DOI: https://doi.org/10.53350/pjmhs211551545

ORIGINAL ARTICLE

Factors Associated with Moral Distress and Caring Behavior of Nurses Working in Emergency Departments of Mazandaran University of Medical Sciences During COVID-19 Pandemic

FATEME TALEBIAN[1], TAHEREH YAGHOUBI[*2], RAHMATOLLAH MARZBAND[3]
[1]*Student Research Committee, Mazandaran University of Medical Sciences, Sari, Iran fatemeh.talebian74@gmail.com*
[2]*Assistant Professor, Department of Nursing Management, Traditional and Complementary Medicine Research Center, Mazandaran University of Medical Sciences, Sari, Iran*
[3]*Assistant Professor, Department of Islamic Thought, Medical faculty, Islamic and health sciences Research Center, Mazandaran University of Medical Sciences, Sari, Iran.*
Corresponding author: Tahereh Yaghoubi

ABSTRACT

Introduction: Moral distress is one of the prevalent problems of nursing which causes stress, that leads to nurses being unable to show a proper moral function in the critical situations. Moreover, due to the stressful conditions in emergency department, caring behaviors of nurses is of great importance. This study aimed to determine the factors associated with moral distress and caring behaviors of nurses working in emergency departments in educational-medical centers of Mazandaran University of Medical Sciences during COVID-19 pandemic.

Methodology: This study was descriptive-analytical which was conducted through stratified and convenience sampling, and by participation of 188 nurses working in emergency departments in 5 educational-medical centers of Mazandaran University of Medical Sciences in 2020. Data was collected through standard three-section questionnaire of demographic information, Corley moral distress and Wolf caring behaviors of nurses, and its validity and reliability was confirmed. Data was analyzed by using descriptive (mean and standard deviation, frequency and percentage) and analytical statistics (Mann–Whitney, Kruskal-Wallis, and Spearman correlation coefficient).

Finding: Moral distress mean score of nurses working in emergency was 20/97±101/60 and they had 92/4% of average moral distress. Caring behavior of nurses was 8/62±101/60. Gender and marital status variables had a significant relation with caring behavior, in a way that male nurses and married nurses had a lower score ($p<0.05$). the relation between moral distress and caring behavior was NOT statistically significant.

Final conclusion: Nursing staff must have a good command of their caring behavior so that caring will be presented in high quality, and patients and help-seekers' satisfaction who come to the emergency, especially in COVID-19 pandemic, will be met. Thus, it is necessary that health and medical system managers provide educational programs to draw nurses' attention to their caring behavior dimensions, especially in emergency departments.

Key words: moral distress, caring behavior, emergency department nurse, COVID-19 pandemic

INTRODUCTION

Moral distress is one of the fundamental problems known among nurses in all medical systems (1). Moral distress results in nurses not being able to show a proper moral function in critical situations, despite having sufficient knowledge (2). Nurses' moral distress can lead to the health and medical system straying from its goals (3). Moral distress means that, although a nurse has the true awareness of his/her job, because of the limitations forced from organization or the higher levels (such as lack of sufficient time, medical limitations, and religious and moral observations, higher-level officials disagreement), it is not possible to implement the right action (4). Findings of one study shows that among factors affecting and creating moral distress and consequently, affecting clinical performance and caring quality of nurses are: insufficient resources, providing fruitless medical care, ignoring patient's independence, inability to prevent death, direct interaction with patient, nurses and doctors' interrelationship (5). This can have various occupational and personal negative impacts (such as job dissatisfaction, mental and physical problems, job abandonment, spiritual, material, and organizational damages (2). Other factors such as nursing labor shortage, policy making, work-hardship, leads to nurses suffering from additional mental pressures which finally influences their moral decision-making (6). It is worthy of mention that in the present era, despite the technological advances, the importance of moral issues has been doubled (7). According to the statement of Emergency Nurses Association, one of the most important professional capabilities of nurses of Emergency Department is clinical decision-making which can noticeably improve the quality of efficiency and caring. Emergency department personnel, experience working in unpredictable and critical conditions that inevitably influences their clinical decisions (8). In Dadkhah study (2016) in the ward, it was revealed that the extent of nurses' moral distress in emergency department was reported as being average (9).

