

Moral Distress and Self-efficacy among Nurses Working in Critical Care Unit in Iran- An Analytical Study

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ABSTRACT

Introduction: Moral distress is one of the major issues that can affect the healthcare system adversely and is defined as discomfort in mental peace and it occurs as a result of failure to take appropriate moral actions despite knowing it.

Aim: To determine the average frequency and intensity of moral distress and its relationship with self-efficacy in nurses working in Critical care units.

Materials and Methods: This study was analytic one, conducted on 300 nurses working in critical care unit selected through simple random sampling method. The data were collected using demographic characteristics questionnaire, Corley's moral distress scale, and Riggs et al., self-efficacy beliefs questionnaire. The data were analysed using descriptive statistics and Pearson's correlation coefficient.

Results: The results showed a moderate level of moral distress among Critical care unit nurses in both frequency and intensity. Also, the results showed that different wards affect frequency and intensity of moral distress in nurses differently, as ICU nurses experienced higher moral distress than nurses of other Department in this study. A significant relationship was observed between intensity ($p=0.03$ and $r=-0.19$) and frequency of moral distress ($p=0.03$ and $r=-0.14$) and perceived self-efficacy in nurses.

Conclusion: This study showed that there is a significant negative relationship between moral distress and the level of perceived self-efficacy i.e., by an increase in moral distress, the level of perceived self-efficiency in nurses decreases.

Keywords: Job satisfaction, Moral distress, Morals, Nursing ethics, Psychological stress

INTRODUCTION

Moral distress is described as the tender feelings and emotional imbalance when a person believes she knows the ethically correct act and is unable to pursue it because of external or internal constraints [1,2]. Albert Bandura defines self-efficacy as a personal judgment of "how well one can execute course of action required to deal with prospective situations" [3-5]. Morality is the integral part of nursing profession. Every day, nurses make many moral decisions in their workplace, but they cannot always act according to their moral commitments in practice. An undesired experience known as moral distress is one of the major issues which many nurses face [6,7]. In 1984, Andrew Jameton defined moral distress as the stress that occurs "when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" [8,9]. One of the most important sources of distress is one's job. Also, the type of the job and the special conditions in workplace are among the factors which increase the intensity of distress. One of the distressful jobs in the opinion of the majority of experts in nursing, as a nurse is an individual who is responsible for controlling and monitoring patients 24 hours a day and is so constantly subjected to multiple distressful factors [9-11]. Nurses working in ICUs deal with many physical and mental distress one of which is moral distress, which is related to different dimensions of moral issues. Undesirable work conditions and deficiency of appropriate equipment, heavy workload, insufficient time to take care of patients, being responsible for the life and death of patients, and close relationship between patients and their anxious relatives and medical personnel increase the probability of causing distress in ICU nurses [12-16]. Moral distress, in addition to absenteeism and desire to resign and leave the profession, causes a decrease in quality of care provided to patients, conflicts among coworkers,

and their reluctance in taking care of patients [17-19]. This study aimed at investigating the relationship between moral distress and perception of self-efficacy in nurses working in critical care unit affiliated to Tehran University of Medical Sciences to identify one of the probable factors related to the level of self-efficacy in nurses as well as providing basic information on the level of perceived self-efficacy among nurses of these units and highlighting the necessity of developing strategies for reducing and controlling moral distress and enhancing self-efficacy in nurses.

MATERIALS AND METHODS

An analytical study was conducted to investigate the relationship between moral distress and perception of self-efficacy in nurses working in Intensive Care Unit (ICU), Cardiac Care Unit (CCU) and dialysis unit of the selected hospitals affiliated to Tehran University of Medical Sciences: Imam Khomeyni Hospital, Vali-e-Asr Hospital, Shahid Rajaei Hospital, Sina Hospital, and Cancer Institute. The duration of study was from August 2017 to December 2017. The participants were 300 nurses (head nurses and staff nurses) i.e., 100 nurses (33.3%) in ICU, 100 (33.3%) in CCU and 100 (33.3%) in dialysis unit. To calculate the sample size, the formula of difference between two populations was used according to a similar study [19] and considering 12 as the mean difference between the two populations, the standard deviation was calculated as 26, alpha as 0.05, the study power as 90% and the sample size in each group as 99 and the present authors have taken sample size as 100 in each group. Written informed consent was taken from the participants in the local language and the study was approved by: Institutional Ethics Committee (Registration NO. IR.ARAKMU.REC.1395.172.) of the Arak University of Medical Sciences.

