

## RESEARCH ARTICLE



# **Investigation of Moral Distress in the Emergency Department Nurses:** A Cross-sectional Study from Northwest of Iran

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#### Abstract:

**Background and Objectives:** Nurses working in the emergency department increasingly face moral distress due to the nature of their profession, negatively affecting their love and compassion toward the patient. Therefore, this study sought to investigate of moral distress in the nurses of the emergency departments of the hospitals in Ardabil.

*Methods*: The current cross-sectional (descriptive correlational) study was conducted using consensus sampling. The study population comprised all nurses working in the emergency departments of hospitals in Ardabil in 2022(N=283; 21 people did not meet the inclusion criteria and were excluded from the study, leading to a sample size of 262). Data were gathered using standard questionnaire moral distress by Hamric *et al.* (2012). The data were analyzed using SPSS - 20 software and descriptive s (mean, standard deviation and frequency) and inferential statistics, including independent T-test and one-way ANOVA.

**Results:** Moral distress was higher than average in governmental hospitals (2.12±0.58) and below average in private and social security hospitals (1.72±0.68). In addition, there was a significant correlation between gender (p=0.001) and income (p=0.003) and MD. According to the results, the mean of MD was higher in male than female nurses. In addition, the results showed that the higher the income, the lower the MD (the significance level of the test error for the confidence level was 0.95).

**Conclusion:** The level of moral distress reflects the impact of conditions causing moral distress on the quality of care and the necessity to prevent such conditions by providing appropriate solutions. Informing nurses about moral distress and its consequences and providing periodic counseling can contribute to its identification and control.

**Keywords:** Moral Distress, Nurses, Emergency Department.

## 1. INTRODUCTION

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Providing high-quality healthcare services and increasing customer satisfaction with healthcare are among the main goals of healthcare and the most significant responsibilities of healthcare managers (1). Nurses are actively involved day and night in providing clinical care to clients (2) and are legally and ethically responsible for quality care (3). Therefore, they should be able to manage ethical challenges and problems effectively (4).

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Moral distress (MD) is one of the most critical moral issues and problems among nurses (5-7). MD was proposed for the first time by Jumpton (1984), who described it as a psychological imbalance caused by ethical decisions that do not lead to ethical performance due to organizational limitations (8, 9).

Previous studies have reported different levels of MD among nurses (10). For example, one study showed that 23.1%, 45.1%, and 31.8% of nurses had low, moderate, and severe MD, respectively. (11) Another study reported low levels of MD among nurses (12).

MD may be associated with different problems for nurses, such as burnout, low job satisfaction, poor quality of care, intention to leave the profession, and compassion fatigue (13–17). Nurses respond to the existing conditions in different ways, including opposition, failure to adapt to the existing conditions, expressing dissatisfaction, and leaving their profession (18). Meanwhile, some nurses, forced to endure the existing conditions contrary to their desire, gradually refuse to be at the bedside of patients and provide care to them, experiencing frustration and fatigue in providing patients with the required care (18,19).

On the one hand, moral distress is a critical issue in the nursing profession, and on the other hand, nurses face special working conditions in our society from various cultural and organizational aspects, which can lead to specific moral problems and adverse consequences on the quality of care and professional conditions of nurses. Therefore, the study aimed to provide a clear picture of the moral distress in nurses working in the emergency departments of Ardabil hospitals and develop educational interventions to improve the current situation.

### 2. MATERIALS & METHODS

## 2.1. Study Design and Setting

The current cross-sectional (descriptive correlational) study aimed to investigation of moral distress in the nurses of the emergency departments of the hospitals in Ardabil Province, Iran.

# 2.2. Study Participants and Sampling

The statistical population included all nurses working in emergency departments in Ardabil city (N=283; 21 people did not meet the inclusion criteria and were excluded from the study, leading to a sample size of 262). The research setting was all emergency departments of hospitals in Ardabil, including the public hospitals of Imam Khomeini (n=117), Dr. Fatemi (n=46), Alavi (n=17), Bu Ali (n=25), and Imam Reza (AS) (n=17), private hospitals (Arta and Qaem) (n=8), and social security hospital (Sablan) (n=32). The research was conducted from April to September 2022.

