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Types of abuse and risk factors associated with elder abuse

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Summary

PRINCIPLES: Detecting elder abuse is challenging because it is a taboo, and many cases remain unreported. This study aimed to identify types of elder abuse and to investigate its associated risk factors.

METHODS: Retrospective analyses of 903 dossiers created at an Independent Complaints Authority for Old Age in the Canton of Zurich, Switzerland, from January 1, 2008 to October 31, 2012. Characteristics of victims and perpetrators, types of abuse, and associated risk factors related to the victim or the perpetrator were assessed. Bi- and multivariate analysis were used to identify abuse and neglect determinants.

RESULTS: A total of 150 cases reflected at least one form of elder abuse or neglect; 104 cases were categorised as abuse with at least one type of abuse (overall 135 mentions), 46 cases were categorised as neglect (active or passive). Psychological abuse was the most reported form (47%), followed by financial (35%), physical (30%) and anticonstitutional abuse (18%). In 81% of the 150 cases at least two risk factors existed. In 13% no associated risk factor could be identified.

Compared with neglect, elders with abuse were less likely to be a nursing home resident than living at home (odds ratio [OR] 0.02, 95% confidence interval [CI] 0.00–0.19). In addition, they were more likely to be cohabiting with their perpetrators (OR 18.01, 95% CI 4.43–73.19).

CONCLUSION: For the majority of the reported elder abuse cases at least two associated risk factors could be identified. Knowledge about these red flags and a multifaceted strategy are needed to identify and prevent elder abuse.

Key words: *elder abuse; risk factors; Switzerland*

Introduction

Elder abuse is a serious problem in our society [1]. The definition of elder abuse adopted from the World Health Organization 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" [2].

Although case reports of elder abuse first appeared in the literature 40 years ago [3, 4], it is still a taboo and a hidden problem, which often does not surmount the private framework of the elderly person [5]. The United Kingdom National Prevalence Study of Elder Mistreatment, which took place in 2006, estimated a past 12-months prevalence of 2.6% for any mistreatment (abuse or neglect) in people aged 66 and older [6]. This means that nearly one in 40 adults is afflicted by mistreatment. Most often the victims hide being abused from the clinician [7]. Especially financially or physically dependent older adults fear that if the perpetrator is arrested or removed from the household following disclosure, they may be institutionalised or lose other freedoms [8].

In Switzerland, data concerning elder abuse and neglect have been collected, especially on the level of institutions (nursing homes), but not reported up to now.

The aim of this study was to assess the frequency of the various types of abuse in victims suffering from elder abuse in the northern part of Switzerland, and the associated risk factors for both victims and perpetrators. Furthermore, we wanted to compare the prevalence of risk factors associated with abuse (wilful infliction of damage) to the prevalence of those associated with neglect (active or passive).

Methods

Data collection

Dossiers of complaints from people 60 years or older, who had contacted the Independent Complaints Authority for Old Age in the Canton of Zurich, Switzerland, were used for this retrospective analysis. This counselling centre is a private association dedicated to solving problems regarding conflicts of elder persons. Only a minority of conflicts fulfil the criteria of active or passive neglect or of abuse, the wilful infliction of damage. The majority concern disagreements over financial details for services provided or simple neighbourhood conflicts or unrealistic expectations of elderly persons of services they would like but have not the right to receive (e.g. financial help). It has an office in the city centre of Zurich, is open on workdays, and is reachable also by e-mail or phone. There is no fee for using the

centre; the counsellors, mostly retired experts of elder care in different professions are subject to professional confidentiality.

The data were collected retrospectively from 1 January 2008 to 31 October 2012 using the electronic database of the Independent Complaints Authority for Old Age. This was done by the first author. In cases of doubt she consulted the head of the expert committee or the manager of the institution, an experienced geriatric nurse. The electronic database consisted of case notes of the counsellors, who explored the reporting person and if possible the victim and the perpetrators. These subjective data were entered into the case notes when they appeared reliable to the counsellors. Some data such as the exact age were not noted regularly, when they seemed to the counsellors not important for solving a conflict. For example, a dementia diagnosis was stated in the case notes when it was reported and appeared to be a probable clinical diagnosis in the observed circumstances, even if it was unknown on which specific criteria the diagnosis was based.

Definitions

All cases were categorised as either neglect (passive or active) or abuse. For the definitions and criteria of the terms "passive neglect", "active neglect" and "abuse" see table 1 (adapted and translated into English from [9]).

Four types of potential abuses were assessed: physical, psychological, financial and anticonstitutional abuse. The following definitions were used [5]:

- Physical abuse is the use of physical force that may result in bodily injury, physical pain or impairment.
- Psychological abuse is the infliction of emotional pain or distress, e.g., verbal assault, insults, threats, intimidation, refusal to communicate.
- Financial abuse is the illegal or improper use of an elder's fund, property or assets.
- Anticonstitutional abuse refers violation of constitutionally guaranteed human rights. Examples are stealing of identity papers, coercion, or false pretence resulting in surrendering rights.

Associated risk factors

Current evidence supports the multifactorial aetiology of elder abuse involving risk factors within the victim, perpetrator, relationship and environment [10–12]. In cases of abuse the prevalence of 14 associated risk factors were documented. They can be divided up in two different groups: risk factors related to the victims (need of support, need of care, dementia, positive history of violence, aggressive behaviour, addiction disease, other psychiatric disease, social isolation) or related to the perpetrators (overload, cohabiting with the victim, dependence on the victim, addiction disease, other psychiatric disease, dementia).

