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Original Article

Elder Abuse in Shiraz, Iran

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Abstract

Background: Aging is an inevitable biological phenomenon. Today, the elderly have a more active life, better life expectancy, and health status than in the past in Iran. However, there are still a lot of related hidden problems such as the elderly abuse.
Objectives: The current study aimed at determining different types of the elder abuse in Shiraz, Iran.
Methods: The current cross sectional study was conducted in 2012. The study population included the elderly in Shiraz, Iran. A sample of 226 elderly was randomly selected from 7 urban health centers. Data were collected using domestic elder abuse questionnaire. Data were analyzed by performing descriptive statistics (mean, frequency percentage, and standard deviation), the Pearson correlation, and the Mann-Whitney test by SPSS.
Results: Overall, 226 elderly, 72.6% females and 27.4% males, were recruited. The mean$\pm$ SD age of the sample was 68.55 $\pm$ 6.28 years. The incidence rates of abuse for the elderly participants were as follows: emotional negligence (43.8%), psychological abuse (41.2%), negligence in healthcare (31.9%), financial abuse (23%), and curtailment of personal autonomy (20.8%), as well as financial negligence (28.8%), physical abuse (7%), and abandonment (4%). According to the results of the current study, there were significant relationships between financial negligence and occupation (P value = 0.02), financial negligence and gender (P value = 0.06); between negligence in healthcare and gender (P value = 0.04); and between financial abuse and gender (P value = 0.04). According to the results of the study, there was a significant relationship between financial negligence and Occupational negligence, gender and negligence in healthcare, and financial abuse and gender.
Conclusions: The results of the study indicated that a high percentage of the elderly participants were abused differently. Therefore, recognizing the prevalence and types of abuse is important to inform the health policy makers and legal authorities, especially families. In this way, better and more desirable care can be provided to the elderly and measures can be taken to improve their lives.

Keywords: Aging, Elderly Abuse, Iran

1. Background

Aging is one of biological changes common to all living organisms. This process cannot be stopped or reversed, but can be delayed with proper care (1). Physical and psychological needs are important in old age and a healthy life alongside special care can make this period favorable and enjoyable (2). According to the latest census in 2011, the number of people over 60 years in Iran was 6 159,676, which made up 8.1% of the total population indicating an increase compared with the 2006 census results (3).

The world's elderly population (60 years and above) is 650 million, which is expected to reach 2 billion by the 2050 (4).

The world health organization (WHO) aims at implementing health programs for the elderly to help them by preventing their disabilities, preventing or at least delaying their dependence, and informing them about scientific health measures and increasing their social activities (5). If the elders have respect and good position among children, peers, friends, and the society, and are being accepted and their abilities are used in the society, they return to the society with hope and encouragement (1).

Aging is a gradual collapse of structure and performance of body in organisms including humans under the influence of time. Gradual changes occur in the structure and function of the body organs (6). During this process, many body systems decline and this decline in their ability increases their dependence on others. These inabilities affect different aspects of their lives; therefore, in a study, one-third of the elderly had cognitive disabilities and 60% of them received assistance in daily activities such as cleaning, moving, lifting, shopping, and transportation (7).

Elder abuse is now recognized internationally as a pervasive and growing problem, meriting the attention of

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clinicians who provide medical care to old people, as well as the general public. For example, a recent WHO report about violence and health prominently featured elder abuse and highlighted the range of harmful activities covered by this term throughout the world. Examples ranged from outright physical assault of old people in the modernized cultures that sadly acculturated to the so-called traditional forms of family violence, to the systematic ostracisation of tribal elders by the community in some less developed countries as a form of scapegoating (eg, old Tanzanian females accused of witchcraft and abandoned in retribution for natural events such as drought or famine). The establishment of the International Network for the Prevention of Elder Abuse in 1997, with representation from more and less developed countries throughout the world, indicated the increasing international concern about elder abuse (8).

Today, the elderly are more active and have better life expectancy and health status than in the past. However, there are still a lot of hidden problems such as elder abuse (9).