Nurses' moral behavior influences their caring behaviors (10). Furthermore, caring is considered as the foundation of nursing profession and leads to human evolutions and survival (11). Thus, providing peace and comfort for patients is one of the important responsibilities of nurses (12). Therefore, nurses should plan their caring according to the patients' needs and tendencies, and at last, accomplish the ultimate goal which is patients' comfort and peace (13). According to Lehninger (1991)

perspective, nurses caring includes measures aiming to help individuals to improve their living conditions or in life-threatening conditions (14). Caring behavior reduces patient's discomforts and meets his/her predictable needs; in fact, patients caring is the art of nursing, the realization of which requires nurses to have personal, social, moral, and mental abilities (15, 16). It is certain that emergency departments are one the most challenging hospital departments related to improving caring quality. According to the studies conducted in several countries, factors such as population density, hospital beds and human-labor shortage, and also insufficiency of essential foundations for meeting patients' satisfaction, are among affecting factors on caring difficulty in emergency departments (17). Gaeeni et al. (2015) found out in their study that there is a direct relation between the two variables of caring behavior and moral reasoning and by enhancing moral reasoning, quality and functioning of caring can be improved (19).

In spite of the studies conducted in the field of moral distress in different departments, there has been no study conducted specifically to investigate factors associated with moral distress and caring behavior in emergency departments so far. During the COVID-19 pandemic, factors such as increasing number of afflicted cases, nurses' extensive workload, personal protecting equipment shortage, lack of special medical techniques, cause mental pressure on medical staff. Hence, this study was designed and conducted, aiming to determine the affecting factors on moral distress through caring behavior of nurses working in emergency department.

METHODOLOGY

Research type: This study was descriptive-analytical which was conducted cross-sectionally in Fall 2020. Research population in this study included all the nurses working in emergency departments from five educational-medical center associated with Mazandaran University of Medical Sciences in Sari and Qaemshahr. Statistical population of the present study consisted of 198 nurses working in emergency units based on the statistics of nursing manager department of Medical Deputy of Mazandaran University of Medical Sciences.

Sampling and sample volume: Stratified, convenience sampling was administered in emergency departments of educational and medical centers, in a way that each emergency department was taken into account as one stratum, and sample in each department was collected as convenience. Inclusion criteria was having nursing Bachelors' degree or higher education and having as least 6 months of work experience in emergency department, and exclusion criteria was incomplete filling of questionnaires.

By using the calculated parameters in the original validation study (20) and by considering 5% of significance and 80% of Power of Test, and by revising the sample volume for the limited population (N=198), 118 samples were estimated for conducting the study.

$$n = \frac{(z_{1-\alpha/2} + z_{1-\beta})^2 * \sigma^2}{d^2} = \frac{(1.96 + 0.84)^2 * 24.2^2}{4^2} = 287$$

$$n = \frac{287}{1 + {}^{287}/_{198}} = 117.2$$

The least sample volume needed for this study was 118 nurses.

Data Collection Instruments: Data collection instrument was a questionnaire consisting of three sections of personal information, moral distress and caring behavior. A) Personal information section consisted of: gender, age, marital status, work experience, position, average of overtime work. B) Moral distress questionnaire was designed by Corley et al. (220), and went through psychometric observation by Beikmorad et al (2010) in Iran, and instrument reliability was reported by using Cronbach Alpha as 0.93. This questionnaire included 36 questions and answering the questions was based on a 6-score Likert scale, which had answers of never (1 score), rarely (2), sometimes (3), often (4), usually (5), and always (6). Questionnaire total score was between 36 and 216, which was classified into three level of low, average and severe; in such a way that scores between 1 and 72 demonstrated low moral distress; scores between 73 and 144 demonstrated average moral distress; and scores between 145 and 216 demonstrated severe moral distress (21, 22). C) Caring behavior questionnaire was designed by Wolf et al. (1991), and went through psychometric observation by Rafiee et al (2009) in Iran, and instrument reliability was reported by using Cronbach Alpha as 0.98. This questionnaire included 42 questions and assesses 5 subscales: respect deference to others (items 1 to 12), assurance of human presence (items 13 to 24), positive connectedness (items 25 to 33), professional knowledge and skill (items 34 to 38), attentive to other's experience (items 39 to 42). Answering the questions is based on 6-score Likert scale: never (1 score), rarely (2), once in a while (3), sometimes (4), often (5), and always (6). Generally, lowest caring behavior score was 42 and the highest 252, and gaining a higher score showed a better caring behavior (23, 24). Questionnaires were completed by nurses as self-administered.

