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OLDER ADULTS' AND NURSES PERCEPTION OF DIGNITY IN THE SETTING OF IRANIAN HOSPITALS: A CROSS-SECTIONAL STUDY

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Abstract

Aim: This study was designed to investigate the perceptions of hospitalized older adults and nurses regarding the importance and observance of dignity, and, in addition, to address the relationship between the importance and observance of dignity and individual social variables in nurses and hospitalized older adults, and the relationship between importance and observance of dignity in older adults and hospital wards and bed layouts. Design: A cross-sectional study. Methods: Convenience sampling was used to select 400 hospitalized older adults and 146 nurses in Kashan University of Medical Science hospitals, Iran. Data were collected using a demographic questionnaire, and a dignity scale including three fields: privacy, communication, and autonomy. The data were described using descriptive statistics, and analyzed via the one-way ANOVA, t- test, Pearson correlation coefficient, and linear regression model. Results: Over half of the older adults were female (57%), and 76.5% were married. More than 60% of older adults believed that dignity had a high degree of importance and that observance of dignity was at a good level. The majority of nurses rated the importance and observance of dignity at weak to moderate levels (p < 0.0001). Conclusion: Due to the difference in viewpoints between older adults and nurses regarding dignity, barriers to the observance of dignity as perceived by nurses should be surveyed.

 $\textbf{Keywords:} \ autonomy, communication, dignity, nurse, privacy, older adult.$

Introduction

According to the World Health Organization (WHO), observance of dignity is a key factor in the improvement of patient health (Leene, 1994). The International Council of Nurses puts an emphasis on nursing with respect for patient dignity (ICN, 2012), an idea that is also recognized in nursing ethics codes (Jollaee et al., 2010). Dignity is a complicated, fundamental, and ambiguous concept (Griffin-Heslin, 2005; Jacobson, 2007). There is no unanimously accepted definition of human dignity, and different definitions have been proposed, such as: a sense of value, respect, observance of privacy, being in control (Lothian, Philp, 2001; Walsh, Kowanko, 2002; Baillie, 2009), human rights, independence, existential satisfaction, security (Guo, Jacelon, 2014), and being free of dependence (Jakobsen, Sørlie, 2010). The observance of human dignity is one of the main components of ethics and

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care (Zehtab, Adib-Hajbaghery, 2014; Rahemi, Williams, 2015); therefore, it is essential to examine this concept in all its varying aspects (Anderberg et al., 2007). The observance of human dignity is more important to certain age groups, such as older adults, who are a special and vulnerable group. This concern is well reflected in the patient's rights charter (Parsapoor, Bagheri, Larijani, 2009; Rejeh, Heravi-Karimooi, Foroughan, 2010). The term of hospitalization in older adults, due to physiological anatomical changes (Hajbaghery, Aminolroayaee-Yamini, 2015; Rahemi et al., 2017), is longer than that of younger age groups (Ferrando et al., 2010). This increases the risk that their dignity will be neglected (Franklin, Ternestedt, Nordenfelt, 2006). Studies have shown that by observing patient dignity, nurses can buy patients' trust in healthcare services, increase satisfaction with nursing care, decrease dependency, attenuate the term of hospitalization, and satisfy more of the needs for security in the patient (Sadeghi, 2009; Ebrahimi, Sadeghian, Seyedfatemi, 2014; Hosseinian. Mirbagher Ajorpaz, Esalat Manesh, 2015).

Additionally, showing greater respect for the human (Chochinov et al., 2005). On the other hand, failure to observe their dignity increases the stress, anxiety, and depression of older adults (Julião et al., 2014), and creates problems such as negative feelings, a decreased proclivity for cooperation, and changes in sleep patterns (Sawada et al., 1996).

Different studies have presented differing results regarding human dignity. There is, however, a paucity of studies on dignity and its aspects in older adults. Authors have reported that most patients are satisfied with the observance of their dignity by nurses (Matiti, Trorey, 2008; Lin, Tsai, Chen, 2011), and, more specifically, that hospitalized patients are satisfied with the observance of their dignity (Ferri, Muzzalupo, Di Lorenzo, 2015). On the other hand, a different study found that a significant number of patients were not satisfied with the observance of their dignity in hospital (Matiti, Trorey, 2008). A study in Iran showed that about half of hospitalized patients (50.6%) perceived the observance of their privacy to be at low to moderate levels (Nayeri, Aghajani, 2010), with many respondents complaining about disregard for their privacy and independence, and disrespectful behavior while receiving nursing care (Sadeghi, 2009; Ebrahimi et al., 2012).

