Marília Santos Silva¹

¹Faculty of Medicine of the University of Porto, Portugal

<u>Author Note:</u> Correspondence concerning this article should be addressed to Marília Santos Silva, Faculty of Medicine of Porto University, Al. Prof. Hernani Monteiro, 4200-319 Porto, Portugal. Phone number: +351 912035658. E-mail: mimed08178@med.up.pt.

Abstract

Abuse against elders with disability is a problem with tendency to grow as the world population is aging. Though of obligatory reporting, cases of abuse are most frequently ignored by health professionals, for a variety of reasons, one of which is the difficulty of making the correct diagnosis, even though they are on a privileged position by the proximity to both victims and abusers. By making a revision of alleged domestic violence cases against elders with moderate to severe disability we aimed to promote a better knowledge about this theme to encourage the detection and prevention of future cases, namely by health professionals.

In our sample, the most frequently reported type of abuse was physical (86%), perpetrated by male abusers (63%) living with their victims (90%), most commonly their children (47%) or their partners (when victims are married; 49%). Victims were most frequently female (63%), with motor disabilities (49%), and presented a history of previous episodes of abuse in 74% of cases, though only 28% were reported. Consequences of abuse were most frequently minor injuries (95%) with or without associated pain, with permanent consequences (scars) resulting in only 6.8% of cases. Lesions were multiple in the majority of cases (64%), the preferential locations being the head and neck (75%).

Keywords

Domestic Violence; Elder; Disability

Introduction

The most consensual definition, adopted by the World Health Organization, describes elder abuse as a single or repeated act or lack of appropriate action, occurring within any relationship in which there is an expectation of trust or dependence, that causes harm or distress to older people, thus contributing to decreased quality of life, increased morbidity, reduced survival and possibly death^[1, 2].

The use of different definitions, as well as sampling and survey methods, applied to different populations makes it difficult to compare studies, describe elder abuse and estimate its prevalence^[2-5], with values ranging from 3.2% to 27.5% in general population studies from different countries^[5].

Some experts believe that the incidence and prevalence of elder abuse may be increasing, but it is not known if this growth is due to better recognition and report or to an actual escalation in the number of cases. What is certain is that elder abuse cases will become more frequent with the aging of the world population. In Portugal, from 2001 to 2011, the population under the age of 15 decreased from 16% to 15% of the total population, with a simultaneous increase in the population over the age of 65 from 16% to 19%^[6], marking a shift in the age pyramid which had already been predicted and is expected to worsen considering the higher longevity and decreased birth rate.

Although most elders are autonomous and independent, it is known that older populations have higher prevalence of health disorders and added consequences of accidents. According to elder abuse literature, mental illness^[7-11], poor physical health^[12-14] or poor health in general^[15] constitute risk factors for abuse. Elders with physical and/or mental disability are at even higher risk as they have inherent limitations in daily living activities^[12, 16, 17] that make them completely or partially

dependent^[5], and in many cases isolated from society. Lower physical resistance to violence, lower capacity to escape from it and/or higher difficulty to understand and report the abuse^[2, 13, 18] are also possible explanations for the increased risk of abuse in elders with disabilities. Abuse against these elders is, thus, an expected event in the aging population, with 50% of people 65 years of age or older, in Portugal, declaring to have much difficulty in performing at least one of six activities of daily living (seeing, hearing, walking, memory/concentration, bathing/dressing up, understanding/making themselves understood)^[6].

Elder abuse is most frequently perpetrated by family members^[2], which may constitute domestic violence cases. This may be partly explained by higher levels of violence, stress, burnout and financial problems affecting the caregivers^[1, 3, 4], that may even lead to deadly consequences^[19].

Notwithstanding the fact that elders with health problems frequently visit their physicians, these being in a privileged position to detect and report cases of elder abuse, only 2% of suspected cases are reported by physicians^[20]. In Portugal, domestic violence constitutes a "public crime", so the Public Prosecutor Office may institute criminal proceedings even though the victim does not express will to press charge; in these cases, public employees have the legal obligation to report every suspected case that they come to acknowledge during their professional activity. Moreover, according to the 53rd article of the Ethics' Code of the Portuguese Medical Association, physicians have the obligation to report these situations to the authorities. However, in addition to the difficulty of distinguishing symptoms and signs of abuse from those age-related or of other disorders, physicians fail to report due to a variety of reasons that might include, among others^[2, 3, 21]: (a) unawareness of the obligation to report; (b)

unawareness of available victim support associations, thus considering that the victim may be more endangered if the abuse is reported; (c) time limitations that make them choose solving other of the patient's problems; (d) preference to keep the patientphysician relationship, when the patient does not want to report the abuse; and (e) fear of implication in a legal process. Among cases involving a moderate or severe disability, these patients being frailer and at increased risk, there may be greater difficulty in making the correct diagnosis and, consequently, the report. Due to their characteristics, these cases deserve special attention for the detection of abuse.