Ethical considerations: Ethical considerations observed in this study consisted of informing samples about the research purposes, optional participation in study, receiving informed consent, keeping anonymous and no necessity to mention name and last name, confidentiality of gained information and receiving ethics code from University Ethics Committee numbered as IR.MAZUMS.REC.2020.6952, and Deputy of Research and Technology of Mazandaran University of Medical Science.

Statistical analysis: After completing and collecting the questionnaires, descriptive analysis was implemented by

using mean, standard deviation, frequency and percentage statistics. For analyzing normality, Kolmogorov–Smirnov test was used. Non-parametric tests of Mann–Whitney, Kruskal-Wallis and Spearman correlation coefficient was used for Statistical inference. SPSS20 software was used for analysis. Significance was considered as 0.05.

Findings: 118 nurses participated in this study, and 100 (84.7%) of them were women and 18 (15.3%) were men. In Table1, demographic information is reported. Nurses' age mean was 33.36±5.74. Most of the participants constituted the age ranges of 31 to 40 by 46.6%, and the youngest and oldest participants were 24 and 46 years old. Most nurses (66.1%) were married and others were single. Most nurses (69.5%) had 10 years of work experience. Nurses' work hour mean was 90.19±8.34. Most nurses' (67.8%) average work hour was 90 hours or less, and least and most work hours were 70 and 110 hours respectively (Table1).

Moral distress and caring behavior questionnaires were completed by nurses, and mean and standard deviation of the questionnaires and the subscales are reported in Table2.

Mean and standard deviation of moral distress questionnaire score was obtained as 20.97±101.60. The highest score was 145 and lowest was 57. In this questionnaire, the question of (treatment and caring of patient on a ventilator with no hope of survival) had the highest mean score (4.73) and the question (cease treatment and caring of patient unable to pay the expenses according to the rules) had the lowest mean score (1.49). On average, the total score of the questionnaire shows that, the participants in this study had an average moral distress. 9 nurses in this study (7.6%) had low moral distress and the rest had an average level.

Mean and standard deviation of caring behavior questionnaire score was obtained as 8.62±197.77. With the maximum score of 208 and minimum score of 187 in this questionnaire, the question of (enthusiastically and voluntarily come to the patient's bed) had the highest mean score (5.98) and the question of (touches the patient to display attention) had the lowest mean score (1.61). in Table1, scores and standard deviation of the questionnaires are reported.

The results of Kolmogorov–Smirnov test demonstrated that questionnaires scores did not have a normal distribution. Thus, non-parametric tests were used for statistical inferences.

Spearman correlation coefficient was obtained as -0.02 between the scores of moral distress and caring behavior questionnaires, and was NOT statistically significant (p-value=0.836). Moreover, by conducting Mann–Whitney test to compare caring behavior in two levels of moral distress (low and average), the results showed that there was no significant relation between the two variables of caring behavior score and level of moral distress (p-value=0.793). Table3 investigates the relation between study variables with nurses' moral distress and caring scores.

