# Original Article

# Moral Distress and its Influential Factors in the Nurses of the Nursing Homes in Khorasan Provinces in 2019: A Descriptive-Correlational Study

#### **Abstract**

Background: Nurses in nursing homes are constantly faced with various moral decisions in terms of elderly care, which in turn causes moral distress. This study aimed to evaluate the moral distress status and its influential factors in the nursing homes in Khorasan provinces, Iran. Materials and Methods: This descriptive-correlational study was conducted on 227 nurses engaged in the nursing homes of Khorasan provinces in 2019. The subjects were selected via census sampling. Data were collected using demographic, occupational, and care center characteristics questionnaire and a moral distress questionnaire. Data analysis was performed in SPSS version 16 using the Mann–Whitney U and Kruskal–Wallis test. Results: The mean (SD) score of moral distress was 28.68 (19.19), and 93.83% of the subjects reported low levels of moral distress. Significant correlations were observed between moral distress and age, work experience, workplace, nurse–physician relations, motivation of the nurses, care facilities, and medical equipment. Furthermore, the highest mean (SD) score of moral distress belonged to the items regarding the lack of work experience 12.19 (3.12). Conclusions: According to the results, moral distress in the nurses of the studied nursing home was relatively low. Despite the favorable outcome of the study, the age discrimination of nurses by nursing homes should not be overlooked.

**Keywords:** Aged, morals, nurses, nursing homes

## Introduction

Morality distinguishes "right" and "wrong" intentions, decisions, and actions. In the nursing profession, moral distress is defined as performing the nursing tasks that oppose the ethical beliefs of nurses, thereby preventing the most moral act. Nursing care is essentially associated with ethical issues in mental, psychological, and spiritual aspects.[1] The complications caused by moral distress in nurses include anger, hopelessness, anxiety, headaches, grief, frustration, depression, medical errors, and resignation.<sup>[2,3]</sup> In a study in this regard, Pijl-Zieber stated that moral distress in nurses had moderate to high prevalence.<sup>[4]</sup> According to the literature, the main influential factors in moral distress in nurses are insufficient resources, provision of futile medical care, physician-patient relations, and powerlessness to prevent death, all of which could adversely affect the clinical performance of nurses and quality of patient care.[5-7]

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Some of the most debilitative diseases in the elderly include dementia and stroke, which not only affect the elderly, but they also influence nurses, families, and the entire community health system, making it inevitable to provide continuous care processes.[1] In a research by Gibson, the findings indicated that the care of the patients with dementia could be emotionally, physically, and morally challenging, giving rise to ethical problems in nurses.[2] In addition, Shafipour has reported the high prevalence of moral distress in the nursing staff providing dementia-related services. Similarly, the management of moral distress on a daily or weekly basis has been emphasized by nursing personnel. Previous studies have reported moderate levels of moral distress in the majority of nurses in various hospital wards.[8]

Considering that most of the problems in elderly patients are chronic and nurses may perceive treatment as futile, it is often observed that the care of the elderly is overlooked by nurses, which leads to

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# Ali Sedaghati<sup>1</sup>, Abdolghader Assarroudi<sup>2</sup>, Rahim Akrami<sup>3</sup>, Mostafa Rad<sup>4</sup>

<sup>1</sup>Student Research Committee. School of Nursing and Midwifery, Sabzevar University of Medical Sciences, Sabzevar, Iran. <sup>2</sup>Iranian Research Center on Healthy Aging, Department of Medical-Surgical Nursing, School of Nursing and Midwifery, Sabzevar University of Medical Sciences, Sabzevar, Iran, <sup>3</sup>Department of Biostatistics and Epidemiology, School of Health, Medicine and Ouran Research Center, Sabzevar University of Medical Sciences, Sabzevar, Iran, <sup>4</sup>Assistant Professor in Nursing, Iranian Research Center on Healthy Aging, Department of Nursing, Nursing and Midwifery School, Sabzevar University of Medical Sciences, Sabzevar,

Address for correspondence:

Dr. Mostafa Rad,
Department of Nursing, Nursing
and Midwifery School, Iranian
Research Center on Healthy
Aging, Sabzevar University of
Medical Sciences, Sabzevar,
Iran.

