underestimates the prevalence of unmet needs. The second way is sometimes argued to lack objectivity and to lead to an overestimation of the level of needs. However, when [Brimblecombe et al \(2017\)](#) used the questionnaire with older persons and their family carers, they found that carers estimated the level of needs and unmet needs more highly than did older people. When [Morrow-Howell et al \(2001\)](#) asked care staff to complete the survey, they noticed that it was the staff, not the older persons, who more usually reported

needs and unmet needs. These findings speak against the argument that older people overestimate their unmet needs in general.

For this article, we used the second approach. Care needs were assessed through a series of 13 items included in the question ‘How do you manage the following activity?’ Items included five ADLs (bathing, dressing, eating, getting out of and into bed, and toileting) and eight IADLs (cleaning, cooking, getting home help and other services, grocery shopping, managing bank affairs, small home repairs and gardening, taking medication, and transportation). For each of these needs, respondents were asked to select one of three options: ‘I cope without difficulties’, ‘I do not cope by myself, but I receive enough help’ and ‘I cannot cope by myself and I need more help than I receive’. Everyone who chose the third option – ‘I cannot cope by myself and I need more help than I receive’ – for one or more ADLs or IADLs was coded to have unmet needs and thus to be in care poverty. The rate of care poverty was measured as the share of those with unmet needs among those with long-term care needs.

Independent variables were chosen from among factors that have been regularly used in earlier studies of unmet needs. They were grouped into two blocks: (1) socio-economic variables; and (2) health variables. In the socio-economic variables, city (Jyväskylä versus Tampere), gender (male versus female), living arrangement (living alone versus living with someone), area of residence (city centre versus suburbs and sparsely populated areas) and level of education (vocational or higher education versus no vocational or higher education) were coded as dichotomous variables. Age was measured as a nominal variable with three groups: 75–79 years old, 80–85 years old and 85+ years old (the oldest respondent was 103 years old).

Income was measured in the questionnaire as household income (as a categorical variable of eight groups ranging from under 750 euro/month to over 3,000 euro/month). We standardised income for household size, using the modified OECD equivalence scale (OECD, no date). For this purpose, the middle value of each group was divided by equivalence factors (a value of 1 for the first adult in the household, a value of 0.5 for other adults). Equivalised household monthly income was coded into three categories (1,000 euro or less versus 1,001–1,500 euro versus over 1,500 euro). The health-related questions, that is, self-rated health (good, rather good or fair versus poor or rather poor) and number of long-term illnesses or impairments (no or only one illness or impairment versus several illnesses or impairments), were both categorised into dichotomous variables.

In this article, we consider the two waves (2010 and 2015) of the questionnaire as an ordinary cross-sectional data set. This approach was chosen because this article does not focus on change between these years. Merging the two data sets into one also increased the number of respondents with unmet needs. No major change in the level or availability of care services took place in Finland between these years. Since the data were collected from the general population, many respondents (about one third) did not need any help with ADLs or IADLs. In particular, people’s needs for support with ADLs were so rare that a larger data set was needed in order to analyse care poverty with regard to ADLs. A dummy variable for the year was used in the analysis to account for the distribution between the two waves.

The data were first analysed using cross-tabulations and chi-squared tests (see [Tables 1–3](#)). Logistic regression analysis was also performed to examine the associations between care poverty and socio-economic and health variables (see [Table 4](#)).

Table 1: Characteristics of respondents

	N	%
City		
Jyväskylä	1,439	49.5
Tampere	1,466	50.5
Gender		
Male	1,065	37.0
Female	1,816	63.0
Age		
75–79 years old	979	35.8
80–84 years old	938	34.3
85–103 years old	815	29.8
Living arrangement		
Living with someone	1,237	43.4
Living alone	1,611	56.6
Area of residence		
City centre	1,310	46.1
Suburb or sparsely populated area	1,530	53.9
Education		
Vocational or higher education	1,669	59.5
No vocational education	1,134	40.5
Equalised monthly income		
More than 1,500 euro	466	17.8
1,001–1,500 euro	1,159	44.2
1,000 euro or less	996	38.0
Long-term illnesses or impairments		
None or one	1,422	54.7
Several	1,176	45.3
Self-rated health		
Good, rather good or fair	2,169	78.6
Poor or rather poor	589	21.4
ADL and IADL needs		
Has at least one ADL need	426	15.2
Has at least one unmet ADL need	73	2.6
Has at least one IADL need	1,983	70.1
Has at least one unmet IADL need	515	18.2

Note: $N = 2,905$.

