Social exclusion, welfare regime and unmet long-term care need: evidence from SHARE

Social exclusion contributes to the unmet need for long-term care
Welfare regimes modify the relationship between social exclusion and unmet long-term care
Countries in the Eastern European welfare regime seem to be most at risk on this issue
Policymakers should focus more strongly on the consequences of social exclusion when developing long-term care policy

17.1 Social exclusion and unmet need for long-term care

In this chapter we explore the relationship between social exclusion in its different components (economic, social, spatial, health care) and the long-term care of older people. We look specifically at the factors that are related to the extent of unmet care needs. The construct “unmet care need” is defined here as a situation in which people need long-term care, due to disability, but are not in receipt of any care, either formal or informal. Our goal is to clarify whether social exclusion predicts such unmet need and, as such, has an adverse effect on conditions of living in late life.

Long-term care is an emerging key issue in discussing the social inclusion or exclusion of the older population in modern European society. As noted by Theobald (2005), since the 1990s approaches to the care of older people have undergone considerable restructuring processes in most Western European countries. Providing care for older people is increasingly complicated by the aging of the population and by the concomitant changes in the size and the shapes of families (Rener et al. 2006). A further challenge arises from changes in the work arena. First, the retirement age is rising and correspondingly, working life is being extended. Second, more women (the traditional informal caregivers) now participate in the work force, reducing the potential pool of informal carers for dependent older persons. The availability of informal carers is also challenged by the decrease in the average number of children per family and the
increase in the number of single people and reorganised families. Furthermore, formal care and its financing becomes an ever more pressing problem due to the expected increase in the number of people who will need care in the future (see e.g. Motel-Klingebiel et al. 2005). For these reasons, cross-national econometric studies of the relationship between formal and informal care for older adults in Western European countries have become a booming field, as stated by Suanet and colleagues (2012).

Due to the changes mentioned above, the question of receiving high quality care is increasingly relevant. Yet, an important related question that has received much less attention concerns who is excluded from receiving any long-term care at all. Also less studied is the question of what contributes to situations of unmet long-term care need. Of specific interest in this regard is whether social deprivation, or exclusion, is a concomitant of unmet long-term care. Clarification of this issue is difficult because, as stated by Theobald (2005), “despite various attempts to clarify the concept, ‘social exclusion’ is still criticised as incoherent and elusive, which diminishes its analytical capacity”.

A pivotal characteristic of the concept of social exclusion is its assumption of multidimensionality. Kronauer (1997), for example, lists several different dimensions, in which processes of social exclusion may occur: 1) economic exclusion, e.g. problems in attaining a sufficient standard of living; 2) institutional exclusion, e.g. problems of access to public institutions and objects; 3) cultural exclusion, e.g. exclusion due to expectations related to certain groups in a society; 4) social exclusion, e.g. problems with social relationships; and 5) spatial exclusion, e.g. problems with segregation of living spaces. Blackman et al. (2001) have applied the concept of social exclusion to the issue of old age and to the arena of care for older people. The starting point of their analysis is the definition of an ageing process as the interaction of genetic, environmental, cultural and social factors, thus reflecting the multidimensional and cumulative character of the process. Hence, in their definition of social exclusion in old age, they combine a broad range of dimensions, which, as a consequence, leads to a complex and elusive concept.

In the analysis that is reported in this chapter, we use the SHARE Wave 5 dataset to consider the correlation between social exclusion and unmet long-term care. We also take into account the role of the welfare system in the association between social exclusion and unmet long-term care (following the classification of Esping-Andersen 1990), because it is known that levels of social exclusion vary among welfare regimes (Ogg 2005). Specifically, studies have shown that the social exclusion of older people is higher in Mediterranean and Eastern European welfare regimes, whereas sociodemocratic and continental welfare regimes seem to better address the needs of the most vulnerable. We expect these regime
differences to be visible when observing the need for long-term care among older people, despite the fact that Mediterranean and Eastern European countries have higher use of informal care which offsets the relative lack of formal care (Suanet and colleagues 2012).

Drawing upon the explanations presented thus far, our main hypothesis to verify is that people who suffer from social exclusion are more likely to have “unmet needs” for long-term care, unmet needs being defined following Gannon and Davin (2010) as people who need care (e.g. have functional limitations or ADL/IADL problems) yet do not receive either formal or informal care. We also examine whether this relationship depends upon the type of welfare system.

17.2 Description of the study

In our study we use the SHARE Wave 5 dataset which was made available for 15 participating countries (Austria, Germany, Sweden, Netherlands, Spain, Italy, France, Denmark, Switzerland, Belgium, Israel, Czech Republic, Luxembourg, Slovenia, Estonia) and includes interviews of 64,966 participants aged 50+ and their spouses of any age. We limited the sample to respondents aged 65 and older, insofar as we are interested in long-term care needs which arise relatively late in life. The final analytic sample thus numbered 34,357 respondents.

