

PREDICTORS OF SATISFACTION WITH LIFE IN FAMILY CARERS: EVIDENCE FROM THE THIRD EUROPEAN QUALITY OF LIFE SURVEY¹

Abstract. This research aimed to identify predictors of satisfaction with life in family carers. Evidence from the literature and from the Third European Quality of Life Survey (years 2011–2012) led to the construction of a model which was tested through linear regression analysis. The results corroborate findings from previous studies identified in the literature, showing that married and employed carers with higher education, those with fewer difficulties making ends meet with their household income and those who are healthier have higher levels of satisfaction with life. Carers that participate in physical and social activities and have larger informal social support networks also have higher levels of satisfaction with life. Those reporting difficulties finding time to see a doctor for their own health due to their caregiving role and those experiencing difficulties in accessing formal long-term care have lower satisfaction with life. Policies aiming at balancing care and other activities, such as work, respite and activities in other life spheres, may have an important influence on informal carers' quality of life.

Keywords: *informal care, family carers, satisfaction with life, linear regression, European Quality of Life Survey*

Introduction

The global older population (aged 60 years or over) increased from 9.2% in 1990 to 11.7% in 2013 and is expected to reach 21.1% by 2050. In 2013,

* Deborah Cristina de Oliveira, PhD student, School of Health Sciences, University of Nottingham; Valentina Hlebec, PhD., Professor, Faculty of Social Sciences, University of Ljubljana.

¹ This paper was partially financed by the Slovenian Research Agency research programme, P5-0200Quality of Life of Social Groups.

The authors are grateful to Robert Anderson and Eszter Sandor (Living Conditions and Quality of Life [LCQL], European Foundation for the Improvement of Living and Working Conditions) and the anonymous reviewers for their comments on earlier versions of the paper.

there were 841 million older people worldwide, and this number is likely to increase to more than 2 billion by 2050, exceeding the number of children for the first time in 2047 (United Nations, 2013). Chronic and degenerative diseases are more common among older people and are the leading costs in health and social care (Lehnert et al., 2011). For example, £26.3 billion has been spent every year on costs involving dementia care in the UK (Kane and Terry, 2015). Apart from the financial costs to society, family members often assume the full-time responsibility of care for the older adult, carrying out all the activities that the older person can no longer perform independently and often receiving little support (NIA, 2005). Family carers are therefore forced to set their own life and interests aside in order to provide care, which can have a significant impact on their quality of life (QoL) and well-being (Kane and Terry, 2015).

Current statistics suggest that there was an increase of 600,000 unpaid carers between 2001 and 2011, totalling approximately 5.8 million people providing unpaid care and support for family members or friends that are frail, ill or disabled across England (White, 2013). Because the number of people over 85 is expected to increase by 50% over the next 10 years, it is estimated that the number of carers will increase by around 60% in the next 30 years (White, 2013). Similar trends are expected in other European countries as well. Approximately 50% of all family carers are older people themselves, often spouses and/or co-residents with the care recipient that provide care at home (Schneider et al., 1999). Caring for a dependent family member can be a complex and demanding task; studies have shown that while it is rewarding for many, this role can be very burdensome and stressful (García-Alberca et al., 2014; Adelman et al., 2014).

Because of this burden, most of the available literature has been focused on the negative aspects of being a carer and their impact on carers' mental health, physical health and social life. However, there has been a shift in this evidence in recent years as researchers have started to demonstrate the presence of positive aspects of caregiving and the potential for health professionals to help carers to cope with this experience. Evidence has shown that there are positive aspects of caregiving which contribute to satisfaction with life (SWL), meaning and psychological well-being (Carbonneau et al., 2010; Lloyd et al., 2014). Researchers have thus questioned which carers under what circumstances are resilient or able to maintain well-being while also caring for others.

Research focused solely on the negative aspects of caregiving has therefore been criticized (Carbonneau et al., 2010) and has prevented the development of a better understanding of coping and the factors that influence it (Folkman and Moskowitz, 2000). Even though the importance of investigating the positive aspects of caregiving has been demonstrated, little research

has focused on these outcomes. In order to fill this gap, the current study focused on the predictors of SWL among family carers in Europe by using data from the European Quality of Life Study (EQLS), a survey of the QoL of the European population carried out in 34 countries in 2012. The structure of the paper is as follows: we begin with an extensive literature review and then present the data set, methods of analyses, interpretations of results and discussion.

Literature Review on Satisfaction with Life

Satisfaction with life (SWL) is considered one of the components of the multidimensional construct of QoL and one of its key outcome variables. It concerns individuals' evaluation of their lives and how they feel about where they are going in the future. It is a component of subjective well-being, together with the other positive and negative affect components (Diener, 1984). Because SWL is a cognitive factor concerning individuals' judgment about their lives, it reflects past experiences, present reality and future perspectives in life. It reports more than just how an individual feels about a specific experience at the present moment; it incorporates an overall evaluation of life as a whole. Several factors can mediate this judgment, such as personality, income, education, levels of cognition, environment etc. In family caregiving, low levels of SWL have been associated with decreased likelihood of care-recipient outpatient visits for both primary and mental health care (Thorpe et al., 2009) and predicted levels of carers' physical health (Reizer and Hetsroni, 2015). In order to identify predictors of SWL in family carers, we conducted a broad literature review utilizing a systematic approach², the results of which are presented in the following subsections.

Factors associated with socioeconomic conditions and levels of support

The socioeconomic status of family carers and how much support is available for these individuals appear to have a strong impact on their own SWL. Carers with higher educational levels (Kaye, 2001), more social

² A search was completed in October 2015 in Medline, PsychINFO, Embase and Google in order to identify studies investigating the life satisfaction of family carers and the variables predicting this outcome. The following key terms were utilized in this search and were adapted according to each database: (exp life satisfaction/ OR satisfaction with life.mp. OR SWLS.mp. OR SWL.mp.) AND (family caregiver\$.mp. OR exp Caregivers/ OR family carer\$.mp. OR carer\$.mp. OR informal carer\$.mp. OR informal caregiver\$.mp. OR family caregiving.mp.). No search limits were applied. The preliminary search resulted in 1,135 documents. After screening by title and abstract, 154 possibly relevant documents were identified. These publications were read in their entirety and 120 articles investigating the life satisfaction of family carers were selected. The variables hereafter presented were selected according to the predictors that were also available in the EQLS in order to enable the statistical analysis.

resources available or higher income are more satisfied with their lives than those in greater need of economic support, social resources or community support (Leibach et al., 2014) or those who are unemployed (Bergstrom et al., 2015). Having a good level of social and family support (Tomomitsu et al., 2014; Abu-Raiya et al., 2015) and being satisfied with the social support received (Hammerling et al., 2008) are among the variables more frequently associated with higher levels of SWL in family carers. In particular, receiving emotional support appears to be a strong positive predictor (Doyle et al., 2013). Those who feel more able to engage with social activities and/or are more satisfied with their social involvement (Morlett-Paredes et al., 2014) are also more satisfied with their lives compared to those who perceive a reduction in their leisure activities (Schuz et al., 2015).

