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RESEARCH ARTICLE

The Relationship between Nurses' Recognition Regarding Elder Abuse and their Attitudes and Performance in Dealing with Elder Abuse Induced by Iranian Family Caregivers

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Abstract:

Introduction:

Knowledge of nurses regarding elder abuse can be helpful in decisions about on-time and appropriate interventions. Our aim was to assess the relationship between recognition of nursing staff toward elder abuse and their attitudes, and performance in dealing with elder abuse induced by Iranian family caregivers.

Methods:

In this descriptive study, 400 nurses were selected, using cluster sampling, from nurses working in public or private hospitals in Iran. Data collection was performed using questionnaires measuring elder abuse symptom recognition, attitudes, and performance.

Results:

There is a significant relationship between the total scores for recognition of symptoms and elder abuse potential risk factors (p=0.05) and the nurses' attitudes and performance scores (p = 0.001). There was no significant difference between the nurses' performance and recognition scores (p = 0.14).

Conclusion:

Interventions to promote nurses' recognition *via* in-service educational programs can improve nurses' performance in different levels of abuse prevention and the quality of nursing care for the elderly.

Keywords: Elder abuse, Nurses' recognition, Nurses' attitude, Nurses' performance, Iranian Family caregivers, nurse, Iran.

1. INTRODUCTION

The increasing incidence of chronic diseases in the elderly population increases their care needs. The pressures and financial problems induced by long-term caregiving for the elderly can be factors in elder abuse by family caregivers [1]. Its incidence ranges from 3% to 18.5%, depending on the country and research method [2 - 4]. The studies have indicated serious psychological problems, such as depression, emotional distress [5], and anxiety [6], as well as physical problems, such as bone or joint pain and hypertension [7] as consequences of elder abuse by family caregivers. Adverse health outcomes [8, 9], poor quality of life [10], more visits to doctors, hospitalization [11, 12], and finally, a higher probability of death [8, 13, 14] are also mentioned in the literature.

It is generally agreed that the healthcare team, especially nurses, plays an important role in identifying, reporting, and preventing elder abuse, as they closely communicate with elder patients during care. However, nurses have been dissatisfied with the response of authorities to their reports of abuse [12].

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Different studies have explored the inability to recognize and report elder abuse [14, 15]. Moreover, fear of becoming involved in legal issues has caused nurses to report elder abuse less often [16, 17]. A lack of awareness and negative attitudes regarding the elder abuse phenomenon can be accompanied by negligence in providing timely reports and arbitrary actions [16]. Inadequate education regarding the symptoms, consequences, and reporting format in professional education programs is a reason for poor recognition of elder abuse by healthcare providers, especially nurses [18]. Likewise, Wagenaar *et al.* (2009) showed that 51% of doctors did not receive any formal education regarding elder abuse during their residency [19]. In a similar study, Gordon *et al.* (2013) found that 68% of the 31 nursing schools in Britain provide elder abuse education [20].

Available data suggest that the overall elder abuse prevalence in Iran is 56.4% with confidence interval 95% (35.1-75.5%) [21]. It is concluded; Iranian's nurses encounter with and take care of elderly patients who have experience abuse. Researches about nurses' knowledge regarding elder abuse and their attitudes, and performance in dealing with elder abuse induced by family caregivers, has not been carried out in Iran so far. Existing studies have examined the prevalence of elder abuse, and the correlation between elder abuse and demographic variables in Iranians' elders [21 - 23]. Assessing the level of nurses' recognition of elder abuse symptoms and potential risk factors can reveal the current situation and provide the needed context for filling the information gap *via* educational interventions. Furthermore, being aware of nurses' attitudes regarding elder abuse can be helpful in deciding effective actions to reform their attitudes and in attaining a multi-aspect and high-quality level of care as nurses' actions and behavioral patterns in elder care are affected by their beliefs and cultural values. Moreover, the role of Iranian's nurses as mandated reporters has not been studied since the clauses on elder abuse in the welfare of the Aged Act were enacted. Nevertheless, despite nurses' important roles as mandated reporters, scant research has been performed to explore the relationship between nurses' knowledge and their attitudes and performance in dealing with elder abuse induced by family caregivers. Therefore, this research was conducted to explore the relationship between nurses' recognition regarding elder abuse and their attitudes and performance in dealing with elder abuse induced by Iranian family caregivers.

