

Risk factors of severity of abuse against older women in the home-setting: a multi-national

European study

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Abstract

This article examines the ecological risk factors of abuse against older women. Data from 2,880 older women was randomly collected in five European countries (Austria, Belgium, Finland, Lithuania and Portugal) using a standardized questionnaire. Results indicate that overall 30.1 % older women had at least one experience of abuse in the past year. The findings demonstrate that a single emphasis on personal risk factors (e.g. health, coping) is important but too simple: abuse is multi-faceted and is embedded in environmental (e.g. loneliness, household income) as well as macro-cultural contexts (e.g. old age dependency ratio).

Keywords: elder abuse, mistreatment, risk factors, ecological model

Running head: Risk factors of abuse against older women

1. Introduction

The extensive increase in the population of older people has resulted in bringing concerns about elder abuse to the fore. In future years a growing population of older people will be living at home and the most vulnerable of them are dependent on care or assistance. Within the European Union (EU), the proportion of the population aged 60 and over will rise from 24.3 % in 2013 to 33 % in 2040; for people aged 80 and over, the figures will increase from 5.0 % to 9.0 % during the same period (Eurostat, 2014). The feminization of ageing (Tews, 1993) suggests that gender is a significant factor in ageing as women outnumber men in older age groups in all EU member states. Of over-80-year-olds, women make up 65.0 % of the population; of over-85-year-olds the proportion of women is 69.0 % (Eurostat, 2014).

Community-dwelling older women often live in vulnerable situations. Their vulnerability can increase sharply with risk factors that are often related to gender in older age such as: an individual's physical frailty (Etman, Burdorf, Van der Cammen, Mackenbach, & Van Lenthe, 2012), compromised mental health status (Carayanni et al. 2012; Kim, Richardson, Park & Park, 2013), social factors such as isolation (Ibrahim, Abolfathi Momtaz, & Hamid, 2013) or poverty, disadvantages and social exclusion (Heap, Lennartsson, & Thorslund, 2013; Ogg, 2005). Furthermore, while any person could become a victim of abuse, a well-established body of literature demonstrates that gender is an important indicator of elder abuse. In most studies, women are more often victims of abuse than men. Women not only report more repeated and severe victimization before the age of 65 (Ansara

& Hindin, 2010; Jönson & Åkerström, 2004), but also after the age of 65 women are more often found to have a higher risk than men of being victims of domestic violence and abuse (Freel & Robinson, 2004, 2005; Gorgen, Herbst, Kotlenga, Nägele, & Rabold, 2009; O'Keeffe et al., 2007). Nevertheless, research on *elder abuse has traditionally been viewed as 'gender neutral', leading to inadequate responses* (Nerenberg, 2002, p.1). Although as long as 2002 Nerenberg emphasized the need for a broad gender-based analysis to gain an understanding of how the economic and social status of women and older people contribute to elder abuse. Brownell (2014) found very little progress more than ten years later.

Finally, De Donder et al. (2011) presented an overview of existing prevalence studies of elder abuse within Europe. A total of 19 prevalence studies were located in this review. Prevalence rates varied from 0.8 % to 29.3 % across Europe – but different study designs, the inclusion or exclusion of types of elder abuse as well as different definitions of mistreatment all contributed to differing prevalence rates that are impossible to compare. Research about where, when and how often elder abuse occurs is generally inadequate and inconsistent, or even non-existent. Some countries have a rich history of prevalence research on elder abuse, but some have only recently begun to tackle the problem (De Donder et al., 2011). Moreover multi-country studies are very rare (Lindert et al., 2011).

In light of abovementioned issues, this article aims to explore the severity of elder abuse among older women across several countries (1) and the main risk factors for abuse (2). First, essential information on the theoretical framework and risk factors will be concisely covered. Next, results will be presented of the Prevalence study of Abuse and Violence against Older Women (AVOW study) in five European countries – Austria, Belgium, Finland, Lithuania and Portugal. Finally, the article also offers recommendations for future work and actions to help prevent mistreatment and to provide support and assistance for older female victims of abuse and violence.

Elder abuse: definition, forms and categories

Different scientists, policymakers and professionals use diverse definitions of elder abuse. In some ways violence and abuse are not easy to conceptualize because the boundaries are somewhat fluid and the beginnings of abusive actions are often difficult to draw (Sev'er, 2009). Nevertheless, one definition arises in a number of studies. This specific definition of elder abuse was developed by the UK charity Action on Elder Abuse (1995, p. 11) and subsequently adopted by the International Network for Prevention of Elder Abuse (INPEA) and the WHO (2002: 3) in their Toronto declaration: elder abuse is “*a single or repeated act, or lack of appropriate*

action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person”.