Two dependent variables are addressed and they include the need for long-term care and unmet need for long-term care. Their mode of measurement is described next. “Need for care” is defined as a dummy variable having the value of 1 if the respondent reports having two or more limitations in Activities of Daily Living and/or Instrumental Activities of Daily Living, and a value of 0 otherwise. “Unmet need” is defined as a dummy variable having the value of 1 if the respondent has need for care (see previous variable) but receives neither formal care nor informal care in any of their forms, and a value of 0 if otherwise.

Key independent variables are related to social exclusion: “material deprivation” is a generated index which measures the extent of material difficulties of households – e.g. affordability of various items, being behind with bills; this variable ranges between 0 and 1. “Social deprivation” is a generated index which measures the extent of social deprivation of households – e.g. local area quality, number of rooms per person, lack of activities; this variable ranges between 0 and 0.89. Finally, “severe deprivation” is a binary indicator for the households which are most deprived (i.e. in the highest/worst quartile) in both dimensions. We will mainly use “severe deprivation” in our analysis as a composite measure for social exclusion.
The main independent variable in the study is “welfare regime”. It encompasses the following categories: 1 – continental (Austria, Germany, Netherlands, France, Switzerland, Belgium, Luxembourg); 2 – social democratic (Sweden, Denmark); 3 – Mediterranean (Spain, Italy); 4 – Eastern European (Czech Republic, Slovenia, Estonia); 5 – mixed (Israel). Dummy variables were constructed for each welfare regime. The Eastern European regime grouping served as the reference category in the multivariate procedure. In addition, we employed terms of interaction between the welfare regime dummies and the severe deprivation variable (see chapter 6 in this volume).

Several socioeconomic control variables were also taken into account. These included: age (4 categories: 65–69 years of age; 70–74 years of age; 75–79 years of age; and 80 or higher years of age); gender (0-male; 1-female); income categories (bottom, middle and upper tertile of income per household member relative to incomes of other respondents in a given country); and education (the highest achieved level of education: primary or less; secondary; tertiary). All of the variables with more than two answer categories were recoded as dummies (1.0).

Several functional health variables were also considered. A dummy for functional limitations has the value of 1 if a respondent has two or more functional limitations and a value of 0 if otherwise. A dummy for memory capabilities has the value of 1 if a respondent is ranked in the bottom quartile judging from the number of recollected words (from 10 listed) and a value of 0 if otherwise. We also employed a dummy for depression which has the value of 1 if a respondent has a score of 4 or more on the Euro-D Depression scale, and a value of 0 if otherwise.

The main analytical method of our inquiry is regression analysis, namely Heckman’s probit model with sample selection (with reference to its usage in Gannon & Davin 2010). The latter is used as a correction device for sample selection in the two-stage construction of the dependent variable: in the first stage we identify who are the respondents with need for care and in the second stage who are the ones who don’t receive any form of formal or informal care. The validity of our procedure was confirmed by the results of a Likelihood-Ratio test of independent equations which was strongly significant in all specifications.

We begin the presentation with the main descriptive statistics about our two dependent variables: need for care and unmet need for long-term care (Figure 17.1). The graph shows that countries in the Mediterranean, Eastern European and mixed welfare regimes have significantly higher proportions of people with need for care than the countries that belong to the social democratic and several of the countries that constitute the continental welfare regime. Furthermore, countries from the Eastern European (except the Czech Republic), mixed and the Mediterranean welfare regimes are the apparent leaders in percentage of people
with unmet long-term care needs. The highest scoring countries in this regard are Estonia and Slovenia, with the latter being particularly notable insofar as its ratio of people with unmet needs to those with need for long-term care is the largest.

Figure 17.1: Percentage in need and unmet long-term care need by welfare regime and country
Notes: Observations: 34,357; Welfare regimes: soc dem – social democratic; Medit – Mediterranean; East Eur – Eastern European; mix – mixed
Source: SHARE Wave 5 release 0

17.3 Factors related to unmet need for long-term care

In the following section we analyse the relationship between social exclusion and long-term care (need and unmet need) by means of econometric methodology. We present the results of two statistical models. Model 1 examines the correlates of unmet long-term care need among the following variables: age categories, gender, income tertiles, education categories, severe deprivation and additional (functional health and social) variables. Model 2 adds the dummy variables for welfare regimes as well as interaction variables between the welfare regime dummies and the severe deprivation.
The results of Model 1 show that the coefficient of the severe deprivation is significant and positive after controlling for the confounders. This confirms our hypothesis on the significance of social exclusion for the problems of unmet need for long-term care: the more someone is socially excluded, the higher is the probability of not receiving the care he/she needs. Among the health related predictors, both the depression and functional limitations measures emerge as significant: the more that someone is depressed or functionally limited, the higher is the probability of not receiving the needed care. Also, the coefficient on memory is insignificant (a finding robust to many different specifications of the memory variable).

