

Original Article**Forensic aspect of elder abuse: risk factors and characteristics**

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Abstract

BACKGROUND: This study aimed to determine the types of elder abuse, their risk factors and the characteristics of abusers among abused elderly people aged above 60 years in Isfahan.

METHODS: In a cross-sectional study, abused elderly individuals aged above 60 years that referred to the centers of competent jurisdiction with complaint against a person harassing them were studied during 2008-2009. The demographic profiles of the abused and abusers were collected by physicians who worked in forensic medical centers, using a questionnaire. The type of abuse was classified as physical, emotional, sexual and neglect.

RESULTS: The prevalence of physical, emotional and sexual abuse as well as neglect in 68 individuals who were intentionally abused was 100%, 100%, 0% and 11.8%, respectively. Abused subjects were healthy, unemployed and illiterate men and women (similar sex distribution) with moderate monthly income who lived with their families, mainly in cities ($p < 0.05$). The abusers were mainly healthy and illiterate men, mostly the sons of the abused person, living in cities ($p < 0.05$). Forty six (67.6%) patients had previous history of abuse, 43 (63.2%) had more than one previous record and in 45 ones (66.2%) the previous abuse was repeated. There was no relation between elder abuse and drug and alcohol abuse ($p > 0.05$).

CONCLUSIONS: The findings of this study provided a sense about the probably high prevalence of elder abuse in our community and its related risk factors.

KEYWORDS: Elder Abuse, Risk Factors.

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The world's population is aging and it is estimated that the old population will increase to 857 million by 2050, with an increased rate of 314%.^{1,2} Given that nearly 60% of world population lives in Asia, population aging is faster in Asian countries than in other parts of the world.² According to the Iran's Ministry of Health reports, aged population in Iran constitutes 6% of Iran's population and will increase to 19% by the year 2030.³ In accordance with population aging, their associated problems will increase too, which include disability and dependency due to physical and mental disorders.⁴ One of the most common and yet often not recognized problems especially in developing countries is elder abuse.^{5,6}

Though many studies have demonstrated that the epidemiology and type of elder abuse may be different in various countries, studies showed that its prevalence ranged between 3.2 and 27.5% among general population.⁷ In a study in Ahwaz, Iran, the prevalence of elder abuse was reported to be 10.5%.⁸ Elder abuse is a complex and multi-dimensional phenomenon. It is considered not only the most common form of domestic violence, but also an undetected and underreported one. The latter is because of little studies done in this field and also the presence of barriers such as lack of clinicians, social and familial awareness, denial of the abused victims and the abusing people due to the fact that it is considered as a family affair

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that should be kept in the privacy of their homes and finally, different definitions of the problem in various ethnic and cultural groups.^{9,10} To the best of our knowledge, elder abuse and its risk factors have not received enough attention and there is not any study in this field in Isfahan, perhaps due to various issues such as the cultural ones. The aim of this study was to determine the types of elder abuse, its risk factors and the characteristics of abusers among abused elderly people aged above 60 years that referred to the centers of competent jurisdiction, in Isfahan.

Methods

Elder abuse is defined as "any pattern of behavior which causes physical, psychological, financial or social harm to an older person".⁵ According to World Health Organization definition, "elderly abuse is a once or repetitive intentional action or lack of action at all which is committed by any of the family members or close people who are generally supposed to support the elderly, causing injury or discomfort to them".⁶ In a cross-sectional study, abused elderly people aged above 60 years that referred to the centers of competent jurisdiction following their complaints from a person harassing them were studied during 2008-2009. The sampling method was census during one year. The abused elderly subjects were referred to the forensic medical centers in Isfahan for examination. All physicians in these centers were informed and justified during a session concerning the research project objectives and steps to be taken to fill the questionnaires according to the examinations and reviews of the elderly medical records. According to the initial evaluation, those who were abused and intentionally injured by children, wife, bride, groom, nurse, career or close family members and other familiar friends were enrolled in the study. Those who did not have the criteria for elderly abuse or were unintentionally beaten or injured by the people and strangers during fights or street fighting were excluded from the study. The aim of the study was described for the participants and written informed consent was obtained

from them. In cases that patients were seemed to be at the state of dementia or its start, the consent was obtained from a related individual.