Carers who have access to respite (Chou et al., 2008) are also more satisfied than those who cannot access respite care (Moreno et al., 2010), even though carers of people receiving formal care may not be so satisfied (Boumans and Deeg, 2011). Being married (Athay, 2012) and having high family or marital satisfaction and cohesion are positive predictors (Santos et al., 2014), whilst some negative family dynamics can contribute negatively to satisfaction levels (Sutter et al., 2014). Moreover, older carers appear to be more satisfied than younger carers (Anderson et al., 2013) and female carers and spouses tend to have lower overall SWL than male carers and non-spouses (Rafnsson et al., 2015).

Some variables were found to mediate the relationship between SWL and predictors and are thus important to integrate both top down and bottom up into a model of SWL (Au et al., 2006). Among them, social support emerged as one of the strongest variables positively mediating the relationship between negative predictors and SWL (Ergh et al., 2003). Good levels of social support appear to buffer the negative effects of neurobehavioral disturbances and the care recipient's unawareness of his or her own limitations (Ergh et al., 2003), whilst high levels of family cohesion seem to buffer the negative impact of burden on SWL (Santos et al., 2014). When low perceived support is available, high levels of family-to-work conflict negatively affect carers' satisfaction (Li et al., 2015).

Physical health, mental health and psychological adaptation to caregiving

Being healthier, having fewer physical limitations, perceiving one's health status as positive or having high vitality and lower stress levels are factors associated with greater SWL. Carers with lower ability in self-care have lower SWL (Forsberg-Warleby et al., 2004). Not having previous diagnoses of an emotional, behavioural or substance use disorder also appear to be

positively related to SWL outcomes (Athay, 2012). On the other hand, overall poor physical and mental health status or perceived poor health can lead to low SWL (Tomomitsu et al., 2014). More specifically, high levels of stress symptoms (Fuentes, 2013), anxiety (Besier et al., 2011), depression (Chang et al., 2013; Tomomitsu et al., 2014), strain (Dahlrup et al., 2015), poor sleep quality (Tomomitsu et al., 2014) and an overall perception of being in emotional, physical, psychological and sleep need (Villasenor-Cabrera et al., 2010) are associated with lower SWL in family carers.

Involvement in spiritual or religious practices very often can preserve SWL levels (Calvo et al., 2011; Abu-Raiya et al., 2015). Additionally, a range of psychological mechanisms appear to be involved in carers' positive or negative SWL outcomes. For example, feeling able to cope effectively and having a more deliberative approach to coping seem to favour SWL (Sun et al., 2010; Sequeira, 2013). Furthermore, those carers who have a more positive affect (Lopes et al., 2012) and experience higher levels of pleasure (Hsieh and Lo, 2013) are also more satisfied. However, some coping mechanisms to deal with stressful situations can reduce SWL (Wells et al., 2005), such as having a passive coping style (Boerboom et al., 2014), avoidance coping (Sun et al., 2010) or avoidant-evasive and regressive coping strategies (Wright et al., 1991).

Furthermore, having a more positive appraisal of caregiving (Kim et al., 2007; Roscoe et al., 2009), especially those who considered it less as a stressful or threatening experience (Haley et al., 2003), also seem more satisfied. Feeling more confident and optimistic and having an overall sense of control over their caregiving role (Sutter et al., 2015), which was also evidenced by higher levels of a sense of mastery (Roscoe et al., 2009; Smeets et al., 2012), self-efficacy (Chang et al., 2013) and a sense of coherence (Forsberg-Warleby et al., 2002), lead to greater satisfaction. The same is also true for those who find meaning and subjective benefits from caregiving (Pakenham, 2008; Brandstatter et al., 2014). On the contrary, feelings of uncertainty or anxiety about the illness of the care recipient (Sabella, 2008; Waldron-Perrine et al., 2009) and viewing the caregiving situation as uncontrollable (Kershner-Rice, 2011) can reduce SWL. Having introjected motives (Kim et al., 2008) and perceiving a conflict between roles within caregiving can also be negative factors (Schacke and Zank, 1998).

Carers who have a more positive view about themselves (Kim et al., 2007; Kruithof et al., 2012) or are more empathic (Kim et al., 2007) also had better levels of SWL and of happiness and subjective well-being. Being able to accept and adapt to their new life as carers (Chang et al., 2013) and having high levels of flexibility (Sutter et al., 2015) and resilience (Naslundemail et al., 2009) also made a positive contribution to SWL. This might explain the fact that carers providing care for longer periods in their lives appear

to have higher levels of SWL in two studies (Ostwald, 2008; Perkins et al., 2011); however, being a carer for longer periods in life can also decrease SWL as the care recipient's functioning is likely to decline, while home caregiving is likely to continue (Vignola et al., 2008). Carers who perceive changes in their lives due to caregiving (Perren et al., 2006) and those who have trouble adapting their lives to their carer role may be dissatisfied with their lives (Chang et al., 2013). Likewise, high levels of rumination (Romero-Moreno et al., 2015) and having dysfunctional or ineffective social problem-solving abilities, problem orientation or lack of motivation to solve problems (Bambara et al., 2009) may generate life dissatisfaction.

Factors related to caregiving and care recipients

The burden level is the caregiving factor most frequently associated with low levels of SWL in family carers (Bergstrom et al., 2011; Kruithof et al., 2012; Perrin et al., 2013; Santos et al., 2014; Fianco et al., 2015). Other variables that also have a negative impact on SWL are the care recipient's advanced age (Sequeira, 2013); being considered a primary (Kershner-Rice, 2011) or frequent carer (Borg and Hallberg, 2006; Stevens et al., 2013); rising caregiving levels (Reizer and Hetsroni, 2015); the care recipient having higher levels of disability/dependency (Forsberg-Warleby et al., 2004; Visser-Meily et al., 2005) or being in an advanced disease stage (Visser-Meily et al., 2008) and caring for someone with a long-term disease (Haley et al., 2015).