Model 2 adds the welfare regime specifics. The results confirm the findings from Model 1, retaining all the same significant variables in the direction of association that was noted previously. In addition, Model 2 shows that welfare regime differences can be observed. When considering only the basic welfare regime dummies, a significant difference can be seen between the continental and social democratic regime and the reference category – the Eastern European regime. The first two have apparently lower probabilities of problems with unmet needs for long-term care than the latter. The coefficients on Mediterranean and mixed regime are of the same sign, but are not significant. On the other hand, most of the coefficients on the interaction variables are statistically insignificant, with the only exception of the mixed welfare regime, being represented by Israel, which apparently has a lower contribution of severe deprivation to the probability of unmet needs than the reference category – the Eastern European regime. This finding can be explained by Israel having a relatively large percentage of formal care as compared to other countries (see e.g. Litwin & Attias-Donfut 2009) while having also one of the largest percentages of socially excluded respondents (see other chapters in this book). The relationship of social exclusion and unmet needs for long-term care in Israel, therefore, seems different than in other SHARE countries which could explain the significance of the interaction variable.
### Table 17.1: Factors associated with unmet long-term care need: Heckman probit models with sample selection

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Standard error</th>
<th>Model 2</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe deprivation</td>
<td>0.1597**</td>
<td>(0.0683)</td>
<td>0.1902*</td>
<td>(0.1023)</td>
</tr>
<tr>
<td>Depression</td>
<td>0.1293**</td>
<td>(0.0651)</td>
<td>0.1495**</td>
<td>(0.0648)</td>
</tr>
<tr>
<td>Functional limitations</td>
<td>0.3139**</td>
<td>(0.1471)</td>
<td>0.3323**</td>
<td>(0.1471)</td>
</tr>
<tr>
<td>Memory</td>
<td>0.0095</td>
<td>(0.0628)</td>
<td>0.0132</td>
<td>(0.0636)</td>
</tr>
<tr>
<td>Welfare regime Continental</td>
<td></td>
<td></td>
<td>-0.2965***</td>
<td>(0.0812)</td>
</tr>
<tr>
<td>Social democratic</td>
<td>-0.2502**</td>
<td>(0.1267)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediterranean</td>
<td>-0.1015</td>
<td>(0.1081)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td>0.0084</td>
<td>(0.2213)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continental X sev.dep.</td>
<td>-0.0922</td>
<td>(0.1761)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social democratic X sev.dep.</td>
<td>-0.4570</td>
<td>(0.5208)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediterranean X sev.dep.</td>
<td>-0.2152</td>
<td>(0.1730)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed X sev.dep.</td>
<td>-0.7846**</td>
<td>(0.3569)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significance: *** = 1%; ** = 5%; * = 10%

Notes: Observations: 21,738; Controlled for age categories (65–69; 70–74; 75–79; 80+), gender, income tertiles and education categories (primary or less; secondary; tertiary).

Source: SHARE Wave 5 release 0

### 17.4 Social deprivation and unmet need: implications for social policy

In this chapter, we analysed the relationship between social exclusion and unmet needs for long-term care. We were able to confirm both of our initial hypotheses, namely that social exclusion adversely contributes to the probability of having an unmet need and that there are observed effects of welfare regimes on the relationship between social exclusion and unmet long-term care need (with a significant difference between the mixed and Eastern European regime). The literature suggests that social exclusion leads to a higher need for care in old age as a result of the accumulation of various disadvantages and limitations over the life course. In the current study, we show that social exclusion, as measured by severe deprivation, also increases the probability of unmet need for long-term care in old age. This underscores the cumulative character of social exclusion and its importance in all life stages.
The function of the welfare state is to address the needs of all citizens, including the most vulnerable. This includes compensating for the lack of individual resources in order to ensure the provision of long-term care in old age. Based on the results of our study, we see that welfare regimes differ in their ability to mitigate the need for long-term care among the most vulnerable of their older members. More specifically, we show that the countries within the Eastern European welfare regime seem to have the least success in ensuring long-term care for socially excluded older people. In comparison, most of the other welfare regimes seem to address the long-term care needs of vulnerable older people more successfully, irrespective of the different social policy mechanisms used in these particular regimes (Esping-Andersen 1990, Ogg 2005).

We should note that a limitation of the present study is that not all welfare mechanisms are covered in the research design. Further analysis can and should reveal which components of the welfare regimes and their policy mechanism are vital for addressing the need for long-term care of the most vulnerable older members of society.

On the basis of the current study, we suggest that policymakers should be more aware of the different dimensions of social exclusion and their relationship to the long-term care of older people. Insofar as we demonstrated the adverse effect of social exclusion on the receipt of needed long-term care, it is therefore important to monitor the extent of social exclusion in a given country and to try to reduce its effect. Furthermore, special attention should be devoted to problems of social exclusion when forming and adopting the needed older care policies, especially in Eastern European countries.

References