Moreover, nurses have different perspectives to patients on the observance of patient dignity, awarding themselves higher scores than the patients would give for observance of privacy and independence of hospitalized patients (Lemonidou et al., 2003; Qvrchyany et al., 2013). Studies by Schopp et al. (2003) have shown that nurses in five European countries believed that they had well respected the privacy of patients, whereas the patients believed otherwise (Schopp et al., 2003). Another study reported that nurses' evaluation of the observance and importance of the dignity of adolescent patients was higher than the estimates of the patients (Karimi et al., 2008). The difference in attitudes of the two groups regarding observance of dignity is worthy of attention, since it is of serious concern that nurses evaluate themselves more highly than patients do. This means that while service receivers are not, in fact, satisfied with the services, nurses continue to believe that they should be (Qvrchyany et al., 2013). While a behavior might seem normal form a nurse's perspective, the same behavior might be construed as disrespectful from the perspective of another nurse, or a patient of different nationality, culture, or age group. Therefore, the results of these studies are difficult to extrapolate (Matiti, 2002), and there is a need to examine dignity from the perspectives of specific groups, such as nurses, patients, cultural groups, nations, and age groups (including older

dignity of older adults decreases their fear of death adults). Human dignity is a fundamental concept in nursing care, but is, at the same time, ambiguous and complex. It is necessary to take into account the limited studies on dignity and its different aspects in older adults and to determine the attitudes of nurses and older adults to the importance and observance of dignity, which will thereby lead to greater cooperation between them.

Aim

This study was designed to investigate the perceptions of hospitalized older adults and nurses of the importance and observance of dignity, and to address the relationship between the importance and observation of dignity and individual social variables in nurses and hospitalized older adults. Another aim of the study was to determine the relationship between the importance and observance of dignity in older adults, and hospital wards and bed layouts.

Methods

Design

A cross-sectional study.

Sample

The study was conducted in Kashan hospitals from June to September 2016. Based on previous studies, and assuming s = 3 (for nurses) and standard deviation (SD) = 5 (for older adults), with a confidence interval of 95%, and standard error (SE) = 0.5 (Karimi et al., 2008), the sample size for nurses and the hospitalized older adults was established as 146 and 400, respectively. The participants were selected through convenience sampling from two hospitals. Inclusion criteria for the hospitalized older adults were: informed consent, age ≥ 60 , at least six hours' hospitalization, ability to answer questions, and no cognitive problems according to the Mini-Mental State Examination (MMSE) \geq 20. Inclusion criteria for the nurses were: willingness to participate, bachelor degree (at least), and at least three months' experience on adult wards. Exclusion criteria for the nurses were: failure to fill in the questionnaires completely, and, for older adults, the development of an intensive medical condition such that medical attention would interfere with the completion of the questionnaire. The participants that were removed from the study were replaced with new participants.

Data collection

Two parallel instruments were developed to assess the perception of hospitalized older adults and nurses regarding the importance and observation of dignity. The validity of the tool was examined on face and content validity by presenting the tool to ten experts university professors. For the nurses' questionnaire, the CVI and CVR values were 0.84 0.88respectively, and for the patient and questionnaire, 0.80 0.80, and respectively. The reliability of the tool was examined using internal reliability and Cronbach's alpha for the nurses ($\alpha = 0.83$) and patients ($\alpha = 0.72$).

The data-gathering tool was a two-section questionnaire; one section for collecting the

demographics of nurses (age, work experience, gender, having an older adult at home) and the hospitalized older adults (gender, age, marital status, education, job, hospitalization term, history of hospitalization, ward, and layout of the bed), and the other section of the questionnaire was a scale for evaluating the importance and observance of dignity. The items of the scale were categorized into three fields: privacy, communication, and autonomy, considered separately for older adults and nurses. (Table 1).

Table 1 Some questions from the dignity observance scale completed by older adults

Questions

- 1) Have any areas of your body been touched unnecessarily during examinations?
- 2) Have any areas of your body been looked at unnecessarily while receiving care?
- 3) Has your privacy been respected in the bathroom?
- 4) Has your medical information been divulged by nurses to others without your consent?
- 5) Have you ever witnessed the unnecessary presence of personnel of the opposite sex beside your bed?
- 6) Do the nurses introduce themselves before providing care?
- 7) Do Nurses explain to you the reason for doing any nursing activity?
- 8) Do nurses communicate appropriately (in a respectful tone) with you and your family?
- 9) Do nurses ever use your bed number instead of your name?
- 10) Do nurses listen patiently when you speak?
- 11) Do you participate in your care?
- 12) Do nurses ask for permission to give you medical treatment?