Living with the care recipient also decreases SWL (Stengard and Salokangas, 1997), especially in dementia care (Ask et al., 2014), which is probably due to the fact that these carers provide more intensive care and have fewer breaks from their carer role. However, giving up the carer role (Reizer and Hetsroni, 2015) or having the care recipient residing in a nursing home (Ask et al., 2014) surprisingly appear to have a negative impact on carers' SWL. Carers are more satisfied when the cared for have lower levels of cognitive impairment (Kaye, 2001), fewer symptoms and better QoL and sleep quality (Baumann et al., 2012). Sleep disturbances (Brissos et al., 2013) and the nature and severity of symptoms presented by the care recipient (Athay, 2012; Baumann and Bucki, 2013; Baumann et al., 2012) negatively affect carers' SWL.

Those carers who have a good relationship with their cared for have better levels of SWL (Ostwald, 2008; Iecovich, 2011), whilst carers who are unaware of their own dependency of care have lower levels of satisfaction (Hammerling et al., 2008; Waldron-Perrine et al., 2009). Carers who feel able to help their loved ones feel more comfortable, needed and wanted (Kuupelomaki et al., 2004) were more satisfied with their lives, whilst those carers of people suffering pain or with poor general health (Coleman et al.,

2013) had lower SWL. Finally, carers who experience a lower impact of the care recipient's disease in their everyday life (Bergstrom et al., 2011) or who provide less care (lower burden) are more satisfied (Kershner-Rice, 2011). However, an international multicentre study carried out in European countries showed that carers providing personal care are significantly more satisfied with life than those helping solely with housework (Schneider and Kleindienst, 2015).

Moderating factors

Ethnicity and self-efficacy mediate the impact of stress on SWL (Cuellar, 1998). Likewise, self-esteem and positive caregiving experiences may also have a positive mediating effect between burden and SWL (Kruithof et al., 2012). Subjective stressors may negatively mediate the relationship between objective stressors and SWL (Goetzinger, 2009), while carer strain mediates the relationship between symptom severity and SWL (Michele Athay, 2012). Finally, the impact of caregiving on SWL may also be mediated by carer age, while the impact of finding meaning in life on SWL may also be mediated by carer age (Ang and O, 2012).

The current study

The literature investigating the SWL of family carers is extremely diverse. Differences are noticed in the topics of study; illnesses of care recipients (stroke, cancer, dementia, learning disabilities, trauma etc.); units of observation (caregivers or dyads); place of study; research design; set of variables included; relationship between carers and care recipients and carer age. The current study utilized EQLS (2011–2012), which also considered carers of people with any diseases; those in different caregiving relationships; those from different socioeconomic backgrounds and those living in different countries. The SWL model created and tested in the present study was in fact identified in this literature review (top down). However, because the dataset is limited to the variables investigated in the survey, the variables identified in the literature were selected according to the variables available in the dataset (bottom up). Limitations owing to a predesigned set of indicators prevent us from including all relevant factors in the statistical model. Namely, factors related to the relationship between the caregiver and the care recipient, care recipients' characteristics, detailed subjective evaluation of caregiver burden and coping style are not available in the EQLS data set.

Aim and Objectives

The aim of this study is to explore which relevant factors have a significant influence on SWL in family carers in Europe by using data from the EQLS. Based on the literature review and the availability of indicators in the EQLS data set, we explored the impact of sociodemographic characteristics of family carers (such as gender, age, marital status, education levels, financial status of the household), hours of care per week, involvement with other activities outside caring and sources and quality of support on the SWL of family carers.

Method

The EQLS is a cross-national and cross-sectional survey conducted every 4 years across all EU Member States and applicant non-EU countries; therefore, in 2011–12 it included 27 Member States as well as Croatia, Iceland, Kosovo, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey³. For the present study, we utilized data from the 27 EU member states and Croatia. For results representing⁴ the whole EU, such as in our study, weights need to be applied to reflect the size of a country's adult population relative to the EU adult population to correct for underrepresentation of larger countries. These weights include the selection of probability weight and the post-stratification weight.

Characteristics of the sample

In order to identify the population of informal carers in the total EQLS sample, we considered the participants' answers to the following question: "In general, how often are you involved in any of the following activities outside of work? – Caring for elderly or disabled relatives (response options: from 'every day' to 'never'). Only respondents who provided care at least once or twice a week were selected for analysis (n = 4,941). Multiple linear regression analysis was used to identify the influence of independent variables identified in the literature and investigated in the EQLS (Table 1) on carers' SWL. The results from this analysis were checked by the EQLS study group in Ireland.

³ It comprises a multi-stage, stratified and randomized sample of all residents aged 18 or older. The study is questionnaire-based, with interviews conducted face to face in people's homes in the national language(s) of each country. The 2011–2012 cohort has sample sizes ranging from 1,000 to 3,000 participants in each country, with a total of 43,636 interviews after completion of fieldwork.

⁴ 3rd European Quality of Life Survey. Technical Report. Working document for The European Foundation for the Improvement of Living and Working Conditions. Prepared by GfK EU3C <http://www.eurofound.europa.eu/eqls-2012-weighting>.

Table 1. INDEPENDENT VARIABLES SELECTED FROM THE EQOLS FOR THIS STUDY.

Group	Variable	Response options
Characteristics of the carer	Gender	0 - Female; 1 - Male
	Age	Number of years of age
	Marital status	0 - Other; 1 - Married or living with partner
	Employment	0 - Not employed; 1 - Employed
	Education	0 - Other; 1 - Tertiary or more
	Financial status - measured by asking the following: <i>Thinking of your household's total monthly income, is your household able to make ends meet?</i>	1 - With great difficulty; 2 - With difficulty; 3 - With some difficulty; 4 - Fairly easily; 5 - Easily; 6 - Very easily
	Health status - measured by <i>subjective evaluation of individual's health</i>	1 - Very bad; 2 - Bad; 3 - Fair; 4 - Good; 5 - Very good
Being limited in daily activities by physical or mental health problems, illness or disability	0 - No / Yes to some extent; 1 - Yes, severely	
Objective burden	Hours of care per week	1-5 (1), 6-10 (2), 11-20 (3), 21 + (4)
Activities outside care	Participating in sports or physical exercise	1 - Never; 2 - Less often 3 - One to three times a month; 4 - At least once a week; 5 - Every day or almost every day
	Participation in the social activities of a club, a society or an association	1 - Never; 2 - Less often; 3 - One to three times a month; 4 - At least once a week; 5 - Every day or almost every day
	Volunteering index - Sum of answers to the following questions: Please look carefully at the list of organizations and answer the following: How often did you do unpaid voluntary work through the following organizations in the last 12 months? In community and social services; Educational, cultural, sports or professional associations; Social movements or charities; Political parties, trade unions; Other voluntary organizations.	0 - Not at all; 1 - Less often/ occasionally; 2 - Every month; 3 - Every week
	Last time you saw a doctor, what factors made it difficult? - We used the following options: Finding time because of work and care for children or for others.	0 - Not difficult at all/A little difficult; 1 - Very difficult