E-mail: mostafarad633@yahoo.com

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discrimination between elderly and nonelderly patients. Such attitude might also cause moral distress in the nurses of nursing homes.[9] The status of moral distress and its influential factors may vary in different nurses in nursing homes, and there is a higher possibility of moral distress due to various environments and type of patients compared to hospital wards; another important factor in this regard is the continuous care provision of the elderly by these nurses and their close contact with these individuals.[10] Although some studies have been focused on moral distress in various hospital wards in Iran, no research has been conducted on the moral distress of the nurses of nursing homes; such studies are required to determine the influential factors in moral distress in nurses and improve the health of the elderly. This study aimed to evaluate the moral distress status and its influential factors in the nursing homes in Khorasan provinces, Iran.

#### **Materials and Methods**

This descriptive-correlational study was performed on the nurses of the nursing homes in Khorasan provinces in 2019. The sample size was calculated to detect an average difference of 3 and a difference of standard deviation of 1 in terms of moral distress from constant, using G\*Power software, 3.1 version. 225 individuals were calculated with a confidence interval of 95%, effect size of 0.2, and test power of 0.93. Considering the 10% probable drop in the samples the final sample size measured 250. Out of 250 nurses, 227 were enrolled in the study. The research setting included the nursing homes in the North, Razavi, and South Khorasan provinces. Most of the nursing home centers were located in Mashhad city, and the remaining were in Sabzevar, Neyshabur, Torbat-e Heydariyeh, Gonabad, Birjand, Ghaen, Ferdows, Kashmar, Bardaskan, Bojnourd, Shirvan, and Daregaz. The selected centers are covered by the National Welfare Organization and are all private.

More than 2000 elderly individuals live In Khorasan provinces who received care from elderly care centers as daily, 24-h, and home services. The inclusion criteria of the study for the nurses were informed consent, employment in a nursing home for a minimum of six months, and an associate or higher degree in nursing. The exclusion criterion was a history of severe distress (e.g., death of a loved one, divorce, severe accidents) within the past six months. In addition, the participants who could not complete the questionnaires were excluded from the study.

Data collection tools consisted of two sections; the first section was a 22-item questionnaire of demographic characteristics, occupational features, and care environment properties, and the second section encompassed a questionnaire of moral distress in nurses. Due to the lack of a valid and reliable questionnaire for the Iranian nurses working in nursing homes, a questionnaire was designed by the researchers, and its psychometric properties were evaluated. Moreover, the questionnaires of moral distress

designed for hospital nurses were reviewed in order to develop a new questionnaire. In this respect, the items of the questionnaires by Hemric *et al.*, Corley *et al.*, and Motevallian *et al.* were used. [11-13] Ultimately, 21 items were obtained after eliminating overlaps. The qualitative and quantitative face validity, content validity (content validity index), and construct validity (Exploratory Factor Analysis [EFA]) were used to assess the validity of the tool. The sample size was determined to be 250 to evaluate the construct validity of the researcher-made questionnaire.

The primary items of the moral distress questionnaire were initially adapted to the working conditions of the nurses in the nursing homes by the research team. In addition, the face validity of the tool was assessed by 10 nurses qualitatively and quantitatively. To evaluate the content validity of the tools, the questionnaire was provided to eight faculty members of the Department of Nursing, who were specialized in medical-surgical and geriatric nursing and familiarized with the design and psychometrics processes of the tool.<sup>[14]</sup> The final moral distress questionnaire contained 12 items with scale content validity index of 0.97 and internal consistency of 0.84.

The designed tool was used to measure the frequency and severity of moral distress based on a 5-point Likert scale (Never Encountered = 0, Always Encountered = 4 in the frequency dimension; None = 0, Highly Distressful = 4 in the severity dimension). The obtained score of moral distress severity was multiplied by the score of the frequency dimension, and the total score of each item was calculated. The score range of moral distress was 0-192, with the score range of 0-64 indicating low distress, and the score ranges of 65-128 and 129-192 showing moderate and high distress levels, respectively.