Statistical analysis

Descriptive statistics were calculated for all variables and presented as proportions, means and standard deviations or medians and interquartile ranges for continuous variables and frequencies and percentages for categorical data. Univariate comparisons between cases of abuse and neglect were performed using Pearson's chi-squared test statistics or Fisher's exact test. To assess the independent association between abuse or neglect, victim or perpetrator characteristics and associated risk factors, respectively, multiple logistic regression analysis was applied. Two-sided p-values <0.05 were considered statistically significant. All statistical analyses were performed using R, version 3.0.2.

Ethical issues and data confidentiality

An anonymised table was built from the electronic database of the Independent Complaints Authority for Old Age. According to the Ethics Committee of the Canton Zurich the study did not require formal ethics approval (reference KEK-ZH-number 26-2015).

Table 1: Definitions and criteria.

Passive neglect: Allowing violence passively (causing harm unconsciously)	
Criteria	Neglecting vital needs
	Allowing malnutrition and dehydration
	Allowing decubiti
	Forcing victim to wear diapers, and restricting access to the toilet
	Deprivation of information
	Limitation of freedom
	Excessive demands towards the victim (the perpetrator is unconscious of it)
	Negligence toward safety precautions
Active neglect: Active admission of violence (consciously inflicting harm)	
Criteria	Deprivation of information
	Intimidation and name-calling
	Tying the victim up to prevent falls without consent of this person
	Consciously ignoring an emergency
	Not calling a physician in spite of indication
	Stopping important treatments
	Failure to provide essential care
	Deprivation of nourishment
	Leaving a person alone for an inappropriate amount of time
	Excessive demands in a situation of care (the perpetrator is conscious of it)
	Not delivering documents (e.g, ballot paper)
Abuse: Wilful infliction of damage	
Criteria	Hitting, pinching or burning victim, abrupt behaviour
	Degrading, mocking
	Threatening
	Deprivation of medication
	Withholding nourishment and hydration
	Sexual abuse
	Tethering victim
	Silence for days (for punishment)
	Defraud mailing
	Financial exploitation
	Deprivation of liberty, locking victim in
	Urging victim to change their last will and testament for the benefit of the perpetrator
	Depriving victim of legal title
	Omission of safety precautions

Results

Study population and characteristics of victims

A total of 903 dossiers were analysed. Of these, 753 cases were not categorised as abuse or neglect (e.g., neighbourhood conflicts) and 150 cases represented at least one form of elder abuse or neglect (fig. 1). Abuse was reported in more than two thirds (69.3%, n = 104), active neglect in 26% (n = 39) and passive neglect in 4.7% (n = 7) (fig. 2). Table 2 displays the victim characteristics. The victim mean age was 82 years ± 9.1 years (range 60–99); 63.3% were female. As a result of anonymous data collection, data regarding age was missing in 76 cases, and gender in 11 cases. Forty-three percent of the victims lived in a nursing home; the remainder lived in their own apartments. On average, the duration of abuse or neglect was 3 months (median, interquartile range [IQR] 2–6).

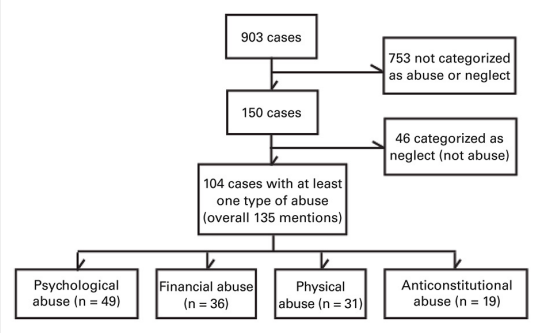

Figure 1

Study flow.

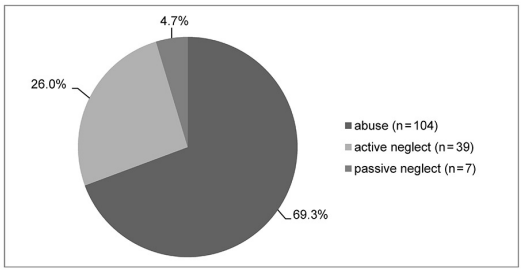

Figure 2

Distribution of neglect and abuse (n = 150 cases).

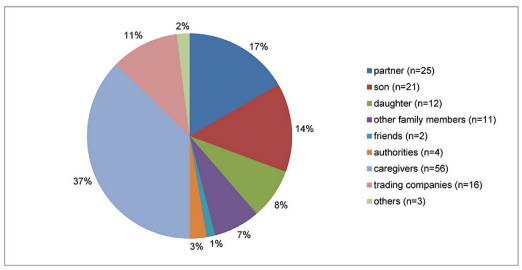

Figure 3a

Perpetrators relationship to their victim.