Group	Variable	Response options
Sources of support	Family members	Number of people in the household
	Social support: measured by the index to 6 questions as the sum of informal support sources (response categories: A member of your family/relative; A friend, neighbour or someone else who does not belong to your family or relatives) -> size of informal support network. <i>From whom would you get support in each of the following situations? For each situation, choose the most important source of support:</i> - <i>If you needed help around the house when ill.</i> - <i>If you needed advice about a serious personal or family matter.</i> - <i>If you needed help when looking for a job.</i> - <i>You were feeling a bit depressed and wanting someone to talk to.</i> - <i>If you needed to urgently raise a large sum of money.</i>	A member of your family/relative; A friend, neighbour or someone else who does not belong to your family or relatives; A service provider, institution or organization; Nobody. Values 0-6
	Experiencing barriers when using formal care - measured by an index of four questions: <i>To what extent did each of the following factors make it difficult or not for you, or someone close to you, to use long-term care services?</i> - <i>Cost</i> - <i>Availability (e.g. waiting lists, lack of services)</i> - <i>Access (e.g. because of distance or opening hours)</i> - <i>Quality of care</i>	Sum of response options very difficult
Country	EU15/EU13 (post-2004 member states)	EU15 = 1, EU13 = 0

Results

On average, informal carers have high levels of SWL (average of 7 on a scale of 1 to 10) (n = 4,941). Most of them are women (59%), with 48.4 years of age on average. They are mostly married or living with a partner (60%); about half (51%) are employed; 22% have tertiary or higher education and about 50% report difficulties making their household's ends meet (mean = 3.5). On a scale from 1 to 5 (very bad to very good), subjective health is rated 3.7 on average, and only 6% are severely limited in their daily activities due to health problems or disability.

Family carers provide 12.5 hours of care per week on average. More than half (53%) participate in sports activities less than one to three times a month; more than two-thirds (69%) participate in social activities with the same frequency; about 60% do not participate in volunteering activities and 7% found

it very difficult to visit a doctor because of work and having to care for children or for others. Family carers live in households with 2.7 people on average; on average, they have an informal network size of 3.3 (range 0 to 4); 82% could raise money in an urgent situation from their informal support network and 90% of family carers did not report using of long-term care services.

Table 2. RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS (N = 4,941).

	b	β
Constant	2.939	
Gender: 0 - Female, 1 - Male	-.208	-.048 ^b
Age	.007	.045 ^b
Marital status: 0 - Other, 1 - Married or living with a partner	.443	.100 ^c
Employment: 0 - Not Employed, 1 - Employed	.240	.056 ^c
Education: 0 - Other, 1 - Tertiary or more	.190	.037 ^a
Making ends meet with household income	.459	.267 ^c
Subjective evaluation of health	.281	.118 ^c
Being limited in daily activities by physical or mental health problems, illness or disability: 0 - Other, 1 - Yes, severely	-.181	-.020
Hours of care per week	-.051	-.028 ^a
Participate in sports or physical exercise	.105	.076 ^c
Participate in the social activities of a club, a society or an association	.062	.037 ^a
Volunteering index	-.026	-.029
Last time you saw a doctor, what factors made it difficult? Finding time because of work, care for children or for others: 0 - Other, 1 - Very difficult	-.381	-.049 ^b
Number of people in the household	-.017	-.011
Size of informal support network	.124	.060 ^c
Experiencing barriers when using formal care index	-.203	-.069 ^c
Country group	.180	.034 ^a
<i>F</i> = 58.256, <i>p</i> = 0.000 * <i>a</i> ≤ 0.05; ** <i>b</i> ≤ 0.01; *** <i>c</i> ≤ 0.001; <i>R</i> ² = 0.194		

Source: European Foundation for the Improvement of Living and Working Conditions, European Quality of Life Survey, 2011–2012 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], January 2014. SN: 7316, <http://dx.doi.org/10.5255/UKDA-SN-7316-2>. Own calculations.

Together, the variables included in the model explain 19% of the variability in SWL of informal carers across the different countries. Nearly all demographic characteristics of carers have a significant influence on their SWL. Contrary to expectations, male carers had lower SWL than women by 0.208, while being married or living with a partner increases SWL by 0.443. Being employed significantly increases SWL by 0.240, while having higher education (0.190), having less difficulties meeting ends with household income (0.459) and having better perceived health (0.281) all have a similarly positive effect.

On the other hand, reporting severe difficulties in daily life activities because of one's own illness or disability does not have an independent significant effect on SWL. Increasing age of caregiver would significantly increase SWL when taking all determinants into account at the same time (0.007).

Objective burden, measured in grouped hours of care per week, did have a significant negative and independent effect on SWL (-0.051). Other variables measuring involvement in other activities, apart from volunteering activities—such as being physically active, being active in social activities and being limited in caring for one's own health—were significantly associated with SWL levels. Participating in sports or physical exercise increased SWL by 0.105 and participation in social activities increased it by 0.062. Reporting significant difficulties the last time carers had to see a doctor owing to work or caring for their children or for others decreased SWL by 0.381.

In getting support from others, two variables demonstrated a significant influence on SWL. The number of household members was not significant and SWL decreased as the number of household members increased. On the other hand, the size of one's informal social support network significantly increases SWL by 0.124. Experiencing difficulties when using or seeking to use formal long-term services had a significant negative effect on the SWL of informal carers (-0.203). Family carers in old EU Member States have significantly higher SWL (0.180).

Rating predictors of SWL based on the magnitude of their importance (rating of β 's) shows that the most important predictor of SWL is making ends meet with household income, followed by subjective evaluation of health and living with a partner. The first three predictors are followed by reported participation in sports or physical exercise; being able to easily access formal long-term care services in the previous 12 months; being employed; having larger informal social support networks and being able to take care of one's own health. Some of these indicators are individual and cannot be influenced or changed by social policy measures. Others—such as organizing accessible long-term care for older people living in the community; organizing respite care for informal carers to enable such carers to take care of their own health; being able to participate in activities outside informal care (such as sports or social activities) and enabling family carers to balance work and care—are the most important aspects for carers' SWL which can be influenced by social policy.

Conclusion

There are several advantages in using secondary data sets such as EQLS for studying the QoL of family carers, such as the large sample size for family carers; the abundance of indicators measuring QoL in numerous objective

and subjective areas; the investigation of several factors potentially influencing SWL; the high measurement quality of the data set and open access for use by researchers. Nevertheless, there are also considerable limitations of using such data sets, which have to be made explicit. The sample sizes of family carers across the investigated countries are small, which therefore prevents in-depth analysis of family carers' samples within countries. Consequently, we are unable to address cross-country variability in a more complex statistical model such as the one used in this study.