Table 1: demographic information

Variable		Number (percentage)	variable		Number (percentage)
Gender	Male	18 (15.3)	Work experience	5 years	36 (30.5)
	Female	100 (84.7)		10 years	82 (69.5)
Age	30 years old or below	45 (38.1)	Work hours	90 hours or below	80 (67.8)
	31 to 40 years old	55 (46.6)		91 hours or above	38 (32.2)
	41 years old or above	18 (15.3)			
Marital status	Single	40 (33.9)			
	Married	78 (66.1)			

Table 2: Scores and standard deviation of questionnaires and subscales

Questionnaire	Subscale	Mean	Standard deviation
Moral distress	Total	101.60	20.97
Caring behavior	Total	197.77	8.62
		57.98	2.02
		59.30	7.22
		37.18	1.23
		23.88	1.09
		19.43	0.60

Table 3: the relation between demographic information with nurses' moral distress and caring behavior score

Variable		Caring behavior questionnaire score			Moral distress questionnaire score		
		Statistics	Mean	p-value	Statistics	Mean	p-value
Gender	Male	557.5	193.89	0.008	715	107.67	0.165
	Female		198.47			100.51	
Age	30 years old or below	1.23	197.62	0.540	0.87	99.18	0.647
	31 to 40 years old		197.85			103.71	
	41 years old or above		197.89			101.22	
Marital status	Single	1084	193.72	0.005	1448.5	103.22	0.525
	married		199.84			100.77	
Work experience	5 years	1154	198.83	0.050	1395	100.22	0.635
	10 years		197.30			102.21	
Work hour	90 hours or below	1376	197.94	0.390	1283.5	100.01	0.172
	91 house or above		197.42			104.95	

According to results of Table3, gender and marital status variables had a significant relation with caring behavior, in a way that female nurses' caring behavior was different from male nurses'. Furthermore, married nurses had a better average rate than single nurses. On the other hand, the impact of work experience on caring behavior is on border line, and requires more investigation. Other

variables had no significant relation with moral distress and caring behavior score on 0.05 level.

In the subscales of caring behavior questionnaire, demographic information was investigated. The “assurance of human presence” subscale score had a significant difference based on gender (p-value=0.007), and women had a higher mean score in this subscale. Also, marital status had a significant impact on all subscales of “respectful deference to other” (p-value=0.001), “assurance of human presence” (p-value=0.001), “positive connectedness” (p-value=0.002), “professional knowledge and skill” (p-value=0.001), “attentive to other’s experience” (p-value=0.001). Singles mean in the subscales of “professional knowledge and skill” and “attentive to other’s experience” was more than the married, whereas in other subscales, the married had higher score.

DISCUSSION

The main purpose of the present study was to determine the factors associated with moral distress and caring behavior in nurses working in emergency departments of five educational-medical centers of Mazandaran University of Medical Sciences. The results of the present study showed that 92.4% of nurses had average moral distress. Abdolmaleki el at. Study (2019) also demonstrated that moral distress in emergency nurses is on an average level (25). Since the emergency department is different from other clinical units in the pace of clinical decision, and our study was conducted during COVID-19 pandemic, so according to the studies conducted, nurses experienced more moral distress when taking care of COVID patients. The factors influencing the increase of moral distress during pandemic include: occupational commitments, nurses’ awareness of measurement and equipment sufficiency to control infection and perceived risk of social stigma (26).

Also, Jalali et al. (2019) study which investigated the moral distress and associated factors of emergency department nurses, reported high moral distress level, and the highest moral distress was for professional-functional competency (27), which is not consistent with the present study. Nurses’ moral distress inconsistency with our study might be because of the difference of moral distress instrument and scoring system and its interpretation. Otherwise, one the most important departments in every hospital is the emergency department, which causes disruption in nursing caring due to providing service in different conditions, and supply and demand imbalance (18).

Moreover, our study showed that “assurance of human presence” and “attentive to other’s experience” obtained the highest and lowest scores out of the caring subscales, respectively. While in Mohammadi et al. study (2014), highest and lowest scores were for “professional knowledge and skill” and “positive connectedness” subscales, respectively (33). Although in both studies, the same instrument was used, the results of the studies were not consistent. One of the reasons of this inconsistency can be related to the nursing service department. In our study, the samples were included in the study from emergency department, but in the above-mentioned study, department type were not an inclusion criterion.