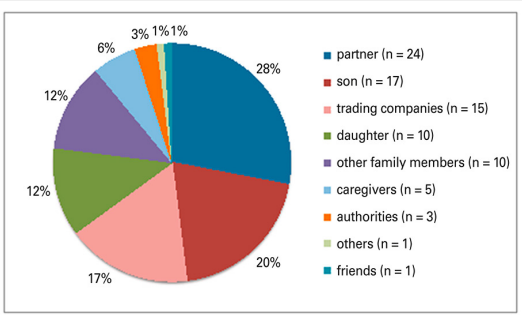

Figure 3b

Perpetrators relationship to their victim (living at home, n = 86).

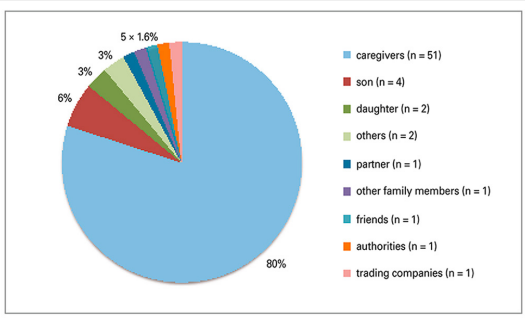

Figure 3c

Perpetrators relation to their victim (nursing home resident, n = 64).

Prevalence of associated risk factors related to the victims

Overall, the most common risk factors related to the victims were: need of support (73%), need of care (59%) and dementia (41%). All persons with need of care were also in need of support for daily activities. Positive history of violence (the victims had suffered violence at least once during their life before the actual case) was reported in 14% of all cases, aggressive behaviour in 11%, addiction disease in 3%, other psychiatric disease in 10%. Social isolation was reported in 6%. Table 3 displays the frequency distribution of the recorded risk factors.

Characteristics of perpetrators

Forty-six percent of perpetrators were family members, 37% professional caregivers and 11% trading companies (fig. 3a). The remaining 6% were categorised as friends, public authorities or "others" (e.g. neighbours). The family members were divided in partner/spouse (17%), son (14%), daughter (8%) and other family members (7%). Concerning the victims living at home, the perpetrators were mainly family members (partner in 28%, son in 20% and daughter in 12%) or trading companies (17%). Concerning nursing home residents, 80% of the perpetrators were professional caregivers.

Prevalence of associated risk factors related to the perpetrators

The most common risk factors related to the perpetrators were being overburdened with the situation and cohabiting with the victim (33% each). In about half of the cases of cohabitation the perpetrator was the partner or spouse of the victim (17%), in the other half it was the son, daughter or

another family member (5% each). Detailed information is displayed in table 4.

In 17% of the reported cases the perpetrator was dependent on the victim. In most cases financial or emotional dependence was reported. Pathological characteristics of perpetrators such as addiction disease, dementia, or other psychiatric disease were reported in 16% of all cases.

Types of abuse

Figure 4 displays the various types of abuse (n = 104, overall 135 mentions). Psychological abuse was the most common form (reported in 47%). Second most common form was financial abuse (35%), followed by physical abuse (30%) and anticonstitutional abuse (18%).

Frequency of risk factors

At least one risk factor, related to either victim or perpetrator, was present in 131 of 150 (87%) assessed cases. Two or more risk factors were reported for 81% of all cases. Three risk factors per case could be identified on average (median, IQR 2–4). The number of risk factors per case ranged between 0 (19 cases, 13%) and 8 (3 cases, 3%). In 120 cases (80%) at least one risk factor related to the victim and in 89 cases (59%) at least one risk factor related to the perpetrator were reported.

Comparison of associated risk factors and characteristics in abuse and neglect

Univariate analysis

Three risk factors were associated with a significantly lower risk for abuse than for neglect: need of support, need of care, and dementia of the victim. In contrast, the factors significantly associated with a higher risk for suffering abuse than neglect were: positive history of violence of the victim, cohabitation of the victim and perpetrator, overburdening of the perpetrator, dependency on the victim by the perpetrator, or psychiatric disease other than addiction disease or dementia of the perpetrator. Likelihood of elder abuse was lower for people living in a nursing home. No significant associations with abuse or neglect were found for the victim's age or gender, or for the other associated risk factors.

Multivariate analysis

We performed two multivariate regression models, model A and B, to identify determinants of abuse. For model A we considered the eight risk factors related to the victim, the living situation (significant in univariate analysis), gender and age (potential confounders). After application of the model, the only significant determinant of abuse was the living situation: nursing home residents had a lower risk of abuse and a higher risk of neglect than persons living at home (odds ratio [OR] 0.02, 95% confidence interval [CI] 0.00–0.20).

For model B we considered the six risk factors related to the perpetrator. Cohabitation was significantly associated with a higher risk of abuse than of neglect (OR 18.01, 95% CI 4.43–73.19). Overburdening was significantly associated with a lower risk of abuse than of neglect (OR 0.07, 95% CI 0.02–0.21).

