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28 The social dynamics of unmet need, catastrophic healthcare expenses and satisfaction with health insurance coverage

- Substantial heterogeneity exists in access to healthcare and health insurance coverage across Europe, with Greece and Italy being the countries in Waves 6 and 7 with the most serious deficiencies
- Unmet healthcare needs over the life cycle are most prevalent among former eastern European countries, whereas the educational inequalities in unmet needs are mostly concentrated in southern Europe
- Low-educated, sick or disabled or divorced individuals have a greater risk of suffering from 'chronic' difficulties related to access to care

28.1 Introduction

In this chapter, we investigate how access to healthcare – as a crucial dimension of social inclusion – varies across European countries and over time. To this end, we focus on social inequality in access to healthcare in SHARE Waves 5, 6 and 7 data among the elderly population along three relevant dimensions: subjective unmet need, catastrophic out-of-pocket (OOP) healthcare expenses (relative to annual household income) and dissatisfaction with basic health insurance (HI) coverage.

Using cross-sectional data from SHARE Wave 5, Jürges (2015) has already shown that access to healthcare varies largely across Europe, with Estonia, Italy and Israel being the countries with the most serious deficiencies. The contribution of this chapter is to extend this analysis in several dimensions. By adding data collected in Waves 6 and 7, we are able to not only describe barriers to access to care and health insurance coverage in a larger set of countries but also document unmet need retrospectively (as elicited from the life-history data in Wave 7) and, perhaps more importantly, analyse the dynamics in barriers to healthcare access. An important aspect of our analysis is to understand whether and the extent to which limited access to healthcare is a persistent phenomenon or just transitory, that is, whether the individuals reporting

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unmet need, catastrophic OOP healthcare expenses or dissatisfaction with health insurance coverage in Wave 6 and/or 7 are the same individuals in Wave 5 ('chronic' deficiency) or whether they are different individuals from one wave to another ('temporary' deficiency). Substantial consensus exists that the persistent or long-term share of poverty – among which limited access to healthcare is included – should receive more attention than the temporary share (Biewen, 2006).

To measure subjective unmet need, catastrophic OOP expenses and dissatisfaction with health insurance coverage, we follow Jürges (2015) and, thus, rely on the detailed information collected in the healthcare module. Specifically, regarding subjective unmet need, we asked respondents the following questions: 'Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?'; 'Was there a time in the past 12 months when you needed to see a doctor but could not because you had to wait too long?'; 'In the last twelve months, to help you keep your living costs down, have you postponed visits to the dentist?' In Wave 7, respondents were also asked the following question: 'Was there a time in the past 12 months when you needed medication but could not afford it because of costs?' Regarding OOP expenses, SHARE provides information on respondents' annual out-of-pocket expenses and the corresponding amount of the deductible (if any) for five types of medical care or care-related illnesses: doctor visits, dentist visits including prostheses, prescription and over-the-counter drugs, hospital and other inpatient stays (including temporary stays in nursing homes) and at-home care (personal care, wheels-on-meals and others). OOP expenses are computed as the sum of the deductibles paid, direct payments to healthcare providers and copayments. Moreover, to compare the financial burden of OOP expenses on households across countries, we compute the percentage of annual household income spent out-of-pocket on healthcare. As in Jürges (2015), we use 15 per cent of net annual household income as the threshold to define catastrophic healthcare expenses (see, for example, Wyszewianski, 1986). Finally, the healthcare module contains self-reported information on satisfaction with health insurance coverage. The following question is asked to the respondents: 'Overall, how satisfied are you with your own coverage in your basic health insurance/national health system?'

One important innovation of our analyses is that we use the retrospective interview in SHARE Wave 7, which contains four self-reported questions on unmet need suffered by respondents not only during their adult life but also during their childhood and youth. In particular, respondents were asked whether during their life they '*ever needed to see a doctor but you did not because you could not afford it*', '*ever needed to see a doctor but you did not*

because you could not afford it', '*ever postponed a dentist visit to help you keep your living costs down*' and '*ever foregone taking medication which you could not afford because of cost*'.