There were 41 questions regarding the importance of dignity, evaluated by a four-point Likert scale (1 = very low; 2 = low; 3 = moderate; 4 = high; 5 = very high); the higher the score, the higher the level of importance of dignity. The scores were categorized into four levels: low (< 160), moderate (160–175), high (17–190), and very high (\ge 190).

There were also 41 questions regarding the observance of dignity, also evaluated by a four-point Likert scale (1 = never; 2 = low; 3 = moderate; 4 = completely); the higher the score, the higher the level of observance of dignity. The scores were categorized into four levels: weak (< 112), moderate (112–122), good (122–132), and very good (\geq 132).

Nurses completed their questionnaire by themselves, while questionnaires for the hospitalized older adults were completed during private interviews. Data were gathered every day in summer, between 8:00 am and 8:00 pm.

Data analysis

The Kolmogorov-Smirnov test was used to determine the normal distribution of the data. Descriptive statistics (i.e., mean, standard deviation, frequency, and percentage) were calculated. To determine the relationship of variables with importance and observance of dignity, we used one-way ANOVA, t-test, Pearson correlation coefficient, and linear regression models. Regression coefficients with corresponding 95% confidence intervals (95% CI) and the coefficient of determination are reported as effect estimates. The level of significance was set at 0.05. Statical analysis was performed using SPSS version 13 (SPSS, Chicago, IL, USA).

Results

The mean age of the hospitalized elderly was 69.53 years. The majority were women (57%), married (76.5%), and housewives (41.8%); a small group of patients were office workers (1.2%). The majority of the patients were in rooms with four beds without curtains (38.5%), while 25.5% had a complete set of curtains. The results showed that there was a significant relationship between sex, length of hospitalization, marital status, and employment, and the importance of dignity in the elderly ($p \le 0.05$) (Table 2). In addition, there was a significant relationship between observance of dignity and hospital wards and bed layouts ($p \le 0.05$) (Table 3).

The average age and work experience of the nurses were 30.83 and 7.26 years, respectively. The majority of nurses were women (71.2%), and 25.3% were looking after an elderly relative at home. Results showed that age (r=0.4; p=0.013) and work experience of nurses (r=0.2; p=0.32) had

Table 2 The relationship between demographic variables and views of older adults regarding the importance of dignity $(n = 400)^1$

Characteristic	n	%	mean	SD	test	P ² -value
Sex						
female	228	57	187.41	12.26	$t^* = 12.5$	0.0001
male	172	43	168.66	17.51	df = 398	
History of hospitalization						
yes	343	85.8	179.05	17.74	t = -0.8	0.3
no	57	14.2	181.15	15.31	df = 398	
Length of hospitalization (hours)						
6 hours	32	8	179.78	15.65	$F^{**} = 4.45$	0.004
6 to 12 hours	34	8.5	174.58	21.24		
12 to 24 hours	67	16.75	173.70	16.32		
more than 24 hours	267	66.75	181.32	17.00		
Marital status						
single	15	3.75	181.26	19.95	t = 5.16	0.002
married	306	76.5	177.54	18.08		
widowed	76	19	185.86	12.08		
divorced	3	0.75	189.00	9.53		
Education						
illiterate	191	47.75	180.56	18.00	F = 0.2	0.7
incomplete elementary	137	34.25	177.30	16.74		
complete elementary	32	8	181.00	14.37		
high school	3	0.75	173.33	21.12		
diploma	27	6.75	180.62	16.72		
university	10	2.5	177.40	25.07		
Employment						
employee	5	1.25	180.20	27.97	F = 20.89	0.0001
free lance	57	14.25	165.31	16.44		
retired	72	18	172.54	18.01		
housewife	167	41.75	187.01	13.28		
disabled	79	19.75	181.03	15.95		
unemployed	20	5	173.10	16.61		

 $^{^{1}}Values~are~means \pm SDs; ^{2}Obtained~from~an~independent~samples~student's~t-test; *t-test; **ANOVA; SD-standard~deviation$