The aim of this study is to promote a better knowledge about domestic violence perpetrated against elderly people presenting physical and/or mental disabilities that make them dependent and/or without autonomy, in order to promote the detection and prevention of these cases, namely by health professionals.

Methods

A retrospective analysis of clinical forensic medical reports was performed. Cases' inclusion criteria were: (a) alleged victim 65 years of age or older presenting, prior to the suspected episode of abuse, a moderate or severe physical and/or mental disability, corresponding to a rate disability superior to 60% (determined according to the Portuguese National Table of Disabilities – annex 1 of the *Decree-Law 352/2007, of 23^{rd} of October*) or to a disability that conditioned dependency or loss of autonomy for daily living activities; (b) allegedly abused by a family member (with or without cohabitation); (c) having been submitted to a forensic medical evaluation in the scope of criminal law; (d) at the north branch of the National Institute of Legal Medicine and Forensic Sciences of Portugal, in Porto; (e) between 2005 and 2013.

Data extracted from reports included characterization of: (a) the alleged victim's and abuser's socio-demographics; (b) the relationship between alleged victim and abuser; (c) the type of disability presented by the victim; (d) previous episodes of violence perpetrated by the same alleged abuser; and (e) the episode of abuse that motivated the report and consequent forensic medical examination, namely its type, the resultant lesions, the need for medical treatment and the existence of permanent physical consequences.

It was considered that for all types of abuse, psychological abuse exists simultaneously, so this type of abuse is only referred when it occurred in isolation.

Victims were divided in 2 groups depending on their disability degree: (a) moderate (when they had autonomy with some dependencies, excluding third person dependence); (b) severe (when they were dependent on a third person). Victims' disabilities were categorized in 5 groups, corresponding to: (a) mental; (b) motor; (c) sensorial; (d) other disabilities; and (e) multiple disabilities (when more than one type of disability was present).

Findings were recorded in a database and studied using SPSS (Statistical Package for Social Science - SPPS INC, Chicago, Illinois, USA) version 21.0, for Windows. Descriptive statistics was performed using frequency analysis for categorical variables and descriptive analysis for continuous variables. Contingency tables were created to study the relationship between categorical variables and Chi-Square or Fisher's test were used to verify the independence and non-existent relationship between variable categories. Variables were considered to be related when p<0.05.

Results

A total of 1278 forensic medical reports related to alleged intrafamilial elder abuse were analyzed, of which 70 (5.5%) were selected according to the above criteria.

Victim's and abusers socio-demographic characterization

Victims' and abusers' socio-demographic characterization is presented in table 1. Victims were mostly female (n= 26, 62.9%), married (52.9%) and retired (94.3%), the majority presenting moderate disability (55.7%). Mean age was 76.94 years old (SD=7.689; median=76; Min.=65; Max.=95), and male and female victims had approximately the same mean age (mean=75, SD=8 vs. mean=78, SD=8). The proportion of severe disability was higher among female victims (56.8% vs. 23.1%; p=0.006), and victims older than 74 years of age (57.5% vs. 26.7%; p=0.010).

Abusers were male in 62.9% (n=44). There was no significant relation between abuser's and victim's sex (p=0.087). Their mean age was 52.53 years old (SD=16.626; median=50; Min.=20; Max.=88). In the 28 cases with available information, none of the abusers had a professional activity. Information about substance abuse was included in 24 reports, of which 75% referred to its presence, alcohol being the most frequent (n=13). Information about psychiatric disorders was included in 11 reports, with 72.7% victims referring their abusers as having some sort of this type of pathology.

Table 2 presents the relationship between alleged victims and abusers in the total sample and in married victims (n=37). Though when considering the totality of cases the majority had been allegedly perpetrated by victim's children (47.1% vs. 32.4% for partners), within married victims, partners corresponded to 48.6% of cases (vs. 28.6% for children). In 46 cases for which there was information, 89.7% (n=52) of abusers were living with the victims.