The questionnaires were distributed among the participants after explaining the method of completion and collection of the tools. Afterwards, the questionnaires were directly delivered to the nurses of the nursing homes after explaining the research objectives and nature of the study and obtaining informed consent. The nurses were asked to complete the questionnaires and return them within 1 week. The questionnaires were collected during January–February 2019, and the nurses who were unwilling to participate in the study or delivered incomplete questionnaires were excluded from the study. In total, 242 out of 250 distributed questionnaires were collected, 227 of which were complete and further analyzed.

Data analysis was performed in SPSS version 16 (SPSS, Chicago, Illinois) using the Mann–Whitney U test and Kruskal–Wallis test. Moreover, nonparametric tests were used to assess the correlations between moral distress and other variables as the Shapiro–Wilk test indicated the abnormal distribution of the moral distress scores. In all the statistical analyses, p value of 0.05 was considered significant.

#### **Ethical considerations**

The study protocol was approved by the Ethics Committee of Sabzevar University of Medical Sciences (code: IR.MEDSAB.REC.1397.058). The data of the participants remained confidential throughout the study, and informed consent was obtained from the participants. The research objectives were also explained to the participants in detail.

#### Results

The majority of the nursing home nurses were female and married, had a bachelor's degree, and worked unofficially. Moreover, the majority stated that their income level was sufficient and were within the age range of 25–34.5 years, mostly working part-time [Table 1].

According to the findings, the mean (SD) moral distress score of 227 nurses was 28.68 (19.19), with the scores varying within the range of 0–91. According to the moral distress score, the majority of the nurses of the nursing homes in Khorasan provinces were classified into two categories of low and moderate moral distress, and high moral distress was observed in none of the subjects. In the moral distress questionnaire, the highest mean (SD) of moral distress belonged to the items regarding the lack of work independence 12.19 (3.12).

Significant correlations were observed between the moral distress scores and age, work experience, nurse–physician relations, motivation of the nurses, care facilities, adequacy of medical equipment, and place of service in the province (p < 0.05). On the contrary, no significant associations were denoted between the mentioned scores and variables of gender, education level, type of work shift, history of educational classes, ability to prevent death, absence,

Table 1: Frequency of demographic variables of nursing homes Nurses

| Demo            | n (%)                       |             |  |
|-----------------|-----------------------------|-------------|--|
| Marital status  | Single                      | 70 (31)     |  |
|                 | Married                     | 154 (68)    |  |
|                 | Divorced or deceased spouse | 3 (1)       |  |
| Level education | Associate degree            | 22 (10)     |  |
|                 | Bachelor (BSc)              | 200 (88)    |  |
|                 | Master of Science (MSc)     | 5 (2)       |  |
| Service type    | Official                    | 15 (7)      |  |
|                 | Unofficial                  | 212 (93)    |  |
| Level of income | Low                         | 95 (43.80)  |  |
|                 | Sufficient                  | 121 (55.70) |  |
|                 | High                        | 1 (0.50)    |  |
| Age             | <24.9                       | 57 (25)     |  |
|                 | 25 _34.9                    | 127 (56)    |  |
|                 | >35                         | 43 (19)     |  |
| Working type    | Full time                   | 36 (15)     |  |
|                 | Part time                   | 191 (85)    |  |
| Gender          | Female                      | 177 (78)    |  |
|                 | Male                        | 50 (22)     |  |

vacation, number of the elderly under care, number of children, and type of services (p > 0.05) [Table 2].

In total, 12 items in the questionnaire evaluated the moral distress of the nurses of the nursing homes. According to the obtained results, the highest severity, frequency, and high total score of moral distress were correlated with the pressure imposed by the nursing managers to reduce the costs of care in the centers. In this regard, the item "I am forced to provide low-quality care." had the mean (SD) scores of 1.60 (1.03), 2 (1.08), and 3.60 (2.11) in the dimensions of frequency, severity, and total score. On the contrary, the lowest scores belonged to the item "I neglected the situations where inadequate information was provided to the elderly to receive an informed consent." showed the mean (SD) frequency of 0.93 (0.88), mean (SD) severity of 1 (1.03), and mean (SD) total score of 1.93 (1.91) [Table 3].