Discussion

The present study showed several key findings. First, psychological abuse was the most frequent type of abuse reported. Second, in more than 80% of all assessed cases, at least two associated risk factors for elder abuse and neglect could be identified. Third, cohabitation was more commonly associated with abuse than neglect. These kinds of cases would not be detected by a facility on the level of institutions (self-reporting of abuse and neglect by professional caregivers). Therefore, a low-threshold service accessible to the whole elderly population is very important. Fourth, abuse was less common for nursing home residents. This implies that in very difficult cases (e.g. severely demented persons) an involvement of professional care-

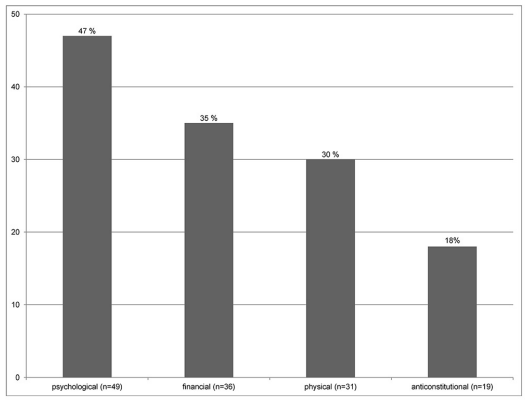

Figure 4

Types of abuse (overall 135 mentions in 104 cases).

Table 2: Sample characteristics of the victims.

Variable	Category	Number	Percentage
Gender	Male	44	29.3
	Female	95	63.3
	Missing information	11	7.3
Age	60–69 years old	7	4.7
	70–79 years old	17	11.3
	80–89 years old	31	20.7
	≥90 years old	19	12.7
	Missing information	76	50.7
Living situation	Nursing home resident	64	42.7
	Living at home	86	57.3
	Missing information	0	0.0

givers is necessary not only to provide support to the patients but also to lower the risk of elder abuse.

Types of abuses

We identified psychological abuse as the most prevalent type of abuse, followed by financial, physical, and anticonstitutional abuse. This ranking is consistent with other studies investigating the past 12-months prevalence in Europe (6.9–35.6% for psychological, 1.7–9.6% for financial and 0.3–2% for physical abuse [13]) and the United States (9% for verbal, 3.4% for financial and 0.2% for physical abuse [14]). However, our prevalence estimates cannot be compared with those of the above-mentioned population-based prevalence studies for two reasons. First, we investigated a preselected sample, i.e., persons who contacted the Independent Complaints Authority for Old Age. Therefore our estimates of the prevalence of the four types of abuse might be higher. Second, the Independent Complaints Authority for Old Age was most often contacted after repeated acts of abuse or neglect (median of duration of abuse or neglect: 3 months), which is very typical for elder abuse. We assume that the past 12-months prevalence might be higher than the life-time prevalence of a repeated act of elder abuse or neglect. A similar German study (using data from counselling services for elderly people) showed a similar distribution and frequencies of types of abuse and neglect [15]. Over a 3 year period (1998–2001) different approaches for prevention and intervention in the field of domestic elder abuse were tested on a local level. Two thirds of the cases concerned psychological abuse, about one third physical abuse, and in 20% each financial and anticonstitutional abuse were reported.

Characteristics of victims and perpetrators

More women than men were victims in our sample, and the mean age was 82 years, which is in line with other studies [5, 13, 16]. A higher percentage of victims lived at their own home than in a nursing home. However, the proportion of nursing home residents in our sample is much higher than in the total population of Switzerland: the proportion of people aged at least 65 years and living in a nursing home is 7% [17]. This may have two different implications. First, a high proportion of elder abuse or neglect in domestic environment might still be underreported. Second, reporting may have been on behalf of victims by third-party reporters: not only victims themselves could contact the Independent Complaints Authority for Old Age and ask for help, but anyone including friends, family members and neighbours. This shows the importance of checks between different actors and partners who care about the well-being of older persons. If these checks do not exist, cases of elder abuse will not be reported.

Regarding the perpetrators, the two main groups were family members (46%) and caregivers (37%). The relatively high proportion of caregiver perpetrators we found compared with other studies has to be discussed carefully. Caregivers do, in fact, report their abusive behaviour [18], but owing to the methodology used in large surveys in Europe and United States, studies based on random sampling of municipal registries, people with disabilities and those living in care institutions were excluded [13], resulting in a lower proportion. In addition, family members have less shame about reporting abuse or neglect by professional caregivers than if done by related family members. Therefore, it is very likely that elder abuse and neglect by family relatives have a much greater rate of underreporting than when committed by professional caregivers. In our study, family members were more likely to be involved in home abuse and neglect, whereas caregivers were predominantly involved in nursing homes. However, comparison of the perpetrator categories (victims living at home versus nursing home residents) is limited as the two settings are totally different.

Prevalence of associated risk factors in our sample compared with the total population

The most common risk factors significantly associated with victimisation were need of care (in multivariate analysis), need of support, dementia, and positive history of violence (in univariate analysis only). Previous studies regarding these risk factors in the total population show lower frequencies for the first three risk factors: need of care was reported for 10%, need of support for 33% [17] and the dementia rate in the same urban area (city of Zurich) amounted to 10% [19]. Data about positive history of violence in a large European study [20] were higher than our rates: life-time prevalence of violence (except neglect) was between 71% and 76%, prevalence of violence occurring during the previous year was reported in around 30%. We assume that this difference is due to the study design. In our retrospective analysis it was not possible to contact the victims and actively inquire about this risk factor, which was often not related to the actual problem or cause for which the person had contacted the Independent Complaints Authority for Old Age.

Concerning the risk factors related to the perpetrators, overburdening, cohabiting with the victim, and dependency on the victim were most often reported in our study. In Switzerland, cohabiting of a person younger and a person older than 65 years was previously reported in 1.4% [17], which is lower than in our sample (33%). For the other two risk factors, insufficient data for the total population exist to make comparisons with our study.