Abusive behaviors can take various forms, including physical, psychological, sexual and financial abuse, violation of personal rights, and neglect (Collins, 2006; Schiamberg & Gans, 2000; WHO, 2002). First, *physical abuse* refers to actions carried out with the intention of causing physical pain or injury to a (vulnerable) older person. Examples can be: being pushed, grabbed, slapped, hit with an object and so on (cf. Schiamberg & Gans, 2000; WHO, 2002). Second, *psychological / emotional / verbal abuse* describes all actions inflicting mental pain, anguish or distress on a person through verbal or nonverbal acts. Examples might be the use of abusive language, bullying, blackmail, shouting, threats, humiliation, infantilization of the person, and so forth (cf. Schiamberg & Gans, 2000; WHO, 2002). Third *sexual abuse* refers to non-consensual sexual contact of any kind (e.g. unwanted intimacy, touching in a sexual way, rape, undressing in front of the victim, sexually slanted approaches and language). Sexual abuse can also be described as “terror in intimate relations” that has the intention to control (through the use of sex) the partner or another person and is only one-sided (Görge, Herbst, Kotlenga, Nägele, & Rabold, 2009, p. 46). Next, *financial / material abuse or exploitation* describes all actions of illegal or improper use of an elder’s funds, property or assets (Schiamberg & Gans, 2000; WHO, 2002). Examples could be: problems with powers of attorney, swindling, disappearance of money or goods, obstruction in managing one's own money, legacy hunting, and extortion. The fifth type, *neglect*, deals with the refusal or failure by those responsible to provide essential daily living assistance and/or support such as food, shelter, health care or protection for an older person. This bears some resemblance to the term *abandonment*, that is, neglect in its most extreme form: the desertion of a vulnerable elder by anyone who has assumed the responsibility for care or custody of that person (Schiamberg & Gans, 2000; WHO, 2002). Finally, *violation of the personal rights of an older person* is not often included in discussions on theoretical concepts and research practices. However, this form of abuse includes for instance, the violation of privacy and the right to autonomy, freedom, refusing access to visitors, isolating the elder or reading or withdrawing mail (Schiamberg & Gans, 2000). Qualitative interviews have revealed this topic to be of major importance in a study that included older people’s perceptions and experiences of elder abuse (WHO 2002).

Following the differentiation between different forms of elder abuse, Bennett and Kingston (1993: 13) point to possible differences in the level of severity of elder abuse. They suggested taking into account the combination of density and intensity, showing the potential degree of danger that an individual might be facing. For instance, elder abuse could be of low density (e.g. only one form of abuse) but of a high intensity (e.g. frequently

happening). Conclusively, they suggest that it is not only necessary to consider the act itself as important but there is also a need to look at the combination of density and intensity in order to shed more light on the issue.

Theoretical development: three stages

Literature on elder abuse has largely developed in a practitioner-oriented rather than a theoretical framework (Pain, 1997). Walklate (1995) expounded theory development concerning domestic violence against women by distinguishing three stages. The first stage is called 'blaming the victim'. In this phase, researchers seek explanations and determinants of elder abuse in the individual's relationships within the family. A next stage in the development of theory comprises 'understanding the victim'. Theories about femininity and women's economic, social and physical vulnerability are at the center of attention here. The third phase in theory development aims at 'structuring the victim'. This intends to set violent events within a context of social (e.g. patriarchal) relations, such as political economy theory or symbolical interactionism theory (Momtaz et al., 2013).

Even though this theory of development concerns domestic violence against women, this line of development can also be found in research on elder abuse. Most research can be grouped in the first stage (Pain, 1997): conditions resulting from ageing or being old (e.g. dementia, age-related disability) are seen as leading to a distorted relationship between the older person and the carer. However, this has been criticized mainly for two reasons: Difficulties in the caring relationship are not enough to cause abuse (Biggs, 1996), and this approach locates the responsibility for the abuse with the victim. Nevertheless, most research focuses on individual or family relationships, and rarely considers structural inequalities, the social and economic construction of old age, nor the power relations which surround it (Pain, 1997). According to Pain (1997) old age will obtain more explanatory power if research focuses on the power relations which enfold it. From a social constructionist point of view, there are more fundamental structures than age, such as gender, social class (income), health (care dependency), and living conditions (location), which are of note here. If we take these elements fully into consideration, the impact of chronological age in such situation could almost entirely disappear.

The ecological framework: risk factors

The ecological framework offers a valuable theoretical structure for understanding the abovementioned risk factors of elder abuse because it delineates the different levels (individual/micro/exo/macro) at which abuse

occurs (Sethi et al., 2011). Originally, it was developed by Bronfenbrenner (1979) for research on human development, but it has since been widely adopted in other disciplines to understand and describe the context in which a phenomenon occurs or as a framework for data analysis: e.g. in child abuse (e.g. Belsky, 1980), intimate partner violence (Akhter & Wilson, 2015; Weeks & Leblanc, 2011), violence against women (Heise, 1998) as well as in research on elder abuse (Schiamberg & Gans, 2000; Sethi et al., 2011; Von Heydrich, Schiamberg & Chee, 2012; WHO, 2010). The ecological framework employs a multi-dimensional and multi-faceted view of interpersonal violence. It examines violence as the outcome of the interaction between individual, relational, community-level and societal factors (WHO, 2002).