Sometimes, a child has not reached maturity or elder care responsibility is imposed to him/her. These, alongside changes in family roles, current crises, mental stress of modern life, weakened faith, and the like have undermined social status of the elderly and caused elder abuse by family members (10). There are various forms of elder abuse including negligence, unfulfilled physical needs, psychological abuse, financial abuse, neglected rights, or even disrespect by family members (9).

There is no reliable report about the types of elder abuse in Iran, because there are no certain organizations and centers allocated to the elderly. The study conducted in Tehran in 1996 showed that one of the causes of failure to satisfy psychological needs of the elderly is abuse by their family member (9).

According to what said above and given the increasing older population in the developing countries including Iran, the current study aimed at examining the types of abuse toward the elderly in Shiraz, Iran. The results were compared with those of similar studies in other parts of the world and Iran. No doubt the results of the current study can help to adopt a better method to deal with the elderly and to provide a better life for them.

The current study aimed at determining various aspects of abuse and its relationship with some demographic variables among the elderly in Shiraz.

2. Materials and Methods

2.1. Study Design and Settings

The current cross sectional study aimed at investigating multiple types of abuse among the elderly in 2012. The study population included all elderly in Shiraz, Iran. A sample of 226 elderly was selected with 95% confidence and 6% error using the random cluster sampling method. Days were considered as clusters and a few days in a week were selected with random sampling. The elderly who visited the centers during these selected days participated in the study. The study was carried out in 7 urban healthcare and retirement centers.

2.2. The Inclusion and Exclusion Criteria

The current study, only covered the elderly over 60 years with Iranian nationality who were able to answer questions and did not use drugs affecting the level of consciousness; participation in the study was completely voluntary, and participants signed informed consent form were obtained.

In the current study, all the people who were unable to answer questions were excluded from study. For example, people who were physically unable to participate in the study or the ones who got positive score in dementia test.

2.3. Questionnaires

The data collection instruments included demographic information checklist including age, gender, occupation, education, etc., and the domestic elder abuse questionnaire (DEAQ). This questionnaire was developed based on the study entitled “Designing and Determining Psychometric Properties of the Domestic Elder Abuse Questionnaire” by Heravi-Karimooi et al. (11).

The results of the study confirm the Cronbach’s alpha coefficient of internal consistency (IC) of the questionnaire (0.90 - 0.975). Test stability through test-retest was 0.99.

The questionnaire aimed at identifying and evaluating various forms of elder abuse. It includes 49 questions investigating 8 factors including negligence in healthcare, psychological abuse, physical abuse, financial abuse, curtailment of personal autonomy, abandonment, financial negligence, and emotional negligence in the family. Given that items were simple and clear, its completion by the literate elders was possible. However, for some reasons such as illiteracy, low literacy, vision problems, etc., the questionnaires were completed by researcher’s face to face interviews with the participants.

The items in the instrument use 3 choices of yes, no, and not applicable. The choice not applicable indicates the

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conditions that are not related to their living conditions. Scores were obtained in the range of 0 to 100. Higher scores indicate more evidence of abuse. Thus, the score of 100 represents the maximum amount of abuse and 0 indicates absence of abuse.

2.4. Study Procedures

About 130 questionnaires were completed through face to face interviews by the investigator (physician) and the rest were completed by the individuals themselves.

2.5. Statistical Analyses

Data were analyzed using SPSS via descriptive statistics (mean, frequency percentage, and standard deviation), the Pearson correlation, the Mann-Whitney and the Kruskal-Wallis tests and linear regression. P value < 0.05 was considered statistically significant.

3. Results

The 226 investigated elders were 72.6% female and 27.4% male. The mean ± SD age was 68.55 ± 6.28 years. The study population was divided into 2 groups of financially independents and family-dependence; 5 groups in terms of education (illiterate, able to read and write, elementary, secondary, high school and diplomas, and above diploma); 4 groups in terms of marital status (single, married, divorced, and widowed), and 3 groups in terms of occupation (housewife, employee, self-employed). The frequency of each subgroup is stated in Table 1.

