How does gender moderate the association between marital status and nursing home entry in Europe?

A panel analysis of data from SHARE (2004-2020)

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Abstract

To the best of our knowledge, no study has focused on how marital status could play a role in nursing home admissions across 28 European countries, with a specific focus on differences between genders. This article will therefore focus on the following research question: how does gender influence the association between marital status and nursing home entry in Europe? Using data from eight waves of the Survey of Health, Ageing and Retirement in Europe (SHARE), we were able to follow 137,785 individuals aged 50 and over from 2004 to 2020 (404,706 observations). Preliminary results from random-effects linear probability models suggest that individuals living with a partner, whether through marriage or registered partnership, have a lower risk of entering a nursing home compared to those who are widowed, divorced, never married, or married but living apart. Interestingly, this trend appears to be consistent between men and women. In further developing our research, we aim to investigate in greater depth how the association between marital status and nursing home entry varies between different European countries.

Keywords: nursing home entry, marital status, gender, Europe

Introduction

Several social and economic factors influence the entry of older adults into nursing homes. Among them, marital status is of particular importance (Casanova 2021; Luppa & al. 2010). This is particularly relevant in light of some recent demographic and societal changes – such as the rise of "silver splits", i.e., divorces and union dissolutions at older ages (Alderotti et al., 2022; Office for National Statistics, 2017; Raley and Sweeney, 2020) and the increasing social inequalities between and within European countries (Bernardi et al., 2021).

Luppa et al. (2010) only points to a small effect of marital status on nursing home entry. However, they studied Western countries before 2010. Because of family transformations of the last decades, we believe that it would be appropriate to refine and update their research on European countries with regard to the relationship between marital status and nursing home entry. In particular, we will address the following research question: *How does gender moderate the association between marital status and nursing home entry in Europe?* To our knowledge, there has been no recent study specifically focused on the association between marital status and nursing home entry for people aged 50 and over in Europe. However, it is crucial to know how marital status influence nursing home entry, as the proportion of older people in Europe is increasing significantly and dependency rates could be critical in some countries. Studying how marital status affects entry into nursing homes will enable us to better understand this phenomenon and to match older people's needs. SHARE longitudinal database is well suited to the task, as it allows us to follow individuals over time at the European level. Moreover, the use of a linear probability model seems optimal in this case (and this will be developed in the methodology section).

Theoretical framework and hypotheses

Marital status and nursing home entry

It has been shown that informal help received by older people varies by marital status (Kwak & al.; 2020). Unpartnered individuals receive informal help mainly from their children (Kwak & al.; 2020). For married men, 90% of informal help comes from their wives (Glaubert, 2017), while married women often rely on a wider range of informal care sources (Kwak et al., 2020), but still receive help mainly from their husbands. This assistance amounts to 80% of total assistance (Glaubert, 2017). We can therefore assume that the fact that informal care is provided differently according to marital status has an impact on the need for formal care, such as entering a nursing home. Furthermore, according to a study by Kwak & al. (2020), single people are less likely to seek informal help than married people. It is therefore plausible that single people will need more formal care and therefore enter nursing homes earlier.

This is confirmed by studies showing that marital status is important in assessing the risk of entering a nursing home (Casanova 2021; McCann 2011; Noël-Miller, 2010). A longitudinal study of people aged 65 and over in the United States, based on data from the Health and Retirement Study (HRS), suggests that widowed people are more likely to enter a nursing home than married people (Casanova, 2021). In addition, unmarried people, whether divorced, widowed or never married, face a higher risk of nursing home admission than their married counterparts (Casanova, 2021; MacCann, 2011; Noël-Miller 2010).

The moderating role of gender

The association between marital status and nursing home entry may differ by gender for several reasons. This could be explained by the fact that women are more likely to turn to their family for help

in times of need and therefore rely more on informal care and are less likely to enter a nursing home than men (Kwak et al., 2020). Another possible explanation is that women, particularly in more traditional societies, have fewer economic opportunities and therefore fewer resources to access formal care (Colombo & al.; 2011).

Empirically, an American study of people aged 50 and over (Kwak & all; 2020) shows that unpartnered Americans woman living alone are more likely to receive informal care than their male counterparts. Among married people, men and women have the same likelihood of receiving informal care, which is higher than among unpartnered people. In addition, Noël-Miller (2010) and MacCann (2011) find that the impact of the loss of a spouse on nursing home entry is more pronounced for husbands than for wives. Widowers are twice as likely to enter a nursing home than those who have not lost their wives. For women, however, the risk of entering a nursing home is similar for those who are married and those who have lost their spouse. MacCann (2011) finds a similar trend for divorced people. According to this author, divorced men are more likely to enter a nursing home than married men, while for women the difference between divorced and married is less pronounced. Thus, as Casanova (2021) points out, "marital status has a differentiated impact on the risk of admission to a nursing home depending on gender".

Hypotheses

The literature allows us to formulate two hypotheses. In the first hypothesis, we suggest that unpartnered people are more likely to move into a nursing home than those living with a partner. In the second hypothesis, we assume that unpartnered men are more likely to move into a nursing home than unpartnered women.

Data and methods

Sample

This work is based on data from eight waves of the Survey of Health, Ageing and Retirement in Europe (SHARE). We were able to follow 140,125 individuals aged 50 and over from 2004 to 2020 (412,110 observations) in 28 European countries. Our sample is composed of 43.5% men and 56.5% women.