Risk factors for elder abuse at the *individual* level comprise physical health, functional limitations and care dependency (Johannesen & LoGiudice, 2013; Roberto Teaster & Duke, 2004), cognitive impairment and psychological problems (Johannesen & LoGiudice, 2013; Von Heydrich, Schiamberg & Chee, 2012) and personality traits including coping capacity (Comijs, Jonker, van Tilburg & Smit, 1999; Johannesen & LoGiudice, 2013). These factors might increase the likelihood of becoming a victim of elder abuse by shaping the person's response to certain stressors from the meso-, exo-, or macro-systems (Heise, 1998).

The other levels refer to contextual influences beyond individual characteristics. Hence, the second level comprises *personal relationships*, such as those with close family, friends and intimate partners. It involves social support (Dong & Simon, 2008; Johannesen & LoGiudice, 2013), social isolation and loneliness (Dong, Beck & Simon, 2009; Garre-Olmo et al., 2009; Von Heydrich, Schiamberg & Chee, 2012), which can influence elder abuse. Further, factors addressed at this second level also concern characteristics of the household, such as poverty and household income (Johannesen & LoGiudice, 2013; Sev'er, 2009) and cohabitation (Buri, Daly, Hartz & Jogerst, 2006; Johannesen & LoGiudice, 2013).

The third level concerning *community* includes exo-contexts in which social relationships occur, such as neighborhoods or social organizations. For example, low participation in social associations or low neighborhood involvement can be risk factors for elder abuse (Sethi et al., 2011)..

Finally, *societal* or macro-level factors can also influence the occurrence of elder abuse. These societal factors include the broad set of cultural values as well as different economic and social policies in different countries, which might create or maintain cultural values. For example, there could be certain cultural norms that approve of violence as acceptable in resolving conflicts (Sethi et al., 2011; WHO, 2002). Examples of macro-level factors are lack of universal health-care, low educational opportunities, type of pensions, low income security, no affordable housing, country inequality and negative attitudes towards ageing (Fraga et al., 2014; Sev'er, 2009).

Theories of elder abuse have tended to emphasize individual explanations for abuse, violence and neglect. For example: sons mistreat their older parents because of substance dependence or psychopathology such as mental disorders (Sev'er, 2009). A more comprehensive understanding of gendered abuse may require recognizing the impact of factors on multiple levels (Heise, 1998). However, little extensive attention has been paid in research to integrating several components at a number of different levels.

Research questions

The social problem of violence and abuse against older women exists throughout Europe but in general we know very little about it. There have been very few prevalence studies that focus on older women's abuse. Consequently, there is a vital need for reliable research about prevalence and risk factors of domestic violence and abuse against older women. The research questions addressed by the study reported in this paper are:

1. In relation to the prevalence of domestic violence and abuse among older women: What is the prevalence rate of domestic violence and abuse when differentiating between different levels of severity of abuse?
2. In relation to the determinants becoming a victim or violence an abuse among older women: Which risk factors exist on the individual, on the relationships, the community and societal level? Which risk factors are most important in explaining the occurrence of elder abuse?

2. Data and method

Data collection

This research reported here forms part of the Prevalence study of Abuse and Violence against Older Women (AVOW), which was funded by the EU's Daphne III program concerning violence against women and children and took place in five European countries. Due to the multi-cultural participation in the study different data collection methods were used which were appropriate for the national context. Three partner countries chose a postal survey (Belgium, Finland, and Portugal) and two selected a face-to-face survey (Belgium, Lithuania). In Austria a telephone survey was undertaken. In Belgium a combination of postal survey and face-to-face sampling strategy was used. Fieldwork was undertaken in all countries between March and July 2010.

The format and layout of the survey questionnaire was principally designed for a mail survey. A cover letter to be sent with the survey explained the purpose of the study and framed it within the context of a European research project. The survey instrument was developed in English and was forward translated to Dutch, French, Finnish, German, Lithuanian, Portuguese, and Russian, and back translated to check for accuracy. The draft questionnaire was piloted in the different national contexts, in individual face-to-face interviews (N=102). The results of this standardized pilot test were used to amend and improve the survey instrument.

