Informal and Formal Care and Unmet Needs in Europe: Socioeconomic Disparities and the Role of Social Policies for older adults

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UN International Day of Care and Support

Building on the concept of ‚care poverty' and unmet need

- Unmet need occurs in long-term care (LTC) when a person has disabilities for which help is needed, but is unavailable or insufficient (Williams et al, 1997)
- Methods vary, with needs often measured based on functional limitations of older persons and 'unmetness' by a total absence of any informal or formal care (Lima and Allen, 2001)
- We follow this common concept related to unmet need for functional limitations (‚**absolute care poverty**') (Kröger et al., 2019; Kröger, 2022)

"Care poverty means the deprivation of adequate coverage of care needs resulting from interplay between individual and societal factors"

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RESEARCH ARTICLE

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Informal and formal long-term care utilization and unmet needs in Europe: examining socioeconomic disparities and the role of social policies for older adults

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Abstract
The rising number of older adults with limitations in their daily activities has major implications for the demands placed on long-term care (LTC) systems across Europe. Recognizing that demand can be both constrained and encouraged by individual and country-specific factors, this study explains the uptake of home-based long-term care in 18 European countries with LTC policies and pension generosity along with individual factors such as socioeconomic status. Using data from the Survey of Health, Ageing and Retirement in Europe conducted in 2019, we apply a two-part multilevel model to assess if disparities in use of LTC are driven by disparities in needs or disparities in use of care when in need. While individual characteristics largely affect the use of care through its association with disparities in need, country-level characteristics are important for the use of care when in need. In particular, the better health of wealthier and more educated individuals makes them less likely to use any type of home-based personal care. At the country level, results show that the absence of a means-tested benefit scheme and the availability of cash-for-care benefits (as opposed to in-kind) are strongly associated with the use of formal care, whether it is mixed (with informal care) or exclusive. LTC policies are, however, shown to be insufficient to significantly reduce unmet needs for personal care. Conversely, generous pensions are significantly associated with lower unmet needs, underscoring the importance of considering the likely adverse effects of future pension reforms.

Keywords Long-term care · SHARE · Two-part multilevel model · Socioeconomic status · Care policy · Pension generosity

JEL Classification I14 · I18 · J18

Inequalities in need or inequalities in use?

- Methodologically, we followed a two-part multilevel design to examine both individual and country-level factors that explain

(1) the likelihood of **needing personal care** (IADL/ADL) and

(2) the likelihood of **using care when in need**, across 18 European countries in 2019 (SHARE Wave 8).

- By combining both parts, we estimated the unconditional probability of using care—or not using any care—distinguishing between different types of care