2. METHODS

This cross-sectional descriptive study was carried out in 2016. The study population included nurses with a master's degree who were working at public or private hospitals in Iran. An optimal sample size of 400 nurses was determined by a formula defined with $\alpha=0.05$, SD=10 and d=1. Cluster sampling was performed in eight randomly selected hospitals. Participants were selected from a list of nurses working at each hospital, based on sample size, through systematic sampling. Selection was performed from different work shifts and different wards where elderly patients were hospitalized, such as internal medicine, surgery, emergency, CCU, post-CCU, and oncology units. Data collection was performed using the questionnaires described below.

2.1. Demographic Information Questionnaire

Gender, age, ward, work experience, type of hospital, employment status, graduation date, experience of living with an elderly family member, experience dealing with elder abuse and the number of cases, reporting inclination, elder abuse information resources for nurses, and nurses' attitudes regarding the rate of elder abuse prevalence in society and health care providers' or social workers' duty to report elder abuse cases.

2.2. Nurses' Recognition of Symptoms and the Potential Risk Factors of Elder Abuse by Family Caregivers Questionnaire

This questionnaire was designed in two steps, based on a review of the literature and nurses' recognition of elder abuse related tools [5, 16, 17, 24 - 29] and field work (semi-structured interviews with nurses). The questionnaire is made up of 67 questions and 3 subscales including "elder abuse symptoms" (physical, sexual, mental and financial abuse and negligence), "elder-related potential risk factors in elder abuse," and "family caregiver-related potential risk factors in elder abuse." This instrument employed a five-point Likert-type scale (1=not at all, 5= very much). The validity of the questionnaire was studied by assessing the face, content, and construct validity. The reliability was assessed using a test-retest design. The inter-class correlation coefficient was calculated to be 0.85. The internal correlation of items was also acceptable ($\alpha=0.98$).

2.3. Nurses' Attitudes Toward Elder Abuse Phenomenon Questionnaire

This questionnaire was designed through an extensive literature review [5, 16, 17, 19, 30, 31] and is made up of 7 questions. This instrument uses a four-point Likert-type scale (1=strongly disagree, 4=strongly agree). Items 1, 4, and 6 are reverse scored. Face and content validity were assessed and reliability was examined using a test-retest design; a Cronbach's alpha of 0.83 was obtained.

2.4. Nurses' Performance Self-Assessment Checklist

This checklist was designed by the researchers in two steps: a review of the literature and related-tools [5, 24, 26, 30, 32] and fieldwork (semi-structured interviews with nurses). It measures the nurses' self-assessment with 13 yes-no questions. Face and content validity were assessed and reliability was determined using a test-retest design, attaining a reliability score of 0.65. The face validity of Nurses' recognition of symptoms, attitudes toward elder abuse phenomenon questionnaires, and performance self-assessment checklist were checked in both qualitative and quantitative methods. It is considered as a degree in which the questionnaire appears effective in terms of its stated aims qualitatively. Ten nurses were asked to comment on difficulty, relevancy, and ambiguous levels to check the face validity qualitatively. Afterwards, the item impact method was applied to decrease or remove the inappropriate items and determine each item's importance as a quantitative method. Likert 5-point scale ("absolutely important" to "absolutely unimportant") was used

to study each item, and the nurses were asked to determine the importance of each item according to their experience. The qualitative methods were used to check the content validity of Nurses' recognition of symptoms, attitudes toward elder abuse phenomenon questionnaires, and performance self-assessment checklist. Five nursing faculty members with sufficient working experience in both the clinical and theoretical settings were asked to comment on the grammar, wording, allocation, and scaling of the items.

2.5. Data Analysis

SPSS software was used for the data analysis. Independent t-tests and ANOVA were used to determine the relationship between the ability to recognize elder abuse with each of the demographic variables, such as gender, age, *etc*. The analysis of variance and chi-square tests were used to determine the relationship between the nurses' level of recognition with their attitudes and performance. The significance level was p<0.05.