### **Discussion**

This study aimed to determine the level of moral distress and its influential factors in the nurses engaged in the nursing homes in Khorasan provinces. According to the obtained results, the subjects had low moral distress, which is inconsistent with the previous studies in this regard. [15] For instance, Corley reported moderate severity and repetition of moral distress among nurses, whereas Shafipour *et al.* reported the high severity of total moral distress. [8]

In a research by Joolaee et al., moral distress was reported to have moderate severity in the nurses employed in the emergency department, Critical Care Unit (CCU), intensive care unit, and medical-surgical ward.[16] Similar results have also been proposed by Abbaszadeh et al.[17] In Italy, the findings of Lusignani indicated moderate moral distress in nurses.<sup>[5]</sup> It seems that various levels of moral distress have been reported in previous studies depending on the place of service. However, the majority of the studies have indicated moderate to high levels of moral distress, which is inconsistent with the current research. In this study, the moral distress score of the nurses was relatively low; the discrepancy in this regard could be due to the evaluation of moral distress in the nurses of specific units, such as emergency departments, CCUs, and oncology or burn wards in the previous studies.[8] Furthermore, these differences may be due to the ageism phenomenon, subconscious thoughts, feelings, and behaviors toward the elderly, which influence the attitudes and practices of nursing home nurses. This issue is also associated with the inadequate knowledge of nurses regarding the rights statements of the elderly, leading to the failure in the prioritization of specialized healthcare services for the elderly.[18]

Considering the close contact of nurses with patients in hospital wards and performing physicians' orders, they are more prone to moral distress compared to nursing homes nurses. In the current research, moral distress was Table 2: Relationship between nurses' moral distress and their variables (demographics, occupational characteristics, care environment properties)

| care environment properties) |                          |                      |                  |     |         |  |  |
|------------------------------|--------------------------|----------------------|------------------|-----|---------|--|--|
| Variable                     |                          | Moral distress score | Statistical      | df  | р       |  |  |
|                              |                          | Mean (SD***)         | results          |     |         |  |  |
| Marital status               | Single                   | 29.88 (2.14)         | $\chi^2=1.37$    | 2   | 0.50*   |  |  |
|                              | Married                  | 31.28 (1.60)         |                  |     |         |  |  |
|                              | Divorced Deceased spouse | 19.33 (6.35)         |                  |     |         |  |  |
| Level education              | Associate degree         | 25.36 (4.16)         | $\chi^2 = 3.07$  | 2   | 0.21*   |  |  |
|                              | BSc                      | 28.70 (4.57)         |                  |     |         |  |  |
|                              | MSc                      | 42.80 (8.42)         |                  |     |         |  |  |
| Service type                 | Official                 | 27.26 (6.41)         | Z=-1.02          | 226 | 0.31**  |  |  |
|                              | Unofficial               | 28.78 (1.29)         |                  |     |         |  |  |
| Relations between            | Undesirable              | 39.77 (5.57)         | $\chi^2 = 26.48$ | 2   | 0.001*  |  |  |
| physicians and nurses        | Medium                   | 33.64 (1.99)         |                  |     |         |  |  |
|                              | Desirable                | 22.27 (1.90)         |                  |     |         |  |  |
|                              | Excellent                | 15.48 (2.62)         |                  |     |         |  |  |
| Care facilities              | Low                      | 40.15 (4.02)         | $\chi^2 = 29.79$ | 2   | 0.001*  |  |  |
|                              | Medium                   | 30.07 (1.44)         |                  |     |         |  |  |
|                              | High                     | 15.28 (2.34)         |                  |     |         |  |  |
| Provincial Place Service     | Khorasan Razavi          | 28.14 (1.45)         | $\chi^2 = 15.22$ | 2   | 0.001*  |  |  |
|                              | North Khorasan           | 41.84 (4.26)         |                  |     |         |  |  |
|                              | South Khorasan           | 21.33 (2.31)         |                  |     |         |  |  |
| Ability prevention of deaths | Low                      | 33.80 (8.58)         | $\chi^2 = 1.63$  | 2   | 0.44*   |  |  |
|                              | Medium                   | 29.12 (1.41)         |                  |     |         |  |  |
|                              | High                     | 26.28 (2.87)         |                  |     |         |  |  |
| Working type                 | Fixed                    | 26.55 (3.58)         | Z=-1.78          | 226 | 0.016** |  |  |
|                              | Unfixed                  | 29.08 (1.35)         |                  |     |         |  |  |
| Personnel motivation         | Undesirable              | 34.40 (3.34)         | $\chi^2 = 18.26$ | 2   | 0.99*   |  |  |
|                              | Medium                   | 32.33 (1.78)         |                  |     |         |  |  |
|                              | Desirable                | 24.55 (2.28)         |                  |     |         |  |  |
| Medical Equipment            | Low                      | 34.14 (2.03)         | $\chi^2 = 20.42$ | 2   | 0.001*  |  |  |
|                              | Medium                   | 27.85 (1.69)         |                  |     |         |  |  |
|                              | High                     | 15.57 (2.92)         |                  |     |         |  |  |
| Age                          | <24.9                    | 27.03 (2.47)         | $\chi^2 = 12.52$ | 2   | 0.001*  |  |  |
|                              | 25 _34.9                 | 31.80 (1.69)         |                  |     |         |  |  |
|                              | >35                      | 21.65 (2.81)         |                  |     |         |  |  |
| work experience              | 1 year                   | 30.48 (1.53)         | Z=1.41           | 226 | 0.016** |  |  |
|                              | More than 1 year         | 24.37 (2.21)         |                  |     |         |  |  |