28.2 Cross-country differences in unmet need, out-of-pocket expenses and satisfaction with health insurance coverage in waves 6 and 7

In this section, we provide a cross-national comparison of the level of unmet need, catastrophic OOP expenses and dissatisfaction with health insurance coverage among European elderly. In particular, Figure 28.1 illustrates – for each country in Wave 6 – the percentage of respondents who declare at least one unmet need (see Panel A), the fraction of households with catastrophic OOP healthcare expenses (see Panel B) and the proportion of respondents who report dissatisfaction or significant dissatisfaction with the coverage in their basic health insurance (see Panel C). Overall, Figure 28.1 shows that the cross-national heterogeneity in terms of the three indicators is remarkable. For example, approximately 40 per cent of respondents in Greece and Estonia reported at least one unmet need in the last 12 months, whereas in countries with the lowest levels of unmet need, such as Austria and Switzerland, this proportion is approximately 5 per cent. Moreover, although more than 15 per cent of households in Portugal, Poland, Greece, Italy and Israel faced catastrophic healthcare expenses, this proportion drops to less than 5 per cent in a number of countries, including Belgium, Czech Republic, Switzerland, Luxembourg, Germany, France, Denmark and Sweden. Figure 28.1 also shows the presence of a significant gap in terms of dissatisfaction with HI coverage, ranging from approximately 55 per cent in Greece to approximately 5 per cent in Switzerland. However, the countries under investigation are noted as having very different cultural histories, labour market institutions and social characteristics. Such differences may play a relevant role in explaining the substantial heterogeneity in the access to healthcare and health insurance coverage across Europe. At the same time, these cross-country differences can be partly explained by the consequences of the recent financial crisis, which were particularly severe for Greece and the other southern European countries, such as Italy and Portugal.

Figure 28.2 shows a similar pattern of healthcare access in the longitudinal sample of Wave 7 (Note: We drop countries with very few observations in one of the three indicators, including Portugal, Estonia and Croatia).

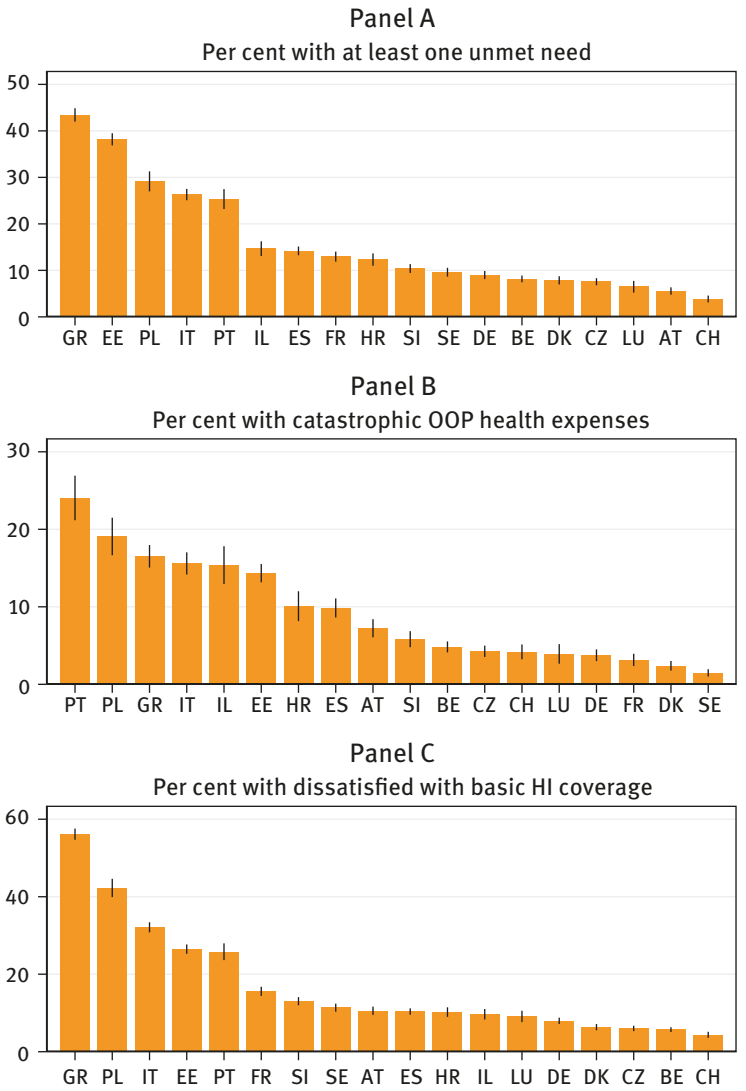

Figure 28.1: Percentage of respondents in Wave 6 reporting at least one unmet need, catastrophic OOP health expenses, dissatisfaction with basic HI coverage, by country. Vertical lines show 95 per cent confidence intervals.
Note: N = 67,226.
Source: SHARE Wave 6 release 6.1.0.

