Investigating the Relationship Between Perception and Attitude With Responsibility for Elderly Care in Nurses of Emergency Wards of Ardabil Hospitals in 2020

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Abstract
Nurses’ knowledge, attitudes, and their professional responsibility regarding elderly people are vital determinants in delivery of quality care for older people. Thus, this study aimed to identify the perception and attitude of nurses toward elderly care and their correlation with professional responsibility in nurses working in emergency departments. This descriptive-correlational study was conducted on 252 nurses working in the emergency departments of five general hospitals located in the province of Ardabil, Iran. Data was collected a demographic questionnaire and standard questionnaire of nursing care for the elderly of Persoon et al. The majority of nurses reported a positive knowledge and attitude towards elderly care. Only half of the nurses had a desirable professional responsibility towards elderly care. Based on the results of multivariate regression model, the variables of knowledge, attitude, age, work experience, and previous care of older client had a significant relationship with nurses’ professional responsibility for elderly care ($p < 0.01$). Knowledge, attitude, age, and previous history of elderly care are significant determinants for professional responsibility towards elderly care; therefore, periodical evaluation of elderly care and its related factors can help the hospital managers to construct the basics of healthcare delivery for older people in emergency departments.

Keywords
geriatric health services, professional responsibility, perception, attitude, emergency departments

Introduction
The improving primary and secondary healthcare have increased the life expectancy of people that subsequently has caused a substantial increase in elderly population (Ghimire et al., 2019). Based on the data from world health organization, elderly population will be 1.2 billion people in 2025 and 2 billion people in 2050 (WHO, 2015). It is estimated that by 2060, 23.5% of the US population and 40% of South Korea will be included as elderly people. In Iran, in 2055, almost 30% of the population will be over 60 years of age. Therefore, it is necessary to pay an inclusive attention to the age people because they have many health problems and are considered as the main consumers of health services. About 50% of hospital admissions and 85% of admissions in chronic care delivery centers belongs to elderly (Arab et al., 2008). In addition, about 23% of the admission of patients in the emergency departments are related to the elderly and this

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number is increasing every year so that the number of elderly referrals to the emergency departments reaches nearly 20 million people (Aminzadeh & Dalziel, 2002). Provision of high-quality care can avoid the onset of geriatric related-syndromes, such as impaired mobility, incontinence, delirium, falling, and polypharmacy (Persoon et al., 2015).

Nurses are responsible for providing physical, psychological, and emotional support for elderly in hospital environment, healthcare centers, and homes. With respect to the important role of nurses, their attitude affects the preference to work with the elderly as well as the quality of care (Hesselink et al., 2019). Therefore, nurses working in these wards must have appropriate knowledge and attitudes and sufficient skills to care for the elderly. Numerous studies have reported that most of nurses who provide care for the elderly in the emergency departments have not received adequate training about the appropriate care of the elderly and feel insecure in dealing with patients (Arab et al., 2008). Additionally, studies showed that approximately 89% of older people in the United States experience age discrimination (Donizzetti, 2019). Rogers et al. in the United States found out that one in 17 adults over the age of 50 experiences repeated discrimination in receiving health care, which is associated with the possibility of 4 years of new disability or worsening of the condition (Rogers et al., 2015). Age discrimination in patients increases the length of hospital stay and creates a negative attitude in people towards themselves and also reduces their participation in self-care (Banerjee et al., 2021). Hence, by recognizing the factors affecting responsibility for aging, information can be obtained to improve their healthcare (Donizzetti, 2019).

Nurses are responsible for elderly patients because of their role in the healthcare system (Doherty et al., 2011). Their professional responsibility leads to more comprehensive services for the elderly. Previous studies have reported a variety of outcomes between the relationship between nurses’ perceptions and attitudes toward responsible care for the elderly (Bahadir-Yilmaz, 2018). Mahmoodi et al. (2017) reported a positive and significant relationship between the variables of nurses’ attitudes and responsibilities toward observing patient rights (Mahmoodi et al., 2017). Milton et al. showed that nurses are not responsible in clinical decisions and compliance with professional standards (Milton-Wildey & O’Brien, 2010).

The literature review showed that most of the studies in the field of geriatric nursing care have been conducted on nurses working in internal and surgical settings. It was assumed that greater awareness, perception, and responsibility toward caring for elderly people in emergency wards are essential to improve the quality of nursing care. Moreover, nurses’ attitudes and responsibilities towards caring for the elderly in different societies are different due to cultural variables and social structure. Hence, this study was conducted with the aim of determination of the relationship between perception and attitude with responsibility for elderly care in nurses of emergency departments.

Methods

Design and Data Collection

This correlational study carried out from May to June, 2020. The study population was composed of all nurses working in the emergency department of eight general hospitals affiliated to Ardabil University of Medical Sciences (N = 280) that were recruited by census sampling method. Of them, 252 nurses returned the questionnaire with response rate of 90%. The inclusion criteria included having at least a bachelor degree in nursing, 6-month employment in emergency department, and the exclusion criteria was incomplete or no response to the questionnaire.