Victims' disability characterization

Proportion and description of the different types of disabilities is presented in Table 3. Motor disability was the most frequent disability presented by the victims, corresponding to 48.6% of cases, followed by multiple disabilities (30%), sensorial disability (8.6%), mental disability (7.1%) and other types (5.7%). Overall, the proportion of victims with motor disabilities was 77.1% (n=54), with mental disabilities was 24.3% (n=17), with sensorial disabilities was 22.9% (n=16) and with other types was 11.4% (n=8).

Description of previous episodes of abuse by the same alleged abuser

Information about previous episodes of abuse by the same alleged abuser was present in 74.3% (n=52) of forensic medical reports. It was not described whether there was a background of abuse in 15 (21.4%) cases. Table 4 presents descriptive statistics of the previous episodes of abuse. The periodicity of abuse was specified in 29 forensic medical reports, with 93.1% of victims referring to have been frequently abused, 25 specified its duration, with 40% mentioning it was superior to 10 years, and 42 stated the occurrence of previous reports with 69% (n=29) denying its occurrence. Of those which had history of previous reports (n=13), in 8 the report had been made by the victim. There was no significant relation between the victims' background of violence and the victims' sex (p=1.000) or the disability degree (p=0.611).

In 51 cases for which it was possible to determine the category of abuse and considering the association between multiple types of abuse, the most frequent type was physical abuse (n=41), followed by financial (n=11), psychological (when isolated; n=8) and sexual (n=1). Among these cases, neglect was observed simultaneously with 9 cases of physical abuse, 4 of physical plus financial abuse and 1 of financial abuse,

corresponding mostly to nutritional and hygiene neglect, followed by medication, health care, rest, affection and housing/safety neglect.

Description of the episode of abuse that motivated the report

The types of abuse that motivated the report were physical abuse in 85.7% (n=60) of cases, physical and financial abuse in 8.6% (n=6), and psychological abuse in 5.7% (n=4). Similarly, in these cases, neglect was identified in 6 cases of physical abuse and 4 cases of physical plus financial abuse, involving nutritional, hygiene, rest, health care, medication and affection neglect.

Physical abuse corresponded to an aggression only by means of body strength (excluding attempted asphyxiation) in 72.9% (n=43) of cases, to aggression through use of blunt objects in 8.5% (n=5), to aggression with resource to body strength (excluding attempted asphyxiation) and to a blunt object in 13.6% (n=8), to attempt to strangle in 3.4% (n=2) and to privation of basic needs in 1.7% (n=1) of cases. Among cases of aggression only by means of body strength the most frequently involved types (not always occurring in isolation) were: pushing (n=27, 51.9%), pounding (n=25, 48.1%), grasping (n=8, 15.4%), slapping (n=8, 15.4%), kicking (n=8, 15.4%), scratching (n=6, 11.5%), hair pushing (n=1, 1.9%) and biting (n=1, 1.9%). There was no significant relation between the occurrence of physical abuse and the victims' (p=0.800) or abusers' (0.800) sex, or the victims' disability degree (p=1.000).

Physical abuse resulted in pain in 5.6% (n=3) of cases, minor injuries in 24.1% (n=13) and minor injuries with pain in 70.4% (n=38). In only 6.8% (n=4) an organic permanent consequence was found (scar). Consequences of physical abuse were not described in 12 forensic medical reports, either because they had evolved to cure at the time of the forensic evaluation or because no physical consequences resulted. Injury distribution is

presented in table 5. The majority of victims had injuries in multiple locations (n=39, 63.9%), the most frequent observed location for injuries being head and/or neck (75.4%), within these face (n=35, 58.3%) and skull (n=20, 33.3%) being the most affected, followed by limbs (55.7%), specially superior limbs (n=27, 45%), and torso (26.2%), with chest being the most affected (n=13, 21.3%). Elders with severe disability had injuries in the head and/or neck more frequently than those with moderate disability (88.5% vs. 65.7%, p=0.041), the same being observed in relation to the presence of injuries in multiple locations, also observed among elders with severe disability more frequently (76.9% vs. 54.3%), though this relation was not statistically significant (p=0.069).