Table 3 The relationship between hospital ward and bed layout and views of older adults regarding observance of dignity $(n = 400)^1$

Characteristic	n	%	mean	SD	test	P ² -value
Hospital wards						
internal emergency	31	7.75	130.41	13.64	F = 11.81	0.0001
surgery department	32	8	133.90	14.37		
CCU	26	6.5	140.15	13.85		
surgical emergency	101	25.25	123.04	14.49		
ENT	26	6.5	141.69	10.20		
department of infectious patients	28	7	137.46	14.77		
post cath	25	6.25	143.32	13.10		
internal ward	102	25.5	131.43	15.62		
women's surgery	29	7.25	121.65	13.10		
Layout of the bed						
four-bed room without curtains	154	38.5	128.21	14.07	F = 25.83	0.0001
four-bed room with curtain	36	9	133.36	14.12		
communal ward without curtains	23	5.75	121.21	15.05		
communal ward with curtains	102	25.5	125.45	14.65		
isolated	52	13	148.00	8.99		
3 walls and 1 curtain (CCU room)	33	8.25	140.12	14.43		

¹Values are means ± SDs; ²Obtained from an independent samples student's t-test; SD – standard deviation; CCU – Coronary Care Unit; ENT – Ear, Nose, and Throat

a significant positive correlation with their perceptions of the importance of dignity for older adults. In addition, female nurses (172.64 \pm 24.5) had more significance for elderly dignity than male nurses (158.21 \pm 25.28) (t = 3.2; p < 0.002).

The results indicated that the majority of older adults (65.5%) believed that dignity was highly or very highly important, and 70.3% believed that observance of dignity was at a good or very good level. On the other hand, 61% of the nurses reported that the dignity of hospitalized older adults was of low to moderate importance, and 87% reported that observance of dignity was at a weak to moderate level (Table 4). The t-test showed a significant difference between the mean scores for importance (t = 5.63; df = 543; p < 0.0001) and observance of dignity (t = 13.7; df = 543; p < 0.0001) from the points of view of hospitalized older adults and thus hospitalized elderly nurses; patients (179.33 ± 17.43) considered the importance of dignity to be higher than nurses

(168.49 \pm 25.5). In addition, the observance of dignity from the point of view of hospitalized elderly patients (131.15 \pm 15.78) was higher than that from the nurses' point of view (111.81 \pm 10.64).

Demographic information of older adults was entered into a multiple linear regression model as a set of independent variables, with observance of dignity being the dependent variable. A significant regression equation was found (F = 22.949; p < 0.0001; R = 0.565; R2 adjusted = 0.306). These demographic data accounted for 30% (R2 = 0.306) of variance in observance of dignity. It means that female older adults and wards were more likely to influence observance of dignity. Demographic data of older adults were also entered into a multiple linear regression model as independent variables, with importance of dignity being the dependent variable. A significant regression equation was found (F = 48.696; p < 0.0001; R = 0.575; R2adjusted = 0.323).

Table 4 Classification of observance and importance of dignity from the Viewpoint of hospitalized elderly and nurses

Dignity	Participant	Responses									
observance		weak		moderate		good		very good		total	
of dignity		n	%	n	%	n	%	n	%	n	%
	patients	54	13.5	65	16.2	87	21.8	194	48.5	400	100
	nurses	75	51.4	52	35.6	15	10.3	4	2.7	146	100
importance		low		moderate		high		very high		total	
of dignity		n	%	n	%	n	%	n	%	n	%
	patients	56	14	82	20.5	156	39	106	26.5	400	100
	nurses	48	32.9	41	28.1	23	15.8	34	23.3	146	100