Inclusion criteria were having BA or higher degree of nursing and at least one year work experience in intensive care units. The exclusion

criteria were not willing to participate in the study and necessity of therapeutic intervention while completing the questionnaire. Data collection tools were demographic information questionnaire, Corley's moral distress scale, and Riggs et al. self-efficacy beliefs questionnaire. Corley's moral distress scale known as Moral Distress Scale (MDS) measures frequency and intensity of moral distress in nurses through 24 questions based on a 5-point Likert's scale. To examine the validity of the questionnaire, 15 faculty members of the Faculty of Nursing Department reviewed the statements. Then, the statements were modified based on their comments. Also, the validity was quantitatively evaluated using the CVI and CVR indexes. The relevance of 89% was calculated based on the CVI index. To determine CVR, the experts were also requested to review each item based on a 3-point scale (necessary, useful but not necessary and not necessary). The content validity ratio was 91%. To assess the reliability of the tool, the questionnaire was given to 20 Critical care units' personnel. The reliability through Cronbach's Alpha for the emergency medical personnel was 0.913. The frequency of moral distress in this questionnaire means the number of times one is faced with distressful factors ranging from "never faced with distressful factors" (score of 0) to "faced with distressful factors many times" (score of 4). The intensity of moral distress in this questionnaire means the degree of distress felt by the person when faced with distressful situations ranging from "doesn't make me distressed" (score of 0) to "makes me highly distressed" (score of 4). The range of scores in each of the dimensions of frequency and intensity in this questionnaire is between 0 to 96 and the higher the score, the higher the frequency or intensity of the moral distress in the individual. Scores for intensity and frequency of moral distress in this questionnaire are categorised as follows: the score of 0-31 shows low, the score of 32-64 shows moderate, and the score of 65-96 shows high intensity or frequency of moral distress [19]. Riggs et al., self-efficacy beliefs questionnaire includes 10 questions based on a 5-point Likert's scale from "strongly disagree" to "strongly agree". The questions number 2, 3, 4, 6, 8, and 10 including negative concepts are scored inversely. The total score which can be acquired on this questionnaire is 0-50, the higher the score of a person the higher the level of perceived self-efficacy in that individual. The categorisation of the perceived self-efficacy level in this questionnaire is as follows: the score of 0-16 shows low, the score of 17-33 shows moderate, and the score of 34-50 shows high level of perceived self-efficacy [19]. After obtaining legal permissions from the relevant authorities, the researcher referred to the medical centers in different shifts and distributed the questionnaires among all qualified nurses for this study. After two hours, the researcher collected the filled out questionnaires.

STATISTICAL ANALYSIS

The data were analysed using SPSS version 16.0. The relationships between main variables of the study including moral distress and self-efficacy level were analysed based on average and using Pearson's correlation coefficient. $p < 0.05$ was considered as significant.

RESULTS

Average age of nurses participating in this study was 36.7 ± 7.5 years and the majority of them were female (70%). Work experience of the nurses was 1-23 years with mean and SD of 7.3 ± 6.3 . The majority of nurses had BA (91%) and MA (6.7%) and worked in rotating shifts (63.34%). [Table/Fig-1].

The results showed that the mean frequency and intensity of moral distress from total score of 96 were 47.4 ± 14.12 and 46.4 ± 16.13 , respectively. And the mean self-efficacy from total score of 50 was 28.6 ± 3.51 and all the three variables were at moderate level in the majority of participants [Table/Fig-2].