In Davoodi et al. study (2020), which aimed to determine the relation between work life quality and caring behavior of nurses, the results revealed that the highest caring behavior was for “professional knowledge and skill” but the lowest for “positive connectedness” subscale (34), that is inconsistent with our study. Although the setting of both studies was the emergency department, the type of relation between nurse and patient was influenced by different factors.

Generally, most studies results show that nurses place the most important on “professional knowledge and skill” dimension which states their expertise in professional activities. Perhaps the low score of this dimension in our study is due to the forcing conditions of COVID-19 pandemic that led to “assurance of human presence” dimension obtaining the highest score.

The findings of our study revealed that there was no significant relation between gender and marital status variables with moral distress, but in O'Connell study (2012), in which the samples consisted of nurses working in ICU, gender variable had a significant impact (28). Of course, the few number of samples in this study, causes trouble in generalization. But Atashzadeh Shorideh et al. study (2013) on the relation between ICU nurses’ demographic features with moral distress and service abandonment, found out that ICU nurses’ moral distress and service abandonment is high, and there is no significant relation between demographic and moral distress variables (29); it is consistent with our study in insignificance of gender and marital status variables. Perhaps it is because of the same instruments used in both studies. It is worth mentioning that service abandonment is more in nurses who experience higher moral distress (30).

Our study demonstrated that there was no significant relation between nurses’ work experience and age with moral distress, which is not consistent with Atashzadeh Shorideh et al. study (2013) (29); probably it is because ICU nurses face more moral distress due to factors such as: using high-tech equipment and sudden revival probability, conflict between organizational commitment and patient commitment (31).

In this study, the relation between caring behavior with demographic variables was also investigated. Findings suggest that there is no significant relation between demographic variables except gender and marital status with caring behavior. Women and the married obtained a higher score than men and the single. Whereas Salhi et al. study results (2019) in North Africa stated that there is no significant relation between demographic variables and caring behavior (35). Perhaps the reason of this inconsistency is related to the different organizational rules and culture. However, it is consistent with Seyedshohadai et al. study findings conducted in Iran (33).

According to the correlational results, there was no significant relation between moral distress and caring behavior in emergency nurse (r=0/025). The results of the descriptive study named as “the correlation between moral distress and caring behavior of ICU nurse” stated that there was a significant, negative relation between moral distress and caring behavior (r=0/15), i.e., when nurses encounter increase in moral distress, they would have fewer caring behaviors (10), which was not consistent in its result with

the present study; probably one of its reasons can be the significant relation between moral distress and the working unit (32), and the second reason can be the sampling type in that study in which individuals were included in the study through census, which forces a problem on generalization of results. While in our study, individuals were randomly selected.

Lack of control on factors such as more extensive work load during COVID-19 pandemic in emergency departments on nurses' moral distress results in caution in generalizing and interpreting the findings of a study.

CONCLUSION

However, based on the findings, more attention must be paid to "positive connectedness", "professional knowledge and skill", and "attentive to other's experience" subscales, especially in men and the single. It seems necessary to offer strategies like in-service courses or in-college courses in order to raise awareness of different dimensions of caring behavior for these groups of people, so that nurses can provide a high-quality care for patient through desirable caring behavior, and meet their satisfaction. Similarly, to determine the effectiveness of the suggested strategies, an intervention study must be designed and conducted. Therefore, there is a need for extensive studies about nurses' moral distress and caring behavior in hospitals of other provinces, and by using other instruments including qualitative methods such as interview, to increase the validity of research findings after COVID-19 pandemic.

Acknowledgement: The ethical code of the present study is IR.MAZUMS.REC.2020.6952, which is recorded in Mazandaran University of Medical Sciences. This is to acknowledge the students research committee of research and technology deputy for financial support and design approval, and cooperation of all nursing personnel who participated in completing the questionnaire.

