Original Article

The relationship between professional autonomy and moral distress in ICU nurses of Guilan University of Medical Sciences in 2017

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ABSTRACT

Background & Aim: Professional autonomy is a key component of decision-making and empowerment of the nurses. However, ICU nurses sometimes experience a degree of moral distress in their decision-making but the relationship of this distress with their autonomous performance in intensive care units is unclear. The aim of this study is determining the relationship between professional autonomy and moral distress of ICU nurses.

Methods & Materials: In this correlational cross-sectional study, 180 ICU nurses were selected by census method from educational hospitals of Guilan University of Medical Sciences in 2017. Research tools were Varjuss professional autonomy and Corely et al. moral distress questionnaires. Data were analyzed using SPSS software version 16.

Results: Most of the subjects were female (93.89%), full-time nurses (61.67%), with age mean and standard deviation of 35±5.97. Mean and standard deviation of professional autonomy and moral distress were 77.04±4 and 140.85±5.45, respectively. Moral distress of most nurses (55.6%) was moderate. There was a positive and significant correlation between professional autonomy and moral distress scores (p<0.001, r=0.33).

Conclusion: This study showed that by increasing the professional autonomy, the moral distress of ICU nurses increases as well. These results, by informing nursing mangers, remind the necessity of using some approaches for reducing the moral distress of nurses along with improving their professional autonomy.

Introduction

According to the available literature, professional autonomy has been defined as the capability of people in governing, self-direction, providing useful feedback and decision-making by assuming the responsibility of these decisions. Professional autonomy in nursing is an important element in the empowerment and professional competence of nurses (1). Autonomy in nursing has two aspects i.e. clinical professional autonomy (autonomy in care) and autonomy in organizational decisions.

It is a predisposing and important factor in job satisfaction and prevention of leave the job in nurses (2). According to the self-determination theory of Deci and Ryan, the need for autonomy, competence, and communication is the foundation of all human needs. This theory considers autonomy in the workplace as an essential element of personnel welfare (3).

Although the role of autonomy is accepted by all as one of the essential elements in the professional development of nursing, there are still limitations in the nursing professional autonomy. These

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limitations, in addition to individual factors like basic knowledge and professional experiences of nurses, are associated with other organizational factors like overlapping medical and nursing activities, insufficient support of managers, defect in the organizational structure, inappropriate application of professional standards (4,5) and cultural and attitude barriers like weakness in systematic thinking, insufficient understanding of teamwork and widespread authorities of doctors in clinical processes (6).

On the other hand, as nurses work in highly stressful environments, the significant lack of control and weakness in the professional autonomy in these environments could be damaging due to the problems occurred in the clinical decision-making process. This is more important in intensive care units (ICU) due to the complexity, acute and unexpected condition of patients, judgment challenges and ethical decision-making. As ICUs are known as stressful and challenging environments which have an effective role in creating job stresses for nurses (7, 8), ICU nurses often encounter ethical issues in the clinical situations that even by believing the proper ethical decisions, cannot implement their decisions due to the organizational constraints and other imposed factors. This condition is called moral distress.

According to the studies, moral distress is one of the most important challenges that ICU nurses face (9).

Dodek et al. believe that nurses suffer moral distress more than physicians in ICUs (10). Nurses face repeatedly damaging and sensitive situations which need careful clinical decision-making (11).

If nurses have more limited job authorities and professional autonomy in these situations with higher job stresses,

mental health problems occur, such as depression which is an important factor in willing to leave the job in nursing. (3). One of the thought-provoking points of moral distress in nurses is reducing self-esteem and as a result, losing the care potential that can lead to consequences like not paying attention to the needs of patients, increasing hospitalization duration, insufficient care and problems in the quality of the care provided for patients (12). Moral distress is known as a serious but forgotten problem in healthcare systems. The situations like insufficient communication between members of the healthcare team, patients and their families, moral conflicts during caring the dying patient, unimportant medical issues as well as the conflict between personal and professional values of nurses are all predisposing factors for moral distress in nurses (13).

In this regard, Papathanassoglou et al. argue that achieving professional autonomy is associated with reducing moral conflicts and improving care quality and its consequences in patients. They also showed that nurses who experience higher emotional and ethical fatigue, enjoy less professional autonomy (5).

In the study by White and Ilipoulu, the highest professional autonomy in ICU was related to the consultation with other nurses for changing the care program of critically ill patients and making decisions about how to monitor these patients, and the lowest professional autonomy was in protest to decisions of doctors for early discharge of patients from ICU before completing the instruction of patient and other nursing activities (2).

Certainly, the approaches which increase the authority and professional autonomy of nurses, including managers' support, training, interaction and positive

cooperation between nurses, doctors and other coworkers, job experience, creation of attractive workplaces and lower work burden are among the most important control methods and priorities in the development of autonomy and as a result, professionalism of nursing (14, 15).

Despite of the fact that professional autonomy of nurses is influenced by the environment and organizational culture governing the clinical environments (16), and the ethical stressors that lead to moral distress in ICU nurses could be different under the effect of organizational behaviors and diversity of clinical environments (12) ,few research is conducted about the professional autonomy and moral distress of ICU nurses in different countries which some of them have reported negative and significant relationship and some others, positive and significant relationship (17). Only one study in Iran has reported the significant relationship between professional autonomy and moral distress in Pediatric Intensive Care Units (PICU) nurses (18). Regarding what has been said and since there is no study in our country which deals with the relationship between professional autonomy and moral distress in ICUs nurses, this study was conducted to determine the relationship between professional autonomy and moral distress of ICU nurses in medical-educational hospitals of Guilan University of Medical Sciences.