Participants

The target population of the study was defined as women aged 60 years or older who were living in private households in the community. Due to the different national contexts, different sampling procedures were used. In Austria, Belgium, and Portugal random probability or stratified random sampling methods – either by community or age groups – from different registers (Telephone or Post Office Registers) were used. In Finland a simple random sampling strategy was put into practice on the basis of the Population Register. In Lithuania a multi-stage random sampling was applied (more information, please see Luoma et al., 2011).

In total 2,880 participants were surveyed or interviewed. The numbers of participants across the different countries were as follows: in Belgium N=436, in Lithuania N=515, in Austria N=593, in Portugal N=649, and in Finland N=687. Based on a conservative calculation, response rates varied from 21.2 % (postal survey in Belgium) to 49.1 % (telephone survey in Austria).

With respect to age, about half of the participants were aged between 60 and 69 years (47.8 %), one third (32.5 %) between 70 and 79 years old and about one fifth (19.7 %) were 80 years or older. The oldest respondent was 97 years old. Half (50.5 %) of all older women in the total sample were married, lived in a civil partnership, or co-habited with another person. About one third (31.8 %) were widowed and slightly over one third (38.2%) lived alone.

Measurement of variables

The dependent variable was elder abuse and involved six different forms of abuse: neglect, emotional, financial, physical, and sexual abuse; and violation of personal rights. Abuse was delineated as violence committed by

someone who was close to the individual. The reference time used was the last 12 months. Each form of violence and abuse was operationalized by multiple indicators¹ representing different incidents, which were selected and adapted from the Conflict Tactics Scale 2 (CTS2) (Straus, 1996, 2007). Neglect and emotional abuse were measured by 9 items each, financial abuse, physical abuse, sexual abuse as well as the violation of rights by 4 items each. In methodological terms, each form of violence or abuse is a latent factor that is measured by a number of formative indicators.²

The answer format for each indicator was a four-point scale representing frequency categories (1=never, 2=1–6 times, 3=once a month, 4=weekly)³. Following this, a new variable “level of severity of elder abuse” was created (after Bennett & Kingston, 1993: 13). By combining the information about density and intensity, one can conceive of a typology with four quadrants that reflect four levels of violence and abuse: Level 1: Low density of abuse (i.e. single indicator) and occurred seldom (i.e. happened 1–6 times in the last year); Level 2a: High density of abuse (i.e. multiple indicators) but occurred seldom; Level 2b: Low density of abuse but occurred often; Level 3: High density of abuse and occurred often.

As discussed in the introduction, using an ecological framework, the independent variables can be framed within four different levels: individual, relationships, community and macro-social factors.

The individual risk factors included in the study analysis were:

- Socio-demographic determinants: three age groups 60-69, 70-79, 80 years or older. Based on previous analyses, marital status was recoded as married versus not married.
- Socio-economic indicators: educational level (years of completed education) and professional situation (full time employed, part-time employed, unemployed, fully retired).
- Subjective physical health and subjective mental health.
- Coping styles measured how individuals normally reacted in difficult or stressful situations (Carver, 1997: active coping (Cronbach’s Alpha=.84), behavioral disengagement (i.e. “giving up or withdrawing effort to find a solution”, Cronbach’s Alpha=.77), using emotional support (Cronbach’s Alpha=.82).

Risk factors on the level of relationships were:

- Household size was measured as the number of people living in the same household.

¹ For instance the older women were asked if somebody close to her has “... insulted you or sworn at you / called you fat, ugly or other names / shouted or yelled at you? / destroyed something that belonged to you?” etc.

² More information on research methodology, non-response and the measurement instrument can be found in De Donder et al., 2013 and Lang et al., 2014.

³ For items representing neglect the answer format/scale represents the frequency of refusals (1=never refused, 2=refused 1-6 times, 3=refused once, 4=refused weekly. For people without the need for help in everyday life an answer category was added (0=no, did not need help).

- Household composition (cohabiting with partner, children, grandchildren, etc.),
- Managing with the household income (badly, averagely, easily).
- Elders Feelings of Unsafety scale (De Donder et al., 2010) (Cronbach's Alpha=.74).
- Short social loneliness scale (De Jong Gierveld & Van Tilburg, 2006) (Cronbach's Alpha=.84).

The risk factors at the community level were:

- Participation in social activities (e.g. charitable or other voluntary work, cultural activities or entertainments, studying, physical exercise or sport).
- Living area (urban vs. rural).

As macro-social 'country' factors we included:

- Country: Austria, Belgium, Finland, Portugal, Lithuania.
- Gross domestic product (GDP) in Euro per capita (<http://epp.eurostat.ec.europa.eu>).
- Risk of poverty (<http://epp.eurostat.ec.europa.eu>).
- Social protection expenditures expressed as the percent of the GDP invested in social benefits (<http://epp.eurostat.ec.europa.eu>).
- Lower education of older age: defined as the percentage of people aged 65 and older with a maximum lower secondary education (<http://epp.eurostat.ec.europa.eu>).
- Old age dependency ratio (<http://epp.eurostat.ec.europa.eu>).
- Population density as the number of inhabitants per km² (<http://epp.eurostat.ec.europa.eu>).
- Gender equality index: The higher the score, the more gender equality (European Institute for Gender Equality, 2013).