REFERENCES

1. Barlem EL, Ramos FR. Constructing a theoretical model of moral distress. Nurs Ethics 2015; 22(5): 608-15.
2. HAMRIC, Ann B.; EPSTEIN, Elizabeth G. A health system-wide moral distress consultation service: development and evaluation. In: *HEC Forum*. Springer Netherlands, 2017. p. 127-143.
3. Sarkoohijabalbarezi Z, Ghodousi A, Davaridolatabadi E. The relationship between professional autonomy and moral distress among nurses working in children's units and pediatric intensive care wards. International Journal of Nursing Science. 2017; 4(2):117-21.
4. Zavotsky KE. Exploring the relationship between moral distress and coping in emergency nursing. Adv Emerg Nurs J 2016;38:133-46.
5. Atashzadeh-Shoorideh, Foroozan, et al. "Factors affecting moral distress in nurses working in intensive care units: A systematic review." *Clinical Ethics* (2020): 1477750920927174.
6. AUSTIN, Cindy L.; SAYLOR, Robert; FINLEY, Phillip J. Moral distress in physicians and nurses: Impact on professional quality of life and turnover. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2017, 9.4: 399.
7. Izadi A., Imani E., Khademi Z., Asadi N., Fariba H., Naghizade F. Nurses moral sensitivity correlated with the behavior of their care. Iranian Journal of Medical Ethics and History. 2013., 6(2): 43-56.
8. Bijani, M., Abedi, S., Karimi, S. et al. Major challenges and barriers in clinical decision-making as perceived by emergency medical services personnel: a qualitative content analysis. BMC Emerg Med 21, 11 (2021).
9. Anami K, Dadkhah B, Mohammadi M. Moral Distress of Nurses in Emergency Department of Ardabil Hospitals in 1395. JHC. 2019; 21 (2) :166-174.
10. Mahmoodzadeh Z, Ashktorab T, Naeeni S M K. The correlation between Moral Distress and Caring Behaviors of Nurses in Intensive Care Units of Bandar Abbas Hospitals in 2018. ijme. 2019; 12 (1) :82-93.
11. Hosseinzadeh H, Mohammadi M, Shamshiri M. The Study of Caring Behaviors and Its Determinant Factors from the Perspective of Nurses in Educational Hospitals of Ardabil. JHC. 2019; 21 (3) :203-211.
12. Mazhariazad F, Taghadosi M, Erami E. Challenges of Nurse-Patient Communication in Iran: A Review Study. SJNMP. 2019; 4 (4) :15-29.
13 Ghafari S, Mohammadi F. Concept Analysis of Nursing Care: a Hybrid Model. J Mazandaran Univ Med Sci. 2012; 21 (1) :153-164.
14. Chen SY, Chang HC, Pai HC. Caring behaviours directly and indirectly affect nursing students' critical thinking. Scand J Caring Sci. 2018; 32(1): 197-203.
15. Joolaee S, Rasti F, Ghiyasvandian S, Haghani H. Patients' perceptions of caring behaviors in oncology settings. Iran J Nurs Res. 2014; 9(1): 56-67.
16. CALONG, Kathyrine A. Calong; SORIANO, Gil P. Caring behavior and patient satisfaction: Merging for satisfaction. *International Journal of Caring Sciences*, 2018, 11.2: 697-703.
17. Fátima Levandovski P, Dias da Silva Lima MA, Marques Acosta A. Patient satisfaction with nursing care in an emergency service. Invest Educ Enferm. 2015 Dec;33(3):473-481.
18. Ahmadi, O., Ghazi Talkhoncheh, M., Pirnia Naieni, A., & Tansaz, Z. (2016). Quality of Nursing Care and Documentation with Overcrowding in Emergency Department. Iranian Journal of Emergency Medicine, 3(2), 57-53.
19. Amiri R 1 , Gaeeni M2*, Ahmari Tehran H3 , Momenyan S. The Relationship between moral reasoning and the caring behavior of nurses in emergency departments of Qom, 2015.IJEC2017;1(3).
20. Etebari-Asl Z, Etebari-Asl F, Nemati K. A Survey on the Level of Moral Distress among Nurses of Special Wards Affiliated to Educational- Therapeutic Centers in Ardabil University of Medical Sciencesin 2016: A Short Report . JRUMS. 2017; 16 (2) :169-178. [Persian]
21. Beikmoradi A, Rabiee S, Khatiban M, Cheraghi. Nurse's distress in intensive care unit: a survey in teaching hospitals. Iran J Med Ethics & History Med 2012; 5(2): 58-69. [Persian]
22. Shafipour V, Esmaeili R, Heidari M R, Aghaei N, Saadatmehr S R, 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 (126) :58-67. [Persian]
23. EIzadi A, Imani E, Khademi Z, Asadi Noughabi F, Hajizadeh N, Naghizadeh F. The correlation of moral sensitivity of critical care nurses with their caring behavior. Iran J Med Ethics Hist Med. 2013; 6(2):43-56. [Persian]
24. Hajinezhad ME, Azodi P, Rafii F, Ramezanian N, Tarighat M. Perspectives of patients and nurses on caring behaviors of nurses. Journal of Hayat. 2012, 17(4): 36-45. [Persian]
25. Abdolmaleki M, Lakdizaji S, Ghahramanian A, Allahbakhshian A, Behshid M. Relationship between