The results showed that emotional negligence had the highest prevalence (43.8%) and abandonment had the lowest prevalence (4%) (Table 2).

The results of the study showed that only financial neglect had a significant relationship with occupation (P value = 0.02) (Tables 3).

To determine the relationship between the number of children and elder abuse, the Pearson correlation coefficient was used. Based on the results presented in Table 4 there was no statistically significant relationship between different types of elder abuse and the number of children.

Based on the results presented in Table 5 there were significant differences between the 2 genders in terms of negligence in healthcare and financial abuse (P value = 0.04). The mean score of females on negligence in healthcare was higher than that of males. The mean score of males on financial abuse was more than that of females. But in other aspects, there was no statistically significant difference between males and females. Further analysis using logistic regression model showed significant relationship between financial abuse and gender. There were 3.95 units of difference between males and females in terms of financial abuse. In other words, the abuse was higher in males. Linear regression model (R square = 1.9%) showed that only 1.9% of variance in score of financial abuse could be explained by gender.

To examine the relationship between different types of abuse and gender, the Pearson correlation coefficient was used. Age had a weak positive significant relationship with the curtailment of personal autonomy (r = 0.131, P value = 0.04). No significant relationship was found for other types (negligence in healthcare (r = -0.087, P value = 0.19), physical abuse (r = 0.03, P value = 0.65), financial abuse (r =

Table 1. Demographic Characteristics

Demographic Variables		**No. (%)**
Gender	Male	61 (27.4)
	Female	165 (72.6)
Income	With income	134 (59.3)
	Supported by family	92 (40.7)
Education	Illiterate	71 (31.4)
	Secondary	45 (19.9)
	Able to read and write	34 (15)
	High school and diploma	31 (13.7)
	Elementary	26 (11.5)
	Academic	19 (8.4)
Marital status	Married	124 (55.1)
	Widowed	94 (41.8)
	Divorced	4 (1.8)
	Single	
Occupation	Housewife	143 (63.3)
	Self employed	57 (25.2)
	Employee	26 (11.5)

Table 2. Prevalence of Elder Abuse

Abuse	**No. (%)**
Emotional negligence	99 (43.8)
Psychological abuse	93 (41.2)
Negligence in healthcare	72 (31.9)
financial negligence	65 (28.8)
Financial abuse	52 (23)
Curtailment of personal autonomy	47 (20.8)
Physical abuse	16 (7)
Abandonment	9 (4)

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Table 3. Different Aspects of Abuse in the Elderly Based on the Occupational Status

Occupation	Negligence in Healthcare	Physical Abuse	Financial Abuse	Curtailment of Personal Autonomy	Abandonment	Financial Negligence	Emotional Negligence	Psychological Abuse
Housewife	18.40 ± 10.46	11.81 ± 3.14	11.92 ± 5.26	8.03 ± 3.81	6.70 ± 1.39	28.24 ± 17.24	36.73 ± 29.37	24.30 ± 15.29
Employee	17.39 ± 7.28	11.60 ± 3.84	17.27 ± 11.02	8.91 ± 3.46	6.53 ± 1.28	24.93 ± 16.02	25.19 ± 21.15	21.99 ± 14.42
Self employed	9.22 ± 4.20	4.64 ± 0.87	12.75 ± 5.96	8.48 ± 3.15	12.37 ± 2.33	16.81 ± 6.43	31.51 ± 25.43	17.08 ± 9.42
Total	16.61 ± 8.52	10.46 ± 2.65	12.90 ± 6.10	8.22 ± 3.60	8.45 ± 1.62	25.77 ± 14.38	34.31 ± 27.43	22.4 ± 13.71
P value	0.11	0.36	0.14	0.44	0.98	0.02	0.73	0.31