Discussion

Nurses' and older adults' attitudes to the importance and observance of dignity of hospitalized patients, and the factors influencing these attitudes, were examined. The results showed a significant difference in terms of the importance of dignity from the perspective of hospitalized older adults and nurses. The former group perceived dignity as a very important matter, while the latter perceived it as a matter of moderate to low importance. Studies have shown that from the point of view of nurses and patients, observing physical boundaries and privacy, having choice, interacting with and telling the truth to patients, and observance of the independence of patients are highly important (Bäck, Wikblad, 1998; Karimi et al., 2008). However, the participating nurses evaluated these issues as less important. Possible reasons for this might be the high workload of nurses and a lack of knowledge about healthcare for older adults. Inadequate awareness in nurses of the moral aspects of providing care to older adults, an understaffed work environment, and high workloads are some of the factors behind moral misjudgments made by nurses in providing care to older adults (Hajbaghery, Safa, Aminolroayaee-Yamini, 2015). Jakobsen, Sørlie (2010) reported that nurses in elderly care centers are frequently challenged by moral issues, and supporting independence of care receivers is a perpetual issue (Jakobsen, Sørlie, 2010). Nurses argue that their concerns about the regulations are neglected and the organization does not support them. In Norway, nurses stated that they were unable to handle the moral issues attached to providing care to patients. Due to these obstacles, nurses, in some cases, lose their moral sensitivity and develop a sense of confusion, lack of concern, ineffectiveness, and indifference (Atashzadeh Shoorideh, Ashktorab, Yaghmaei, 2012). In short, lack of knowledge, will, and ability depreciate moral concerns in nurses

(Borhani, Abbaszadeh, Mohsenpour, 2013; Hajbaghery, Safa, Aminolroayaee-Yamini, 2015).

A significant difference was found between hospitalized older adults and nurses in terms of observance of dignity, with the former group evaluating it to be at a good to very good level and the latter group evaluating it to be at a low to moderate level. Sabeghi et al. (2017) report that hospitalized older adults evaluate observance of patient dignity to be higher than nurses do (Sabeghi et al., 2017). However, other studies have reported that nurses evaluate observance of patient dignity to be higher than patients themselves (Lemonidou et al., 2003; Qvrchyany et al., 2013). One of the causes of the inconsistency among studies is the difference between the participants in terms of age. Older adults, more commonly, need to be hospitalized for longer time periods (Matteson, McConnell, 1988; Jacelon, 2004), which gives them more time to learn about the hospital environment, interact with nurses, and understand their situation. Therefore, they tend to be more satisfied with the personnel, including nurses. In addition, most of the older adults under study had heart and respiratory diseases, and such patients are usually hospitalized in a special ward with more equipment and facilities, not usually available to other patients. This fact also helps explain why the subjects develop better attitudes and are more open to medical interventions. Baillie (2009) report that the attitude of patients (e.g., acceptance of the disease), and being hospitalized with other patients with the same disease affected the observance of dignity of patients (Baillie, 2009). In addition, the development of hospitals in terms of facilities and equipment means that when older adults compare their current environment with "the old days" they tend to adopt a more positive attitude to and satisfaction with services.

The findings indicate that the importance of dignity for older female adults was higher than for older male adults. As suggested in other studies, women are more concerned about their privacy (Bäck, Wikblad, 1998), more sensitive to violations of their privacy, and tend to react more negatively to such events (Cohen, Delaney, Boston, 1994). In contrast to female patients, male patients are less concerned about their clothes and how much of their body is exposed (Matiti, 2002). Therefore, observance of dignity is a more serious issue for older female adults.

There was a significant relationship between occupation and attitudes of older adults to the importance of dignity. It was more important for patients who did not have a job than for those who

were employed or had retired. One study has indicated that patients with physical disabilities have problems in preserving their dignity independence (Baillie, 2009). Disabilities create a sense of humiliation in older adults (Adib-Hajbaghery, Akbari, 2009; Tagharrobi, Sharifi, Sooky, 2014); thus the importance of dignity is higher for disabled older adults. Moreover, dignity was more important for elderly housewives than for those who worked outside the home. Since all the participants in the former group were women, one probable conclusion is that gender has a role to play in this regard.

The results revealed a significant relationship between the type of ward the patients were hospitalized in and observance of patient dignity from the perspectives of older adults. Comparison of observance of dignity in different wards showed that the dignity of patients was highly respected in Post-CAT, intensive care, and ENT moderately respected in emergency, internal, infection, and internal/surgery wards; and poorly respected in emergency surgical, and female surgical wards. Another study found that patient dignity was poorly and moderately respected in emergency and urology wards (Karro, Dent, Farish, 2005; Baillie, 2007). Other studies have shown that observance of the dignity of patients in ENT wards was at an acceptable level (Sarkhil, Darvishpoor-Kakhaki, Borzabadi-Farahani, 2013; Koivula-Tynnilä, Axelin, Leino-Kilpi, 2018), and at moderate level in surgical wards (Lemonidou et al., 2003). These results are consistent with our findings.