Having at least a bachelor's degree in nursing, at least one year of work experience in the emergency department, and involvement in direct patient care in the emergency department were the inclusion criteria. Also, lack of consent to participate in the study, lack of cooperation to continue the project, and incomplete completion of the questionnaires were the exclusion criteria.

The sampling method was consensual, conducted by distributing 283 questionnaires among nurses in the research environment. Totally, 262 respondents answered the questionnaires (8 people were excluded due to lack of cooperation and 13 because of less than one year of experience).

## 2.3. Data Collection Tool and Technique

Data were gathered using a questionnaire. The first part of the questionnaire was about demographic information (age, sex, work experience, marriage, etc.), and the second part of the questionnaire was about moral distress (19).

The 21-item Hamric *et al.*'s standard moral distress questionnaire (2012) was designed for nurses. The scoring method of this questionnaire is based on a 5-point Likert scale from zero (none) to four (very high). In their study, Corley *et al.* divided the score of frequency and severity obtained from the whole scale into three categories: low (0-2), average (2.01-4), and high (4.01-6) (20). The content validity of this questionnaire was assessed and confirmed by experts (CVI=89%), and Cronbach's alpha was used to obtain its reliability, which was 0.87 for the whole questionnaire.

Questionnaires were distributed among the nurses working in the emergency departments of Ardabil hospitals in different shifts and filled by them.

## 2.4. Data Analysis

The data were analyzed using SPSS-20 software and descriptive and inferential statistics. Frequency distribution tables, mean, and standard deviation were used for descriptive statistics. Independent t, and oneway ANOVA were used to analyze the correlation between variables at a significance level of 0.05 (P<0.05). Also, the Kolmogorov-Smirnov test was used to determine the normality of the study variables (Table 1).

Table 1. The Kolmogorov-Smirnov test results to determine the normality of research variables.

Statistics	Moral distress	
Kolmogorov-Smirnov z value	1.18	
significance level	0.12	

Based on the results of Table 1 and considering that the significance level of the test error is > 0.05 for the confidence level of 0.95, the distribution of the research variables is normal, and parametric tests can be used to analyze the hypotheses.

## 2.5. Ethical Considerations

Ethical considerations of the study included obtaining permission to start work and the code of ethics from the research vice-chancellor of Ardabil University of Medical Sciences, introducing the researcher and explaining research objectives to the subjects, and taking into account their willingness to participate in the research and ensuring the anonymity of the participants (consent to complete the questionnaire). It should be mentioned that the consent to complete the questionnaire was mentioned in a completely clear and expressive manner in the first part of the research questionnaire. This article is a part of the emergency nursing master's thesis under the code of ethics IR.ARUMS.REC.1401.064, conducted at Ardabil University of Medical Sciences without financial support.

### 3. RESULTS

According to the descriptive results, 67.9% of nurses were married, and 32.1% were single. Also, 43.9% of nurses were <30 years old, 43.9% were 30 to 40 years old, and 12.2 % were > 40 years old. Of the patricians, 93.1% had a bachelor's degree, and 6.9% had a master's degree. It was also shown that 24.4% of nurses had >10 years, and 42% had <5 years of service experience. Finally, 4.2% of nurses stated their income as high, and 59.9% stated their income as average (Table 2).

Table 2. Frequency of personal characteristics of participating nurses.

Demographic characteristics	Frequency	Percent
Sex Male	95	36.3
Female	167	63.7
Marital status Married	178	67.9
Single	84	32.1
Age <30 years	115	43.9
30 to 40 years	115	43.9
>40 years	32	12.2
Education Bachelor's degree	244	93.1
Master's degree	18	6.9

Demographic characteristics	Frequency	Percent
Work experience <5 years	110	43
5 to 10 years	88	32.6
>10 years	64	24.4
Employment type Official	142	54.1
Contractual	42	16
Temporary-to permanent	19	7.3
Corporate	13	5
Service commitment	46	17.6
Income Low	94	35.9
Average	157	59.9
High	11	4.2
Shift Fixed	40	15.3
Rotating shift	222	84.7

The results showed higher-than-average levels of moral distress in governmental hospitals  $(2.12\pm0.58)$ . The highest amount of MD belonged to Alavi hospital nurses  $(2.34\pm0.55)$ , followed by Bu Ali  $(2.29\pm0.45)$  and Imam Reza  $(2.26\pm0.52)$  hospital nurses. Meanwhile, the lowest amount of MD belonged to social security hospital nurses  $(1.69\pm0.60)$ .