For an overview of the macro country factors see table 1.

<Table 1 around here>

Design and analysis

In order to answer the research questions several statistical techniques were used. First, chi-square test and Spearman correlations were used to evaluate the bivariate associations between abuse and risk factors. Second, collinearity diagnostics were assessed to reveal whether independent variables were correlated too strongly. We followed Bowerman & O'Connell (1990) who conclude that if the largest VIF is greater than 10 then there is cause for concern and if the average VIF is substantially greater than 1 then the regression may be biased (in

Field, 2006). As a result, all variables with a multi-collinearity problem were omitted from the logistic regression analyses. Third, all remaining variables were included in a multi-nominal logistic regression to explore the role of the independent variables on the likelihood of experiencing level 1 abuse, level 2 abuse or level 3 abuse, using no abuse as a reference category (Field, 2006). The 'stepwise' method was used. As different methods of data collection could influence the results, the different type of data collection method was used as control variable. For the logistic regression, pseudo R²-statistics and odds ratios were reported (Field, 2006).

The characteristics of the country were not included in the logistic regression analysis as this is a higher-level unit. Multi-level modeling would take this into account, but as the number of higher-level units (5 countries) was below the suggested 50 (Hox, 1998), 30 (Richter, 2006) and even 10 (Nezlek, 2008), multilevel modeling was not possible. Consequently the correlations between severity abuse and the macro country factors were estimated using Spearman correlations. Statistical significance was set at $p < 0.05$ for all analyses. All analysis procedures were performed using SPSS 22.

3. Results

Severity of abuse and violence against older women

The results indicate that 30.1 % of older women had experienced at least one kind of violence and abuse in their own home in the last 12 months by someone who is close to them. Figure 1 presents the prevalence rates for the different levels of severity. The results indicate that 7.4 % of older women had experienced one single form of abuse, but rarely (level 1). 14.6 % reported several forms (indicators) of violence and abuse, but occurring seldom (level 2a). 1.5 % of respondents were often or very often exposed to one form of abuse (level 2b). The most vulnerable group of older women with the highest potential danger of abuse (several forms, each happening often) accounted for 6.5 % of older women (level 3).

<Figure 1 around here>

The next step in the analyses comprised assessing bivariate relations between the independent variables separately and the different levels of abuse using Spearman Correlations (table 2) and chi-square analysis (table 3). The results demonstrate that education, active coping, feeling unsafe, GDP per capita, risk of poverty, social protection expenditures of the country and cohabiting with grandchildren were not related with severity of abuse.

Consequently, we did not incorporate them in the subsequent multi-nominal logistic regression. Furthermore, VIF and tolerance statistics indicated some problems with multi-collinearity. Cohabiting with a partner showed unacceptable tolerance levels and VIF-values. Consequently, this variable was excluded from further analyses.

<Table 2 around here>

<Table 3 around here>

Risk factors of abuse and violence against older women

The multi-nominal logistic regression generated three important analyses and associated findings. Table 4 presents the comparisons of level 1 abuse versus not abused, level 2 abuse versus not abused, and level 3 abuse versus not abused.

<Table 4 around here>

Level 1 Abuse versus not Abused

Column 1 (Level 1 versus not abused) demonstrates mainly non-significant results, suggesting that older women who reported one item of abuse occurring infrequently (Level 1) did not differ greatly from older women who were not abused at all. Only household size generated significant differences, indicating that older women who had larger household sizes had smaller odds of experiencing elder abuse than older women with smaller household sizes.

Level 2 Abuse versus not Abused

Considering the Level 2 severity of abuse, several significant results appeared. Older women aged 60 to 69 years had three times higher odds of experiencing Level 2 abuse than experiencing no abuse, in comparison with the oldest age groups. A similar finding was demonstrated for older women aged 70 to 79 years, albeit that the odds ratio was somewhat lower than the odds ratio of the youngest age group. Next, older women who were married had a higher risk of experiencing Level 2 abuse than experiencing no abuse in comparison with older women who were not married, signifying that married older women had a higher risk of experiencing Level 2 abuse. Health status was also important as older women with poor reported mental health had more risk of experiencing Level 2 abuse than experiencing no abuse. Furthermore, the results indicated that older women who more frequently adopted the coping mechanism of behavioral disengagement (giving-up) were more likely to

experience Level 2 abuse. Finally, loneliness presented significant positive relationships with Level 2 abuse. Feeling lonely was associated with greater odds of experiencing Level 2 abuse. Finally, there were significant differences between countries and level 2 abuse. Austria, Belgium, Finland and Portugal had significant higher odds of experiencing level 2 abuse than Lithuania. In Belgium and Portugal, older people were 3 times as likely to experience level 2 abuse, compared to Lithuania.