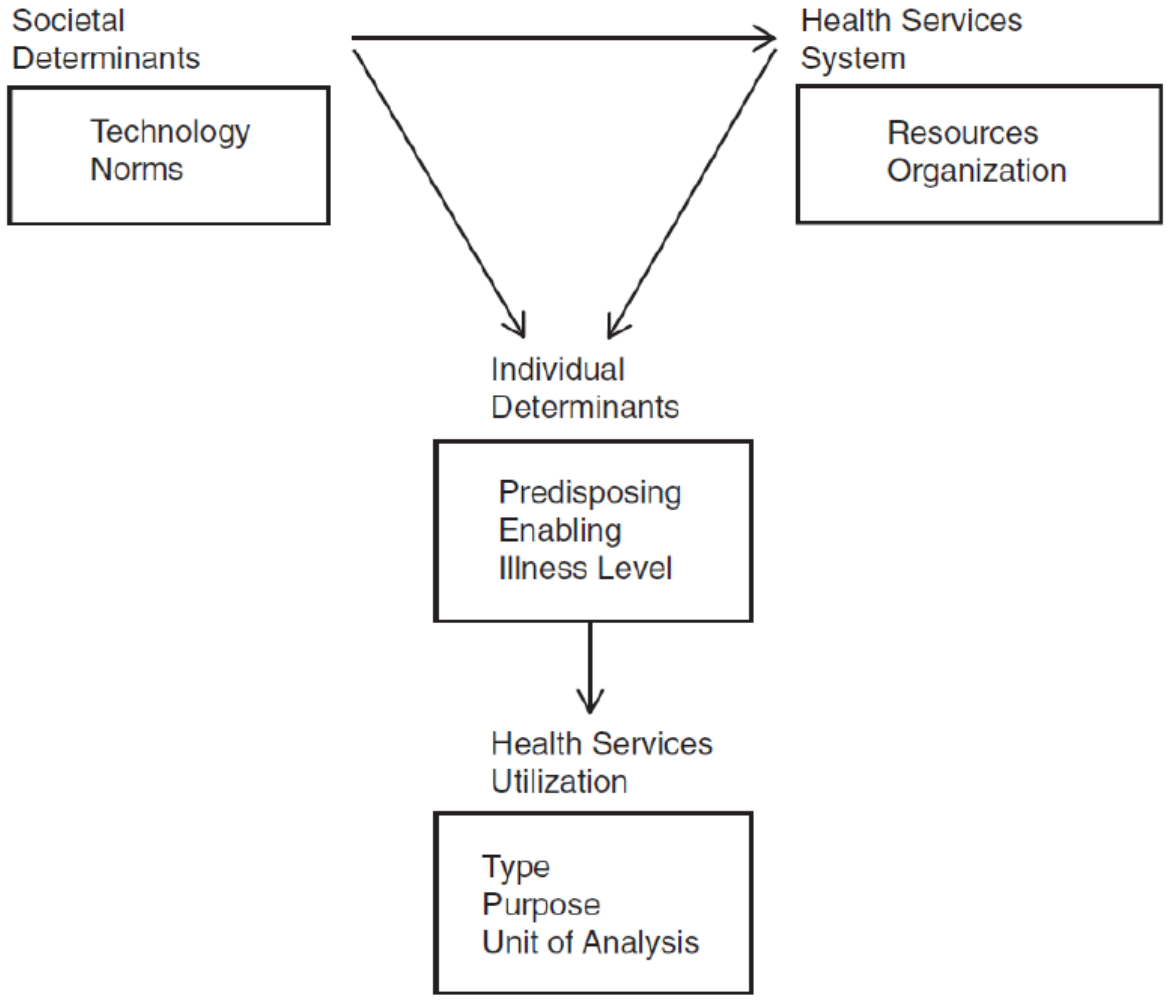
By focusing on **unmet needs (for ADL disabilities) through an absolute care poverty** lens, our approach may represent a lower bound of care poverty.

Absolute care poverty captures only the most severe cases—where no care is provided—while overlooking those who receive insufficient care in terms of quantity or quality, reflecting relative care poverty.

Micro- and macro level determinants of unmet need

- Following Grossman (1972) and Andersen and Newman (1973), disparities in the probability **to (not) use informal and formal care are related to socioeconomic inequalities** next to other individual-level factors.

Disparities in care use include care need and one's opportunity to access care when in need



Source: Andersen and Newman (1973)

Micro- and macro level determinants of unmet need

We also focus on social policies for older adults across two main domains:

i. **the LTC system and**

ii. **the pension scheme** (Szenkurök et al, 2024; Andersen & Newman, 1973; Broese van Groenou & De Boer, 2016).