Elder abuse versus elder neglect

Cohabiting was significantly more common in cases of abuse than neglect in both univariate and multivariate analysis. Comparing across different types of abuse, a higher proportion of perpetrators inflicting physical abuse, as well as considerably fewer inflicting psychological abuse lived with the victim, as compared with financial and anticonstitutional abuse. In half of the cases the perpetrator was the partner or spouse; in the other half it was another person, mostly the son, daughter or another family member. These findings are in line with available studies on elder abuse from the USA [5, 21].

Nursing home residents were significantly less likely to suffer from abuse than neglect compared with persons living at home. First, a reporting bias has to be considered (the mild type of neglect might be reported rather than abuse). Second, as discussed before, this might be due to reciproc-

al checks among professional caregivers or external checks by a family member. This checking is often missing in the domestic environment. In regions with an already existing ombudsman on the level of institutions, these cases will not be reported and remain undetected. Therefore, it is important to establish a facility not only on the level of institutions (e.g. nursing homes, hospitals) but also for individuals living in their own homes, like the Independent Complaints Authority for Old Age.

Limitations and strengths of this study

The study has several limitations. First, the study sample is small (n = 150). Second, it investigated only cases reported by the victims or their proxies. Only persons who know about this private institution can address it. Furthermore, a reporting bias has to be taken into account. Third, the retrospective design limits our ability to ask the victims explicitly about associated risk factors, hence no causal connection can be established. That means the case notes were not based on a standardised questionnaire, but rather on information documented by chance. Fourth, the classification was made only by the first author, checked by another (AW) on only a few, incidentally chosen files.

The strength of our study is the classification of the different types of elderly abuse in a systematic way. Within our sample the main associated risk factors were overrepresented compared with the total population. In addition, in contrast to other studies excluding people with disabilities and those living in nursing homes, we also collected data

Table 3: Comparison of associated risk factors and victim characteristics.

Risk factors	Abuse, n (%)	Neglect, n (%)	Abuse and neglect, n (%)
Need of support °	67 (45)	43 (29)	110 (73)
– In patients living at home	40 (27)	7 (5)	47 (31)
– In nursing home residents	27 (18)	36 (24)	63 (42)
Need of care (AND support)°	49 (33)	40 (27)	89 (59)
– In patients living at home	26 (17)	7 (5)	33 (22)
– In nursing home residents	23 (15)	33 (22)	56 (37)
Dementia°	34 (23)	27 (18)	61 (41)
Positive history of violence°	19 (13)	2 (1)	21 (14)
Aggressive behaviour	11 (7)	5 (3)	16 (11)
Addiction disease	3 (2)	1 (1)	4 (3)
Other psychiatric disease	9 (6)	6 (4)	15 (10)
Social isolation	7 (5)	2 (1)	9 (6)
Gender (missing information n = 11)			
– Male	29 (19)	15 (10)	44 (29)
– Female	69 (46)	26 (17)	95 (63)
Age (missing information n = 76)			
– 60–69 years old	6 (4)	1 (1)	7 (5)
– 70–79 years old	11 (7)	6 (4)	17 (11)
– 80–89 years old	23 (15)	8 (5)	31 (21)
– ≥90 years old	11 (7)	8 (5)	19 (13)
Living situation*			
– Nursing home	27 (18)	37 (25)	64 (43)
– Living at home	77 (51)	9 (6)	86 (57)

In total, associated risk factors were mentioned 325 times in 120 cases, the percentage refers to the total of 150 cases.
*p <0.05 multivariate associations, °p <0.05 univariate associations only.

Table 4: Prevalence of risk factors in perpetrators.

Risk factors	Abuse, n (%)	Neglect, n (%)	Abuse and neglect, n (%)
Overburdening*	23 (15)	27 (18)	50 (33)
– Professional caregivers	4 (3)	22 (15)	26 (17)
– Nonprofessional caregivers	19 (13)	5 (3)	24 (16)
Cohabiting*	45 (30)	4 (3)	49 (33)
– Perpetrator = partner	25 (17)	0 (0)	25 (17)
– Perpetrator = son	6 (4)	2 (1)	8 (5)
– Perpetrator = daughter	5 (3)	2 (1)	7 (5)
– Perpetrator = other family members	7 (5)	0 (0)	7 (5)
– Perpetrator = friends	1 (1)	0 (0)	1 (1)
– Perpetrator = caregivers	0 (0)	0 (0)	0 (0)
– Perpetrator = authorities	1 (1)	0 (0)	1 (1)
Dependence on the victim°	22 (15)	3 (2)	25 (17)
Addiction disease	9 (6)	1 (0)	10 (7)
Other psychiatric disease°	10 (7)	0 (0)	10 (7)
Dementia	3 (2)	0 (0)	3 (2)

In total, associated risk factors in perpetrators were mentioned 147 times in 89 cases, the percentage refers to the total of 150 cases.
*p <0.05 multivariate associations, °p <0.05 univariate associations only

about elder abuse of victims with these two associated risk factors.