Differences in results across countries could be due to different health and social support systems, different cultures, living conditions etc. For example, the analysis of EQLS data carried out by Eurofound, in which European countries were divided into clusters, showed that family carers in the most developed European countries had been less involved with care provision than in less developed countries, demonstrating that perhaps formal sources of care were more often involved in the former group (Anderson, 2015). Future exploration of family carers' SWL should therefore address differences across countries in a more systematic way by, for example, grouping the countries by long-term care system classifications.

Moreover, using secondary data sets prevents the utilization of all theoretically relevant variables in statistical models, as the dataset is not focused on carers' specific matters. In order to systematically address the SWL of family carers by taking into account all dimensions indicated in the literature, some important characteristics were missing, such as quality of the relationship between carers and the cared for; the length of care and the provision of care with regards to the geographical distance between carer and the dependent person. Finally, the subjective burden was not measured, nor was how participants perceived their social life as being limited by the caregiving activities. Regardless of these limitations, this study confirms some important theoretical expectations provided in previous studies. It also provides further directions for the analysis of SWL in informal carers and ideas for measures that can be used to maintain or improve SWL.

Numerous studies have documented the negative impact of the care burden on the SWL of family carers (Bergstrom et al., 2011; Kruithof et al., 2012; Perrin et al., 2013; Santos et al., 2014; Fianco et al., 2015). Our study corroborated the negative influence of the care burden on the SWL of family carers, but the effect was not very strong. A plausible explanation is that not all dimensions of the care burden, such as intensity of care and duration of care, were measured in the EQLS survey. Furthermore, we are assuming that the interference of care with other spheres of life, especially employment or limiting carers' own health care, would decrease SWL for family carers. These effects were significant in the explored statistical model.

The number of household members is an indirect indicator of the

availability of an informal support network and the potential for shared care among members of a household. Larger number of potential informal carers would also allow primary carers to take respite when needed. The impact of the number of household members on SWL was not significant. It seems that having someone (e.g. a family member, friend or neighbour) to rely on for social support—such as help around the house when ill; getting advice about a serious personal or family matter; getting help when looking for a job or having someone to talk to when feeling a bit depressed—would increase SWL. This result indicates that the availability of support for family carers may also come from outside the household from a broader social support network and that it is important for family carers to maintain such social contacts.

Getting help from formal long-term services may be important for the organization of informal care and the SWL of family carers, especially when care becomes more demanding. Our results confirm that carers experiencing great difficulties in accessing long-term services have lower SWL. However, the organization of high-quality formal care for older people living in their own homes and support for informal carers are core issues social policy makers have to address in relation to the ageing of the population. Our results indicate that these are areas in family care that can and should be addressed by social policy.

BIBLIOGRAPHY

- Abu-Raiya, Hisham, Liat Hamama and Fatima Fokra (2015): Contribution of religious coping and social support to the subjective well-being of Israeli Muslim parents of children with cancer: A preliminary study. *Health Social Work* 41(1): 7–15.
- Adelman, Ronald D., L. Tmanova, Lyubov, Diana Delgado, Sarah Dion and Mark S. Lachs (2014): Caregiver burden: A clinical review. *JAMA* 311(10): 1052–1059.
- Anderson, Lynda A., Valerie J. Edwards, William S. Pearson, Ronda C. Talley, Lisa C. McGuire and Elena M. Andresen (2013): Adult caregivers in the United States: characteristics and differences in well-being, by caregiver age and caregiving status. *Prev Chronic Dis.* 15(10): E135.
- Anderson, Robert (2015): Carers and employment in the EU. 6th International Carers Conference 2015. Gothenburg, Sweden [Prejela od Avtor].
- Ang, Rebecca P. and O. Jiaqing (2012): Association between caregiving, meaning in life, and life satisfaction beyond 50 in an Asian sample: Age as a moderator. *Social Indicators Research* 108(3): 525–534.
- Ask, Helga, Ellen M. Langballe, Jostein Holmen, Geir Selbaek, Ingvild Saltvedt and Kristian Tambs (2014): Mental health and wellbeing in spouses of persons with dementia: the Nord-Trøndelag Health Study. *BMC Public Health* 14(413): 1–12.
- Athay, Mary M. (2012): Caregiver life satisfaction: relationship to youth symptom severity through treatment. *Journal of clinical child and adolescent psychology: the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*(41): 433–444.

- Au, A., P. Leung, I. Chan, I. Lam, P. Li, R. Chung, L. M. Po and P. Yu (2006): Correlates of Life Satisfaction in HIV Caregivers in Hong Kong. *Journal of Psychology in Chinese Societies* 7(1): 63–82.
- Bambara, Jennifer, Cynthia Owsley, Virginia Wadley, Roy Martin, Chebon Porter and Laura E. Dreer (2009): Family caregiver social problem-solving abilities and adjustment to caring for a relative with vision loss. *Investigative Ophthalmology & Visual Science* 50(4): 1585–1592.
- Baumann, Michéle and Barbara Bucki (2013): Lifestyle as a health risk for family caregivers with least life satisfaction, in home-based post-stroke caring. *Health Policy*. 9 (Spec Issue): 98–111.
- Baumann, Michéle, Sophie Couffignal, Etienne Le Bihan and Narkasen Chau (2012): Life satisfaction two-years after stroke onset: The effects of gender, sex occupational status, memory function and quality of life among stroke patients (Newsqol) and their family caregivers (Whoqol-bref) in Luxembourg. *BMC Neurol.* 12(105): 1–11.
- Bergström, Aileen L., Gunilla Eriksson, Lena von Koch and Kerstin Tham (2011): Combined life satisfaction of persons with stroke and their caregivers: associations with caregiver burden and the impact of stroke. *Health Qual Life Outcomes*. 9(1): 1–11.
- Bergström, Aileen L., Lena von Koch, Magnus Andersson, Kerstin Tham and Gunilla Eriksson (2015): Participation in everyday life and life satisfaction in persons with stroke and their caregivers 3–6 months after onset. *Journal of Rehabilitation Medicine* 47(6): 508–515.
- Besier, Tanja, Anja Born, Gerhard Henrich, Andreas Hinz, Quittner, A. Lutz and Goldbeck (2011): Anxiety, depression, and life satisfaction in parents caring for children with cystic fibrosis. *Pediatric Pulmonology* 46(7): 672–682.
- Boerboom, Wendy, Esther A. C. Jacobs, Ladbou Khajeh, Fop Van Kooten, Gerard Ribbers M. and Majanka H. Heijnenbrok-Kal (2014): The relationship of coping style with depression, burden, and life dissatisfaction in caregivers of patients with subarachnoid haemorrhage. *J Rehabil Med.* 46(4): 321–326.
- Borg, Christel and Ingalill R. Hallberg (2006): Life satisfaction among informal caregivers in comparison with non-caregivers. *Scandinavian Journal of Caring Sciences*, 20(4): 427–438.
- Boumans, Jenny and Dorly J. H. Deeg (2011): Changes in the quality of life of older people living at home: does type of care play a role? *Tijdschr Gerontol Geriatr.* 42(4): 170–183.
- Brandstätter, Monika, Monika Kogler, Urs Baumann Veronika Fensterer, Helmut Kuchenhoff, Gian D. Borasio and Martin J. Fegg (2014): Experience of meaning in life in bereaved informal caregivers of palliative care patients. *Supportive Care Cancer* 22(5): 1391–1399.
- Brissos, Sofia, Pedro Afonso, Fernando Canas, Julio Bobes, Ivan Bernardo Fernandez and Carlos Guzman (2013): Satisfaction with Life of Schizophrenia Outpatients and Their Caregivers: Differences between Patients with and without Self-Reported Sleep Complaints. *Schizophrenia Research and Treatment* 13(502172): 1–3.