Table 4. The Relationship Between the Number of Children and Elder Abuse

Abuse	Correlation Coefficient	P Value
Negligence in healthcare	0.033	0.61
Physical abuse	0.028	0.67
Financial abuse	0.002	0.97
Curtailment of personal autonomy	-0.093	0.16
Abandonment	-0.016	0.8
Financial negligence	0.059	0.37
Emotional negligence	-0.031	0.64
Psychological abuse	-0.025	0.71

0.51, P value = 0.44), abandonment (r = 0.103, P value = 0.12), financial negligence (r = 0.042, P-value = 0.52), emotional negligence (r = 0.018, P value = 0.78), psychological abuse(r = -0.03, P value = 0.65). Further analysis using linear regression showed a 17% coefficient for age (R-square = 1.7%), but only 1.7% of variance in curtailment of personal autonomy can be explained by changes in age.

4. Discussion

Based on the findings of the current study, the rate of psychological elder abuse was 41.2%. Karimi found that psychological abuse in Ahvaz, Iran, was 16.9% (12). The reason for this difference can be the type of questionnaires used in the 2 studies. In the current study, the questionnaire included 8 items about psychological abuse, while the questionnaire used by Karimi included 2 limited items on this aspect. Cooper reported that prevalence of psychological abuse was 25% (13). In another study in the United Kingdom the prevalence of psychological abuse was 0.4% (14).

In the study by Nori et al. the overall prevalence of elder abuse was 2.8% to 26.7% and the highest prevalence was obtained for psychological abuse (26.7%) (15). The study by Kissal and Beser in Turkey in 2011 showed that the most common type of elder abuse was psychological abuse (16).

The reason for this difference can be attributed to the difference in Eastern and Western societies. In Iran, children respect their parents and even obey them in their lives and some private issues, such as selecting a spouse and a place to residence as part of their culture and traditions. Opposing ideas against the elderly is deemed disrespect and emotional abuse in these cultures. Therefore, the statistics rises in this area. However, in Western culture, disagreement with the elderly is not regarded as a disrespect and abuse (12).

The results of the current study showed 7% prevalence for physical abuse, which was consistent with results of Cooper et al. (5.6%) (13).

According to the results of the study by Heravi-Karimoei, the most prevalent types of elder abuse were emotional negligence (74.45%) and psychological abuse (62.22%), and the least prevalent types were rejection (13.34%) and physical abuse (23.34%) (17).

In the current study, the prevalence of financial abuse was 23% consistent with the results of Karimi and Elahi with a prevalence of 25% (12).

In the current study, the prevalence of abandonment was 4%, but Karimi and Elahi reported a 12% prevalence of abandonment in Ahvaz (12). Perhaps the reason for this difference was that subjects in Karimi's study were residing in a nursing home. Since the elderly were forced to live in a place other than their home, the atmosphere of the nursing home caused dissatisfaction among them resulting in a deeper sense of abandonment.

In the current study, the prevalence of other aspects of elder abuse was 31.9% for negligence in healthcare, 28.8% for financial abuse, and 43.8% for emotional abuse.

In the study by Nori et al. the elderly experienced emotional negligence (34.8%), negligence in healthcare (33.6%), and financial negligence (29.1%) at least once (15).

Based on Dubey et al. 27% of the elderly in India were neglected (18). Mattoo found that the most impor-

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Table 5. Different Aspects of Abuse in the Elderly Based on Gender[a]

Abuse	Female	Male	Total	P Value
Negligence in healthcare	5.27 ± 13.56	9.74 ± 17.50	8.52 ± 16.61	0.04
Physical abuse	2.41 ± 8.71	2.74 ± 11.08	2.65 ± 10.46	0.76
Financial abuse	8.97 ± 15.59	5.02 ± 11.41	6.10 ± 12.90	0.04
Curtailment of personal autonomy	3.38 ± 8.86	3.69 ± 7.99	3.60 ± 8.22	0.35
Abandonment	2.68 ± 12.51	1.21 ± 6.27	1.62 ± 8.45	0.65
Financial negligence	9.27 ± 20.08	16.31 ± 27.43	14.38 ± 25.77	0.06
Emotional negligence	24.19 ± 28.25	28.65 ± 36.34	27.43 ± 34.31	0.4
Psychological abuse	13.50 ± 20.40	13.79 ± 23.27	13.71 ± 22.48	0.6

[a]Values are expressed as mean ± SD.

tant factors in the elderly who experienced negligence included emotional factors, violence because of the generation gap, economic dependency, isolation, unemployment, caregivers stress, family overcrowding, dementia, and physical disorders (19).