Conclusion

To identify these risk factors in a dyad of perpetrator and victim a high level of attention and confidence is needed. Clinicians who often know the most intimate details of patient's lives should be aware of these risk factors to prevent and identify cases of elder abuse or neglect. The results of our study underline the importance of establishing a multifaceted strategy on different levels (not only clinician and other healthcare professionals, and institutions, but also community resources and policymakers to reach nonprofessional caregivers) to identify and prevent elder abuse. Especially family physicians and those providing services for the support and care for elderly persons living in private apartments or houses should regularly ask caring family members about their burden of caring and address opportunities for lowering the burden by one or more professional services. This should be done with even greater emphasis if several other risk factors are present especially social isolation, dementia, addiction or other psychiatric illness.

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Figures (large format)

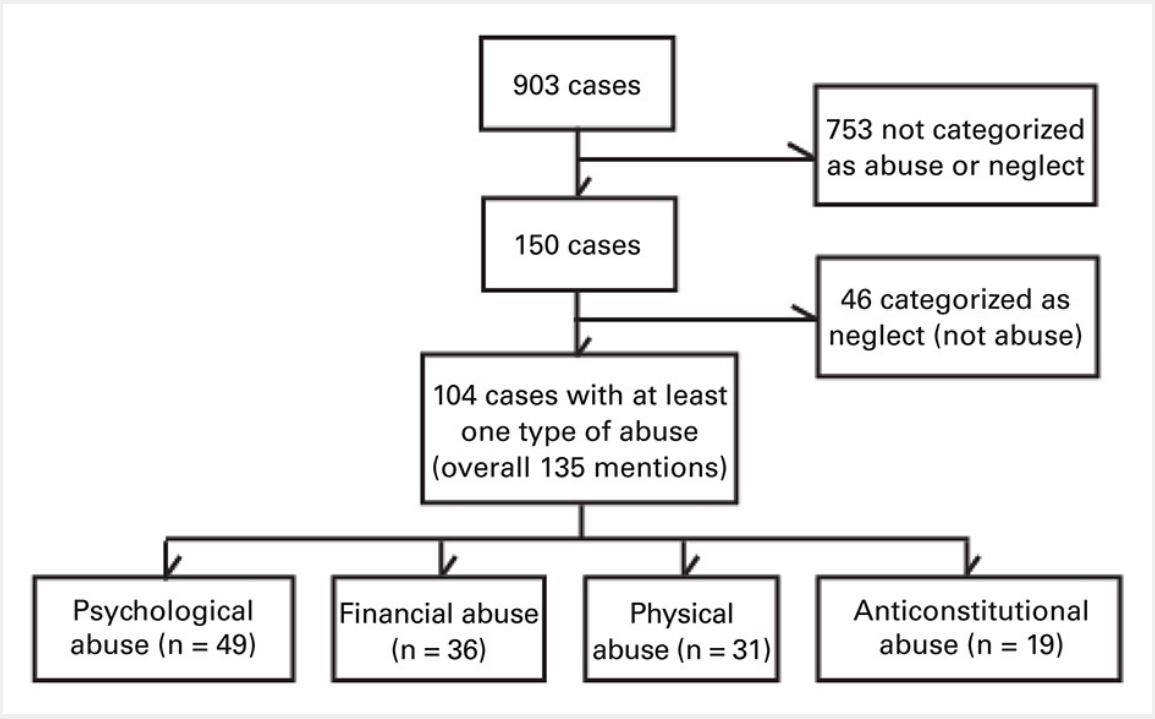

Figure 1
Study flow.

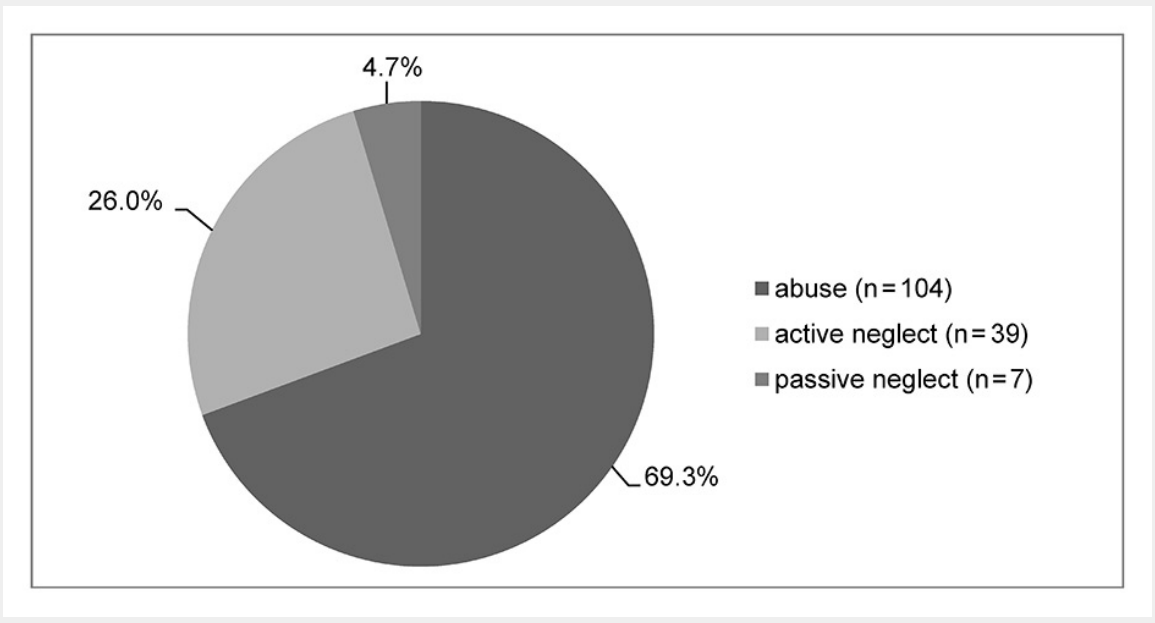

Figure 2
Distribution of neglect and abuse (n = 150 cases).