Described cases of psychological abuse corresponded mostly to insults, humiliation, defamation, or to threatened aggression or life threats to the victim. Among 23 cases in which psychological consequences of abuse were described, it resulted in anxiety, anguish or fear in 65.2% (n=15), in physical symptoms of anxiety in 21.7% (n=5) and in need to escape in 13% (n=3).

Table 6 presents report authorship by the victims or by a third person according to the victims' characteristics. In the majority of cases the charge was pressed by the victims (n=54, 77.1%). Reports were made by professionals (1 nurse and 9 day center attendants) in 14.3% of cases, in 7.1% (n=5) by family members and in 1.4% (n=1) by neighbors. Victims with severe disability had a third person report more frequently than victims with moderate disability (p=0.000), as well as victims with mental disability when compared to victims without mental disability (p=0.000). Female victims also had reports presented by a third person more frequently, but when the relation between

victims' sex and author of the report was layered with the degree of disability its statistical significance no longer existed.

Discussion

Considering that disability is a recognized risk factor for abuse, the rate of 5.5% of elders with this problem, found in our forensic sample of 1278 elders allegedly abused by a family member, seems clearly underestimated. This may be related to the difficulties that these persons have in disclosing their victimization and to the low projection of these cases.

Victim's socio-demographic and disability characterization

Most social, demographic and health characteristics of the elderly have been considered risk factors for abuse. The observed predominance of female over male victims in our study is not explained by the sex distribution in the general Portuguese population, in which women correspond to approximately 52%^[6]. Results from previous studies in frail or hospitalized elders^[21, 22], as well as in elders in the general population^[1], have shown similar results, suggesting that being female is a risk factor for abuse.

As expected, older elders had a higher proportion of severe disability than the younger ones. In Portugal, in 2011, the most frequently reported difficulties in daily living activities among people over the age of 65 were: walking (27%), bathing and dressing (14%), seeing (19%), earing (15%), memory and concentration (15%), and understanding and making themselves understood $(10\%)^{[6]}$. This is consistent with our study's results in which motor disabilities were the most frequently reported, followed by mental and sensorial disabilities. Many studies on abuse of elders with disabilities

focus on elders with mental disability, the reported prevalence of abuse being between 37% and 62%^[23]. According to a systematic-review and meta-analysis of observational studies, when compared with non-disabled individuals, the crude odds ratio for the risk of violence against adults with mental illness (OR=3.86) or cognitive impairment (OR=1.6) was higher than that for adults with non-specific impairments $(OR=1.31)^{[10]}$. Comparing these studies with our, the proportion of elders with mental disability found may appear lower than expected. That could be explained by a decreased frequency of reporting since in comparison to other groups of elders with disability, they have a higher probability of: (a) not understanding that they are being abused; (b) not knowing how or where to make the report; or (c) being discredited when they disclose the abuse. It is thus possible that the proportion of elders with mental disability is by these means decreased when compared to elders with other types of disability, even though it was observed that, proportionally, more reports were made by a third person in this group of elders than in others. This greater proportion of reporting by a third person may be explained by a social belief that elders with mental disability are less capable to decide for themselves whether to report an abuse. The observed frailty among elders with severe disability may also be an explanation for these having a higher proportion of reports made by a third person than those with moderate disability.

Socio-demographic characterization of the alleged abuser

In our study, abusers were predominantly male. That is in accordance with a study of cases of elder abuse performed in the United States^[4] and a study of abuse in elders with cognitive impairment^[23]. However, there are also studies that do not support these data, stating that abusers' male sex is not a risk factor^[12].

Information on offenders' professional occupation was given by the victims and in few of the reports, raising the possibility of a bias. Still, it was noted that abusers seemed to spend more time at home as they were either unemployed, retired or had no professional occupation. It was also noted that most offenders co-habited with the victim, thus raising the possibility of spending more time together. In addition to co-habitation being for itself considered a risk factor for elder abuse^[11], taking care of elders with disability may further increase the stress and burden on the abuser, also considered to be risk factors in studies of elders requiring assistance with daily living activities or with dementia^[12].

Supporting previous data, both in elders in general^[2, 4] and in frail elders^[22], almost half of reports in our study referred to victims' children as the alleged abusers. However, many studies state that the most frequent abusers are victims' partners^[15, 21, 24], corroborating the observation that among cases of married victims, 50% were perpetrated by their partners.