<sup>\*</sup>Kruskal-Wallis, \*\*Mann-Whitney U, \*\*\*Standard deviation

assessed from three perspectives; firstly, the nurses of the nursing homes were faced with the issue of moral distress during care provision due to their interest and love to care for the elderly, as well as the dignity and social status of the elderly. Secondly, nurses of nursing homes are less in contact with physicians compared to hospital nurses and are also more independent in performing their daily tasks. In hospitals, physicians appear to be distorting the nurse—physician relations through inappropriate, disruptive or abusive behaviors.<sup>[19]</sup> Therefore, it could be concluded that proper relations between physicians and nurses could lower moral distress among nursing homes nurses.

In terms of the distribution of the questionnaire item scores regarding moral distress in this study, the highest mean scores belonged to the dimensions of lack of work independence, acceptance of work pressure, futile care, and improper teamwork, respectively. By definition, moral distress occurs when an individual knows the "right thing to do" but is not independent enough to perform the task and experiences moral distress as a result. It seems that lack of professional independence among nurses is a major influential factor in moral distress.[20] The findings of the current research indicated a significant association between the moral distress scores of the nurses of the nursing homes and work experience. This is inconsistent with the study by Ebrahimi et al., which was performed on nurses in the northwest of Iran.[21] On the contrary, our findings are in congruence with the results obtained by Abbaszadeh et al., which showed significant correlations between the age, work experience, and moral distress of the participants.[17] The positive association between moral distress and work

Table 3: Ranking of moral distress questionnaire scores of nursing homes nurses in terms of frequency, severity, and sum of them