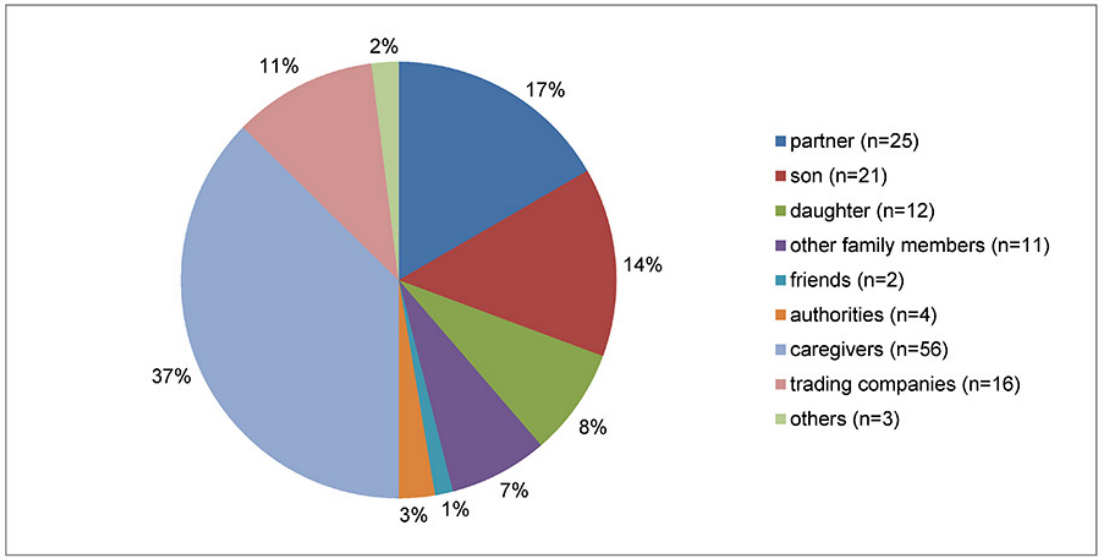

Figure 3a

Perpetrators relationship to their victim.

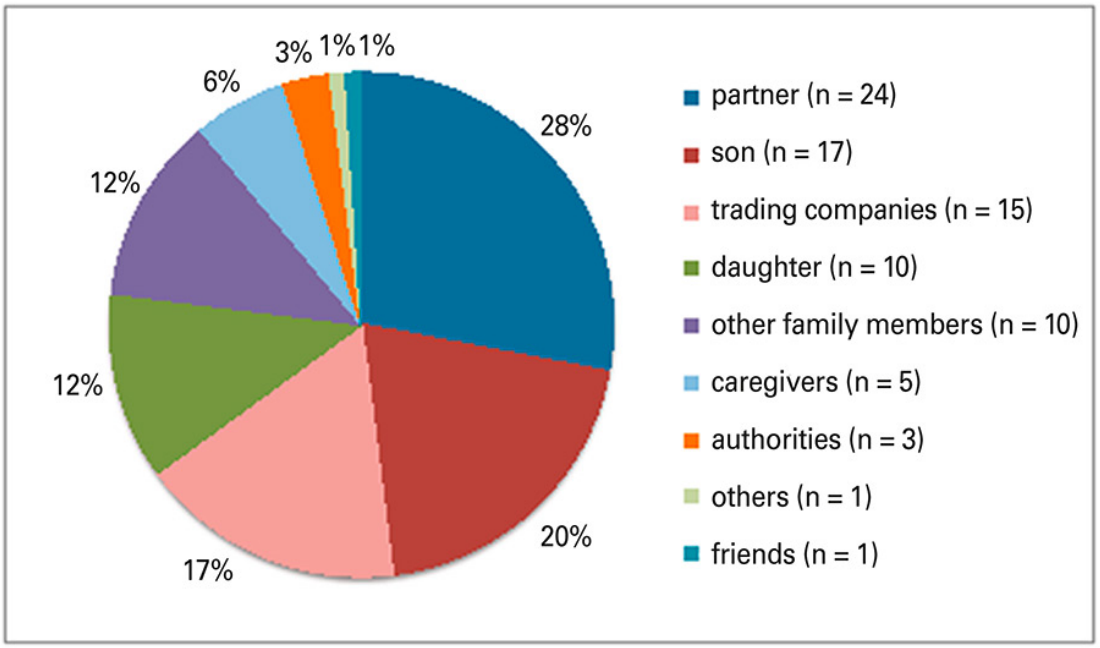

Figure 3b

Perpetrators relationship to their victim (living at home, n = 86).