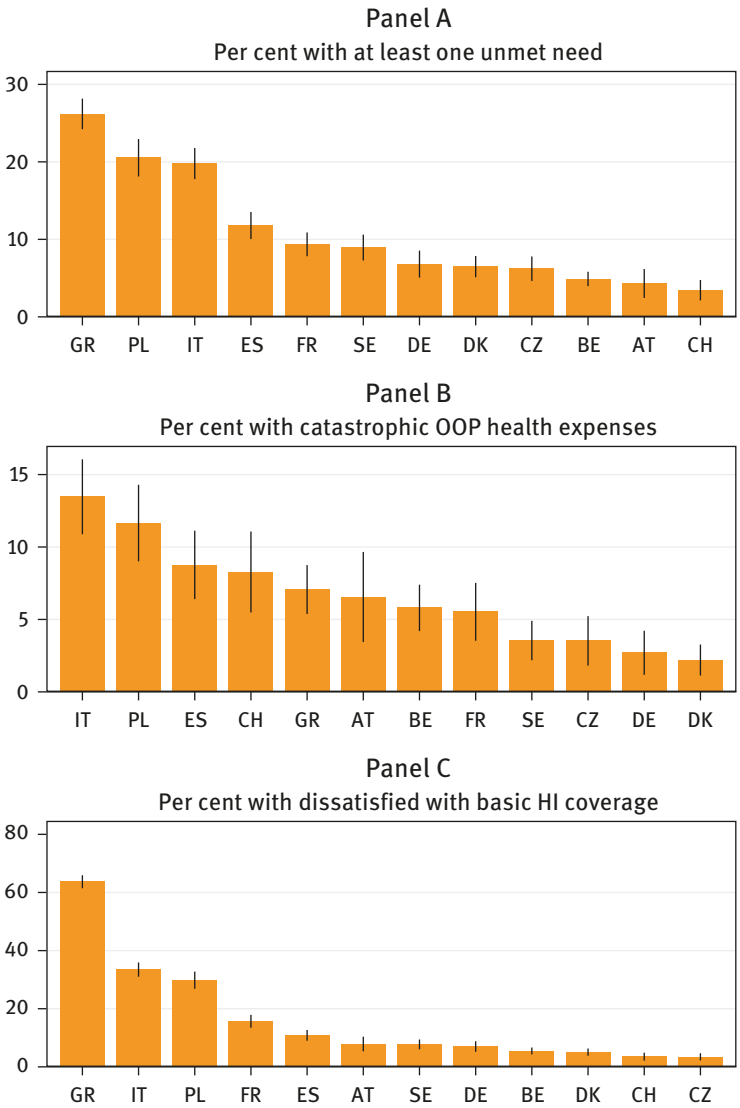

Figure 28.2: Percentage of respondents in Wave 7 reporting at least one unmet need, catastrophic OOP health expenses and dissatisfaction with basic HI coverage, by country. Vertical lines show 95 per cent confidence intervals.
Note: N = 54,824 (longitudinal respondents).
Source: SHARE Wave 7 release 0.

28.3 Cross-country differences in unmet need over the life cycle

Figure 28.3 illustrates the percentage of individuals who reported at least one unmet healthcare need over their life cycle across the SHARE countries, separately for high versus low education for individuals. Countries are first grouped regionally, and then by the average percentage of individuals who reported unmet need. High and low education refers to being in the top versus bottom 50 per cent in terms of educational attainment in a specific country. Education itself was measured by the ISCED 1997 classification.

The data show substantial differences in reported unmet healthcare needs across the SHARE countries, overall and within the four European regions. Overall, respondents in the former eastern European countries report the highest levels, but the range is broad. For example, the country with the largest proportion of reported unmet need is Romania (37%), whereas the three countries with the lowest proportions are the Czech Republic (9%), Slovenia (9%) and Slovakia (7%). Interestingly, the median country in this group (Poland) has similar levels of unmet need (22%) as countries with the highest levels in the three other European regions.

In southern Europe, the country with the highest level of unmet need is Greece (29%), probably reflecting the consequences of its financial crisis. In northern Europe, Finland (24%) stands out in comparison to the other Nordic countries, such as Denmark and Sweden. The lowest levels of self-reported unmet need can be found among the western European countries, but with a substantial gap that ranges from 8 per cent in Austria to 21 per cent in France. The 'top performing' countries in the other three European regions should be noted as having levels of unmet need that are as low as those in Switzerland and Austria.