autonomy and moral distress in emergency nurses. Indian J Med Ethics. 2019 Jan-Mar;4(1):20-25
26. Choi JS, Kim JS. Factors influencing emergency nurses' ethical problems during the outbreak of MERS-CoV. Nurs Ethics. 2018 May;25(3):335-345.
27. Yazarloo, M., Hojjati, H., Gharebagh, Z.A. The effect of spiritual self-care education on stress of mothers of premature infants admitted to NICU of hospitals affiliated to golestan university of medical sciences (2019). Pakistan Journal of Medical and Health Sciences, 2020, 14(3), pp. 1615–1619
28. Hanieh Sajadi1, Golbahar Akhoundzadeh2, Hamid Hojjati3. (2020). The Effect of Empowerment Program on Participation of Mothers with Premature Infants Hospitalized in Neonatal Intensive Care Unit of Sayyed Shirazi Hospital in Gorgan, in 2018. *Indian Journal of Forensic Medicine & Toxicology*, *14*(2), 1269-1276.https://doi.org/10.37506/ijfmt.v14i2.3082
29. Atashzadeh Shorideh F, Ashktorab T, Yaghmaei F, Alavimajd H. Association of ICU nurses' demographic characteristics and moral distress. ijme. 2013; 5 (7) :66-78.
30. Hosseini N, Akhoundzadeh G, Hojjati H. The effect of child-parent relationship therapy on social skills of Preschool Children: a semi-experimental study. International Journal of Adolescent Medicine and Health. 2019. **DOI:** 10.1515/ijamh-2019-0151
31. HENRICH, Natalie J., et al. Consequences of moral distress in the intensive care unit: a qualitative study. American Journal of Critical Care, 2017, 26.4: e48-e57.
32. Mohammadi S, Borhani F, Roshanzadeh M. Moral sensitivity and Moral distress in critical care unit nurses. Med Ethics Journal. 2017; 10(38): 19-28. [in Persian]
33. Negar Ranjbar Hajabadi , Roya Ebrahimi , Sakine Farhadi , Hojjati Hamid , Mahboubeh Tabrsa4. (2020). The Relationship between Frequency of Prayer and Death Anxiety in Cancer Patients. *Indian Journal of Forensic Medicine & Toxicology*, *14*(3), 2163-2167. https://doi.org/10.37506/ijfmt.v14i3.10748
34. Davoodi, A., Azarsa, T., Shahbazpour, M., Sokhanvar, Z. and Ghahramanian, A. "Relationship between quality of work life and caring behaviors among emergency nurses", International Journal of Workplace Health Management. 2020; 13 (6): 687-701.
35. Soudabeh Aloustani KBASHH. The Comparison of Social Support Against the Life Quality of The Spinal Cord Injury Under Stress. Indian Journal of Forensic Medicine & Toxicology. 2020;14(2):1938-42