| Questionnaire Items  | Mean (SD)      |                |                             |  |
|--|----------------|----------------|-----------------------------|--|
|  | Frequency of   | Severity of    | Sum of severity and         |  |
|  | moral distress | moral distress | frequency of moral distress |  |
| Pressure from managers, to reduce costs of center, forces me to provide poor quality care  | 1.60 (1.03)    | 2 (1.08)       | 3.6 (2.11)                  |  |
| When I notice that a medical error has occurred for the elderly and has not been reported, I take no action.   | 1.34 (1.09)    | 1.89 (1.30)    | 3.23 (2.39)                 |  |
| I didn't do anything about the moral problem, because the person who created that moral problem asked me to do nothing.  | 1.17 (1.03)    | 1.74 (1.35)    | 2.91 (2.38)                 |  |
| I have helped a physician who, in my opinion, provides inappropriate services.   | 1.12 (1.06)    | 1.33 (1.11)    | 2.45 (2.17)                 |  |
| Because of poor communication between the members of the treatment team, I have seen a decline in the quality of care.   | 1.12 (1.02)    | 1.33 (1.05)    | 2.45 (2.07)                 |  |
| Although I disagreed with the elderly family, I acted out of fear of legal consequences for their desire to take care of the patient.  | 1.11 (0.94)    | 1.3 (1.01)     | 2.41 (1.95)                 |  |
| I have seen health care providers give false promises to the elderly and their families.   | 1.11 (0.94)    | 1.29 (0.96)    | 2.4 (1.90)                  |  |
| I have witnessed the suffering of the elderly due to a disruption in the care process.   | 1.09 (0.90)    | 1.25 (1.08)    | 2.34 (1.98)                 |  |
| I provided care to the elderly who did not alleviate their suffering because<br>the physician was worried that an increase in pain medication would cause<br>the patient to die. | 1.07 (1.01)    | 1.24 (0.97)    | 2.31 (1.98)                 |  |
| I have worked with various levels of nurses or other care providers, which I find unsafe to work with them.  | 1.07 (0.96)    | 1.17 (1.07)    | 2.24 (2.03)                 |  |
| I needed to care for the elderly who did not have the competence to care for them.   | 0.98 (0.85)    | 1.12 (0.96)    | 2.1 (1.81)                  |  |
| I neglected the situations where inadequate information was provided to the elderly to receive an informed consent.  | 0.93 (0.88)    | 1 (1.03)       | 1.93 (1.91)                 |  |

experience might be due to the increased moral distress of the nurses of nursing homes after years of disappointment and repetitive experience of moral distress.

The results of this study indicated a significant correlation between moral distress and place of service in the province, which is not in line with the results obtained by Shafipour *et al.* in Sari (Iran).<sup>[8]</sup> It seems that in Khorasan provinces, the moral distress level depends on the work setting and characteristics of individuals, as well as the cultural, social, and personal aspects of these areas. For instance, nurses in South Khorasan province have reported lower moral distress due to their hard work and tolerance against problems in this area.

The results of this study showed a significant correlation between moral distress and type of nurse–physician relations. It seems that the nurse–physician relationship also affects the moral distress of nurses. Some professional relations between nurses and physicians are essentially based upon mutual respect. However, physicians often pay no attention to the concerns of nurses regarding patients and their issues. Consequently, nurses who demand optimal care for patients may feel neglected and experience lack of professional independence and powerlessness, which in turn lead to moral distress.<sup>[22]</sup> In this study, this issue was less encountered by the researchers due to the proper nurse-physician relations in the nursing homes.

The findings of the current research indicated a significant association between moral distress and motivation of the nurses, whereas the moral distress scores, care facilities, and medical equipment were also correlated. Consistent with our findings, Heydari *et al.* reported that the lack of the medical equipment and tools required by patients was among the major causes of moral distress in nurses.<sup>[23]</sup> Therefore, access to sufficient medical equipment and facilities could decrease moral distress in nurses.

The main limitation of the study was the fact that moral distress is a multidimensional phenomenon, which is affected by various environmental, occupational, organizational, managerial, and personal factors; unfortunately, we were not able to address all these factors.

#### **Conclusion**

According to the results, the level of moral distress was relatively low in the nurses of the nursing homes. The difference between our findings and other studies raises doubts about age discrimination by nurses. Despite the favorable outcome of the study, the issue of age discrimination by nursing home nurses should not be overlooked.

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#### **Conflicts of interest**

Nothing to declare.