Variables

The dependent variable of the study identifies whether the respondent stayed in a nursing home during the year preceding the survey. More specifically, it is a dichotomous variable indicating whether the individual stayed in a nursing home (temporarily or permanently) or not (0 = not being in a nursing home; 1 = being in a nursing home). The main independent variables are gender (0 = men; 1 = women) and marital status (0 = “married and living together with the spouse”, 1 = “married and not living with the spouse”, 2 = “registered partnership”, 3 = “divorced”, 4 = “never married”, and 5 = “widowed”. Our preliminary regression models also included the level of education, based on ISCED-97 (“low”, “medium”, and “high”), age (6 categories), and country of residence.

Methods

To investigate the relationships between marital status and nursing home transitions, we use random-effects linear probability models (LPMs). Random-effects models adjust for the within-person correlation resulting from using multiple observations from the same individual (Halaby 2004). LPMs

allow us to make a straightforward comparison of the coefficients of stratified models estimated separately for men and women (Mood 2010).

Preliminary results

Table 1 shows that only 0.46% of people aged 50 and over had stayed in a nursing home in the year preceding the survey, compared with 0.67% of people aged 65 and over. Regarding marital status, 69% of people of our sample are married and live with their spouse, 1% of individuals are legally cohabiting, 1% are married but not living with their spouse, 5% have never been married, 8% are divorced and 16% are widowed.

Table 2 shows the results from a series of random-effects LPMs. Preliminary results indicate that marital status affects admission to a nursing home, but that there is no difference between men and women. The coefficients associated with this variable are relatively low. This may be attributed in part to the fact that, among people aged 50 and over, a limited proportion of the sample had resided in a nursing home in the year prior to data collection. Nevertheless, it is important to emphasise that this does not mean that marital status has no effect on nursing home entry. Marital status seems to exert a more marked influence on admission to a nursing home than level of education.

More specifically, it appears that registered partnership and married people living with their spouse have a similar probability of entering a nursing home (coefficients of "legally cohabiting" exhibit no statistically significant differences from the reference category "married living with the spouse"). Moreover, when we look at women, never married have the highest increase in probability of entering a nursing home when compared with the reference category (0.7 percentage points higher than married woman living together), followed by widows (0.5 percentage points higher than married woman living together), those who are married but do not live with their spouse (0.4 percentage points higher), and divorced people (0.3 percentage points higher). For men, those who have never been married and widowers have the highest increase in probability of admission (0.6 percentage points more than married men living together), followed by individuals who are married but live separately from their spouse (0.4 percentage points), and divorced individuals (0.3 percentage points more than married men living together). It should be noted that, overall, individuals living without a spouse (married not living with a spouse, widows, and single individuals) have a higher probability of entering a nursing home compared to married individuals living with their spouse, and there is no substantial difference between men and women.

Conclusions and next steps

In line with the previous literature (e.g., Casanova 2021), the preliminary findings from this study suggest that marital status is associated with nursing home admission. This corroborates our first hypothesis suggesting that unpartnered people are more likely to transition into a nursing home than those living with a spouse. On the other hand, our second hypothesis, suggesting that the association between marital status and nursing home admission would vary according to gender, is not supported by the data. Therefore, at the European level, we find that marital status is associated with entry into a nursing home for people aged 50 and over, and that this effect is substantively the same for men than for women. The next stage of this work will be to examine how this association varies across different European family and care regimes (Albertini and Pavolini 2017; Esping-Andersen 1999; Saraceno and Keck 2010).

Tables

Table 1 Description of the variables used in the analyses

	Freq.	%
stay in nursing home		
No	369.898	91,44
Yes	1.698	0,42
Missing values	32.919	8,14
Marital status		
Married and living together with spouse	254.758	62,98
registered partnership	5.227	1,29
married, living separated from spouse	4.402	1,09
Never married	19.857	4,91
Divorced	30.260	7,48
Windowed	60.210	14,88
Missing values	29.801	7,37
education		
Low education	151.093	37,35
Medium education	141.143	34,89
High education	79.233	19,59
Missing values	33.046	8,17
Age		
50-59 year	106.068	26,22
60-69 year	141.487	34,98
70-79 year	103.804	25,66
80-89 year	47.073	11,64
90-99 year	5.974	1,48
100 year and more	109	0,03
Missing values	0	0
Gender		
Male	178.297	44,08
Female	226.218	55,92
Missing values	0	0

Table 2 Linear probability models

	Men			woman		
	coefficient	p-value	95% CIs	coefficient	p-value	95% CIs
Statut matrimonial						
Married, living together						
Married, living separeted	0,004	0,01	0,001 ; 0,008	0,004	0,04	0,000 ; 0,008
Registered partnership	0,001	0,78	-0,003 ; 0,004	0,001	0,57	-0,003 ; 0,005
Never married	0,006	0,00	0,004 ; 0,008	0,007	0,00	0,005 ; 0,009
Divorced	0,003	0,00	0,001 ; 0,005	0,003	0,00	0,001 ; 0,004
Windowed	0,006	0,00	0,005 ; 0,008	0,005	0,00	0,004 ; 0,006
Control variables		*YES*			*YES*	

Note: All models control for the following confounding factors: education, age, country of residence.

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