Level 3 Abuse versus not Abused

A third component in the multi-nominal logistic regression examined the odds of experiencing Level 3 severity abuse versus not being abused. Similar to the analysis to predict the likelihood of Level 2 abuse occurring, older women who were married, reported poor mental health, more often adopted behavioral disengagement or felt lonely were more likely to experience Level 3 abuse. However, the odds were stronger than measured for the previous analysis at Level 2. For example, in relation to loneliness, the predicted odds of 1.83 suggest that older women who felt lonely almost were almost twice more likely to experience the most severe level of abuse than to experience no abuse.

Additionally, older women who experienced poor physical health had higher odds of being classified in the group with Level 3 abuse than in the group with no abuse. Further, household income was also strongly associated with Level 3 abuse. The odds ratio suggest that people who struggled to get around with their household income were 2.5 times as likely to experience level 3 abuse than no abuse, in comparison with older women who easily managed with their income. Finally, also country was positively related with level 3 abuse, with significant odds for Belgium and Portugal.

When all variables were taken together in the logistic regression, several variables were no longer significantly associated with severity of abuse: seeking emotional support as a coping mechanism, urbanization rate and participating in social activities.

Country-level factors

As we found a significant relationship between country and severity of abuse, we performed additional Spearman correlations to investigate the relationship between 7 country-level factors and severity of abuse (table 5). Four country-level factors were significantly related with severity abuse, albeit weakly. Higher levels of abuse of older women were significantly related with a lower education level of older people in a country, a higher old age dependency ratio, higher gender inequality and higher population density of a country. Socio-

economic parameters such as GDP per capita, risk of poverty and social protection expenditures were not significantly related.

4. Conclusion and discussion

This article presents the results of the prevalence study on the Abuse and Violence against Older Women (AVOW) study with a specific focus on risk factors. The AVOW research, developed in five European countries – Austria, Belgium, Finland, Lithuania and Portugal – obtained information about the prevalence of abuse of women aged 60 years and over living in private households, and its association with variables on the individual, relational, community and macro level. This research has contributed to resolving the lack of up-to-date, reliable information on the prevalence of elder abuse. Furthermore, since literature has demonstrated that gender plays a significant role in the occurrence of elder abuse, the AVOW-study specifically focuses on abuse of older women.

The research provided information on two main topics: the severity of elder abuse and risk factors. First, the prevalence rate of elder abuse among women across all 5 European countries is 30.1 %. About half (16.1 %) of these abused women reported experiencing intermediate severity levels of abuse and violence. 6.5 % older women experience the most severe level of abuse. Compared with earlier studies (reviewed in De Donder et al., 2011) this prevalence rate is rather high because it is based on a broad concept of elder abuse including several different forms. Nevertheless these rates are in line with recent research on elder abuse among men and women in Europe (Fraga et al., 2014) and Korea (Jang & Park, 2012) and in line with the review by Alhabib et al. (2010) on 134 studies on the prevalence of domestic violence against women aged 18 to 65 years. Devries et al. (2013) found that global prevalence of (physical and/or sexual) intimate partner violence against women aged 15 and over in 2010 was 30.0%.

A second main research interest concerned *risk factors* for elder abuse. Which older women are most likely to be victims of abuse and violence and are most at risk? The data revealed that there were factors at all four levels which were significantly associated with higher severity of abuse on a bivariate level: individual level (age, marital status, education, occupational status, health status and coping styles), level of relationships (household income, cohabiting with partner, adult children, and living alone, household size, loneliness), community level (urbanization rate, participating in social activities) and macro-level (low educational level of older age, older age dependency ratio, gender equality, population density).

Further statistical analyses of these variables were undertaken through logistic regressions in order to assess their potential as risk factors of the likelihood of severity of abuse. Older women who reported one indicator of abuse occurring infrequently (Level 1) barely differed from older women who were not abused at all, on the variables we have examined. Next, the younger old (60-69y); married women; women with poor mental health; who adopt a behavioral disengagement to solve problems; and lonely people had a greater risk to be abused (level 2). Contrary to most literature (e.g. Garre-Olmo et al., 2009; O’Keeffe et al., 2007) experience of abuse decreases with age. *The youngest older women (60-69y)* had a higher risk of experiencing level 2 abuse than no abuse, in comparison with the oldest-old.

Furthermore, it was established that married women, with poor physical and mental health status, who adopt a behavioral disengagement coping strategy, lonely women, and who manage poorly with their household income had a higher risk of being most severely abused (level 3) than of not being abused.