#### References

- Fuji S, Tanioka T, Yasuhara Y, Sato M, Saito K, Purnell MJ, et al. Characteristic autonomic nervous activity of institutionalized elders with dementia. OJPsych 2016;6:34-49. doi: 10.4236/ ojpsych.2016.61004.
- Gibson G, Dickinson C, Brittain K, Robinson L. The everyday use of assistive technology by people with dementia and their family carers: A qualitative study. BMC Geriatr 2015;15:89.
- Jo H, Kim S. Moral sensitivity, empathy and perceived ethical climate of psychiatric nurses working in the national mental hospitals. J Korean Acad Psychiatr Ment Health Nurs 2017;26:204-15.
- Pijl-Zieber EM, Awosoga O, Spenceley S, Hagen B, Hall B, Lapins J. Caring in the wake of the rising tide: Moral distress in residential nursing care of people living with dementia. Dementia 2018;17:315-36.
- Lusignani M, Gianni ML, Re LG, Buffon ML. Moral distress among nurses in medical, surgical and intensive-care units. J Nurs Manag 2017;25:477-85.
- Berhie AY, Tezera ZB, Azagew AW. Moral distress and its associated factors among nurses in northwest amhara regional state referral hospitals, Northwest Ethiopia. Psychol Res Behav Manag 2020;13:161-7.
- Parandeh A, Khaghanizade M, Mohammadi E, Mokhtari-Nouri J. Nurses' human dignity in education and practice: An integrated literature review. Iran J Nurs Midwifery Res 2016;21:1-8.
- Shafipour A, Ravanbakhsh Esmaeili V, Heidari MR, Aghaei N, Saadatmehr SR, Sanagoo A. Investigating the level of moral distress and its related factors among nurses in Mazandaran

- Burn Center." J Mazandaran Univ Med Sci 2015;25:58-67. [In Persian].
- Dzeng E, Colaianni A, Roland M, Levine D, Kelly MP, Barclay S, et al. Moral distress amongst American physician trainees regarding futile treatments at the end of life: A qualitative study. J Gen Intern Med 2016;31:93-9.
- Borhani F, Abbaszadeh A, Mohamadi E, Ghasemi E, Hoseinabad-Farahani MJ. Moral sensitivity and moral distress in Iranian critical care nurses. Nurs Ethics 2017;24:474-82.
- Barlem EL, Lunardi VL, Lunardi GL, Tomaschewski-Barlem JG, Almeida AS, Hirsch CD. Psycometric characteristics of the Moral Distress Scale in Brazilian nursing professionals. Texto Contexto Enfermagem 2014;23:563-72. Doi: https://doi.org/10.1590/0104-07072014000060013.
- Hamric AB, Borchers CT, Epstein EG. Development and testing of an instrument to measure moral distress in healthcare professionals. AJOB Prim Res 2012;3:1-9.
- Motevallian SA, Alizadegan S, Hossein Vaziri M, Khoiee EM, Goushegir SA, Ghoroubi J. Developing the moral distress scale in the population of Iranian nurses. Iran J Psychiatry 2008:55-8.
- Williams B, Onsman A, Brown T. Exploratory factor analysis: A five-step guide for novices. Aust J Paramed 2010;8:1-13.
- 15. Corley MC, Minick P, Elswick R, Jacobs M. Nurse moral distress and ethical work environment. Nurs Ethics 2005;12:381-90.
- Joolaee S, Jalili HR, Rafii F, Hajibabaee F, Haghani H. Relationship between moral distress and job satisfaction among nurses of Tehran University of Medical Sciences Hospitals. Hayat 2012;18:42-51. [In Persian].
- Abbaszadeh A, Nakhaei N, Borhani F, Roshanzadeh M. The relationship between moral distress and retention in nurses in Birjand teaching hospitals. IJME 2013;6:57-66. [In Persian].
- Nelson TD. Promoting healthy aging by confronting ageism. Am Psychol 2016;71:276-82.
- Robaee N, Atashzadeh-Shoorideh F, Ashktorab T, Baghestani A, Barkhordari-Sharifabad M. Perceived organizational support and moral distress among nurses. BMC Nurs 2018;17:2.
- Rushton CH, Kaszniak AW, Halifax JS. A framework for understanding moral distress among palliative care clinicians. J Palliat Med 2013;16:1074-9.
- 21. Ebrahimi H, Kazemi A, Asghari Jafarabadi M, Azarm A. Moral distress in nurses working in educational hospitals of Northwest Medical Universities of Iran. IJME 2013;6:80-8. [In Persian].
- Henrich NJ, Dodek PM, Gladstone E, Alden L, Keenan SP, Reynolds S, et al. Consequences of moral distress in the intensive care unit: A qualitative study. Am J Crit Care 2017;26:e48-57.
- Heydari A, Ahrari S, Toghian Chaharsoughi N. Moral distress in nursing and its contributors in the context of Iran. Health Spiritual Med Ethics J 2018;5:44-50.