There is a negative significant relationship between intensity of moral distress and self-efficacy ($p = 0.03$ and $r = -0.19$) and between

Demographic characteristics		n	Percent (%)
Age	20-30	18	6%
	31-40	187	62.3%
	41-50	86	28.6%
	>50	9	3%
Sex	Male	90	30%
	Female	210	70%
Educational qualification	Associate degree	7	2.33%
	Bachelor	273	91%
	Master	20	6.7%
Experience in critical care nursing	<5 years	39	13 %
	5-10	191	63.66%
	11-15	38	12.67%
	16-20	22	7.34%
	>20	10	3.33%
Shift	Morning	12	4%
	Evening	38	12.67%
	Night	60	20%
	Rotation	190	63.34%
Marital status	Single	31	10.4%
	Married	269	89.6%

[Table/Fig-1]: Demographic characteristics of the participants.

Variable	Ward	Frequency (%)		
		Low (scores 0-31)	Moderate (scores 32-64)	High (scores 65-96)
Intensity of moral distress	ICU	15 (15%)	66 (66%)	19 (19%)
	CCU	37 (37%)	53 (53%)	10 (10%)
	Haemodialysis	55 (55%)	37 (37%)	8 (8%)
	M±SD		46.4±16.13	
	p*0.002			
Frequency of moral distress	ICU	17 (17%)	66 (66%)	17 (17%)
	CCU	36 (36%)	53 (53%)	11 (11%)
	Haemodialysis	54 (54%)	37 (37%)	9 (9%)
	M±SD		47.4±14.12	
	p*0.001			
Perceived self-efficacy		Low (scores 0-16)	Moderate (scores 17-33)	High (scores 34-50)
	ICU	-----	71 (%71)	29 (29%)
	CCU	-----	80 (%80)	20 (20%)
	Haemodialysis	-----	67 (%67)	33 (33%)
	M±SD		28.6±3.51	
p*0.003				

[Table/Fig-2]: Frequency distribution of moral distress and level of perceived self-efficacy in nurses according to their units.

*chi-square test

frequency of moral distress and self-efficacy ($p = 0.03$ and $r = -0.14$). In this way, an increase in intensity and frequency of moral distress decreases the level of perceived self-efficacy in nurses [Table/Fig-3].

Self-efficacy	Moral distress	Pearson's correlation	p-value
Frequency of moral distress		-0.14	0.03
Intensity of moral distress		-0.19	0.03

[Table/Fig-3]: Correlation of moral distress and perceived self-efficacy in nurses.

DISCUSSION

The results of this study showed that the Intensity of moral distress and Frequency of moral distress of nurses in educational-medical centres of critical care units of the selected hospitals affiliated to Tehran University of Medical Sciences were 46.4 ± 16.13 and

47.4±14.12 which is compatible with the results of the study of Ebrahimi H et al., [20]. The study of Corley MC et al., reported the level of moral distress of nurses working in ICU as moderate-to-high [21]. Also, the study of Elpern EH et al., reported the level of moral distress in Medical Intensive Care Unit (MICU) as 3.66 out of 7 [22]. Another study by Maiden J et al., estimated the average distress of nurses in ICU as 3.89 out of 7 [23] which is compatible with the results of the present study.

Norman LD et al., in a study reported that the level of moral distress of nurses as high and the relationship between moral distress and quitting the job as positive [24]. Cummings CL, also reported the relationship between moral distress and tendency to quit the job as positive [25]. According to Ebrahimi H et al., the major sources of job stress for nurses, especially ICU nurses, is overwork, job difficulty, conflict with coworkers and authorities, insufficiency of staff and resources, emotional demands of patients and their families and facing with death and loss of patients. The findings of the present study are nearly in the same line with the above results [26]. Papathanassoglou ED et al., reported the moral distress of nurses of ICUs as moderate (73/67±39/19) [27]. The results of the study of Maiden in United States of America showed that the average moral distress of nurses working in ICUs was 3.89 out of 7 [23]. The results of the previous study showed that the average intensity and frequency of moral distress of nurses were in moderate range, which was in agreement with the present study. As there is an increase in intensity and frequency of moral distress there is decrease in the level of perceived self-efficacy of nurses. Contrary to the result of this study Hosseini M and Azimzadeh E, rated the self-efficacy score of nurses in Critical Care Units, emergency Wards and surgical wards of the Naft Hospital between 19 and 29 (29.82±4.66). According to the results of his study, 83.7% of the nurses in the study had a high average self-efficacy score (score 25), and only 16.3% had a self-efficacy score less than the average [28], which contradicted the results of the study. This study can be used to differentiate the facilities available in educational hospitals in Tehran and Naft Hospital, as well as because of the differences in the tools used, because the General Self-Efficacy Questionnaire (GSEQ) was used in that study, but Riggs et al., 'S self-efficacy questionnaire was used in present study. It was used to perceive individual self-efficacy in the field of education in addition, only Critical Care Units (ICU, CCU, and dialysis) has been studied in present study, while in the study conducted by Hosseini M and Azimzadeh E, in addition to Critical care units, the surgery wards and the emergency wards were also considered [28].