Scarce information was obtained among our study's forensic medical reports concerning substance abuse or psychiatric illness, recognized risk factors referred by literature^[1, 3, 25]. In a study of patients with Alzheimer's disease, caregivers with alcohol issues were found to be 3 times more likely to use physical violence^[26]. In studies of elders requiring assistance with daily living activities and elders with dementia, psychiatric illness or psychological problems were considered risk factors for abuse^[12]. Despite the scarce numbers of reports providing that kind of information, a great proportion referred to the presence of substance abuse or psychiatric illness affecting the abusers, being in accordance with the literature. Still, this proportion may be increased as there may be a tendency for experts to miss the absence of substance abuse behaviors and psychiatric

illness and to note when they are present as these are frequent excuses for abuse mentioned by both perpetrators and victims but may not be asked in routine clinical forensic medicine interviews. The relation between alcohol problems or psychiatric illness and elder abuse was not confirmed in 2 studies of abuse on elders with dementia^[11, 27].

Abuse characterization

The fact that the majority of reports refer the occurrence of previous episodes of abuse shows the inefficacy of our society in protecting these victims. Although abuse occurs repeatedly, in multiple ways and in most cases for many years, the majority of the victims do not disclose it. In our study, more than half of forensic medical reports with background of abuse had no previous reports made. Of those which had, more than half were made by a third person. Underreporting by the victims may occur for various reasons, including^[2, 28]: (a) not being aware of being victims or feeling that the abuse is deserved, as they see themselves as a burden to their caregivers; (b) fear of being displaced from their homes and taken away from their loved ones; (c) fear that their loved ones will get into trouble and that they will lose their care-giving and be neglected; (d) shame over being abused; (e) fear of disbelief; (f) fear of retaliation; (g) lack of knowledge of available resources; (h) inability to disclose the abuse, either for communication problems (e.g. due to dementia) or due to interference from the abuser. Because of these reasons, it is estimated that only 1 in 6 cases are reported to the authorities.

General cultural disapproval of physical violence, with this type of violence widely exposed in the media, may explain the observed predominance of this type of abuse over other types, even though only minor injuries and/or pain were observed in our

study's cases. The absence of severe lesions certainly does not mean that severe forms of physical abuse do not occur. As shown in a study among hospitalized elders with abuse or neglect diagnosis in the United States, physical abuse was the second most frequently coded form of abuse, only surpassed by nutritional neglect^[21]. Among the cases of our study motivated by a report made by a health professional, in none was the professional a physician and only one was a nurse. Thus, our results probably reflect underreporting by health professionals. Although much has been written and spoken about elder abuse, this is still a topic that raises doubts, insecurity and concern among health professionals, resulting in underreporting. Further studies are necessary to characterize reporting habits among the Portuguese health professionals, so that this problem can be understood and solved.

The distribution of injuries observed differed from that suggested by a literature review in elder abuse^[20]. That review points upper limbs as the most frequent location for injuries resulting from physical abuse to elders, what is logical considering that most physically abused victims will try to defend themselves. Elders with disability, especially those with severe disability, as observed in our study, may have less capacity to do so. That could explain the presence of injuries in multiple locations in so many cases, and the predominance of injuries in the head and/or neck instead of the limbs, as observed in some studies of that review^[20]. Head and neck injuries may be more frequent as these are the most accessible areas, particularly when one is sitting or bedridden, preferential positions for those with significant disabilities.

Psychological abuse (when isolated), the most frequent self-reported type of abuse admitted by caregivers^[8, 11, 22-24, 27, 29, 30], did not represent a significant part of our cases when reported by itself. This could be explained by the underestimation of

15

psychological abuse as a significant or serious form of abuse by many people, especially when compared to physical abuse. It is also possible that psychological abuse is not as predominant over physical abuse as self-reported by caregivers, since people may tend to hide behaviors considered most reprehensible, thus disclosing psychological abuse more easily than physical abuse.

Literature mentions financial abuse as more prevalent than physical abuse among elders^[1]. However, it was present in only 8.6% of our cases. It is possible that these cases are not referred as the victim may feel that the forensic expert is not the appropriate person to whom they should denounce this type of abuse as it is not directly associated with their health. Another explanation may be that the police might not direct financial abuse to a forensic medical examination.