2.6. Ethical Considerations

The aim of the study was described in detail and participants' anonymity was guaranteed. Written consent was obtained from the participants, with the understanding that they could withdraw from the study at any stage.

Table 1. Mean scores for the recognition of symptoms, attitudes toward elder abuse and Performance assessment.

No.	Items	Mean and Standard Deviation
1	The recognition of symptoms	114.27±28.3
.a.1	Elder-related potential risk factors of elder abuse	771.75±0.7
.b.1	Family caregiver-related potential risk factors of elder abuse	27.1±0.3
.c.1	Physical abuse symptoms	33.53±9.3
.d.1	Sexual abuse symptoms	12.33±5.7
.e.1	Mental abuse symptoms	18.79±5.5
.f.1	Financial abuse symptoms	18.99±6
.g.1	Negligence symptoms	31.75±8.1
2	Attitudes toward elder abuse	18.32±0.2
3	Performance assessment	9.76±3.16

3. RESULTS

A total of 400 nurses participated in this study: 365 females and 35 males. Of the participants, 282(70.5%) were

employed by the government and 29.5% were working in private hospitals. The average age of the participants was 33.76 years. The average time since graduation and the amount of work experience was 13.5 and 11.2 years, respectively. The most common setting for participants was the emergency department (23.8%). Moreover, 23% of participants were living with an elderly family member and 27% had dealt with an elder abuse case at least once. Of the nurses, 58% showed a tendency for reporting elder abuse cases and 52% of them felt confident about their ability to recognize and understand the phenomenon. Social media was the main resource used to be informed and updated about elder abuse for 32.8% of the participants. In addition, 56.8% of the participants recognized elder abuse as a prevalent phenomenon in society and 38.5% of them believed that reporting elder abuse cases is the duty of doctors and nurses, while 55.8% indicated that it is the duty of social workers.

The recognition mean score was 114.27±28.3, while the highest mean score was attained in the aspect of "recognizing the physical symptoms of elder abuse" (Table **1**). The results show that "the inclination to report abuse or negligence" was significantly related to nurses' recognition of the elder abuse phenomenon (p=0.01).

According to the results, the mean score for nurses' attitudes toward elder abuse and nurses' performance in dealing with an elder abuse case were 18.32±0.2, 9.76±3.16, respectively (Table **1**).

The majority (78.7%) of the participants didn't believed that asking the elderly about being abused or neglected can be abusive in itself and 71.5% believed that case reporting by a nurse can annoy family caregivers. Only 28% of the participants believed that intervening is the duty of nurses in dealing with an elder abuse case (Tables **2** and **3**).

The results indicate that there is a significant relationship between the total scores for recognition of symptoms and recognition of elder abuse potential risk factors (p=0.05). Furthermore, the financial abuse subscale (p=0.017) and the family-related factors (p=0.044) were amongst the subscales for recognition of symptoms of elder abuse that were significantly related to the attitude total score. The relationship between the recognition scores and nurses' performance regarding elder abuse was not significant (p=0.14). The results showed that there is no significant relationship between the nurses' recognition of elder abuse and their performance. However, the scores for the sexual abuse subscale were

Table 2. Nurses' attitudes toward elder abuse.

No.	Items	Not at all (n, %)	Disagree (n, %)	Agree (n, %)	Strongly agree (n,
1	Asking an elderly person about being abused can itself be abusive.	(24.4%) 98	(54.3%) 217	(19%) 76	(2.3%) 9
2	It is the nurses' duty to intervene in elder abuse cases.	(19%) 76	(53%) 212	(21%) 84	(7%) 28
3	Reporting the abuse can annoy caregivers.	(3%) 12	(25.5%) 102	(54%) 216	(17.5%) 70
4	It is useless to report an elder abuse case when the elderly person is denying it.	(4%) 16	(34%) 136	(51%) 204	(11%) 44
5	Elder abuse and negligence is a crime.	(6.4%) 26	(39%) 156	(43.8%) 175	(10.8%) 43
6	Elder abuse and negligence is a crime.	(11%) 45	(42%) 167	(35%) 141	(12%) 47
7	Nurses are legally obligated to report elder abuse cases.	(29.25%) 117	(53.5%) 214	(12.5%) 50	(4.75%) 19

Table 3. Performance self-assessment checklist for nurses.