- Cavo, Andrea, Cristina Moglia, Antonio Iliardi, Stefania Cammarosano, Sara Gallo, Antonio Canosa, Enza Mastro, Anna Montuschi and Adriano Chio (2011): Religiousness is positively associated with quality of life of ALS caregivers. *Amyotrophic Lateral Sclerosis* 12(3): 168-171.
- Carbonneau, Helene, Chantal Caron and Johanne Desrosiers (2010): Development of a conceptual framework of positive aspects of caregiving in dementia. *Dementia* 9(3): 327-353.
- Chang, Ae-Kyung, James Park and Sohyune R. Sok (2013): Relationships among self-efficacy, depression, life satisfaction, and adaptation among older Korean adults residing in for-profit professional nursing facilities. *Journal of Nursing Research* 21(3): 162-169.
- Chou, Yueh-Ching, Ping-Yi Tzou, Cheng-Yun Pu, Teppo Kroger and Wan-Ping Lee (2008): Respite care as a community care service: Factors associated with the effects on family carers of adults with intellectual disability in Taiwan. *J Intellect Dev Disabil.* 33(1): 12-21.
- Coleman, Jennifer A., Leia A. Harper, Paul B. Perrin, Silva L. Olivera, Jose A. Peromo, Jose A. Arango and Juan C. Arango-Lasprilla (2013): Examining the relationships between health-related quality of life in individuals with SCI and the mental health of their caregivers in Colombia, South America. *Int J Rehabil Res.* 36(4): 308-14.
- Cuellar, Norma G. (1998): A comparison of caregiving self-efficacy, stress, social support, coping, depression, and life satisfaction among African-American and White-American female caregivers of elder bedbound patients. UMI: 118p.
- Dahlrup, Beth, Henrik Ekstrom, Eva Nordell and Solve Elmstahl (2015): Coping as a caregiver: a question of strain and its consequences on life satisfaction and health-related quality of life. *Archives of Gerontology Geriatrics* 61(2): 261-270.
- Diener, Ed (1984): Subjective Well-being. *Psychological Bulletin* 95(3): 542-575.
- Doyle, Sarah T., Paul B. Perrin, Culce M. Diaz Sosa, Jove Irma G. Espinosa, Gloria K. Lee and Juan C. Arango-Lasprilla (2013): Connecting family needs and TBI caregiver mental health in Mexico City, Mexico. *Brain injury* 27(12): 1441-1449.
- Ergl, Tanya C., Robin A. Hanks, Lisa J. Rapport and Renee D. Coleman (2003): Social support moderates caregiver life satisfaction following traumatic brain injury. *Journal of Clinical Experimental Neuropsychology* 25(8): 1090-1101.
- Fianco, Andrea, Raffaella D. G. Sartori, Luca Negri, Saverio Lorini, Giovanni Valle and Antonella D. Fave (2015): The relationship between burden and well-being among caregivers of Italian people diagnosed with severe neuromotor and cognitive disorders. *Res Dev Disabil.* 39: 43-54.
- Folkman, Susan and Judith T. Moskowitz (2000): Positive Affect and the Other Side of Coping. *American Psychologist* 55(6): 647-654.
- Forsberg-Warleby, Gunilla, Anders Moller and Christian Blomstrand (2002): Spouses of first-ever stroke victims: Sense of coherence in the first phase after stroke. *Journal of Rehabilitation Medicine* 34(3): 128-133.
- Forsberg-Warleby, Gunilla, Anders Moller and Christian Blomstrand (2004): Life satisfaction in spouses of patients with stroke during the first year after stroke. *Journal of rehabilitation medicine* 36(1): 4-11.

- Fuentes, Charlene J. (2013): Satisfaction with life for parents of children with autism [Online]. US: ProQuest Information & Learning US. Dostopno preko: http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:3517237 (20. 10. 2015).
- Garcia-Alberca, Jose M., Jose P. Lara, Victoria Garrido, Ester Gris, Vanessa Gonzalez-Herero and Lara, Almudena (2014): Neuropsychiatric Symptoms in Patients With Alzheimer's Disease: The Role of Caregiver Burden and Coping Strategies. *American Journal of Alzheimer's Disease & Other Dementias* 29(4): 1-8.
- Goetzinger, Amy M. (2009): Predictors of caregiver well-being and satisfaction: The development of a comprehensive model. US: <http://search.proquest.com/docview/304534340> (20. 10. 2015).
- Hayley, William E., Laurie A. Lamonde, Beth Han, Allison M. Burton and Ronald Schonwetter (2003): Predictors of depression and life satisfaction among spousal caregivers in hospice: application of a stress process model. *Journal of Palliative Medicine* 6(2): 215-224.
- Hayley, William E. David L. Roth, Martha Hovater and Olivio J. Clay (2015): Long-term impact of stroke on family caregiver well-being: a population-based case-control study. *Neurology* 84(13): 1323-1329.
- Haemmerling, Ellen, Claudia Ludwig and Claudia Wendel (2008): Satisfaction with life in partners of chronically brain injured individuals with special consideration to perceived personality change. *Zeitschrift für Neuropsychologie* 19: 223-233.
- Hsieh, Ya-Lin and Jin-Ling Lo (2013): Occupational experiences and subjective well-being of mothers of children with ASD in Taiwan. *Occupational Therapy International* 20(1): 45-53.
- Iecovich, Esther (2011): Quality of relationships between care recipients and their primary caregivers and its effect on caregivers' burden and satisfaction in Israel. *Journal of Gerontological Social Work* 54(6): 570-591.
- Kane, Martina and Gavin Terry (2015): *Dementia 2015: Aiming higher to transform lives*. London, UK: Alzheimer's Society.
- Kaye, Judy (2001): Spirituality and the emotional and physical health of Black and White Southern caregivers of persons with Alzheimer's disease and other dementias. *Am J Alzhemier's Dis other Demen* 25(5): 389-406.
- Kershner-Rice, Kendall (2011): The impact of meaning focused coping on the life satisfaction of informal caregivers for traumatic brain injury survivors. US: ProQuest Information & Learning US. Dostopno preko: <http://search.proquest.com/docview/853757996> (20. 10. 2015).
- Kim, Youngmee, Charles S. Carver, Edward L. Deci and Tim Kasser (2008): Adult Attachment and Psychological Well-Being in Cancer Caregivers: The Mediation Role of Spouses' Motives for Caregiving. *Health Psychol.* 27(2 Suppl): S144-S154.
- Kim, Youngmee, Richard Schulz & Charles S. Carver (2007): Benefit-finding in the cancer caregiving experience. *Psychosomatic medicine* 69(3): 283-291.