The regression model included only those respondents who reported having at least one care need ($n = 1,983$; 69 percent of all respondents). The exclusion of other respondents was essential since this study focuses on care poverty among older people with care needs. A regression diagnostic procedure was performed to verify the multicollinearity issue in the independent variables, benchmarking the tolerance

Table 2: Met and unmet ADL and IADL needs and care poverty rates (N = 2837)

	I don't need help	I get enough help	I don't get enough help	Care poverty rate*
	%	%	%	%
ADLs				
Bathing	86	12	2	14
Eating	96	4	<1	14
Getting out of/into bed	95	4	<1	16
Toileting	96	4	<1	16
Dressing	93	7	<1	12
ADLs total	85	12	3	17
IADLs				
Transportation	67	25	8	24
Grocery shopping	67	28	5	15
Getting home help and other services	57	34	8	19
Managing bank affairs	68	29	3	10
Small home repairs and gardening	36	51	13	20
Cleaning	50	40	10	20
Cooking	73	23	4	15
Taking medications	84	15	1	8
IADLs total	30	52	18	26
ADLs and IADLs total	30	52	18	26

Notes: N = 2,837. *Share of those with unmet needs out of all with care needs.

values < 0.1 and the VIF value > 10 (Field, 2009). The results showed that both values (for example, VIF < 2.5) were within the acceptable range. The model results were presented as odds ratios (ORs) with their confidence intervals (CIs) at 95 percent. The data were analysed with IBM SPSS version 22, and all missing data in the regression model were deleted using a listwise approach.

Results

Our data were collected in two Finnish cities, which were evenly represented (see Table 1). A majority (63 percent) of respondents were women as they are also over-represented in the general 75+ population. People aged 75–79, 80–84 and 85+ each comprised approximately one third (30–36 percent) of the sample. A slight majority lived alone (57 percent) and outside the city centre (54 percent), and had a vocational or higher education (60 percent). A minority (18 percent) had an equivalised disposable income of over 1,500 euro per month while over a third (38 percent) had an income of under 1,000 euro per month.

Fewer than half (45 percent) of respondents had more than one long-term illness or impairment. Almost four in five (79 percent) reported that their health status was at least fair. Fewer than one in seven (15 percent) had at least one ADL need, while IADL needs were much more usual: over two thirds (70 percent) had at least one.

Table 3: Met and unmet ADL and IADL needs according to socio-economic and health factors

	Met ADL needs	Unmet ADL needs	<i>p value</i>	Met IADL needs	Unmet IADL needs	<i>p value</i>
	(<i>n</i> = 353)	(<i>n</i> = 73)		(<i>n</i> = 1,468)	(<i>n</i> = 515)	
	%	%		%	%	
City						
Jyväskylä	48	56	0.262	48	46	0.371
Tampere	52	44		52	54	
Gender						
Male	34	27	0.295	31	28	0.194
Female	67	73		69	72	
Age						
75–79	15	11	0.548	33	22	0.000
80–84	27	32		33	37	
85–103	58	57		34	41	
Living						
Together	37	30	0.329	40	34	0.019
Alone	63	70		60	66	
Area						
City centre	47	37	0.149	46	47	0.725
Suburbs	53	63		54	53	
Education						
At least occupational	47	47	0.927	60	56	0.071
No occupational	53	53		40	44	
Equivalised monthly income						
Over €1,500	12	12	0.621	20	12	0.000
€1,001–1,500	46	52		46	44	
Under €1,000	42	36		34	44	
Self-rated health						
Good	45	26	0.003	80	45	0.000
Poor	55	74		20	55	
Long-term illnesses/impairments						
One/none	26	15	0.054	53	26	0.000
Several	74	85		47	74	

Note: The table includes only those respondents who reported having at least one (met or unmet) ADL/IADL need.

Hence, it was logical that unmet IADL needs (18 percent) were considerably more usual than unmet ADL needs (3 percent).

There was substantial variation in the prevalence of need for help between different ADLs and IADLs (see Table 2). Among ADLs, help was most often needed with bathing (14 percent) and this need was also the one that remained unmet most frequently (2 percent). Among IADLs, help was most often needed with small home repairs

Table 4: Association of ADL and IADL care poverty with socio-economic and health factors (logistic regression)