In this study, a negative significant relationship was observed between moral distress and self-efficiency of nurses. The results of the study of Leggett JM et al., also showed that teaching self-efficiency skills for 60 minutes in a day for a month significantly decreased the moral distress of nurses working in burn intensive care units [29].

LIMITATION

This study was conducted in small population of nurse's critical care unit and there is need to be known about the Moral Distress and its effects on self-efficacy of the all nurses working in hospitals affiliated to Tehran University of Medical Sciences.

CONCLUSION

The present study showed that there is a significant negative relationship between moral distress and the level of perceived self-efficacy. The complexity of the work done by ICU nurses and also their daily facing with moral distress, it is recommended that healthcare system should employ strategies for reducing and controlling moral distress in nurses to prevent occurrence of undesired negative consequences like decreased level of self-efficacy in them.

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REFERENCES

- [1] Morley G, Ives J, Bradbury-Jones C, Irvine F. What is 'moral distress'? A narrative synthesis of the literature. *Nursing Ethics*. 2019;26(3):646-62.
- [2] Brenninkmeijer V, Lagerveld SE, Blonk RW, Schaufeli WB, Wijngaards-de Meij LD. Predicting the effectiveness of work-focused CBT for common mental disorders: The influence of baseline self-efficacy, depression and anxiety. *Journal of Occupational Rehabilitation*. 2019;29(1):31-41.
- [3] Bandura A. Recycling misconceptions of perceived self-efficacy. *Cognitive therapy and research*. 1984;8(3):231-55.
- [4] Chiafery MC, Hopkins P, Norton SA, Shaw MH. Nursing ethics huddles to decrease moral distress among nurses in the intensive care unit. *The Journal of Clinical Ethics*. 2018;29(3):217-26.
- [5] Browning ED, Cruz JS. Reflective debriefing: a social work intervention addressing moral distress among ICU nurses. *Journal of Social Work in End-of-Life & Palliative Care*. 2018;14(1):44-72.
- [6] 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. *American Journal of Critical Care*. 2017;26(4):e48-57.
- [7] Dodek PM, Norena M, Ayas N, Wong H. Moral distress is associated with general workplace distress in intensive care unit personnel. *Journal of Critical Care*. 2019;50:122-25.
- [8] Khan N, Jackson D, Stayt L, Walthall H. Factors influencing nurses' intentions to leave adult critical care settings. *Nursing in Critical Care*. 2019;24(1):24-32.
- [9] Jameton A, Jackson EM. Nuclear war and nursing ethics. What is the nurse's responsibility?. *Journal of Continuing Education in the Health Professions*. 1984;4(1):75-88.
- [10] Harorani M, Varvanifarahani P, Yazdanbakhsh SA, Pakniyat AG, Sadeghi H, Norozi M, et al. Evaluation of the vulnerable factors of occupational violence against practitioner medical personnel in the emergency units of the training hospitals of Arak City. *Medical Ethics Journal*. 2017;11(39):55-61.
- [11] Sahebi A, Mousavi SS, Jodaki K, Yousefi MS, Khademi F, Golitaleb M. Comparative study of the prevalence of metabolic syndrome in intensive care unit (ICU) nurses and administrative staff of Arak University of Medical Sciences in 2016. *International Journal of Advanced Biotechnology and Research*. 2017;8(3):2443-51.
- [12] Henrich NJ, Dodek PM, Alden L, Keenan SP, Reynolds S, Rodney P. Causes of moral distress in the intensive care unit: A qualitative study. *Journal of Critical Care*. 2016;35:57-62.