- Kruithof, Willeke J., Johanna M. A. Visser-Meily, Marcel W. M. Post (2012): Positive caregiving experiences are associated with life satisfaction in spouses of stroke survivors. *J Stroke Cerebrovasc Dis.* 21(8): 801–807.
- Kuuppelomaki, Merja, Akiko Sasaki, Kouko Yamada, Noriko Asakawa and Setsu Shimanouchi (2004): Family carers for older relatives: sources of satisfaction and related factors in Finland. *International Journal of Nursing Studies* 41(5): 497–505.
- Lehnert, Thomas, Dirk Heider, Hanna Leicht, Sven Heinrich, Sandro Corrieri, Melanie Lupp, Steffi Riedel-Heller and Hans-Helmut König (2011): Health Care Utilization and Costs of Elderly Persons With Multiple Chronic Conditions. *Medical Care Research and Review* 68(4): 387–420.
- Leibach, Gillian G. Stephen K. Trapp, Paul B. Perrin, Robin S. Everhart, Teresita V. Cabrera, Miriam Jimenez-Maldonado and Juan C. Arango-Lasprilla (2014): Family needs and TBI caregiver mental health in Guadalajara, Mexico. *NeuroRehabilitation* 34(1): 167–175.
- Li, Andrew, Jonathan Shaffer and Jessica Bagger (2015): The psychological well-being of disability caregivers: examining the roles of family strain, family-to-work conflict, and perceived supervisor support. *J Occup Health Psychol.* 20(1): 40–49.
- Lloyd, Joanna, Tom Patterson and Jane Muers (2014): The positive aspects of caregiving in dementia: A critical review of the qualitative literature. *Dementia* 29: 1–28.
- Lopes, Lais, Orestes Forlenza, Paula Nunes, Glenda Santos and Meire Cachioni (2012): Subjective well-being among caregivers of elderly with Alzheimer's disease. *Alzheimer's & Dementia* 8(4) Supplement: 379–380.
- Mochele Athay, Mary (2012): Satisfaction With Life Scale (SWLS) in caregivers of clinically-referred youth: Psychometric properties and mediation analysis. *Adm Policy Ment Health* 39(1–2): 41–50.
- Moreno, John Alexander M., Juan Carlos Arango-Lasprilla and Heather Rogers (2010): Family needs and their relationship with psychosocial functioning in caregivers of people with dementia *Psicol. Caribe* 26: 1–35.
- Morlett-Paredes, Alejandra, Paul B. Perrin, Silvia Olivera, Heather L. Rogers, Jose Libardo Perdomo, Jose A. Arango and Juan Carlos Arango-Lasprilla (2014): With a little help from my friends: social support and mental health in SCI caregivers from Neiva, Colombia. *NeuroRehabilitation* 35(4): 841–849.
- Naslund, John, B. Lynn Beatie, Anthony Kupferschmidt and Norm O'Rourke (2009): Psychological resilience and the well-being of spousal caregivers of persons with alzheimer disease. *Alzheimer's & Dementia* 5(4): 230–231.
- NIA (2005): National Institute on Aging: Progress Report on Alzheimers' Disease 2004–2005. Washington, DC: US Government Printing Office.
- Ostwald, Sharon K. (2009): Predictors of life satisfaction among stroke survivors and spousal caregivers: A narrative review. *Rehabil Nurs.* 34(4): 160–174.
- Pakenham, Kenneth I. (2008): The nature of sense making in caregiving for persons with multiple sclerosis. *Disability and Rehabilitation* 30(17): 1263–1273.
- Perkins, Martinique, Olivio Clay and David Roth (2011): Health trajectories in caregivers of dementia patients. *Alzheimer's & Dementia* 7(4) Supplement: S433–S434.

- Perren, S. Schmid, R. and A. Wettstein (2006): Caregivers' adaptation to change: the impact of increasing impairment of persons suffering from dementia on their caregivers' subjective well-being. *Aging Ment Health* 10(5): 539-548.
- Perrin, Paul B., Lillian F. Stevens, Megan Sutter, Rebecca Hubbard, Dulce Maria Diaz Sosa, Irma G. Espinosa Jove and Juan Carlos Arango-Lasprilla (2013): Exploring the connections between traumatic brain injury caregiver mental health and family dynamics in Mexico City, Mexico. *PM R*. 5(10): 839-849.
- Rafnsson, Snorri B., Aparna Shankar and Andrew Steptoe (2015): Informal caregiving transitions, subjective well-being and depressed mood: Findings from the English Longitudinal Study of Ageing. *Aging Ment Health*. 24: 1-9.
- Reizer, Abira and Amir Hetsroni (2015): Does helping others impair caregivers' health? Associating caregiving, life satisfaction, and physical health. *Social Behavior & Personality* 43(2): 255-268.
- Romero-Moreno, Rosa, Maria Marquez-Gonzalez, Andrez Losada, Virginia Fernandez-Fernandez and Celia Nogales-Gonzales (2015): Rumination and cognitive fusion in dementia family caregivers. *Rev Esp Geriatr Gerontol*. 50(5): 216-222.
- Roscoe, Lori A. Elizabeth Corsentino, Shirley Watkins, Marcia McCall and Juan Sanchez-Ramos (2009): Well-being of family caregivers of persons with late-stage Huntington's disease: lessons in stress and coping. *Health Commun* 24(3): 239-248.
- Sabella, S. A. (2008): The impact of social support, professional support, and financial hardship on the life satisfaction of family caregivers after traumatic brain injury. US: University of Northern Colorado.
- Santos, S., C. Crespo and M. C. Canavarró (2014): Caregiver burden and parents' adaptation in pediatric oncology settings: The mediating role of family cohesion. *Psycho-Oncology* 23(S3): 12.
- Schacke, Claudia and Susanne Zank (1998): Family care of patients with dementia: differential significance of specific stress dimensions for the well-being of caregivers and the stability of the home nursing situation. *Zeitschrift für Gerontologie und Geriatrie* 31(5): 355-361.
- Schneider, Justine, Joanna Murray, Sube Banerjee and Anthony Mann (1999): Eurocare: A cross-sectional study of co-resident spouse carers for people with Alzheimer's disease: I-Factors associated with carer burden. *International Journal of Geriatric Psychiatry* 14(8): 651-661.
- Schneider, Ulrike and Julia Kleindienst (2015): Monetising the provision of informal long-term care by elderly people: estimates for European out-of-home caregivers based on the well-being valuation method. *Health and Social Care in Community*.
- Schuz, Benjamin, Alana Czerniawski, Nicola Davie, Lisa Miller, Michael G. Quinn, Carolyn King, Andrea Carr, Kate-Ellen Elliott, Andrew Robinson and Jenn L. Scott (2015): Leisure Time Activities and Mental Health in Informal Dementia Caregivers. *Applied Psychology Health Well Being* 7(2): 230-248.
- Sequeira, Carlos (2013): Difficulties, coping strategies, satisfaction and burden in informal Portuguese caregivers. *Journal of Clinical Nursing* 22(3-4): 491-500.
- Smeets, Sanne M., Caroline M. Van Heugten, Johanna F. Geboers, Johanna M. Visser-