Variables	OR (95% CI)	
	ADL care poverty (<i>n</i> = 337)	IADL care poverty (<i>n</i> = 1,584)
I. Socio-economic background		
Tampere (ref: Jyväskylä)	1.23 (0.68–2.23)	0.86 (0.67–1.11)
Female (ref: male)	1.94 (0.92–4.06)	1.11 (0.82–1.52)
Age (ref: 75–79)		
80–84	1.83 (0.64–5.21)	1.32 (0.95–1.84)
85–103	1.59 (0.59–4.30)	1.40 (1.00–1.94)*
Living alone (ref: living together)	0.79 (0.38–1.64)	1.40 (1.03–1.91)*
Living in suburbs or sparsely populated area (ref: city centre)	1.89 (1.02–3.50)*	0.89 (0.88–1.13)
No occupational or higher education (ref: occupational or higher education)	0.88 (0.47–1.67)	0.86 (0.66–1.13)
Equivalised income (ref: over €1,500/month)		
€1,001–1,500/month	0.84 (0.31–2.26)	1.49 (1.01–2.19)*
€1,000/month or less	0.61 (0.21–1.77)	2.15 (1.42–3.24)***
II. Health status		
Poor or rather poor self-rated health (ref: good, rather good or mediocre)	1.87 (0.96–3.65)	3.87 (2.95–5.08)***
Several long-term illnesses/impairments (ref: none/ one)	1.67 (0.71–3.90)	1.98 (1.49–2.63)***

Notes: *N* = 1,983. Reference group: met ADL/IADL needs. * < 0.05; ** < 0.01; *** < 0.001; controlled for the year using a dummy variable.

and gardening (64 percent) and cleaning (50 percent), while help was needed most rarely with taking medication (16 percent). Unmet needs were also most usual in small home repairs and gardening (13 percent) and cleaning (10 percent). In taking medications, only 1 percent reported an unmet need.

The focus of this study is not, however, on the level of unmet care needs per se, but on care poverty, which only applies to those who have a need for support. Accordingly, those without ADL or IADL limitations were excluded from further analysis. Care poverty rates were counted separately for each ADL and IADL, as well as in total (see Table 2). Regarding different ADLs, care poverty rates varied between 12 percent (dressing) and 16 percent (getting out of/into bed and toileting). For IADLs, the rates varied between 8 percent (taking medications) and 27 percent (transportation).

One in six respondents did not receive adequate support for one or more of their ADLs: the total rate of ADL care poverty was 17 percent. Care poverty regarding IADL needs had a total rate of 26 percent. As many as one in four people with IADL needs were thus left without adequate support. When ADL and IADL needs were counted together, the overall care poverty rate followed very closely the level of IADL care poverty as practically all who had unmet ADL needs also had unmet IADL needs.

When their associations with socio-economic and health variables were examined through a cross-tabulation, ADL and IADL care poverty displayed very dissimilar results (see Table 3). All background factors except self-rated health lacked a significant

relation with the incidence of unmet ADL needs. In the case of IADL-based needs, the results were very different. A significant correlation was found between unmet needs and age group, living arrangement, income level, self-rated health and the number of long-term illnesses or impairments of the respondent. City, gender, living area and education level were not connected to either ADL or IADL care poverty in the data. A logistic regression was also performed, analysing the odds for ADL and IADL care poverty in connection with the aforementioned socio-economic and health variables (see [Table 4](#)). Only living area proved to be a predictor of ADL care poverty. The odds of care poverty for the group living in suburbs or in sparsely populated areas were clearly higher (OR = 1.89) than for the group living in the city centre. Unlike in the cross-tabulation, self-rated health was not significantly associated with unmet ADL needs in the regression.

In the case of IADL care poverty, the findings followed the results of the cross-tabulation. Age, living arrangement, income level and health variables all predicted IADL care poverty (see [Table 4](#)). The odds of care poverty were higher (OR = 1.40) in the 85+ age group and among those living alone than in their reference groups (75–79 year olds and those living with someone). Income level predicted IADL care poverty even more strongly: compared with those with a monthly income of over 1,500 euro, those who received between 1,000 and 1,500 euro (OR = 1.49), as well as those who received less than 1,000 euro (OR = 2.15), had considerably higher odds of care poverty. Having several long-term care illnesses or impairments also doubled the odds (OR = 1.98). Finally, having poor or rather poor self-rated health more than tripled the odds of IADL care poverty (OR = 3.87). City, gender, being 80–84 years old, living area and education level all remained non-significant in connection to IADL care poverty.

Discussion

This article began by briefly describing the two major transformations that the Finnish care system has experienced since the early 1990s – stricter targeting and the outsourcing of services to for-profit providers – and by asking whether the current system still fulfils the Nordic ambition for universalism, that is, whether it manages to provide care to everyone who needs it. Based on the results of the analysis, Finland fails to reach this basic objective of its welfare system. According to our data, a quarter (26 percent) of those in the 75+ age group who need support with their IADLs do not receive adequate help, and are in care poverty. Even in ADLs, that is, personal care needs, one in six (17 percent) are left without appropriate support. These results are consistent with earlier Finnish studies, though they have used partly different methods to analyse unmet needs (for example, [Vaarama, 2004](#); [Van Aerschoot, 2014](#); [Murto et al, 2016](#)).