- [13] Johnson-Coyle L, Oppenorth D, Bellows M, Dhaliwal J, Richardson-Carr S, Bagshaw SM. Moral distress and burnout among cardiovascular surgery intensive care unit healthcare professionals: A prospective cross-sectional survey. *Canadian Journal of Critical Care Nursing*. 2016;27(4):27-36.
- [14] Rostami S, Esmaeili R, Jafari H, Cherati JY. Perception of futile care and caring behaviors of nurses in intensive care units. *Nursing Ethics*. 2019;26(1):248-55.
- [15] Borhani F, Mohammadi S, Roshanzadeh M. Moral distress and perception of futile care in intensive care nurses. *Journal of Medical Ethics and History of Medicine*. 2015;8:2.
- [16] Harorani M, Pakniyat AG, Jadidi A, Sadeghi H, Varvanifarahani P, Golitaleb M, et al. The Extent of maintaining the privacy of patients hospitalized in emergency departments of hospitals affiliated with Arak University of medical sciences; A cross-sectional study. *Iranian Journal of Emergency Medicine*. 2017;4(4):158-63.
- [17] Ohnishi K, Ohgushi Y, Nakano M, Fujii H, Tanaka H, Kitaoka K, et al. Moral distress experienced by psychiatric nurses in Japan. *Nursing Ethics*. 2010;17(6):726-40.
- [18] Golaghaie F, Momeni R, Jafarimanesh H, Golestanieraghi M, Golitaleb M, Rafiei F. Impact of stylet bend angle on the performance of orotracheal intubation by emergency response nurses: a randomized simulation study. *Eurasian Journal of Emergency Medicine*. 2018;17(2):45-49.
- [19] Riggs ML, Warka J, Babasa B, Betancourt R, Hooker S. Development and validation of self-efficacy and outcome expectancy scales for job-related applications. *Educational and psychological measurement*. 1994;54(3):793-802.
- [20] Ebrahimi H, Kazemi A, Asghari-Jafarabadi M, Azarm A. Moral distress in nurses working in educational hospitals of Northwest Medical Universities of Iran. *Iranian Journal of Medical Ethics and History of Medicine*. 2013;6(4):80-88.
- [21] Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a moral distress scale. *J Adv Nurs*. 2001;33(2):250-56.
- [22] Elpern EH, Covert B, Kleinpell R. Moral distress of staff nurses in a medical intensive care unit. *Am J Crit Care*. 2005;14(6):523-30.
- [23] Maiden J, Georges JM, Connelly CD. Moral distress, compassion fatigue, and perceptions about medication errors in certified critical care nurses. *Dimensions of Critical Care Nursing*. 2011;30(6):339-45.

- [24] Norman LD, Donelan K, Buerhaus PI, Willis G, Williams M, Ulrich B, et al. The older nurse in the workplace: Does age matter? *Nurs Econ*. 2005;23(6):282-89.
- [25] Cummings CL. The effect of moral distress on nursing retention in the acute care setting. http://www.stti.iupui.edu/pp07/congress10/cummings_c.pdf (accessed in 2012).
- [26] Ebrahimi H, Nikravesh M, Oskouie F, Ahmadi FA. Stress: Major reaction of nurses to the context of ethical decision making. *Razi Journal of Medical Sciences*. 2007;14(54):07-15.
- [27] Papatthanassoglou ED, Karanikola MN, Kalafati M, Giannakopoulou M, Lemonidou C, Albarran JW. Professional autonomy, collaboration with physicians, and moral distress among European intensive care nurses. *Am J Crit Care*. 2012;21(2):41-52.
- [28] Hosseini M, Azimzadeh E. Correlation between self-efficacy and nurses' conflict management strategies. *J of Health Pro Manag*. 2013;2(4):16-23.
- [29] Leggett JM, Wasson K, Sinacore JM, Gamelli RL. A pilot study examining moral distress in nurse working in one United States burn center. *J Burn Care Res*. 2013;34(5):521-28.

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