Therefore, according to the results of the study, MD was higher than average in Fatemi, Bu Ali, Imam Reza, and Alavi hospitals and Imam Khomeini Corona emergency department and below average and low in Imam Khomeini emergency department, private hospitals, and social security hospital (Table 3).

Table 3. Mean and standard deviation of nurses' moral distress in the emergency department of different hospitals.

Hospital	Mean	SD
Dr. Fatemi Educational and Treatment Hospital (Governmental)	2.22	0.62
Bu Ali Educational and Treatment Hospital (Governmental)	2.29	0.45
Imam Reza Educational and Treatment Hospital (Governmental)	2.26	0.52
Alavi Educational and Treatment Hospital (Governmental)	2.34	0.55
Corona emergency of Imam Khomeini Educational and Treatment (Governmental)	2.04	0.62
Internal emergency of Imam Khomeini Educational and Treatment (Governmental)	1.99	0.61
emergency hospitalization of Imam Khomeini Educational and Treatment (Governmental)	1.76	0.73
Private Hospitals (Arta and Qaem)	1.76	0.76
Sablan Social Security Hospital	1.69	0.60
Total	2.04	0.63

In addition, there was a significant correlation between gender (p=0.001) and income (p=0.003) and MD. According to the results, the mean of MD was higher in male than female nurses. In addition, the results showed that the higher the income, the lower the MD (the significance level of the test error for the confidence level was 0.95).

### 4. DISCUSSION

According to the results of the study, the average moral distress in the emergency department of Ardabil hospitals was 2.04. Also, the highest mean of MD was related to the emergency nurses of Alavi hospital (2.34), followed by the emergency nurses of Bu Ali (2.29) and Imam Reza (2.26) hospitals. Meanwhile, the lowest average of MD was related to the social security hospital's emergency nurses (1.69). Besides, MD

was higher than average in Dr. Fatemi, Bu Ali, Imam Reza, and Alavi hospitals and Imam Khomeini Corona emergency departments, and lower than average in the Imam Khomeini emergency department, private hospitals, and social security hospital.

Assuming the range of MD between zero and five, the average MD in nurses is at a range of average to high. Most of the conducted studies have reported average to high levels of MD in nurses. According to Mason et al., the average MD in nurses was 3.80 (21), while Mohammadi et al. (22) and Borhani et al. (23) reported average MD values of 3.50 and 2.25 in nurses, respectively.

The results were not consistent with research conducted by Fernandez Parson et al., (24) Anami et al., (13) Mahdavi et al., (25) Naboureh et al., (26) Boulton et al., (10) Vaziri et al., (27) Alimoradi et al., (28) and Asadi et al., (29) who showed an average to low overall level of MD among emergency nurses. Also, the results were consistent with those obtained by Lane Cahl Aft, [30] Bayat et al., (5) Abbasi et al., (31) Robaee et al., (32) Jill L Guttormson et al. (33), Hosseini Damiri et al. (34), and Al-Turfi et al. (35), all of whom showed that the mean MD in nurses was average to high.