Data which included the demographic profile of the abused and the abusers were collected by physicians who were working in forensic medical centers, using an appropriate questionnaire. The questionnaire consisted of two parts, one part devoted to the abused subjects and the second part was related to the individual variables of the abusers. Content validity of the questionnaire was confirmed by experts. The first draft of questionnaire was sent to three faculties and all approved the contents with minor changes. Variables related to the abused and abusers including demographic characteristics, precise family relationship between the abused and the abuser, income of each one, location of them, how the harm took place, potential drug use by the abuser and the abused chronic disease were recorded. The type of abuse was classified as physical, emotional, sexual and neglect. The classification was according to the definition of the National Center for Elder Abuse.¹¹ Given the fact that the abusers did not go along with the abused ones, the information about the abuser person was received from the abused one and the people around them. Records of disease and behavioral profile based on medical records of the abused and the abuser and the questions from their elderly relatives were the basis of diagnosis in this regard. The research protocol was approved by the research and ethics committee of Legal Medicine Organization of Iran (project number: 184090). Obtained data were analyzed using chi-square test to compare the frequency distribution of different subcategories within each characteristic category through SPSS software version 13 (Chicago, USA).

Results

Sixty eight aged people who were intentionally abused were studied. Demographic characteristics of both abused subjects and abusers are presented in tables 1 and 2. The prevalence of physical, emotional, and sexual abuse and neglect was 100%, 100%, 0% and 11.8%, respectively.

Table 1. Demographic characteristics of abused victims

	n (%)
Male	33(48.6)
Age (years, mean \pm SD)	65.4 \pm 6.4
Residing place	
-Rural	22 (32.4)
-Urban	46 (67.6)*
Education	
-Illiterate or elementary	45 (66.1)
-Under secondary school diploma	14 (20.5)
-Secondary school diploma	7 (10.2)
-Higher education	2 (3.2)*
Work	
-Working	13 (19.1)
-Unemployed	55 (80.9)*
Monthly income	
-No income	11 (16.1)
-Below 100 dollars	17 (25)
-Between 100 to 300 dollars	38 (55.8)
-More than 300 dollars	2 (3.1)*
Living with	
-Spouses	19 (27.9)
-Relatives	42 (61.7)
-Daughter	2 (2.9)
-Son	5 (7.5)*
Disease	
-Mental illnesses	3 (4.4)
-Chronic physical illnesses	23 (33.8)
-Mental and chronic physical illnesses	1 (1.4)
-Healthy	41 (60.4)*

* P < 0.05 using chi-square test.

The relative frequencies of different categories of physical and emotional abuse are presented in figures 1 and 2. Sixty elders (88.2%) asserted no history of neglect. One case (1.4%) complained of inadequate housing; 1 case (1.4%) had no health security and 6 patients (8.8%) were abused by being ignored.

Nothing was reported on suffering from inadequate food supplies or medicines. Forty six (67.6%) elders had previous history of abuse, 43 (63.2%) had more than one previous record and in 45 (66.2%) subjects the previous abuse was repeated. Of the 46 people who had previous history of abuse, 9 (19.5%) had already a forensic medical visit. Those who had previous history of abuse but did not refer to forensic medical service, reasoned that fear of the abusers, fear of the deterioration of the situation, fear of losing care and neglect and loss of the importance of the primary issue

prevented them from seeking medical advice. Twenty four (20.5%) abusers smoked cigarettes, 12 (17.6%) were drug abuser, 5 (7.3%) were both active smoker and drug abuser, 2 (3.2%) were heavy alcohol drinker and 35 (51.4%) did not use any substance regularly.

Discussion

During this study, the types of elder abuse, its risk factors and the characteristics of abusers among abused elderly people for the first time, aged above 60 years, were determined in Isfahan, Iran. The findings of the current study indicated that the most common abused people were healthy, unemployed and illiterate men and women (similar sex distribution) with moderate monthly income who lived with their families, mainly in cities. The abusers mainly were healthy and illiterate men, mostly the sons of the victims living in cities.

Table 2. Demographic characteristics of abusers

Variables	n (%)
Male	55 (80.8)
Age (years, mean \pm SD)	39.6 \pm 14.6
Residing place	
-Rural	20 (29.4)
-Urban	48 (70.6)*
Education	
-Illiterate or elementary	26 (38.2)
-Under secondary school diploma	22 (32.3)
-Secondary school diploma	12 (17.6)
-Higher education	8 (11.9)*
Work	
-Working**	53 (78)
-Unemployed	15 (22)*
Relation with abused person	
-Spouses	14 (20.5)
-Daughter	3 (4.4)
-Son	30 (44.1)
-Brides	4 (5.8)
-Grooms	5 (7.4)
-Other family members rather than the above	9 (13.2)
-Acquaintances	3 (4.6)*
Disease	
-Mental illnesses	7 (10.3)
-Chronic physical illnesses	4 (5.9)
-Mental and chronic physical illnesses	3 (4.4)
-Healthy	54 (79.4)*

* $P < 0.05$ using chi-square test.