- Macroeconomic controls: GDP per capita, Consumer price index for personal care and the female labor market participation rate

	Social policies for older adults				Macroeconomic indicators		
Country	Cash benefit	Means testing	LTC beds[1]	Pension generosity[2]	CPI[3]	GDP p. capita	FLMP[4]
Austria	Cash	No	45.9	89.9	105.1	126	72.3
Belgium	Cash	Yes	68.7	66.2	104.1	118	64.9
Czech Republic	Cash	No	35.6	60.3	110.8	93	69.8
Denmark	In-kind	No	37.7	70.9	95.1	127	76.0
Estonia	In-kind	Yes	48.1	53.1	108.2	82	75.7
Finland	Cash	No	54.2	64.2	101.1	109	76.6
France	Cash	Yes	49.1	73.6	100.9	106	68.2
Germany	Cash	No	54.2	51.9	104.1	121	74.9
Greece	In-kind	No	1.8	51.1	93.1	66	60.4
Hungary	In-kind	No	44.5	84.3	109.4	73	65.3
Italy	Cash	Yes	18.8	91.8	101.4	96	56.5
Luxembourg	Cash	Yes	80.8	90.1	104.7	254	67.4
Netherlands	Cash	Yes	72.1	80.2	106.3	128	76.7
Poland	Cash	No	11.3	35.1	101.5	73	63.4
Slovenia	Cash	Yes	51.9	57.5	101.9	88	72.2
Spain	Cash	Yes	43.9	83.4	99.9	91	70.1
Sweden	In-kind	No	68.1	53.4	109.9	119	81.1
Switzerland	Cash	Yes	63.6	44.3	97.3	157	80.2

[1] p. 1,000 inhabitants aged 65+
[2] net replacement rate in %
[3] consumer price index for personal care
[4] female labor market participation rate in %

Note: Information on cash benefit and means testing are sourced from Ariaans et al (2021) and the Mutual Information System on Social Protection (MISSOC, 2022).

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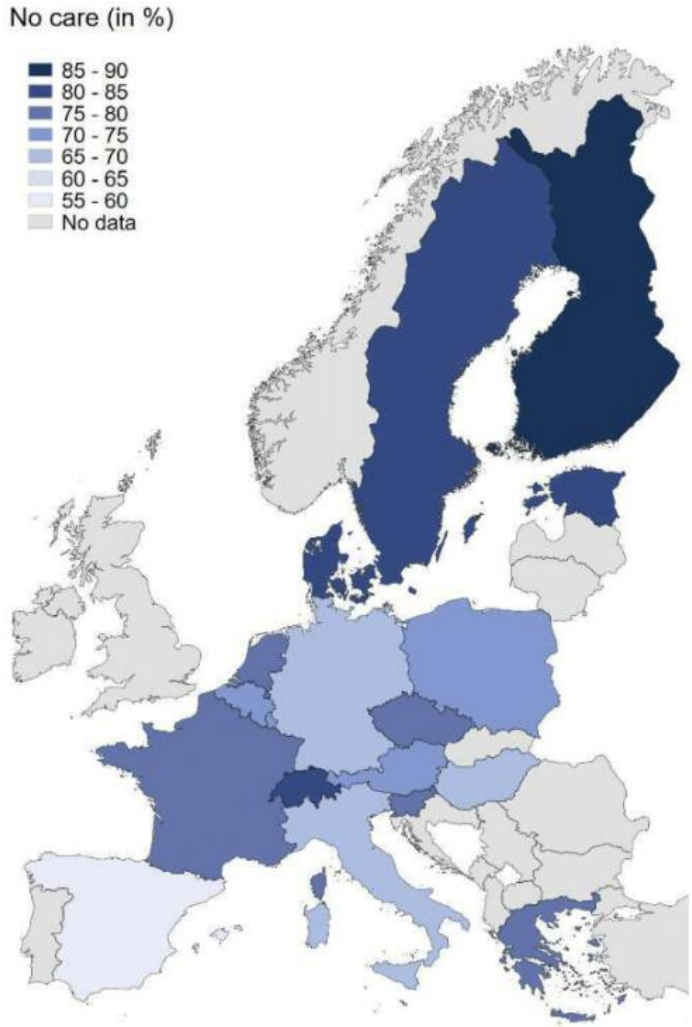
Care use in Europe

- **Informal care remains the predominant type of care** compared to formal or mixed care, yet the extent to which a country resorts to informal care varies considerably across Europe (exclusive informal care use ranging between 5 and 30%).
- While the **prevalence of informal care is relatively high in Southern and Eastern European countries**, Western and Northern European countries increasingly resort to formal care when limitations with IADL or ADL are reported.
- **Austria, Germany and Spain** belong to the countries with the highest prevalence of **mixed care**, with a share between 6 and 10%.
- The share of older adults (50+) using no care at all varies considerably across European countries.