It should be primarily noted that MD puts nurses and patient care workers at risk and may be clearly reflected in behaviors such as withdrawing from patient care. Likewise, nurses experience frustration, anger, and discomfort, resulting in their failure to meet the needs of their patients or their inability to fulfill their duties and obligations towards their patients. Nurses are in groups that face the risk of emotional conflict because of frequent exposure to a large number of sick people and their deaths. MD occurs when individuals know the right action, but a set of factors and obstacles convince them that doing the right action is impossible. Thus, it can be said that moral distress is related to reluctance to work, lack of job satisfaction, reduced interaction with patients and their families, and ultimately job burnout (36). A moral dilemma also appears in addition to moral distress, when it is necessary to pay attention to more than one professional and personal principle, value, and belief in decision-making, but it is not possible to apply and consider them simultaneously. Although it is always necessary to pay attention to all values, it is inevitable to ignore some principles and conflicting values when moral dilemmas arise. MD is often observed as a result of moral decisions in nurses (37). When the conditions for creating distress are met, different personality traits and adaptation mechanisms of people lead to different reactions. Some become depressed and hopeless and adopt nonadaptive mechanisms, while others try to change the conditions and consequently show conflicts with the relevant organization and other members of the health team. Still, some accept the existing conditions and are unconsciously affected by the hidden effects of MD in the long run and suffer dissatisfaction and burnout (38).

As the results showed, most of the studied centers dealing with accident victims or critically ill patients (Dr. Fatemi and Alavi Hospitals) or involved with Covid-19 patients (Imam Reza and Imam Khomeini Covid-19 emergency department) had higher MD scores compared to other hospitals. Especially, the level of MD was much lower in private than in the mentioned hospitals, highlighting the effect of environmental conditions, type of patients, tensions created in the work environment, multiple work shifts, the tension between hospitals and nurses, and especially the deaths caused by accidents and diseases, on the moral distress of nurses. Therefore, the amount of confusion and moral distress increases in crowded centers with high turnover, work pressure and lack of labor force, unnecessary care and tests and procedures for patients, incompetence of some coworkers, high demands of the patients and their families, and decision-making for patients at the end of life. The effect of these factors on the formation and development of moral distress depends on the workplace and individual characteristics. Many studies have reported different levels of moral distress at a range of average to high, depending on the type of department, and more evident in departments such as emergency.

In addition, there was a significant correlation between gender and income with MD among the nurses of the emergency departments. The mean score of MD was higher in male nurses than in females, and the higher the income, the lower the MD. These results were consistent with the findings of Ruiz-Fernandez et al., (39) Fernandez-Parsons et al., (24) Anami et al., (13) and Ebrahimi et al (40). On the other hand, lack of financial incentives, low salaries and benefits, and even the amount of household income can reduce job

motivation in nurses, subsequently increasing MD. Therefore, as confirmed in this research, family income is expected to affect the MD level of nurses.

Studies have shown that nurses are more prone to developing moral distress than other healthcare providers because they work closely with patients. MD has always been associated with a negative effect on mental health in the form of anxiety and failure in the professional life of nurses, and continuous MD leads to a decrease in job satisfaction, job burnout, decreased job retention, leaving the profession, minimal interaction with patients and families, and aggravation of shortage of nurses. The continuation of this trend and the increase in the level of MD among nurses will lead to a decrease in the level of compassion toward patients.

## 5. STRENGTHS OF THE STUDY ARE AS FOLLOWS:

- Examining all service providing hospitals (public, private, etc.);
- Surveying all nurses in the emergency departments of the studied hospitals
- Limitations of the study are as follows:
- Pessimism and a lack of nurses' familiarity with research made work difficult and limited. Besides, it was not possible to go to the hospital at any hour of the day to fill out the questionnaires.
- The statistical population was limited to nurses in emergency departments of medical hospitals in Ardabil city.
- The research only used questionnaires to collect data, and there were restrictions on using interview tools.
- Data collection was carried out by questionnaire and self-assessment method, which increases the possibility of bias.

## **CONCLUSION**

The level of moral distress reflects the impact of conditions causing moral distress on the quality of care and the necessity to prevent such conditions by providing appropriate solutions. Informing nurses about moral distress and its consequences and providing periodic counseling can contribute to its identification and control.

Considering the high level of MD of nurses in the studied centers, the following suggestions are made to control and reduce the MD of nurses:

Hospital managers are suggested to consider the spiritual and psychological needs of the nurses in addition to their physical needs, especially during critical conditions, and take the necessary actions to solve their problems to provide grounds for controlling MD among them.