** 5 (7.3%) were retired, 3 (4.4%) were housewives, 38 (55%) were self-employed and 7 (10.5%) had a state job.

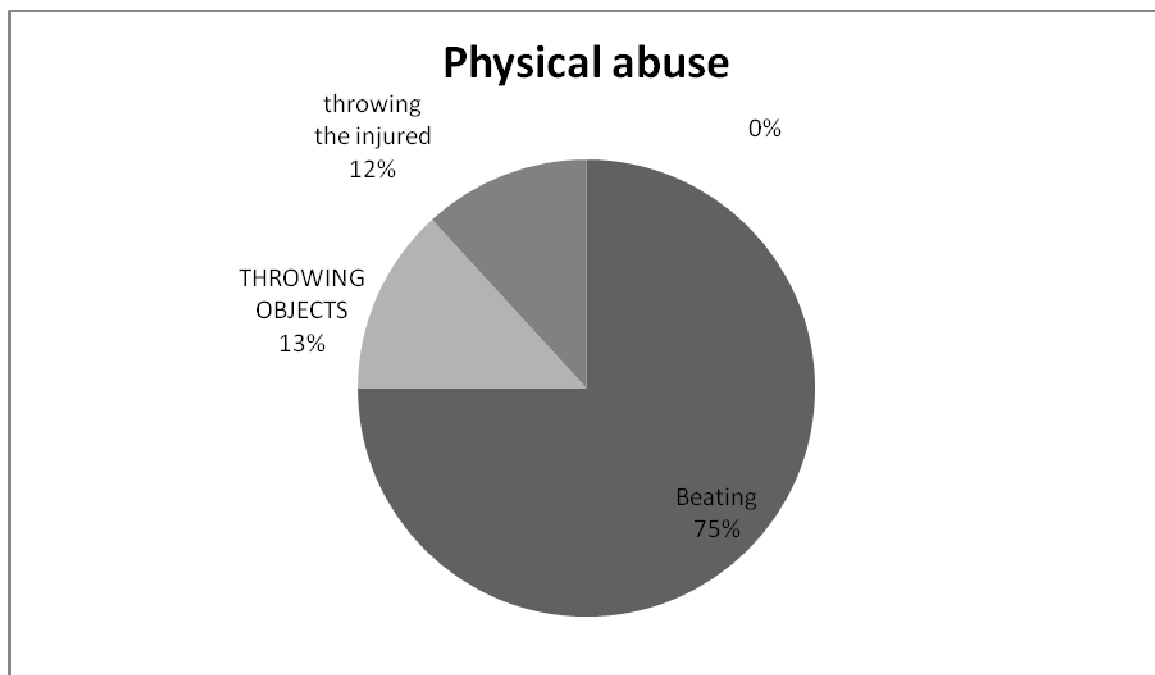


Figure 1. Frequencies of different categories of physical abuse in abused victims

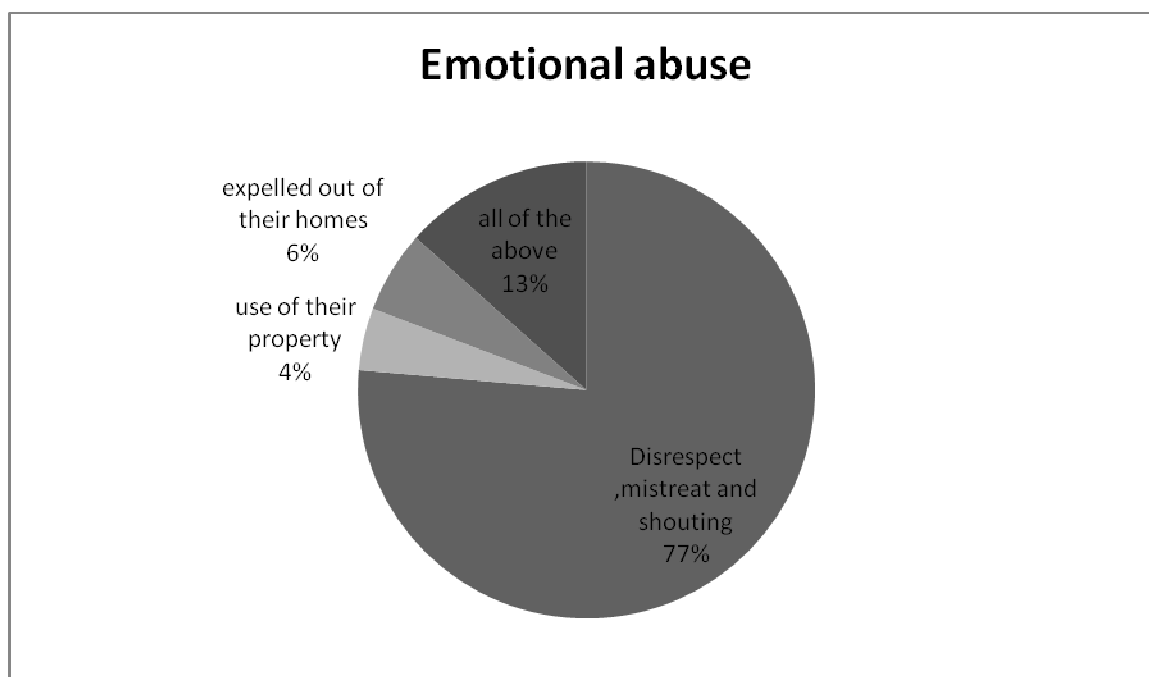


Figure 2. Frequencies of different categories of emotional abuse in abused victims