Before the data collection, the research project was approved by the ethics committee in the research deputy of Ardabil University of Medical Sciences (ethics code: IR. ARUMSREC.1398.49). The data collection tool was a questionnaire consisting of two parts: (1) Personal-social information included 13 questions (gender, age, position, work experience, etc.), (2) The modified version of Geriatric In-Hospital Nursing Care Questionnaire (GerINCQ), developed by Persoon et al., in 2015 (Persoon et al., 2015). This questionnaire contains of 41 five-point Likert questions with a score range of 41–205. It is a standard tool and has three domains. The first domain includes perception about caring for the elderly containing 15 questions. The second domain is about attitudes towards caring for elderly containing 14 questions and the third domain measures professional responsibility of nurses in caring for the elderly containing 12 questions.

The validity and reliability of the GerINCQ have been confirmed in the study of (Persoon et al., 2015). The Cronbach’s alpha coefficient of the whole instrument was (0.86). The reliability of the tool components was: perception about caring for the elderly (0.67), attitude towards caring for elderly (0.64), and professional responsibility (0.89) (Persoon et al., 2015). After translating the scale into Persian, it was translated into English again by an expert. The face and content validity of the instrument were confirmed by 10 faculty members of the school of nursing using the Walters and Basel technique, CVR = 0.8, CVI = 1, (Waltz & Bausell, 1981). In the present study, reliability was calculated with Cronbach’s alpha (a=0.86). Data collection was performed by the first author. Questionnaires were provided to emergency nurses between May and July, 2020 to be completed. The mean score of GerINCQ and its dimensions were compared with criterion scores. The following formula was used to determine the criterion score: maximum score minus minimum score divided by two plus minimum score (Bazargan et al., 2005)

Data Analysis

Data were analyzed by SPSS software version 26 using descriptive (frequency, mean, and standard deviation) and inferential (one-sample t-test, independent t-test, one-way ANOVA, and linear regression) statistics.
Results

Characteristics of the Participants

Two hundred fifty-two nurses completed and returned the questionnaires with response rate of 90%. The mean and standard deviation of the age of the respondents in the study was (31.84 ± 6.27) years. Table 1 provides more demographic information about the study subjects. Table 1

The findings showed that the mean perception score of nurses about elderly care (45.42 ± 7.53) was higher than the criterion score of 45 and this difference was statistically significant. There was no statistically significant relationship between the demographic characteristics of nurses and perceptions of elderly care. Similarly, the attitude score of nurses (56.14 ± 12.35) was higher than the criterion score of 42 and this difference was statistically significant. Attitude score was higher in women than men and this difference was statistically significant. There was also a statistically significant relationship between living with the elderly person and attitudes toward elderly care.

There was no statistically significant difference between other social demographic characteristics with perception and attitude toward elderly care. The mean score of responsibility was 39.62 ± 9.86 which was higher than the criterion score of 36 and this difference was statistically significant. There was
a statistically significant relationship between the area of responsibility and gender, living with the elderly, age, and work experience (Table 2).

The results of regression model showed that the variables of perception and attitude towards elderly care, work experience, age, and living with the elderly person had a significant relationship with nurses’ professional responsibility for elderly care. Stepwise regression analysis showed that the variable of attitude toward care for the elderly was a strong predictor than other variables for professional responsibility of nurses and explains 36% of the variations in professional responsibility. Table 3

| Prediction Variables          | R  | R²  | F    | Non-std. Coefficient β | SE  | St. Coefficient β | T    | p    |
|------------------------------|----|-----|------|------------------------|-----|------------------|------|------|
| Perception                   | 0.08 | 0.008 | 1.93 | 35.23                  | 3.23 | 0.08             | 10.89 | 0.001 |
| Attitude                     | 0.6 | 0.36 | 0.94 | 42.61                  | 3.11 | 0.06             | 13.68 | 0.001 |
| Job experience in emergency  | 0.04 | 0.002 | 0.4  | 39.11                  | 1.1  | 0.04             | 35.56 | 0.001 |
| Age                          | 0.02 | 0.004 | 0.09 | 38.71                  | 3.22 | 0.02             | 12.00 | 0.001 |
| History of living with elderly | 0.3  | 0.09  | 0.09 | 38.71                  | 3.22 | 0.04             | 12.00 | 0.01  |

Discussion

This study was performed to identify the relationship between perception and attitude with professional responsibility for elderly care among nurses working in emergency departments. The results showed that in the field of perception of elderly care, the obtained average score was higher than criterion score and the difference was statistically significant, which is in line with the results of Faronbi et al. (2017). The positive perception towards elderly care might be due to the public respect for the elderly people (Faronbi et al., 2017). In contrast, in the study of (Muvwimi, 2017), nurses’ perception of caring for the elderly was lower (Muvwimi, 2017). Contrary results in this study may be due to the cultural differences towards aged people and the personalities of nurses.