It is suggested that hospital managers seek help from psychological consultants to prevent the emergence of MD when nurses face a lot of mental pressure in dealing with the work environment. It is also suggested that hospital managers try to divide the assigned tasks in such a way that the job duties of the nurses are not disturbed, the nurses are not psychologically offended, and the conditions for MD of the nurses are reduced. Besides, hospital managers should continuously survey the nurses about the working environment and conditions to use their guidance for working conditions improvement and burnout control.

## SUGGESTIONS FOR FUTURE RESEARCH

- The research can be carried out on a wider statistical population and in different departments of public and private hospitals to compare the results.
- Future studies can use interviews in addition to questionnaires to collect data.
- It is suggested to include the researchers' observations in the research results in addition to the results of the questionnaires.

It is suggested that future studies examine policies to improve nurses' working conditions.

#### **DECLARATION BY AUTHORS**

## **AUTHORS' CONTRIBUTIONS**

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

### ETHICAL APPROVAL

It is approved by the code of ethics IR.ARUMS.REC.1401.064.

## CONSENT FOR PUBLICATION

Not applicable.

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None.

## CONFLICT OF INTEREST

The author confirms that this article's content has no conflict of interest.

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## REFERENCES

- [1] Rahim AIA, Ibrahim MI, Musa KI, Chua SL, Yaacob NM. Patient Satisfaction and Hospital Quality of Care Evaluation in Malaysia Using SERVQUAL and Facebook. Healthcare (Basel). 2021; 9(10): 1369. Doi: 10.3390/healthcare9101369. PMID: 34683050; PMCID: PMC8544585.
- Moyo N, Jones M, Kushemererwa D, Arefadib N, Jones A, Pantha S, Gray R. Service User and Carer Views and Ex-[2] pectations of Mental Health Nurses: A Systematic Review. Int J Environ Res Public Health. 2022; 19(17): 11001. Doi: 10.3390/ijerph191711001. PMID: 36078717; PMCID: PMC9517907.
- Mohammadi MMD, Sheikhasadi H, Mahani SA, Taheri A, Sheikhbardsiri H, Abdi K. The effect of bio ethical principles [3] education on ethical attitude of prehospital paramedic personnel. J Educ Health Promot. 2021; 31(10): 289. Doi: 10.4103/jehp.jehp 708 20. PMID: 34667789; PMCID: PMC8459844.
- [4] Sheikhbardsiri H, Esamaeili Abdar Z, Sheikhasadi H, Ayoubi Mahani S, Sarani A. Observance of patients' rights in emergency department of educational hospitals in south-east Iran. International Journal of Human Rights in Healthcare. 2020; 13 (5): 435-444. https://doi.org/10.1108/IJHRH-09-2019-0072.
- Bayat M, Shahriyari M KM. The relationship between moral distress in nurses and ethical climate in selected hospitals [5] of the Iranian social security organization. J Med Ethics Hist Med. 2019; 12: 1–16.
- [6] Safarpour H, Ghazanfarabadi M, Varasteh S, Bazyar J, Fuladvandi M ML. The association between moral distress and moral courage in nurses: A cross-sectional study in Iran. Iran J Nurs Midwifery Res. 2020; 25: 533-538. Doi: 10.4103/ijnmr.IJNMR 156 19. PMID: 33.
- Donkers MA, Gilissen VJHS, Candel MJJM, van Dijk NM, Kling H, Heijnen-Panis R, Pragt E, van der Horst I, Pronk [7] SA van MW. Moral distress and ethical climate in intensive care medicine during COVID-19: a nationwide study. BMC Med Ethics. 2021; 22: 73. Doi: 10.1186/s12910-021-00641-3. PMID: 3413999.
- Morley G, Ives J, Bradbury-Jones C, et al. What is 'moral distress'? A narrative synthesis of the literature. Nurs Ethics. [8] 2019; 26: 646-662.
- [9] Fard ZR, Azadi A, Veisani Y, Jamshidbeigi A. The association between nurses' moral distress and sleep quality and their influencing factor in private and public hospitals in Iran. J Edu Health Promot. 2020; 9: 268.