Item No.	Item	Response	
		No (n, %)	**Yes (n,%)**
1	I check for any elder abuse symptoms at reception.	320 (80%)	80 (20%)
2	I use special tools to check for any elder abuse by caregivers.	400 (100%)	-
3	I record my observations without paying attention to the elder's denial about being abused.	87 (22%)	313 (78%)
4	I will ask both the elder and the caregiver about suspicious symptoms of abuse.	72 (18%)	328 (82%)
5	I take enough time to check for elder abuse symptoms.	251 (62.75%)	149(37.25%)
6	I control my emotions in dealing with an elder abuse case.	116 (29%)	284 (71%)
7	I educate the elderly about the subject in order to prevent any potential elder abuse by family caregivers.	296 (74%)	104 (26%)
8	I report the potential risk of elder abuse to other treatment team members (head nurse, supervisor, *etc.*)	52 (13%)	348 (87%)
9	I maintain privacy in dealing with elder abuse cases.	100 (25%)	300 (75%)
10	I talk about accessible and appropriate supportive resources, such as social workers or the state welfare organization, with an elder who is abused.	48 (12%)	352 (88%)
11	I support an abused elder emotionally and mentally.	183 (46%)	216 (54%)
12	I report elder abuse cases to police.	392 (98%)	8 (2%)
13	I take the necessary interventions to reduce the risk of abuse in dealing with an elder at high risk.	320 (80%)	80 (20%)

significantly related with nurses' performance, as were the recognition sub-scale and performance scores (Table **4**).

Table 4. Relationship between nurses' recognition regarding elder abuse, attitudes, and performance.

Recognizing the elder Abuse type and related symptoms	Attitude scores	Performance scores
Physical abuse	r=.059 p=0.240	r=0.090 p=0.074
Sexual abuse	r=0.28 p=0.576	r=0.116 *p=0.20
Mental abuse	r=0.46 p=0.355	r=0.032 p=0.530
Financial abuse	r=0.12 *p=0.017	r=0.076 p=0.130
Negligence	r=-003 p=0.948	r=0.022 p=0.659
Elder abuse symptoms(Total)	r=0.053 p=0.295	r=0.075 p=0.135
Elderly-related potential risk factors	r=0.035 p=0.484	r=0.066 p=0.190
Family-related potential risk factors	r=0.101 *p=0.044	r=0.044 p=0.382
Elder abuse potential risk factors(Total)	r=0.057 p=0.258	r=0.062 p=0.219
Recognizing the elder abuse phenomenon	r=0.058 p=0.250	r=0.074 p=0.141
Attitude aspect	-	r=0.159 *p=0.001

4. DISCUSSION

The mean scores of the nurses' recognition of elder abuse, was 114.27±28.3 (out of 7 questions). Cho *et al.* (2015) have found that 40.5% of the emergency nurses were educated about the phenomenon, while 50% were not aware of reporting and data gathering formats [17]. On the other hand, Dedeli *et al.* (2012) have shown that 89.4% of their participants, including police officers, social workers, and nurses, were not educated about elder abuse [5].

The average level of recognition found in this study might

be the result of inadequate education and the lack of in-service programs about elder abuse. Meanwhile, there is no standardized procedure for reporting elder abuse cases among supportive organizations, such as social workers, psychological counselors, or police officers, in Iran. This has resulted in an undesirable negligence of assessing nurses' educational needs about the elder abuse phenomenon among the system of health-care providers. Other studies have also emphasized the lack of reporting as a result of problems recognizing elder abuse by family caregivers, as well as the poor treatment and re-habilitation services provided for abused elders [27, 33 - 35]. In this regard, Gonzalez *et al.* (2016) conducted a qualitative study on elder abuse recognition and reporting barriers among emergency medical technicians; their participants knew of the different factors, such as not receiving enough education, the lack of an automatic reporting system, or not using identification tools, as impediments of elder abuse recognition [36]. Meanwhile, providing effective elder care, increased self-efficiency among nurses, providing effective interventions, and the reporting of elder abuse cases all need to be covered in gerontology related education [33, 37].