Sexual abuse was reported in only one of the cases of our sample, and as an event occurring in the distant past. This type of abuse may be hidden as sex is still seen as a taboo topic in the eldest groups of our society. However, the reported prevalence of this type of abuse is also low among European countries $(0.7\%)^{[1]}$, thus being difficult to represent in a sample such small as ours'^[28].

Among cases in which a preliminary report was written, less than half were concluded. That may reflect withdrawal from complaint (when the public prosecutor does not see the case as a domestic violence one), denial of charges (when the victim is blackmailed by the abuser to do so, or when the report is presented against the victim's will) or death of the victim.

Conclusions

From this study, we can conclude:

- a) The proportion of 5.5% of victims with disability observed among all cases of elders allegedly abused by family members presented to forensic medical evaluation at the north branch of the National Institute of Legal Medicine and Forensic Sciences of Portugal, in Porto, seems clearly underestimated;
- b) The victims are predominantly female (63%);
- c) Motor disability (49%) appears to be much more frequent than mental disability (7%) in our sample of abused elders; however, there may be more significant underreporting in the last group;
- d) Elders with severe disability have reports presented by a third person more frequently than elders with moderate disability; the same happens when comparing elders with and without mental disability;
- e) The abusers are predominantly male (63%) and living with the victims (90%);
- f) Although most abusers are victims' children (47%), married victims are most frequently abused by their partners (49%);
- g) Most victims have previous history of abuse by the same abuser (74%), in multiple cases for many years and with frequent episodes (93%);
- h) Physical abuse is the most frequently reported type of abuse (86%);
- i) Abused elders frequently present with multiple superficial injuries (64%), mostly in the head and neck (75%).

Since this was a retrospective study of forensic medical reports, caution must be taken in the generalization of our results to the general population of elders with moderate or severe disability.

Declaration of Conflicting Interests

There were no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research or preparation of this article.

Ethical approval

This study was carried out in accordance with ethical rules. It has not been submitted to Ethical Approval since it was a retrospective review in which no invasive studies were carried out nor identification of the individuals was given.

References

- Sethi, D., et al., *European report on preventing elder maltreatment*, 2011, World Health Organization: Denmark.
- Bond, M.C. and K.H. Butler, *Elder abuse and neglect: definitions, epidemiology, and approaches to emergency department screening.* Clin Geriatr Med, 2013. 29(1): p. 257-73.
- Yaffe, M.J. and B. Tazkarji, Understanding elder abuse in family practice. Can Fam Physician, 2012. 58(12): p. 1336-40, e695-8.

- Krienert, J.L., J.A. Walsh, and M. Turner, *Elderly in America: a descriptive study of elder abuse examining National Incident-Based Reporting System (NIBRS) data*, 2000-2005. J Elder Abuse Negl, 2009. 21(4): p. 325-45.
- 5. Cooper, C., A. Selwood, and G. Livingston, *The prevalence of elder abuse and neglect: a systematic review*. Age Ageing, 2008. **37**(2): p. 151-60.
- Instituto Nacional de Estatística, I.P., Censos 2011 Resultados Definitivos -Portugal, 2012, Instituto Nacional de Estatística, I.P.
- Anetzberger, G.J., et al., A model intervention for elder abuse and dementia.
 Gerontologist, 2000. 40(4): p. 492-7.
- 8. Cooper, C., et al., *Abuse of people with dementia by family carers: representative cross sectional survey.* BMJ, 2009. **338**: p. b155.
- 9. Lee, M. and S.R. Kolomer, *Caregiver burden, dementia, and elder abuse in South Korea.* J Elder Abuse Negl, 2005. **17**(1): p. 61-74.
- Hughes, K., et al., Prevalence and risk of violence against adults with disabilities: a systematic review and meta-analysis of observational studies. Lancet, 2012. 379(9826): p. 1621-9.
- 11. Compton, S.A., P. Flanagan, and W. Gregg, *Elder abuse in people with dementia in Northern Ireland: Prevalence and predictors in cases referred to a psychiatry of old age service.* Int J Geriatr Psychiatry, 1997. **12**(6): p. 632-5.
- 12. Johannesen, M. and D. LoGiudice, *Elder abuse: a systematic review of risk factors in community-dwelling elders.* Age Ageing, 2013. **42**(3): p. 292-8.
- Laumann, E.O., S.A. Leitsch, and L.J. Waite, *Elder mistreatment in the United States: prevalence estimates from a nationally representative study.* J Gerontol B Psychol Sci Soc Sci, 2008. 63(4): p. S248-S254.