Elder abuse which is also called mistreatment is a common, largely undetected problem worldwide with various prevalence and features in different ethnic and cultural communities.¹¹ In this study, all subjects complained of both physical and emotional abuse. In a study in Singapore, among 42 cases with suspected mistreatment, the most common types of abuse were physical and neglect and similar to our study, there was no report of sexual abuse.¹² In the study of Karimi et al. in Ahwaz, Iran, the most common type was neglect.⁸ In a study in Israel, the most common types were emotional and verbal abuse while physical, sexual, and limitation of freedom abuse were relatively low.¹³ In a study in Japan, the most prevalent types of abuse were psychological neglect, financial and physical abuse.¹⁴ In a study in USA, most victims suffered from multiple types of abuse.¹⁵

Though it is difficult to accurately understand the cause of variations in rates of different features of abuse, it could be explained by differences in the reticence of reporting specific types of abuse in different cultural groups.¹⁶ In Iran, emotional and physical abuse is more accepted to be reported than sexual one. In addition, our studied population consisted of those

elder people that referred to police station themselves and there could be some cases with milder or even more severe abuse who did not seek police attention. As reported by other studies, the accepted explanation is that the official agencies receive reports about the most visible types of abuse and neglect but many other incidents remain unidentified and unreported.^{17,18} The sex distribution of abused elderly people was similar in this study, and it was in line with the study of Pillemer et al.¹⁸ However, most studies indicated that women are more commonly abused than men.¹⁹

The most abused elder people were illiterate or had low education which indicates that education and literacy are effective in changing the thinking horizon of people in old age, acceptance of others and interests of family members. The results were in line with the study of Dong et al. in China.²⁰ Similarly, most of the victims were unemployed, which increased the time of contact between the elders and the abusers and can be effective in the creation of friction. Considering that most abused elder subjects had middle income in the current study, lived with their families, had no significant mental and physical diseases and did not abuse any drug or alcohol, it indicates that they were independent,

but were abused. The results of this study contradicts the results of researches in Singapore and USA which expressed significant association of underlying diseases with the prevalence of elderly abuse.^{12,21}

The abusers were mainly males with the average age of 35 years. This is in agreement with other studies that showed young males as the main abusers and confirmed that the desire for aggression is higher in males.²² Most abusers were residents in the cities which represents the effects of urban culture and the machine life on family relationships and emotions. Due to different lifestyles in the cities, people have less time than rural residents for family members and the problems of urban life makes them susceptible to stimulations. Furthermore, elder abuse rate revealed substantial differences among different states of the USA due to differences in specific aspects of the state law.²³ Therefore, the rate of elder abuse could be decreased by strengthening the related supporting law. Moreover, conditions in the family should be regularly verified to combat elder abuse.²⁴ Ten key priorities for future research include defining elder abuse, providing researchers with access to victims and abusers, determining the best approaches in treating abusers, exploiting existing data sets, identifying risk factors, understanding the impact of cultural factors, improving program evaluation, establishing how cognitive

impairment affects legal investigations, promoting studies of financial and medical forensics, and improving professional reporting and training.²⁵

The limitations of this study included small sample size and non-attendance of the most abusers for interview. In addition, in this study, studied subjects were not selected from general population and they were only the elderly people who referred to police station to seek help and thus, were referred to medical and legal centers for further evaluation. However, there are many abused elders who do not refer to blame anyone.

Conclusion

In conclusion, the findings of this study provided us a sense about the probably high prevalence of elder abuse in our community and its related risk factors, but further community-based studies are needed in order to focus on both contributing and causal factors of elder abuse and its prevalence. Truly understanding of these factors would be useful for healthcare policymakers in developing more effective methods for responding to and, ultimately, preventing the victimization of the vulnerable elder population. In general, the results of this study provided us new insights in this issue which will be useful for planning appropriate health policies in order to improve the quality of life of elder population.

Conflict of Interests

Authors have no conflict of interests.

Authors' Contributions

AG, SM and MH all participated in designing and conducting the study and data gathering. AG analyzed the data and wrote the first draft of the article. All researchers took part in interpretation of the results. SM and MH also read and modified the article.

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