These results could support the hypothesis that structural inequalities (such as for example, income) increase the risk of abuse among older women (Pain, 1997). Likewise, findings relating to poor mental health and behavioral disengagement could be interpreted as experience of low levels of power. Empowering older women to a more active way of coping, could have potential benefits in terms of reduced likelihood of abuse and violence occurring.

Our findings should be considered in light of the following limitations, each of which raises questions to be addressed in future analyses. First, a methodological limitation is the cross-sectional design of the study, in which a clear causal relation is not always apparent. There is clearly a significant association between several risk factors and the severity of abuse, although these results are limited because a causal direction of the relationship can only be hypothesized in a cross-sectional study. Longitudinal studies could provide more elaborate evidence on the matter of causality, although in light of this sensitive topic such longitudinal studies are very difficult to undertake.

Second, although using the ecological model is advantageous because it directs attention to different levels of risk factors that contribute to violence against older women, it is difficult to test every level very extensively. For example, this article explores only a very brief number of risk factors on the community level. Research is needed that serves to assess which community factors might increase vulnerability to abuse such as social support from neighbors, relatives or legal support (Akhter & Wilson, 2015; Sethi et al., 2011). Third, this article has investigated risk factors at different levels of severity. However, future research could examine the different

constellations of risk factors for the different types of abuse (Jackson & Hafemeister, 2011) among older women. Are there different risk factors that operate for neglect, emotional abuse or physical abuse?

In the light of the results a number of practical and policy recommendations can be deduced. First, an assessment of the risk factors for abuse of older women does not mean that older women have an implicit obligation to alter these risk factors, or that otherwise they hold the responsibility for elder abuse. It is helpful to understand which older women have a higher risk, so a pro-active detection and possible intervention becomes possible. Second, help and supportive services need to consider the different levels of severity of abuse that exist. The related risk factors for these levels of severity point to the need for different kinds of intervention. The development of case management approaches by differentiating measures and interventions could help to meet the needs and expectations of victims. Third, the results of the AVOW study highlight that older women with self-reported poor mental health and who reported feelings of loneliness were often more vulnerable to severe levels of violence and abuse. Actions promoting active ageing and combating social exclusion and isolation of older women could strengthen the social surroundings of the person at risk and lessen associated risk factors. One type of prevention program, for instance, aims to train older people to serve as visitors to potential victims (Sethi et al. 2010). This could also serve to increase a preventive detection of elder abuse.

In conclusion, this article has established evidence that an in-depth understanding of abuse against older women needs differentiation between the different levels of severity. In that sense, different risk factors may or may not contribute to vulnerability to abuse, when different levels of abuse are taken into account. Hence, research, policies and intervention strategies should be developed and devised that consider these complicated and multiple layers of the phenomenon, in order to find appropriate solutions to this complex social and public health problem.

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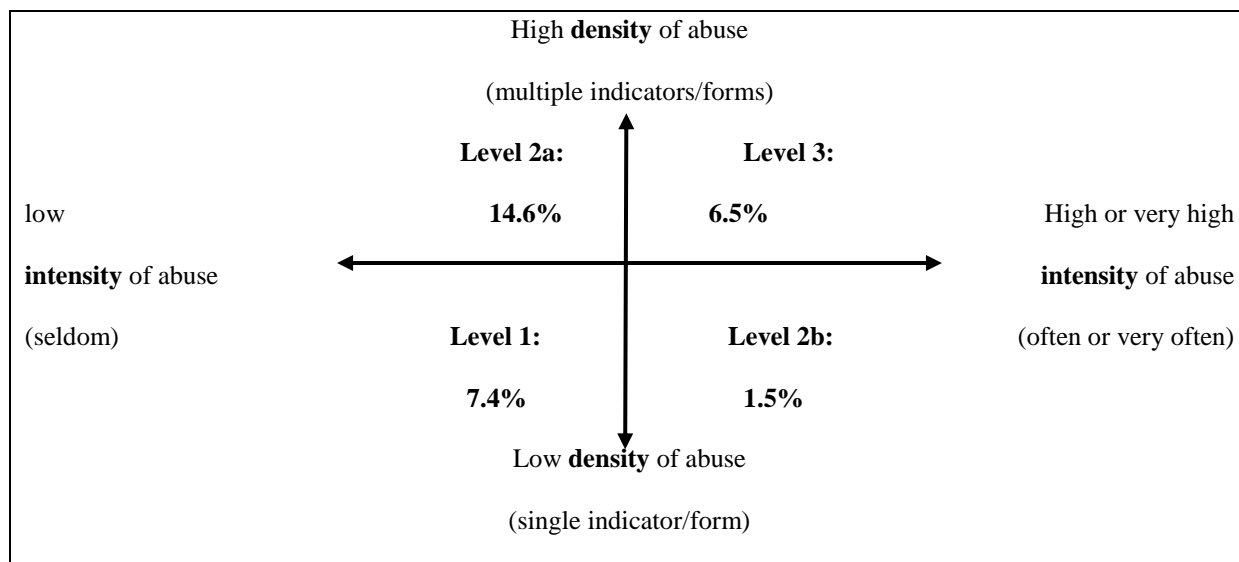