Care needs regarding ADLs and IADLs are very different in nature and it could be expected that the level of unmet needs would also be different for these two categories of daily activities. As limitations in practical daily activities are much more common than personal care needs, it could be anticipated that the rate of IADL care poverty would also be higher than that of ADL care poverty. The findings confirmed this but, at the same time, also showed that the rate of ADL care poverty was not so much below the IADL care poverty rate. Even though the number of older people with ADL needs is limited, many of them do not receive the support they need. It is

also worth noticing that practically all those with unmet ADL needs are also facing IADL care poverty, which further accentuates their vulnerability.

Another unanticipated finding was that the predictors of ADL and IADL care poverty proved to be so different. As expected, having unmet IADL needs was connected with a number of background factors, including income level, living arrangement and health status. This showed that, in our data, on the one hand, IADL care poverty is associated with low incomes but, on the other hand, the lack of economic resources is not the only, or even the strongest, predictor of care poverty. Instead, it was poor self-rated health that brought the highest odds of unmet IADL needs. Somewhat surprisingly, gender, education level or city did not explain IADL care poverty. They did not predict ADL care poverty either, but nor did income level, living arrangement or health status. The area in which they lived proved to be the sole predictor of ADL care poverty within the data as people living in suburbs, or in sparsely populated areas, had higher odds of unmet ADL needs. Public as well as private care services are usually more available in city centres, which might at least partly explain the connection.

Based on these results, for IADLs, there are several sources of inequality as having these needs met depends on whether you are well-off, live with another person and have at least mediocre health. The Finnish welfare state has not succeeded in meeting the practical daily needs of those who are poor, sick or live alone. This also raises the question of how well the most vulnerable groups are currently supported throughout their life by welfare policies. If their IADL needs remain unmet for a longer period, this will probably increase their ADL needs and other health problems.

With regard to ADLs, however, there were no significant differences between those with low and higher incomes, those having poor and not-so-poor health, and those living alone and those living with someone else. The lack of connections between ADL care poverty and socio-economic and health factors (except the area in which they live) can be tentatively regarded as good news, indicating that the welfare system has managed to even out differences in the receipt of personal care between different social groups, that is, to prevent inequalities concerning personal care poverty. This is exactly what a universalist welfare state should accomplish. However, the limited number of respondents with ADL needs in the data set calls for caution in the interpretation of these results. We need larger and more representative data to be sure that Finland really provides equal access to personal care. At the same time, it is necessary to remember that even though ADL care poverty was not connected to income or health variables in the data, unmet ADL needs were not rare. This means that Finnish care policies have not managed to provide appropriate support to all older people and that inequalities exist between those in care poverty and those out of it.

Limitations and conclusions

This study has aimed, on the one hand, to introduce the new concept of care poverty and, on the other hand, to use it in an empirical analysis. Care poverty was defined as inadequate coverage of care needs resulting from an interplay between individual and societal factors. Thus, large needs and a lack of resources lead to care poverty for individuals only when these factors are combined with insufficient welfare policies and social structures that prevent appropriate responses to people's needs. Empirically,

the article analysed questionnaire data and showed that care poverty is a frequent phenomenon among Finnish older people in practical daily activities, as well as in personal care.

The study has some limitations that need to be taken into account. The data are local in character: these two cities do not represent all Finnish cities and certainly not the whole of Finland. The questionnaire did not cover needs other than ADLs and IADLs, which means that the inadequate coverage of social needs, for example, could not be analysed here. As mentioned, the number of respondents with ADL needs was rather low, which weakens the value of results on ADL care poverty. It is probable that the limited number of respondents with ADL needs is partly caused by an under-representation of this group in the data as those with extensive personal care needs are, we may presume, less likely to complete postal questionnaires.

The limitations of this study highlight the compelling need for further research. Not just the incidence, but also the consequences, of care poverty should be analysed, as well as the effectiveness of different policy measures in eradicating it. Larger, nationally representative data sets are needed in order to produce generalisable and more nuanced knowledge, especially concerning personal care poverty. Such data are not only needed in Finland: although there are already a number of studies on unmet care needs in various countries, these are typically based on local and rather limited sets of data, like the present study.

The long-term goal should be the creation of an international databank that would provide comparable and reliable data on care poverty. Such data would make it possible to perform full comparative analyses on care poverty, which could serve as a critical indicator in the evaluation and comparative analysis of care policies. In order to develop care policies that really fulfil the goal of satisfying people's care needs, we need to find out which groups of older people are currently not served by the welfare state and left in care poverty.

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Conflict of interest

The authors declare that there is no conflict of interest.

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