- 14. Ferreira-Alves, J. and A.J. Santos *Prevalence Study of Abuse and Violence* against Older Women - Portugal Report (AVOW Project). 2011.
- Biggs, S., et al., *Mistreatment of older people in the United Kingdom: findings from the first National Prevalence Study*. J Elder Abuse Negl, 2009. 21(1): p. 1-14.
- 16. Lachs, M.S., et al., *Risk factors for reported elder abuse and neglect: a nineyear observational cohort study.* Gerontologist, 1997. **37**(4): p. 469-74.
- 17. Perez-Carceles, M.D., et al., *Suspicion of elder abuse in South Eastern Spain: the extent and risk factors*. Arch Gerontol Geriatr, 2009. **49**(1): p. 132-7.
- Walsh, C.A., et al., *Elder abuse and oppression: voices of marginalized elders*. J
 Elder Abuse Negl, 2011. 23(1): p. 17-42.
- 19. Dantas, S., et al., *Parricide: A forensic approach*. J Forensic Leg Med, 2014. 22:p. 1-6.
- Murphy, K., et al., A literature review of findings in physical elder abuse. Can Assoc Radiol J, 2013. 64(1): p. 10-4.
- Rovi, S., et al., Mapping the elder mistreatment iceberg: U.S. hospitalizations with elder abuse and neglect diagnoses. J Elder Abuse Negl, 2009. 21(4): p. 346-59.
- 22. Anme, T., M. McCall, and T. Tatara, An exploratory study of abuse among frail elders using services in a small village in Japan. J Elder Abuse Negl, 2005.
 17(2): p. 1-20.
- 23. Kishimoto, Y., et al., Abuse of people with cognitive impairment by family caregivers in Japan (a cross-sectional study). Psychiatry Res, 2013. 209(3): p. 699-704.

- 24. Wiglesworth, A., et al., *Screening for abuse and neglect of people with dementia.* J Am Geriatr Soc, 2010. **58**(3): p. 493-500.
- 25. Walsh, C.A. and Y. Yon, *Developing an empirical profile for elder abuse research in Canada.* J Elder Abuse Negl, 2012. **24**(2): p. 104-19.
- 26. Vandeweerd, C., et al., *Physical mistreatment in persons with Alzheimer's disease*. J Aging Res, 2013. **2013**: p. 920324.
- 27. Cooney, C., R. Howard, and B. Lawlor, *Abuse of vulnerable people with dementia by their carers: can we identify those most at risk?* Int J Geriatr Psychiatry, 2006. **21**(6): p. 564-71.
- 28. Nobrega Pinto, A., et al., *Sexual offenses against elderly people: forensic evaluation and judicial outcome.* J Elder Abuse Negl, 2014. **26**(2): p. 189-204.
- 29. Cooper, C., et al., *The determinants of family carers' abusive behaviour to people with dementia: results of the CARD study*. J Affect Disord, 2010. 121(1-2): p. 136-42.
- 30. Yan, E. and T. Kwok, *Abuse of older Chinese with dementia by family caregivers: an inquiry into the role of caregiver burden.* Int J Geriatr Psychiatry, 2011. 26(5): p. 527-35.

Tables

Table 1: Victims' and abusers' socio-demographic data (n=70)

		Victims	Abusers
		n (%)	n (%)
	Married	37 (52.9)	-
	Widowed	25 (35.7)	-
Marital status	Divorced 5 (7.1)		-
	Single	3 (4.3)	-
	Retired	66 (94.3)	9 (32.1)*
Due for sie und andieiter	Without activity	4 (5.7)	1 (3.6)*
Professional activity	Unemployed	0	18 (64.3)*
	Without information	0	42 (60)
Degree of disability	Moderate	39 (55.7)	-
	Severe	31 (44.3)	-
	Yes	-	18 (75.0)*
Substance abuse	No	-	6 (25.0)*
	Without information	-	46 (65.7)
Psychiatric disorders	Yes	-	8 (72.7)*
	No	-	3 (27.3)*
	Without information	-	59 (84.3)