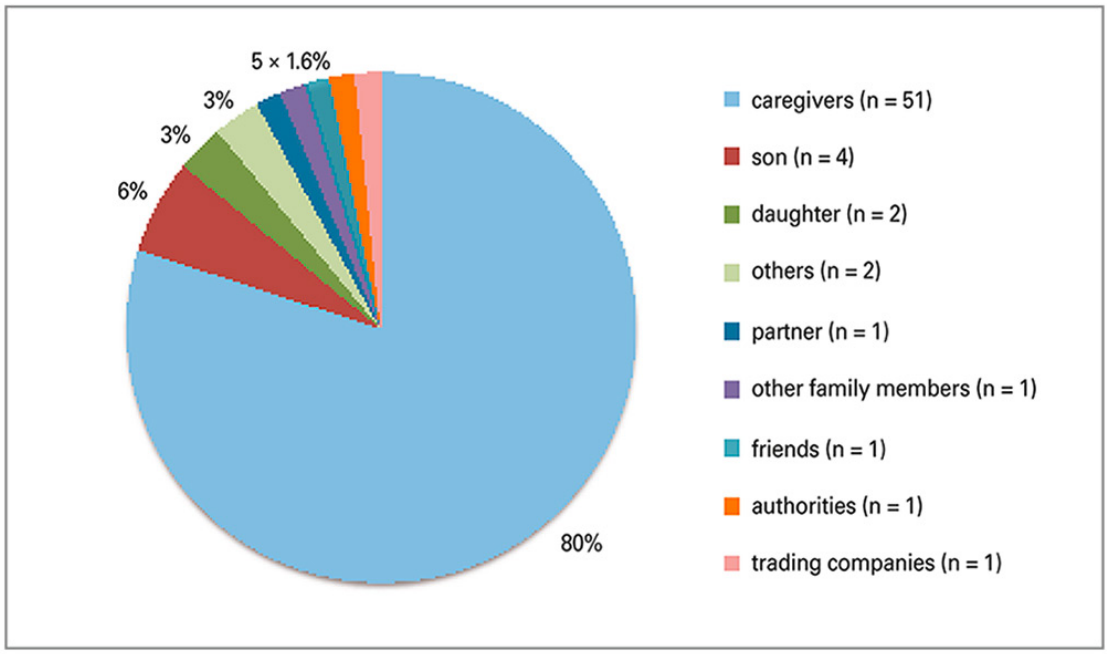

Figure 3c

Perpetrators relation to their victim (nursing home resident, n = 64).

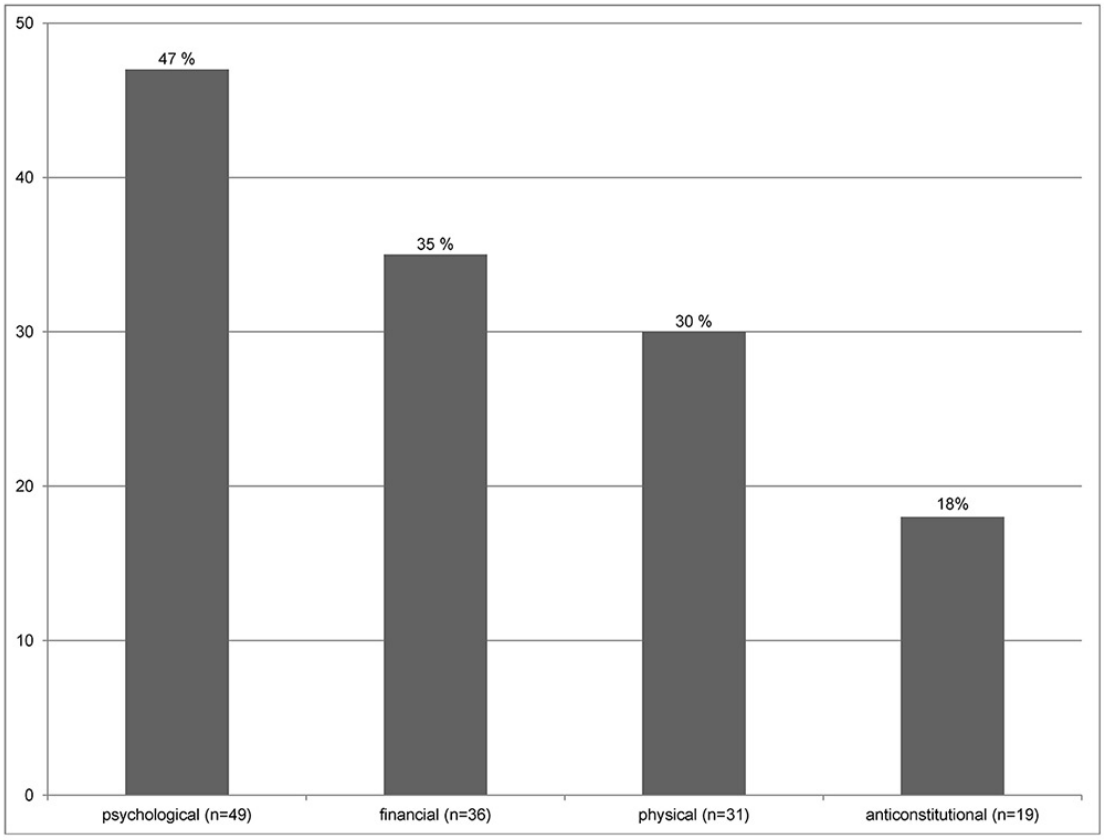

Figure 4

Types of abuse (overall 135 mentions in 104 cases).