Whereas educational differences in experiencing unmet need are fairly low in several countries (in 14 out of 27 countries, the educational differences are up to 2 percentage points, which is neither statistically nor substantively significant), a group of countries (i.e. Greece, Italy, Portugal, Luxembourg, Israel and Bulgaria) present substantial inequalities in unmet healthcare needs, ranging from 7 percentage points in Luxembourg and Portugal to 10 percentage points in Israel. Taken together, this evidence suggests that educational inequalities in access to healthcare are mostly concentrated in southern European countries.

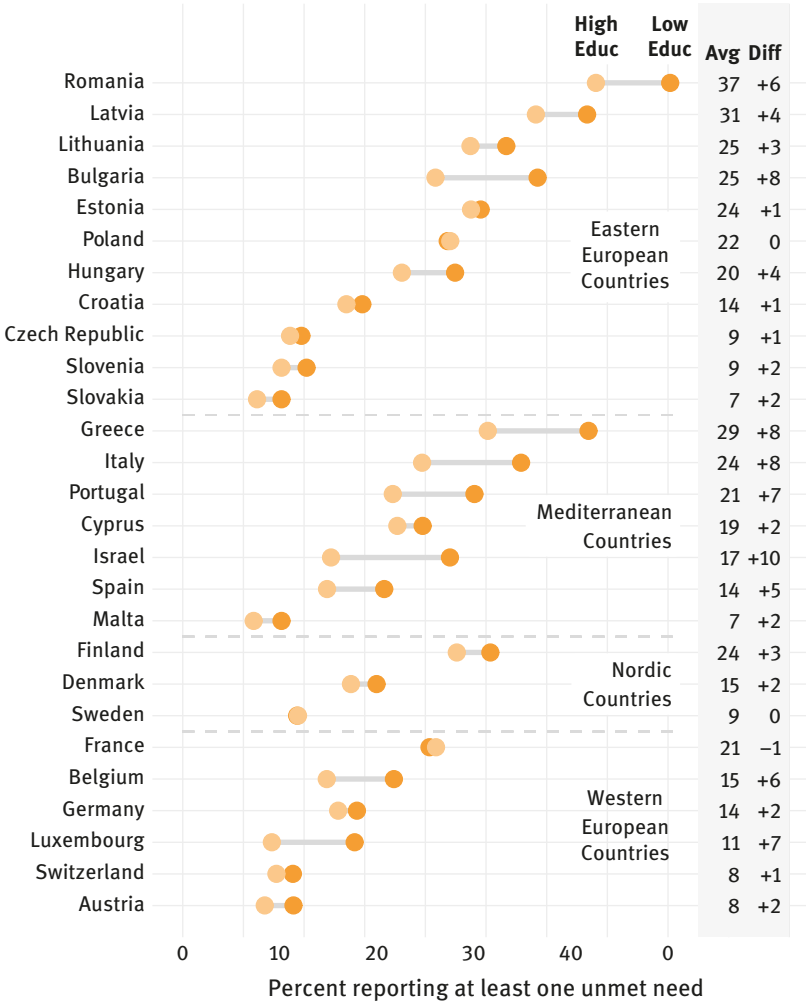

Figure 28.3: Percentage of respondents in Wave 7 reporting at least one unmet healthcare need over their life, by country and educational attainment. Low and high education are measured by the relative within-country rank (bottom versus top 50 per cent of sample respondents). Confidence intervals around proportions are approximately plus/minus 2 percentage points.
Note: N = 73,578 observations.
Source: SHARE Wave 7 release 0.

28.4 Individual predictors of unmet need, out-of-pocket expenses and satisfaction with health insurance

In Table 28.1, we use Waves 5, 6 and 7 and report the estimates of the effects of a set of individual covariates on our outcomes of interest, that is, unmet need (see columns 1 and 2), catastrophic OOP healthcare expenses (see columns 3

Table 28.1: Individual predictors of unmet need, catastrophic OOP health expenses and dissatisfaction with basic HI coverage.