Figure 1: Four Levels of Severity of Elder Abuse (after Bennett & Kingston, 1993: 13)

Table 1. Macro factors for each participating country

	Austria	Belgium	Finland	Lithuania	Portugal
GDP per capita ^a	30,900	29,400	27,900	15,100	19,600
Risk of poverty ^a	16.6	21.0	16.9	34.0	25.3
Social protection expenditures ^a	30.6	30.1	30.6	19.1	26.8
Lower education older age ^a	42.8	65.7	59.2	58.6	92.6
Old Age Dependency Ratio ^a	26.1	26.0	25.6	25.6	27.5
Gender equality index ^b	50.4	59.6	73.4	43.6	41.3
Population density ^a	101.8	358.7	17.6	52.4	115.4

Sources: ^a <http://epp.eurostat.ec.europa.eu>, 2010; ^b European Institute for Gender Equality, 2013

Table 2: Spearman Correlation Coefficients for Numeric Independent Variables and Severity of Abuse

		Severity of abuse
Individual level	Age	-.115*
	Education	-.010
	Coping: Active coping	-.005
	Coping: Behavioral disengagement	.160*
	Coping: Using Emotional support	-.050*
	Bad Mental health	.184*
Relationships Level	Feeling unsafe	.010
	Managing easily with household income	-.113*
	Loneliness	.203*
	Household size	.089*
Community Level	Social activities	-.038*

* p < 0.05

Table 3: Abuse and Non-abuse for Categorical Independent Variables (column %)

		No abuse	Level 1	Level 2	Level 3
		%	%	%	%
Total		70,0%	7,4%	16,1%	6,5%
Individual Level					
Marital status	Not Married*	73.9	7.5	13.3	5.3
	Married*	66.2	7.4	18.6	7.8
Occupational status	Unemployed*	50.0	14.9	26.6	8.5
	Full-time employed*	63.4	9.7	20.1	6.7
	Part-time employed*	61.3	6.5	25.8	6.5
	Fully retired*	71.3	7.1	15.3	6.3
Physical health	Poor health*	63.1	6.7	18.0	12.2
	Good health*	71.5	7.5	15.7	5.3
Relationships Level					
Cohabiting with	Partner*	66.5	7.3	18.4	7.8
	Adult children*	66.3	4.6	17.6	11.5
	Grandchildren	69.6	1.8	19.6	8.9
	Living alone*	74.3	8.5	13.4	3.8
Community Level					
Living area	Urban*	72.1	6.3	15.6	6.0
	Rural*	67.4	8.9	16.7	7.0
Macro Level					
Country	Austria*	73.5	6.5	14.3	5.7
	Belgium*	67.0	10.0	18.0	5.0
	Finland*	73.5	7.0	14.5	4.9
	Portugal*	58.5	7.7	22.5	11.3
	Lithuania*	77.2	6.4	11.1	5.3

* p < 0.05

Table 4: Likelihood of Levels of Severity older Abuse by Individual and Contextual Variables

		Level 1 vs. not abused	Level 2 vs. not abused	Level 3 vs. not abused
		Odds ratio	Odds ratio	Odds ratio
Individual Level				
Age	60–69	ns	3.00*	ns
	70–79	ns	2.11*	ns
	80+ (<i>reference</i>)	.	.	.
Marital status (married)		ns	1.57*	1.97*
Poor physical health		ns	ns	2.25*
Poor mental health		ns	1.23*	1.75*
Behavioral disengagement		ns	1.43*	1.77*
Relationships Level				
Household size		.58*	ns	ns
Household income	Badly	ns	ns	2.55*
	Averagely	ns	ns	ns
	Easily (<i>reference</i>)	.	.	.
Loneliness		ns	1.35*	1.83*
Macro Level				
Country	Austria	.ns.	1.75*	.ns.
	Belgium	2.19*	3.21*	2.58*
	Finland	.ns.	1.91*	.ns.
	Portugal	2.31*	2.82*	5.37*
	Lithuania (<i>reference</i>)	.	.	.

* $p < 0.05$, ns=not significant; Cox and Snell $R^2 = 15.6\%$; Nagelkerke $R^2 = 18.6\%$

Table 5: Spearman Correlation Coefficients for Macro Level Variables and Severity of Abuse

	Severity of abuse
GDP per capita	-.019
Risk of poverty	.034
Social protection expenditures	-.035
Lower education older age	.129*
Old Age Dependency Ratio	.126*
Gender inequality	.084*
Population density	.104*