The results of this study show that the highest scores were obtained by nurses in recognizing physical elder abuse symptoms and the lowest scores were related to sexual abuse. Daly *et al.* (2012) found that none of their participants were knowledgeable about sexual abuse of the elderly [37]. Anderson (2015) has also shown that the highest self-efficiency scores were attained in the physical abuse (74.84±18.28) and negligence subscales (76.97±17.67), while the lowest scores were obtained in the sexual abuse subscale (42.47±26.55) [29]. Likewise, Austin and Rinker (2009) have indicated that their participants' information about physical abuse and negligence was much greater than their knowledge about sexual abuse symptoms [26]. This finding might be due to the recognizable signs and symptoms of physical abuse and the tendency to keep sexually related issues as secret as possible, among both nurses and elderly patients. To justifying this, it can be said that signs of physical elder abuse can be seen obviously. But the symptoms of sexual abuse are not visible. In addition to, the

elderly do not express it, because of shame. Therefore, these symptoms are not well recognized by nurses. Also, in the nursing undergraduate curriculum, there has not been considered elder abuse, in particular signs and symptoms of sexual abuse. Therefore, nurses will not receive training either.

Moreover, we found that most of the participants did not know it was their duty to report cases of elder abuse. This finding might be due to their lack of knowledge about their professional and ethical duties, the reporting format, and necessary interventions, or a fear of consequences from reporting cases of elder abuse. Anderson (2015) also showed that 80.1% of nurses believe that elder abuse is a private issue and that reporting cases was not part of their duties [29].

On the other hand, in research by Dedeli *et al.* (2013), 89.1% of nurses did report the elder abuse cases they encountered [5]. Cho et al. (2015) stated that 77.1% of nurses and doctors reported elder abuse cases and were aware of their duty in this regard [17]. Social media was the main source of receiving information about the subject for our participants, while a minority of nurses used nursing-related books and resources to increase their knowledge. Dedeli *et al.* (2013) found that 39.1% of nurses used radio and television programs as a source of receiving elder abuse-related information, 22.8% used in-service programs, 20.4% utilized newspapers and magazines, and 6.3% received the required information from their friends and colleagues [5]. Likewise, Mandiroglu *et al.* (2006) showed that only 24% of their sample had received formal education about the elder abuse phenomenon [24], while a similar study by Anderson (2015) found 82.5% of nurses "received college-level training about the subject [29].

The mean scores of the nurses' attitudes regarding the elderly abuse were found 18.32±0.2 (out of 67 questions), as indicated by the results. The reason for this finding might be a lack of information and knowledge about elder abuse and a lack of work experience in wards providing care for the elderly. Ko and Koh (2012) have also shown that 50% of their participants believed that elder abuse is a private and family issue; therefore, there is no need to report the cases and intervene [31]. The nurses and the doctors working at private hospitals had a better recognition of the subject and their attitudes were more positive (p=0.008), as Almogue *et al.* (2012) have found. They also indicated that 59% of participants believed that reporting elder abuse cases did not harm their relationships with the elderly and one third of nurses were sure that most elder-abuse victims conceal the problem [16]. Similarly, Raciela Boganto (2011) conducted a survey with nursing practitioner students about elder abuse and found half of the participants indicated that reporting did not damage their relationships with the elderly, and all the participants had accepted their legal duties in supporting elderly patients faced with abuse [38]. Trying to reform and improve nurses' attitudes toward the elder abuse phenomenon is a necessity for the nursing profession, as attitudes are known to be a combination of nurses' recognition, emotions, and beliefs, which provide the background for becoming a nurse. It seems that improving nurses' knowledge regarding the aging process, the related needs, and the potential risk factors that threaten the elderly using in-service programs can provide more information to this group of healthcare providers about the subject, change their attitudes regarding the elder abuse phenomenon, and give them an overall indication of elderly patients' needs and the consequences of elder abuse.