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome:	**Unmet need**		**Catastrophic OOP expenses**		**Dissatisfaction with HI**	
Group:	**One wave**	**Two or three waves**	**One wave**	**Two or three waves**	**One wave**	**Two or three waves**
Female	1.311***	1.219***	1.044	1.062**	1.118***	1.108***
	(0.040)	(0.023)	(0.036)	(0.029)	(0.042)	(0.021)
Having a child	1.237***	1.196***	0.875**	0.815***	1.042	1.014
	(0.070)	(0.042)	(0.054)	(0.038)	(0.074)	(0.036)
Never married – ref.						
Married	0.711***	0.707***	1.485***	0.922	0.841*	0.966
	(0.057)	(0.031)	(0.138)	(0.059)	(0.086)	(0.044)
Divorced	1.012	1.432***	1.375***	1.138*	1.174	1.254***
	(0.094)	(0.071)	(0.150)	(0.083)	(0.139)	(0.064)
Widowed	0.886	0.817***	1.270**	1.039	0.759**	0.929
	(0.079)	(0.041)	(0.133)	(0.073)	(0.087)	(0.048)
Low-educated – ref.						
Medium-educated	0.815***	0.755***	1.023	0.958	1.008	0.992
	(0.029)	(0.016)	(0.043)	(0.030)	(0.044)	(0.022)

Table 28.1 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome:	**Unmet need**		**Catastrophic OOP expenses**		**Dissatisfaction with HI**	
Group:	**One wave**	**Two or three waves**	**One wave**	**Two or three waves**	**One wave**	**Two or three waves**
Highly educated	0.740***	0.770***	0.884***	0.838***	0.856***	0.847***
	(0.031)	(0.020)	(0.040)	(0.031)	(0.043)	(0.023)
Other employment – ref.						
Retired	0.875	0.577***	1.069	0.703***	0.760**	0.760***
	(0.102)	(0.040)	(0.155)	(0.074)	(0.102)	(0.059)
Employed	0.756**	0.491***	0.719**	0.519***	0.753**	0.833**
	(0.094)	(0.035)	(0.108)	(0.057)	(0.108)	(0.067)
Unemployed	1.788***	1.323***	0.969	0.718**	1.010	1.164
	(0.259)	(0.110)	(0.196)	(0.100)	(0.186)	(0.109)
Sick or disabled	1.599***	1.379***	1.172	1.344**	1.239	1.278***
	(0.223)	(0.110)	(0.211)	(0.160)	(0.208)	(0.116)
Homemaker	0.839	0.717***	1.049	0.778**	0.854	0.863*
	(0.104)	(0.052)	(0.165)	(0.087)	(0.122)	(0.072)
Observations	102,927	102,927	70,153	70,153	98,431	98,431

Note: Multinomial logit estimations; relative-risk ratios reported. The referent group is given by zero waves. Robust standard errors are reported in parentheses. All regressions include age indicators (in 10-year intervals), wave dummies and county fixed effects.
Significance: *** = 1%; ** = 5%; * = 10%.
Source: SHARE Wave 5 and 6 release 6.1.0; Wave 7 release 0.

and 4) and dissatisfaction with basic health insurance coverage (see columns 5 and 6). These outcomes may occur in different groups of waves, which we operationalize as follows: no waves (referent group), one wave (see columns 1, 3 and 5) and more than one wave (see columns 2, 4 and 6). Importantly, by considering people who reported any condition in two or three waves, we aim to provide an assessment of the individuals who face 'chronic' difficulties in

healthcare access and, thus, shed light on the persistent phenomenon of limited access to healthcare.

Specifically, each equation is estimated using a multinomial logit model, and the results are presented in terms of relative risk ratios.

What emerges is that, irrespective of the chosen outcome, highly educated individuals (ISCED ≥ 5, tertiary education) are significantly less likely to report deficiencies in healthcare access. Notably, this result also holds for the respondents who reported any condition in two or three waves, thereby suggesting that low-educated people have a greater risk of suffering from 'chronic' deficiencies in access to healthcare. We interpret this result as evidence that education plays a key role in explaining the lasting inequalities in access to healthcare services.

We also find that employed people exhibit a substantially lower probability of suffering from persistent unmet needs, catastrophic OOP expenses or being dissatisfied with basic HI coverage. In contrast, being sick or disabled is positively associated with these outcomes, especially for individuals who reported the condition in two or three waves. Divorced individuals appear to be at greater risk of reporting 'chronic' difficulties in healthcare access, suggesting that family disruptions represent a relevant determinant of our outcomes. Consistent with this idea, we find that being married reduces the likelihood of reporting unmet need and being dissatisfied with HI coverage, although the effect on catastrophic OOP expenses varies between one versus two or three waves and is significant only in the former case. Moreover, females appear to be particularly vulnerable to insufficient access to healthcare services.

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