The questionnaire used in the current study fitted the cultural standards of Iranian society and was based on Iranian elders' understanding and experience of the concept of abuse. Therefore, abuse was divided into more aspects, including negligence in healthcare, and financial and emotional negligence. This can be the reason for the above inconsistency in the results.

In the current study, financial abuse was higher in males, but in the study by Naughton in Ireland, financial abuse was higher in females (20). The reason for this difference can be because the Iranian society is male-dominated and financial expectations of children from fathers as provider of family are higher.

The results of the current study showed no significant relationship between education level of the elderly and different aspects of abuse (P value > 0.05). The study by Keskinoglu et al. in Turkey showed that the prevalence of neglecting elderly was lower in an area that had low socioeconomic and education status with low income or no income and the prevalence of negligence was associated with lower education and chronic diseases (21). This discrepancy can be attributed to the differences in attitudes of the elderly in different societies and cultures. The elderly are respected in the Iranian culture even if they have low educational level.

The current study showed a significant relationship between occupation and elder financial negligence (P value = 0.02). It was consistent with the results of Biggs in the UK in a study entitled "Elder Abuse Varies With Economic and Health Status" (22), and Li Wu in China in a study entitled "Having Demanding Difficult Jobs and Only Relying on One's Income Are the Risk Factors for Abuse" (23).

There was no significant relationship between the number of children and elderly abuse in the current study. There was no study in the literature on the relationship between the number of children and elderly abuse.

Despite the different cultures in the Iranian society in dealing with elderly, different types of elder abuse are witnessed. In general, any level of elderly abuse is considerable. Exact and more fundamental scrutiny of the problem seems to be necessary. Reduction of the burden of this important issue requires the authorities' cooperation. The results of these studies can be a good source of information for policymakers and officials to prevent, diagnose, and take care of the elderly to provide physical and mental health for this group and reduce the burden of the consequences of this phenomenon. Limitations of this study included non-participation of the elderly with severe and physical disability or a history of drug abuse as well as not considering individuals' income, which should be examined in future studies.

4.1. Limitations of the Study

The limitations of this study included the lack of participation of elderly people with Alzheimer or those with a low level of awareness due to taking certain medications. Another limitation was related to gender proportion.

4.2. Suggestions for Further Research

Since the elderly are in the last years of their lives and they are emotionally more sensitive to different problems, abusing them may remain irreparable effects. Therefore, increasing awareness of the public regarding the need for taking care of them and being tolerant with them can have a major effect on the improvement of their lives.

In addition, research is needed in the following areas:

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- Identifying factors leading to elder abuse and appropriate interventions for at-risk groups;

- Increasing public awareness in relation to various aspects of elderly abuse and its complications for the individual and society;

- Developing an information source about the elder abuse and strategies to diagnose, prevent, and take care of the elderly for policy makers and health care providers; and

- Identifying the best practices to control elder abuse.

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Footnotes

Authors' Contribution: Seyyed Mansour Kashfi, Sayed Hamidreza Tabatabaee and Ali Khani Jeihooni performed the sampling, intervention, and data collection. Seyyed Mansour Kashfi, Ahdiye Asadi, Sayed Hamidreza Tabatabaee, and Ali khani Jeihooni designed the study, performed the statistical analysis, and drafting and revising the manuscript. Maryam Yazdankhah, Ali Khani Jeihooni, Tayebeh Rakhshani, and Seyyed Hannan Kashfi participated in study design and interpreted the clinical data. All authors read and approved the final manuscript.

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