- [10] Boulton O, Farquharson B. Does moral distress in emergency department nurses contribute to intentions to leave their post, specialisation, or profession: A systematic review. Int J Nurs Stud Adv. 2023; 6:100164. doi: 10.1016/j.ijnsa.2023.100164. PMID: 38746824; PMCID: PMC11080548.
- [11] Mardani Hamooleh M, Iranshahi M, Seyedfatemi N HH. An evaluation of moral distress levels among the nursing staff of Malayer hospitals: a cross-sectional study. Iran J Med Ethics Hist Med. 2016; 9: 42-53.
- [12] Watts T, Sydor A, Whybrow D, Temeng E, Hewitt R, Pattinson R, Bundy C, Kyle RG, Jones B. Registered Nurses' and nursing students' perspectives on moral distress and its effects: A mixed-methods systematic review and thematic synthesis. Nurs Open. 2023;10(9):6014-6032. doi: 10.1002/nop2.1913. Epub 2023 Jul 17. PMID: 37458290; PMCID: PMC10416007.
- [13] Anami K, Dadkhah B MM. Moral Distress of Nurses in Emergency Department of Ardabil Hospitals in 1395. JHC. 2019; 21: 166–174.
- [14] Adhikari S, Paudel K, Aro AR, Adhikari TB, Adhikari B, Mishra SR. Knowledge, attitude and practice of healthcare ethics among resident doctors and ward nurses from a resource poor setting, Nepal. BMC Med Ethics. 2016; 17(1): 68. Doi: 10.1186/s12910-016-0154-9. PMID: 27821141; PMCID: PMC5100232.
- [15] Gandossi C, De Brasi EL, Rosa D, Maffioli S, Zappa S, Villa G, Manara DF. How Do Nursing Students Perceive Moral Distress? An Interpretative Phenomenological Study. Nurs Rep. 2023;13(1):539-548. doi: 10.3390/nursrep13010049. PMID: 36976701; PMCID: PMC1005656
- [16] Yeganeh MR, Pouralizadeh M GA. The relationship between professional autonomy and moral distress in ICU nurses of Guilan University of Medical Sciences. Nurs Pr Today. 2019; 6: 133-41. Doi: 10.18502/npt.v 6i3.1256.
- [17] Maunder, R.G., Heeney, N.D., Greenberg, R.A. *et al.* The relationship between moral distress, burnout, and considering leaving a hospital job during the COVID-19 pandemic: a longitudinal survey. BMC Nurs. 2023; 22: 243. https://doi.org/10.1186/s12912-023-01407-5
- [18] Currie GP, Laing RB. Moral distress in healthcare professionals: Time to reflect. Journal of the Royal College of Physicians of Edinburgh. 2023;53(4):237-238. doi:10.1177/14782715231215409
- [19] 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.
- [20] Mary Corley, Ptlene Minick, R K Elswick MJ. Nurse moral distress and ethical work environment. Nurs Ethics. 2005; 12: 381–390.
- [21] Mason VM, Leslie G, Clark K, *et al.* Compassion fatigue, moral distress, and work engagement in surgical intensive care unit trauma nurses: A pilot study. Dimens Crit Care Nurs. 2014; 33: 215–225.
- [22] Mohammadi S, Borhani F, Roshanzadeh L RM. Moral distress and compassion fatigue in patient care: a correlational study on nurses. Ijme. 2014; 7: 69–79.
- [23] Borhani F, Abbaszadeh A, Nakhaee N RM. The relationship between moral distress, professional stress, and intent to stay in the nursing profession. J Med Ethics Hist Med. 2014; 18: 3. PMID: 25512824; PMCID: PMC4263391.
- [24] Fernandez-Parsons R, Rodriguez L GD. Moral distress in emergency nurses. J Emerg Nurs. 2013; 39: 547–552.
- [25] Mahdavi Fashtami S, Mohammadeh zadeh Zarankesh S EBM. Moral distress among emergency department nurses: frequency, intensity, effect. Med Sci. 2016; 26: 248–255.
- [26] Naboureh A, Imanipour M, Salehi T TH. The relationship between moral distress and self-efficacy among nurses in critical care and emergency units in hospitals affiliated to Ahvaz Jundishapur University of Medical Sciences in 2015. J Rafsanjan Univ Med Sci. 2015; 14: 443-54.
- [27] Vaziri MH, Merghati-Khoei E TS. Moral Distress among Iranian Nurses. Iran J Psychiatry. 2015; 10: 32-6. PMID: 26005478; PMCID: PMC4434426.
- [28] Alimoradi Z, Jafari E, Lin CY, Rajabi R, Marznaki ZH, Soodmand M, Potenza MN PA. Estimation of moral distress among nurses: A systematic review and meta-analysis. Nurs Ethics. 2023; 30: 334-357. Doi: 10.1177/09697330221135212. Epub 2023.
- [29] Asadi N, Salmani F, Asgari N SM. Alarm fatigue and moral distress in ICU nurses in COVID-19 pandemic. BMC Nurs. 2022; 25: 125. Doi: 10.1186/s12912-022-00909-y. PMID: 356106.
- [30] Aft SLK. Moral distress in medical surgical nurses: Western Carolina University. A thesis presented to the faculty of the Graduate School of Western Carolina University in partial fulfillment of the requirements for the degree of Masters of Science in Nursing. 2011; 62–119.
- [31] Abbasi M, Hajatmand F, Khaghanizadeh M GA. Moral distress in nurses employed in selected hospitals of Shahid Beheshti University of Medical Sciences. Med Ethics. 2015; 19: 121–140.
- [32] Robaee N, Atashzadeh-Shoorideh F, Ashktorab T, Baghestani A B-SM. Perceived organizational support and moral distress among nurses. BMC Nurs. 2018; 10: 2. Doi: 10.1186/s12912-017-0270-y. PMID: 29344004.
- [33] Guttormson JL, Calkins K, McAndrew N, Fitzgerald J, Losurdo H LD. Critical Care Nurse Burnout, Moral Distress, and Mental Health During the COVID-19 Pandemic: A United States Survey. Hear Lung. 2022; 55: 127-133. Doi: 10.1016/j.hrtlng. 2022.04.015. Epub 2.
- [34] Hoseini Damiri SF, Araghian F JH. Moral distress and the factors affecting it: a review study. J Multidiscip Care. 2022; 11: 37-44. doi: 10.34172/jmdc.2022.07.