The results indicate a significant relationship between the level of recognition and nurses' attitudes toward elder abuse. This finding is consonant with those of Ko's study (2010) [39], but contrasts with those in the research conducted by Almogue *et al.* (2010) [16]. Using reformative solutions for changing nurses' attitudes can improve elder care since attitudes affect nurses' performance and their inclination to report the cases of elder abuse they encounter [16, 33, 40].

There was no significant relationship found between recognition of the phenomenon and nurses' performance in dealing with elder abuse cases. This finding may be due to the lack of an appropriate screening tool for elder abuse cases in the early stage of hospitalization or care, and the lack of a formal reporting protocol. The current study was conducted in cities with low populations and, therefore, it was customary for nurses to see familiar elderly patients, creating a sense of fear regarding the social and legal consequences of intervening [31].

Moreover, Schmeidel *et al.* [2012] have described a sense of shame in asking whether the suspected abuse stemmed from the elderly individual or his/her relatives as a reason for ignoring the cases [27]. Clark *et al.* (1990), Jones *et al.* (1997), and Kennedy (2005) have also reported a fear of legal consequences as the main reason for a lack of interest in dealing with elder abuse cases [41 - 43]. In studies by Cho *et al.* (2015) and Schmeidel *et al.* (2012), time limitations caused by work load and limited work schedules were cited as a reason for nurses not to report elder abuse cases [17, 27]. Our results indicate that none of the participants used an elder abuse screening tool while assessing the elderly; using social tools can reduce the possibility of misdiagnosing elder abuse and prevent arbitrary actions by nurses [44]. Subramanian (1998) has also indicated that one of the main barriers for elder abuse recognition is the lack access to in-service education and standardized tools [45, 46].

CONCLUSION

According to the results of this study, there is a significant relationship between the recognition of elder abuse symptoms and the nurses' attitudes, and the nurses' attitudes and performance. There was no significant difference between the nurses' performance and the recognition of elder abuse symptoms. In this regard, interventions to empower nurses through the use of in-service programs and adding the topic of elder abuse and related nursing interventions to the nursing curriculum are recommended. Culture-building practices and educating nurses to increase their sense of professional and ethical duty can be helpful in improving positive attitudes.

The results of this study can help nursing managers to design and implement in-service programs for nurses. Thus nurses learn; How to identify cases of elderly abused by family caregivers and take the necessary action.

To improve nurses' performance, it would be helpful for

health policy makers to compile elder abuse-related protocols and impart them to hospitals and treatment centers.

Establishing a comprehensive statistical elder abuse reporting system at nursing offices of hospitals and better communication with supportive organizations, such as state welfare organizations, as well as social emergency and legal institutions can improve nurses' performance in dealing with cases of elder abuse.

CLINICAL APPLICATIONS OF THE FINDINGS

- The results of current study can provide a scientific background for other researchers, policymakers, and nursing education practitioners.
- Assessing the level of recognizing potential risk factors and symptoms of elder abuse can indicate the current situation regarding nurses' knowledge and, therefore, facilitate filling information gaps using educational interventions.
- Analyzing nurses' attitudes toward elder abuse can influence decisions for appropriate interventions to reform their attitudes and, ultimately, attain high-quality and multi-aspect nursing care.
- Assessing nurses' performance in dealing with abused elderly patients can determine necessary educational requirements and identify probable behavioral problems.
- Three questionnaires were designed to assess recognition, attitudes, and performance of nurses in dealing with elder abuse cases. The acceptable validity and reliability found in this study affirm the use of these questionnaires in future studies.
- Nursing managers can schedule appropriate theoretical and clinical retraining classes regarding elder abuse by assessing the recognition, attitudes, and performance levels of clinical nurses in dealing with cases of elder abuse. This can resolve the educational needs and reform the nurses' attitudes toward elder abuse.

LIMITATIONS

The variability in nurses' working shifts was a limitation in the data collection for this study.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This research was approved by the Ethics Committee at the Ramsar Nursing Care Research Center (Code Number 1395.34MUBABOL.REC).

HUMAN AND ANIMAL RIGHTS

No animals/humans were used for studies that are the basis of this research.

CONSENT FOR PUBLICATION

Written informed consent was obtained from all the participants.

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CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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