There was a significant difference between bed position and observance of patient dignity from the point of view of older adults. Participants hospitalized in private rooms or in spaces with greater privacy evaluated observance of dignity to be at higher levels than participants in shared rooms or spaces with less privacy. Thus, compared to shared rooms, patient dignity is more respected in private rooms and spaces where the privacy of patients is better preserved (Rylance, 1999).

The results indicated that dignity was more important to older nurses than younger ones. Older nurses paid more attention to the independence of patients, and tended to make better decisions and to perform better when faced with moral dilemmas (Moosavi, Borhani, Abbaszadeh, 2017).

The results showed that the importance of dignity for female nurses was higher than for male nurses. Studies have reported that female nurses are more concerned about moral principles than male nurses, and that the former group are more sensitive to moral issues (Dehghani et al., 2015; Mohammady, Borhani, Roshanzadeh, 2017).

Moreover, our results indicated that nurses who had an older adult member in their family tended to be more respectful of the dignity of patients than nurses who did not. Having experience of looking after an elderly relative at home improves the attitudes of nurses and, consequently, improves the quality of nursing care (Liu, Norman, While, 2013). Living with older adults improves perception of their needs and increases the desire to meet such needs.

Limitation of study

Given that the study was limited to hospitals located in one city, studies with larger and more diverse sample groups are recommended. Moreover, only patients with more than six hours elderly of hospitalization entered the study. Future works could cover elderly outpatients. also The psychological state of the respondents, and the fact that nurses completed the questionnaire by themselves are other limitations of the study. Further studies may include the monitoring of nurses in terms of their observance of the dignity of hospitalized elderly patients.

Conclusion

The observance of dignity, and providing care with respect for moral values are some of the most important needs of patients, and are of more importance for older adults due to their special physical and psychological state. In their past, older adults played a role in society and helped society to progress. Therefore, observance of moral principles, including patient dignity, is highly important in providing healthcare to these patients.

In contrast to older adults, nurses evaluated the importance of dignity to be low to moderate, and the observance of dignity to be at weak to moderate levels. Therefore obstacles opposing observance of dignity from the viewpoint of nurses should be surveyed, and healthcare managers should pay more attention to the dignity of patients, and take the dignity of patients into account in both human resources management, and design of the physical environment of hospitals.

Ethical aspects and conflict of interest

The ethical principles of 1964 Helsinki declaration were considered. This research was approved by the ethics committee of Kashan University of Medical Science (IR.KAUMS.REC.1395.130). The

research objectives were explained to the participants, and written informed consent was obtained.

The participants were informed about the voluntary nature of participation and their right to withdraw at any time. They were assured that their anonymity would be protected and that their personal information would remain confidential. The authors declare that they have no conflict of interests.

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Author contributions

Study's conception and design and process of sampling (MA, HK), data analysis (NMA), manuscript draft (MA), critical revision of the manuscript (MA, NMA), final approval of the manuscript (MA).

References

Adib-Hajbaghery M, Akbari H. The severity of old age disability and its related factors. *Feyz Journal of Kashan University of Medical Sciences*. 2009;13(3):225–234.

Anderberg P, Lepp M, Berglund AL, Segesten K. Preserving dignity in caring for older adults: a concept analysis. *Journal of Advanced Nursing*. 2007;59(6):635–643.

Atashzadeh Shoorideh F, Ashktorab T, Yaghmaei F. Responses of ICU nurses to moral distress: a qualitative study. *Iranian Journal of Critical Care Nursing*. 2012;4(4):159–168.

Bäck E, Wikblad K. Privacy in hospital. *Journal of Advanced Nursing*. 1998;27(5):940–945.

Baillie L. The impact of urological conditions on patients' dignity. *International Journal of Urological Nursing*. 2007;1(1):27–35.

Baillie L. Patient dignity in an acute hospital setting: a case study. *International Journal of Nursing Studies*. 2009;46(1):23–36.

Borhani F, Abbaszadeh A, Mohsenpour M. Nursing students' understanding of factors influencing ethical sensitivity: a qualitative study. *Iranian Journal of Nursing and Midwifery Research*. 2013;18(4):310–315.

Chochinov HM, Hack T, Hassard T, Kristjanson LJ, McClement S, Harlos M. Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. *Journal of Clinical Oncology*. 2005;23(24):5520–5525.

Cohen L, Delaney P, Boston P. Listening to the customer: implementing a patient satisfaction measurement system. *Gastroenterology Nursing*. 1994;17(3):110–115.