*Valid percent

Palationshin	Total (<i>n</i> =70)	Married victims (n=37)	
Relationship	<i>n</i> (%)	n (%)	
Partner	20 (28.6)	18 (48.6)	
Children	33 (47.1)	12 (32.4)	
Children-in-law	10 (14.3)	3 (8.1)	
Grandchildren	5 (7.1)	3 (8.1)	
Other	2 (2.9)	1 (2.7)	

Table 2: Relationship between victim and abuser.

	n (%)	Type of disability
Mental	5 (7.1)	NSD (3); Alzheimer's disease (1); Aphasia (1)
		MSP (18); MSP and hemiparesis (3); MSP and monoparesis (1);
Motor	34 (48.6)	MSP and ataxia (1); Hemiparesis (4); Monoparesis (3);
		Parkinson's disease (3); Hemiparesis and dysarthria (1)
Sensorial	6 (8.6)	Decreased visual acuity (3); Decreased hearing acuity (1);
Sensorial	0 (0.0)	Amaurosis (1); Bilateral deafness (1)
Other	4 (5.7)	Renal failure (2); Respiratory failure (2)
	A da ha M bl M bl M Pa re co in da da	NSD and MSP (4); NSD with aphasia and ataxia (1);
		Alzheimer's disease and MSP (1); Parkinson's disease with
		dementia and MSP (1); Alzheimer's disease and decreased
		hearing acuity (1); Hemiparesis and decreased visual acuity (2);
		MSP with decreased hearing acuity (2); MSP with bilateral
		blindness (1); MSP with decreased hearing and visual acuity (1);
Multiple		MSP, loss of sphincter continence and neoplastic pathology (1);
Multiple		Parkinson's disease with MSP and pneumonia (1); MSP and
		renal failure (1) NSD with MSP, hemiparesis, loss of sphincter
		continence and decreased hearing acuity (1); Cognitive
		impairment with aphasia, MSP, loss of sphincter continence and
		decreased hearing and visual acuity (1); Parkinson's disease with
		dementia, MSP and decreased visual acuity (1); NSD, MSP and
		epilepsy (1)
		cpnopsy (1)

Table 3: Victims' disability characterization (n=70)

MSP: Musculoskeletal pathology; NSD: Non-specified dementia

		n	%
	Frequently	27	93.1*
Periodicity	Sporadically	2	6.9*
	Without information	23	44.2
	< 1 month	3	12.0*
	1 month-1 year	8	32.0*
Duration	1-5 years	4	16.0^{*}
	>10 years	10	40.0^{*}
	Without information	27	51.9
Type of abuse	Psychological	8	15.7*
	Physical	31	60.8^*
	Financial	2	3.9*
	Physical + Financial	9	17.6^{*}
	Physical + Sexual	1	2.0^{*}
	Without information	1	1.9
Report	Yes	13	31.0*
	No	29	69.0 [*]
	Without information	10	19.2

Table 4: Background of abuse (n=52)

*Valid percent

Domestic Violence against Elderly with Handicap

		Total	Moderate	Severe	
		n (%)	n (%)	n (%)	р
Head and Neck	Yes	46 (75.4)	23 (65.7)	23 (88.5)	0.041
	No	15 (24.6)	12 (34.3)	3 (11.5)	
Torso	Yes	16 (26.2)	9 (25.7)	7 (26.9)	0.915
	No	45 (73.8)	26 (74.3)	19 (73.1)	
Limbs	Yes	34 (55.7)	16 (45.7)	18 (69.2)	0.067
	No	27 (44.3)	19 (54.3)	8 (30.8)	

Table 5: Location of injuries according to victims' disability degree (*n*=61).

			By the victim	By other person		
			n (%)	n (%)	р	
Total			54 (77.1)	16 (22.9)	-	
Victims' sex		Female	29 (65.9)	15 (34.1)	0.003*	
		Male	25 (96.2)	1 (3.8)		
Degree of disability		Moderate	37 (94.9)	2 (5.1)	0.000	
		Severe	17 (54.8)	14 (45.2)		
	Motor	Yes	41 (75.9)	13 (24.1)	0.748	
		No	13 (81.3)	3 (18.8)		
Type of	Mental	Yes	6 (35.3)	11 (64.7)	0.000	
disability		No	48 (90.6)	5 (9.4)		
	Sensorial	Yes	14 (87.5)	2 (12.5)	0.329	
		No	40 (74.1)	14 (25.9)		

Table 6: Report authorship according to victims' characteristics

*Statistical significance lost when layered with degree of disability