- Al-Turfi, M. K., & Al-Jubouri MB. Effect of moral distress on professional quality work among nurses in intensive care [35] units. Int J Health Sci (Qassim). 2022; 6: 8632–8643. https://doi.org/10.53730/ijhs.v6nS1.650.
- [36] Khoshkbari, Z., Rejeh, N., & Tadrisi SD. Relationship between Moral Distress and Job Burnout in Nurses of Critical Care Units of Hospitals. Q J Med Ethics. 2022; 16: 1-13. https://doi.org/10.22037/mej.v16i47.38734.
- [37] Asadi N, Ahmadi A AA. Investigating the Relationship Between Stress Management Training and Employee Work Ethics. J Arak Uni Med Sci. 2022; 25: 54-71.
- Caram C da S, Rezende LC, Fonseca MP, Almeida NG, Rezende LS, Nascimento J et al. STRATEGIES FOR COPING [38] WITH MORAL DISTRESS ADOPTED BY NURSES IN TERTIARY CARE: A SCOPING REVIEW. Texto Context - enferm [Internet]. 2022; 31.
- [39] Ruiz-Fernández MD P-GEO-G. Quality of Life in Nursing Professionals: Burnout, Fatigue, and Compassion Satisfaction. Int J Env Res Public Heal. 2020; 17: 1253. Doi: 10.3390/ijerph17041253. PMID: 32075252.
- [40] Ebrahimi H, Kazemi A AJMA. Moral distress in nurses working in educational hospitals of Northwest medical of Iran. Med ethics Hist Med. 2013; 4: 80-8.

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