Dehghani A, Radbeh F, Parviniannasab AM, Khaki S, Shamsizadeh M, Beyramijam M. Enactment of professional ethics standards compliance in patients and nurses prospective. *Journal of Holistic Nursing and Midwifery*. 2015;25(4):64–72.

Ebrahimi H, Sadeghian E, Seyedfatemi N. Exploring outcomes of respect for patient autonomy in hospital: a qualitative research. *Avicena Journal of Nursing and Midwifery Care*. 2014;22(2):15–25.

Ebrahimi H, Torabizadeh C, Mohammadi E, Valizadeh S. Patients' perception of dignity in Iranian healthcare settings: a qualitative content analysis. *Journal of Medical Ethics*. 2012;38(12):723–728.

Ferrando AA, Paddon-Jones D, Hays NP, Kortebein P, Ronsen O, Williams RH, McComb A, Symons TB, Wolfe RR, Evans W. EAA supplementation to increase nitrogen intake improves muscle function during bed rest in the elderly. *Clinical Nutrition*. 2010;29(1):18–23.

Ferri P, Muzzalupo J, Di Lorenzo R. Patients' perception of dignity in an Italian general hospital: a cross-sectional analysis. *BMC Health Services Research*. 2015;15:41.

Franklin LL, Ternestedt BM, Nordenfelt L. Views on dignity of elderly nursing home residents. *Nursing Ethics*. 2006;13(2):130–146.

Griffin-Heslin VL. An analysis of the concept dignity. *Accident and Emergency Nursing*. 2005;13(4):251–257.

Guo Q, Jacelon CS. An integrative review of dignity in end-of-life care. *Palliative Medicine*. 2014;28(7):931–940.

Hajbaghery MA, Safa A, Aminolroayaee-Yamini E. Nurses' knowledge of ethical and legal issues in elderly care. *Medical Ethics Journal*. 2015;9(31):169–191.

Hosseinian M, Mirbagher Ajorpaz N, Esalat Manesh S. Mothers' satisfaction with two systems of providing care to their hospitalized children. *Iranian Red Crescent Medical Journal*. 2015;17(2):e23333.

ICN. The ICN Code of ethics for nurses. *International Council of Nurses*. 2012;1–10.

Jacelon CS. Managing personal integrity: the process of hospitalization for elders. *Journal of Advanced Nursing*. 2004;46(5):549–557.

Jacobson N. Dignity and health: a review. *Social Science & Medicine*. 2007;64(2):292–302.

Jakobsen R, Sørlie V. Dignity of older people in a nursing home: narratives of care providers. *Nursing Ethics*. 2010;17(3):289–300.

Jollaee S, Bakhshandeh B, Mohammad Ebrahim, M, Asgarzadeh M, Vasheghani Farahani A, Shariat E. Nursing code of ethics in Iran: the report of a qualitative study. *Medical Ethics and History of Medicine*. 2010;3(2):45–53.

Julião M, Oliveira F, Nunes B, Vaz Carneiro A, Barbosa A. Efficacy of dignity therapy on depression and anxiety in Portuguese terminally ill patients: a phase II randomized controlled trial. *Journal of Palliative Medicine*. 2014;17(6):688–695.

Karimi R, Dehghan Nayyeri N, Sadeghi T, Mehran A. Patients dignity: a comparative study between the perspective of nurses and adolescents. *Iranian Journal of Medical Ethics and History of Medicine*. 2008;1(4):53–62.

Karro J, Dent AW, Farish S. Patient perceptions of privacy infringements in an emergency department. *Emergency Medicine Australasia*. 2005;17(2):117–123.

Koivula-Tynnilä H, Axelin A, Leino-Kilpi H. Informational privacy in the recovery room-patients' perspective. *Journal of Perianesthesia Nursing*. 2018;33(4):479–489.

Leene H. A declaration on the promotion of patient rights in Europe. *Tijdschrift voor Gezondheidsrecht*. 1994;18(5):100–106.

Lemonidou C, Merkouris A, Leino-Kilpi H, Välimäki M, Dassen T, Gasull M, Scote PA, Tafas C, Arndt M. A comparison of surgical patients' and nurses' perceptions of patients' autonomy, privacy and informed consent in nursing interventions. *Clinical Effectiveness in Nursing*. 2003;7(2):73–83.