Taking a closer look into ‚unmet need'?

- In Denmark, Finland and Sweden the respective share varies between 80 and 90%, while in Italy and Spain it remains between only 55 and 65%.
- While the share of older adults with care needs (1+ IADL) in Denmark, Finland, and Sweden is between 14% and 16%, it is higher in Italy and Spain, ranging from 18% to 24%.
- Using ADL, the proportion of older adults in need is only **9-10%** compared to **12-16%**.
- Similarly, differences exist with respect to the severity of care needs existent

Relative numbers matter, but absolute numbers should also be considered to provide a more comprehensive understanding of both the scale and severity of unmet care needs



Sample: % using no informal or formal care when having 1+ IADL

Individual and country-level barriers in using informal and formal care

- **Wealthier** individuals make **less use of personal care**
  - Less likely to need (intensive) care, thus less reliant on personal care and able to outsource demand to practical household help or postpone personal care use
  - If severe need: more likely to opt out into institutional care (including day centers and care homes)
- **Social resources are crucial** with children playing a greater role for prevention of need and spouses and partners important informal sources when in need
- **Cash-for care** availability (e.g., Austria, Czech Republic, Finland, Germany and Poland) facilitate **mixed care use**
- Fewer restrictions in accessing LTC-related benefits (i.e., the absence of means testing) and greater **state responsibility** (Belgium, Luxembourg, Netherlands, and Sweden) facilitate exclusive **formal care use**

Reducing unmet need…

- Presence of a **spouse or partner** most strongly reduces unmet need (**19.5% decrease in the risk of unmet need)**
- Institutional arrangements of the LTC system turn out not to have a significant effect on unmet need for personal care.
- **Countries with generous pension schemes face significantly lower levels of unmet needs** through improved access to all types of care but in particular formal care.

Note: To draw robust conclusions on unmet need we relied on the use of ADLs (instead of IADL) as they more consistently match the description of personal care use in SHARE

Table 3 Probability of care need (1 + ADL) and overall utilization – Individual- and country-level average marginal effects

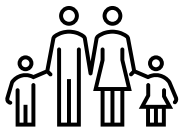
	(Part I) Need for personal care		(Part II) Care use conditional on need		Unconditional care use	
	(1) 1 + ADL		*(2) care utilization*		*(3) care utilization*	
Individual-level characteristics						
Socioeconomic status						
Material resources (ref. 1st wealth quintile)						
2nd wealth quintile	−0.026***	(0.006)	−0.051**	(0.020)	−0.134***	(0.025)
3rd wealth quintile	−0.045***	(0.006)	−0.051**	(0.022)	−0.213***	(0.030)
4th wealth quintile	−0.059***	(0.006)	−0.087***	(0.025)	−0.304***	(0.033)
5th wealth quintile	−0.065***	(0.006)	−0.108***	(0.025)	−0.353***	(0.031)
Human resources (ref. primary education)						
Secondary education	−0.029***	(0.005)	−0.037*	(0.019)	−0.139***	(0.027)
Tertiary education	−0.056***	(0.006)	−0.062**	(0.025)	−0.282***	(0.037)
Social resources						
Has spouse/partner	−0.006*	(0.004)	0.194***	(0.016)	0.149***	(0.019)
Has children	−0.018***	(0.006)	-0.029	(0.025)	-0.095***	(0.035)
Predisposing factors						
Age	-0.013***	(0.002)	-0.027***	(0.010)	-0.077***	(0.014)
Age^2	0.00013***	(0.000)	0.00025***	(0.000)	0.00075***	(0.000)
Gender (female)	-0.009**	(0.003)	-0.018	(0.015)	-0.051**	(0.020)
Country-level characteristics						
LTC policy						
Means testing (ref. none)	−0.006	(0.015)	−0.059	(0.038)	−0.077***	(0.026)
Cash-for-care benefits (ref. in-kind benefits)	0.025*	(0.013)	0.015	(0.036)	0.119***	(0.023)
LTC beds (p. 1000)	0.001	(0.001)	0.003	(0.002)	0.005***	(0.001)
Pension generosity						
Net replacement rate	−0.000	(0.000)	0.003***	(0.001)	0.001**	(0.001)
N	35,547		4246		35,547	