The findings showed that nurses’ attitude towards nursing care for the elderly in the emergency department was positive, which was consistent with the study of Ghorbani et al. (2021) and Adibelli & Kilic (2013) (Adibelli & Kilic, 2013; Ghorbani et al., 2021) but inconsistent from the results of the study by (Vu et al., 2019). This difference in nurses’ attitude toward the elderly care can be due to professional development and expectations.

The results showed that female nurses had a more positive attitude towards caring for the elderly, in the study of Hamedanizadeh et al. (2008) and Seresht et al. (2006), those who lived with their elderly parents showed a positive attitude towards the elderly patients and the presence of the elderly person in the family (Hamedanizadeh et al., 2008; Seresht et al., 2006). It can be claimed that having an elderly person at home has a positive effect on the attitude of the members of family.

The results showed that about fifty percent of the emergency nurses had a desirable professional responsibility toward caring for elderly. This result is consistent with the study of Jarling et al. (2020) where the caregivers’ perception of professional responsibility towards the elderly was moderate (Jarling et al., 2020). In the study of Hassanian et al. (2017) and Dehghani and Kermanshahi (2012), nurses’ responsibility for caring for elderly patients was high (Dehghani & Kermanshahi, 2012; Hassanian et al., 2017). In contrast, in the study of Milton-Wildey and O’Brien (2010), nurses’ professional responsibility was low and nurses were not responsible in making clinical decisions and maintaining nursing care standards (Milton-Wildey & O’Brien, 2010). Contradictory results in this study could be due to differences in nurses’ workload, lack of time, lack of professional skills, or due to differences in care standards.

The results showed that female nurses had more responsibility than men. This is consistent with the results of Hassanian et al. (2017) (Hassanian et al., 2017). This is due to the flexibility of female nurses with professional regulations and rules. Perez and Bosque found that gender and level of education were not powerful determinants for better professional responsibility (Pérez & del Bosque, 2015). This difference is probably due to greater responsibility of women in Iranian society. In addition, the score of professional responsibility for caring of elderly in married nurses was higher than single and this difference was statistically significant, which is consistent with the results of the study of (Hassanian et al., 2017). Married nurses probably have more responsibility due to their older age and sense of responsibility in their personal life towards their family.

The results showed that there was a significant relationship between professional responsibility regarding elderly care and age of nurses. In other words, with increasing the age of nurses, their responsibility would be increased. This seems to be reasonably acceptable, as their responsibilities increase as their age increases them and gain professional experience. In addition, there was a significant and positive relationship between work experience and...
responsibility, which is consistent with the study of (Hassanian et al., 2017). In other words, with increasing work experience, nurses’ responsibility in caring for the elderly increased.

The results of regression analysis showed that the factors of perception, attitude, age, work experience and living with the elderly people are predictors for professional responsibility of nurses toward elderly care. The study showed that there was a significant relationship between nurses’ attitude and their professional responsibility in which responsibility for caring for the elderly was higher in nurses who had a high attitude, which is in line with the findings of Mahmoodi et al., (2017). In this regard, Battie and Steelman, (2014) and Heydari et al., (2016) also showed nurses’ attitudes and professional responsibility are related with considering patients’ rights (Battié & Steelman, 2014; heydari et al., 2016).

This study had some limitations. Using the self-report method and not having enough time to fill out the questionnaire were the main limitations of this study. Also, it is possible that nurses who were more dissatisfied were more likely to respond negatively to the attitude questionnaire. Therefore, we tried to control the effects to a large extent by choosing the right time, giving the opportunity, explaining the goals, gaining trust and cooperation, and emphasizing the confidentiality of the questionnaires.

**Conclusion**

In total, there was a meaningful relationship between perception and attitude of nurses with professional responsibility for caring of the elderly among nurses working in emergency departments. Since, there was a statistically significant relationship between nurses’ age, work experience, gender and living with elderly family member with professional responsibility towards the elderly care, it is suggested for nursing managers to consider these variables in selecting nurses to provide effective care for the elderly in the emergency department. In addition, proper training of emergency nurses in the areas of professional responsibility is one of the main strategies to improve the quality of geriatric care delivery.

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**Author Contributions**

Indira Modarres Sadraei: the concept of study/design, helping to collect data, analysis, interpreting data and preparing a manuscript. Mohammadali Mohammad: study design, data analysis, monitoring, administrative/technical/material support, final review. Behrouz Dadkhah with a detailed review of the proposal, article design and important reviews for important intellectual content.

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**Ethical Approval**

The present paper is the result of the dissertation with ethics code IR. ARUMS.REC.1398.498 approved by the ethics committee of Ardabil University of Medical Sciences. Obtaining informed oral consent from the samples, justifying the objectives of the research, observing the principle of confidentiality in disseminating information and keeping it confidential, the freedom of the research units to leave the study were among the ethical principles that were observed in this research.

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