Lin YP, Tsai YF, Chen HF. Dignity in care in the hospital setting from patients' perspectives in Taiwan: a descriptive qualitative study. *Journal of Clinical Nursing*. 2011;20(5–6):794–801.

Liu YE, Norman IJ, While AE. Nurses' attitudes towards older people: a systematic review. *International Journal of Nursing Studies*. 2013;50(9):1271–1282.

Lothian K, Philp I. Maintaining the dignity and autonomy of older people in the healthcare setting. *British Medical Journal*. 2001;322(7287):668–670.

Matiti MR. *Patient dignity in nursing: a phemomenological study*. Huddersfield: University of Huddersfield; 2002.

Matiti MR, Trorey GM. Patients' expectations of the maintenance of their dignity. *Journal of Clinical Nursing*. 2008;17(20):2709–2717.

Matteson M, McConnell E. Gerontological nursing in acute care settings. In: *Gerontological Nursing: Concepts and Practice.* 2nd ed. 1998; pp. 721–750.

Mohammady S, Borhani F, Roshanzadeh M. Moral sensitivity and nurse's attitude toward patients' rights. *Medical Ethics and History of Medicine*. 2017;9(5):52–62.

Moosavi SS, Borhani F, Abbaszadeh A. The moral courage of nurses employed in hospitals affiliated to Shahid Beheshti University of Medical Sciences. *Journal of Hayat*. 2017;22(4):339–349.

Nayeri ND, Aghajani M. Patients' privacy and satisfaction in the emergency department: a descriptive analytical study. *Nursing Ethics*. 2010;17(2):167–177.

Parsapoor A, Bagheri A, Larijani B. Patient's rights charter in Iran. *Acta Medica Iranica*. 2014:52(1):24–28.

Qvrchyany F, Barati Marnani A, Abulghasem Georgi H, Khatami Firoozabadi AM. Observe the nursing code of ethics for nurses and patients in a teaching hospital in Tehran University of Medical Sciences In 1931. *Medical Ethics*. 2013;7(23):63–79.

Rahemi Z, Williams CL. Development of a dignity-enhancing model of caring for older adults. *International Journal for Human Caring*. 2015;19(3):36-41.

Rahemi Z, Mirbagher Ajorpaz N, Sharifi Esfahani M, Aghajani M. Sensation-seeking and factors related to dangerous driving behaviors among Iranian drivers. *Personality and Individual Differences*. 2017;116:314–318.

Rejeh N, Heravi-Karimooi M, Foroughan M. The needs of hospitalized elderly patients: A qualitative study. *Iranian Journal of Ageing*. 2010;5(1):42–52.

Rylance G. Privacy, dignity, and confidentiality: interview study with structured questionnaire. *British Medical Journal*. 1999;318(7179):301.

Sabeghi H, Nasiri A, Zarei M, Tabar AK, Golbaf D. Respecting for human dignity in elders caring in perspective of nurses and elderly patients. *Medical Ethics*. 2017;9(32):45–70.

Sadeghi T. Observance of independence in nursing care based on opinious of hospitalized teenagers in pediatrics hospitals of Tehran University of Medical Sciences during 2008. *Community Health Journal*. 2009;4(1):26–33.

Sarkhil H, Darvishpoor-Kakhaki A, Borzabadi-Farahani Z. Respecting patient's privacy in cardiac care units of Tehran's selected hospitals. *Iranian Journal of Cardiovascular Nursing*. 2013;2(2):40–47.

Sawada NO, Correia FA, Costa Mendes IA, Dela Coleta JA. Personal and territorial space of the patients: a nursing ethics question. *Medicine and Law.* 1996;15(2):261–270.

Schopp A, Leino-Kilpi H, Välimäki M, Dassen T, Gasull M, Lemonidou C, Scott PA, Arndt M, Kaljonen A. Perceptions of

privacy in the care of elderly people in five European countries. *Nursing Ethics*. 2003;10(1):39–47.

Tagharrobi Z, Sharifi K, Sooky Z. Psychometric evaluation of Stanford health assessment questionnaire 8-item disability index (HAQ 8-item DI) in elderly people. *Journal of Holistic Nursing and Midwifery*. 2014;24(1):9–20.

Walsh K, Kowanko I. Nurses' and patients' perceptions of dignity. *International Journal of Nursing Practice*. 2002;8(3):143–151.

Zehtab S, Adib-Hajbaghery M. The importance of spiritual care in nursing. *Nursing and Midwifery Studies*. 2014;3(3):e22261.