(Bootstrapped) standard errors are in parentheses

*$p<0.10$, **$p<0.05$, ***$p<0.01$

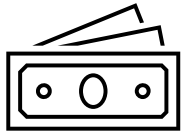
Final remarks I

- Preventive measures designed to reduce socioeconomic disparities may be particularly effective in mitigating potential barriers in accessing informal or formal care services.



Wealth and education significantly reduce disparities in need, the presence of social resources, particularly the presence of a **spouse or a partner**, significantly **reduces** the likelihood of **unmet need**

- While existing LTC policies play a key role in the choice of care type (informal or formal), **pensions could play a greater role in preventing unmet need.**



Countries like Austria, Hungary, Italy, Luxembourg, and the Netherlands exhibit notably high pension net replacement rates, surpassing 80%

Final remarks II

- The current empirical findings likely represent a lower bound for measuring unmet need and its magnitude as they

i) adopt an absolute care poverty approach and

ii) do not fully account for the severity of care needs

★★☆ Implementing a relative care poverty approach would further enhance our understanding of unmet need and its potential drivers

The concept of (unmet) need is central to our understanding of how welfare states design and provide (LTC) policies for older adults.

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References

- Care Utilization in the United States." *The Milbank Quarterly* 83(4):Online-only-Online-only. doi: https://doi.org/10.1111/j.1468-0009.2005.00428.x.
- Broese van Groenou, M., and Alice De Boer. 2016. "Providing Informal Care in a Changing Society." *European Journal of Ageing* 13(3):271–79. doi: 10.1007/s10433-016-0370-7.
- Grossman, Michael. 1972. *The Demand for Health: A Theoretical and Empirical Investigation*. Columbia University Press.
- Kröger, Teppo. 2022. *Care Poverty: When Older People's Needs Remain Unmet*. Cham: Springer International Publishing.
- Kröger, Teppo, Jiby Mathew Puthenparambil, and Lina Van Aerschot. 2019. "Care Poverty: Unmet Care Needs in a Nordic Welfare State." *International Journal of Care and Caring* 3(4):485–500. doi: 10.1332/239788219X15641291564296.
- Lima, Julie C., and Susan M. Allen. 2001. "Targeting Risk for Unmet Need: Not Enough Help Versus No Help at All." *The Journals of Gerontology: Series B* 56(5):S302–10. doi: 10.1093/geronb/56.5.S302.
- Szenkurök, Viktoria, Daniela Weber, and Marcel Bilger. 2024. "Informal and Formal Long-Term Care Utilization and Unmet Needs in Europe: Examining Socioeconomic Disparities and the Role of Social Policies for Older Adults." *International Journal of Health Economics and Management*. doi: 10.1007/s10754-024-09378-z.
- Williams, D. R., null Yan Yu, J. S. Jackson, and N. B. Anderson. 1997. "Racial Differences in Physical and Mental Health: Socio-Economic Status, Stress and Discrimination." *Journal of Health Psychology* 2(3):335–51. doi: 10.1177/135910539700200305.