- Meily, and Vera P. Schepers (2012): Respite care after acquired brain injury: the well-being of caregivers and patients. *Archives Physical Medicine and Rehabilitation* 93(5): 834–841.
- Stengard, Eija and Raimo K. R. Salokangas (1997): Well-being of the caregivers of the mentally ill. *Nordic journal of psychiatry* 51(3): 159–164.
- Stevens, Lillian F. Paul B. Perrin, Shaina Gulin, Heather L. Rogers, Teresita Villaseñor Cabrera, Miriam Jimenez-Maldonado and Juan Carlos Arango-Lasprilla (2013): Examining the influence of three types of social support on the mental health of mexican caregivers of individuals with traumatic brain injury. *American Journal of Physical Medicine & Rehabilitation* 92(11): 959–967.
- Sun, Fei, Jordan I. Kosberg, Allan V. Kaufman and James D. Leeper (2010): Coping strategies and caregiving outcomes among rural dementia caregivers. *Journal of Gerontological Social Work* 53(6): 547–567.
- Sutter, Megan, Paul B. Perrin, Yu-Ping Chang, Guillermo R. Hoyos, Jaqueline A. Buraye and Juan Carlos Arango-Lasprilla (2014): Linking family dynamics and the mental health of Colombian Dementia Caregivers. *Am J Alzheimers Dis Other Demen* 29(1): 67–75.
- Sutter, Megan, Paul B. Perrin, Silvina Peralta, Miriam E. Stolfi, Eliana Morelli, Leticia A. Pena Obeso and Juan Carlos Arango-Lasprilla (2015): Beyond Strain: Personal Strengths and Mental Health of Mexican and Argentinean Dementia Caregivers. *Journal Transcultural Nursing*.
- Thorpe, Joshua M. Courtney H. van Houtven and Betsy L. Sleath (2009): Barriers to outpatient care in community-dwelling elderly with dementia: The role of caregiver life satisfaction. *Journal of Applied Gerontology* 28(4): 436–460.
- Tomomitsu, Monica Regina, Monica Rodrigues Perracini and Anita L. Neri (2014): Factors associated with satisfaction with life among elderly caregivers and non-caregivers. *Cien Saude Colet.*19(8): 3429–3440.
- United Nations (2013): *World Population Ageing 2013*. Division Department of Economic and Social Affairs (ed.). New York: United Nations.
- Vignola, A. A. Guzzo, A. Calvo, C. Moglia, A. Pessia, E. Cavallo, S. Cammarosano, S. Giacone, P. Ghiglione and A. Chio (2008): Anxiety undermines quality of life in ALS patients and caregivers. *Eur J Neurol.* 15(11): 1231–1236.
- Villasenor-Cabrera, Teresita, Miriam Jimenez-Maldonado, Genoveva Rizo-Curiel, Maria Luisa Martinez Cortes, Allison Drew and Juan Carlos Arango-Lasprilla (2010): Family needs and psychological well-being in caregivers of individuals with traumatic brain injury in Guadalajara, Mexico. *Informa Healthcare. Dostopno preko:* <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=e med9&NEWS=N&AN=70147828> (20. 10. 2015).
- Visser-Meily, Anne, Marcel Post, V. Schepers and E. Lindeman (2005): Spouses' quality of life 1 year after stroke: prediction at the start of clinical rehabilitation. *Cerebrovasc Dis.* 20(6): 443–448
- Visser-Meily, Anne, Marcel Post, Ingrid Van de Port, Caroline Van Heugten and Trudi Van den Bos (2008): Psychosocial functioning of spouses in the chronic phase after stroke: improvement or deterioration between 1 and 3 years after stroke? *Patient Education and Counseling* 73(1): 153–158.

- Waldron-Perrine, Brigid, Lisa J. Rapport, Kelly A. Ryan and Kaja T. Harper (2009): Predictors of life satisfaction among caregivers of individuals with multiple sclerosis. *Clin Neuropsychol* 23(3): 462-478.
- Wells, R., J. Dyway and J. Dumas (2005): Life satisfaction and distress in family caregivers as related to specific behavioural changes after traumatic brain injury. *Brain Injury* 19(13): 1105-1115.
- White, C. (2013): Census Analysis – Unpaid care in England and Wales, 2011 in comparison with 2001. ONS (ed.).
- Wright, Scott D., Dale A. Lund, Michael S. Caserta and Clara Pratt (1991): Coping and caregiver well-being: The impact of maladaptive strategies. *Journal of Gerontological Social Work* 17(1-2): 75-91.

SOURCES

- 3rd European Quality of Life Survey. Technical Report. Working document for The European Foundation for the Improvement of Living and Working Conditions. Prepared by GfK EU3C <http://www.eurofound.europa.eu/eqls-2012-weighting>.
- European Foundation for the Improvement of Living and Working Conditions, European Quality of Life Survey, 2011-2012 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], January 2014. SN: 7316, <http://dx.doi.org/10.5255/UKDA-SN-7316-2>.