Methods

This is a correlational cross-sectional study. The research population of the study was ICU nurses in educational hospitals of Guilan University of Medical Sciences. Samples were selected by census from 8 hospitals with general (2 hospitals), pediatrics, gynecology, ENT surgery,

neurology, burn, and heart surgery ICUs. The total number of participants was 200 and finally the questionnaires were completed by 180 volunteer nurses.

Inclusion criteria were having a bachelor degree or higher in nursing, and at least one year experience in ICU. Part-time nurses and those who were not intended to participate did not enter the study.

The research tool was three questionnaires. The first questionnaire was demographic and job characteristics including 12 items of age, gender, marital status, educational degree, hospital name, , experience, experience in ICU, employment status, work shift, ICU type, motivation and job satisfaction in ICU. The second questionnaire was Varjus et al. professional autonomy questionnaire (19) including 18 questions in three areas of knowledge-based autonomy, performance and personal values that all its items were based on 6-point Likert scale from strongly disagree (1) to strongly agree (6). The reliability of this questionnaire was confirmed with Cronbach alpha of 0.99 and ICC 0.88 in test-retest in 2 weeks interval in a pilot study with 30 subjects.

The third tool was Corely et al. moral distress questionnaire which has 18 items and its reliability determined by test-retest as 0.86 (4).In this questionnaire, items in moral distress frequency and its intensity were scored from none (0) to very high (4). The total score of moral distress was obtained by multiplying the scores of intensity and frequency such that each question can obtain 0-16 scores. The score range of questionnaire is 0-288 such that 0-96 shows the low level of moral distress, 97-192 shows moderate moral distress and 193-288 is the high moral distress. In the assessing moral distress questionnaire reliability,

internal consistency was confirmed with 0.85 Cronbach alpha and the stability of the questionnaire determined in two weeks with 0.9 ICC.

To gather data, the researcher referred to ICUs and obtained data with the census method. Sampling was done for 2 months (from May to June 2017).

For sampling, the researcher prepared a list of ICU nurses in the hospitals and after distributing questionnaires and with repeated visits of all wards in different shifts, questionnaires were gathered. Totally, 200 questionnaires were distributed. 14 questionnaires were not returned by the respondents and 6 questionnaires were removed due to incomplete data. Statistical analysis was done with SPSS version 16. After determining the normality of variables' distribution with Kolmogorov- Smirnov test, descriptive statistics including frequency, percent, mean and standard deviation were used to study the demographic and job data.

Chi-square test was also used to study the relationship between demographic variables with main variables. Spearman coefficient was used to measure the relationship of main variables. The significance level of study was $p < 0.05$. This study confirmed under code number IR.GUMS.REC.1396.92 by the ethics committee of Guilan University of Medical Sciences. Before beginning the study, some explanations were given about the objective, voluntary nature of research and confidentiality of data to participants. Informed written consent of participants was taken.

Results

%93.89 of samples were female and %62.22 were married. % 61.67 were full-time nurses and %92.78 has a nursing bachelor degree. Mean and standard deviation of participants age was 34.75±5.79 (Table 1).

Table 1. Distribution of demographic and job characteristics of ICU nurses of teaching hospitals in Guilan University of Medical Sciences (N = 180)

Job variables		N (%)	Demographic variables		Mean ±SD N (%)
Type of ICU	General	49(27.22)	**Age**		**34.75 ±5.79**
	NICU	6(3.23)	**Experience(year)**		**10.85±5.09**
	PICU	28(15.57)	**Experience in ICU(year)**		**7.45±3.91**
	Neurology	36(20)	**Gender**	Female	**169(93.89)**
	Gynecology	3(1.67)		Male	**11(6.11)**
	Trauma	26(14.44)	**Marital status**	Single	**68(37.78)**
	ENT	8(4.44)		Married	**112(62.22)**
	Cardiology	9(5)	**Education al degree**	Bachelor	**167(97.78)**
	Burn	15(8.33)		Master	**13(7.22)**
Employment status	Permanent official	111(61.66)		PhD	**0(0)**
	Under direct contract	22(12.22)			
	Under indirect contract	29(16.11)			
	Bachelor mandatory service	18(10)			
Work shift	Day	26(20)			
	Evening	6(3.33)			
	Rotation	138(76.67)			
Motivation of work in ICU	Yes	108(60)			
	Somewhat	61(33.89)			
	No	11(6.11)			
Satisfaction of work in ICU	Yes	85(47.22)			
	Somewhat	87(48.34)			
	No	8(4.44)			

Mean and standard deviation of professional autonomy was 77.04±4. The highest mean among professional autonomy dimensions was related to performance-based autonomy (24.97±5.35). Mean and standard deviation of moral distress was 140.85±5.45. According to the findings, the moral distress of most nurses (%55.6) was moderate (Table 2). In studying the relationship between demographic variables and main variables of professional autonomy and moral distress, chi-square test showed a significant relationship between professional autonomy and job satisfaction in ICU ($p<0.001$) and job motivation for working in ICU ($p<0.001$). Pearson correlation coefficient showed the positive and significant relationship between moral distress, the total score of professional autonomy and its dimensions (Table 3).

Table2. The mean scores of professional autonomy and moral distress in ICU nurses of teaching hospitals in Guilan University of Medical Sciences

Variables	Dimensions	Mean ±SD	Total Mean±SD
Professional autonomy	knowledge-based autonomy	23.56±5	77.04±4
	Action-based autonomy	24.97±5.35	
	Value- based autonomy	22.96±6.63	
Moral distress	–	-	140.85±5.45

Table 3. The relationship of professional autonomy and its dimensions to moral distress in ICU nurses

Variables		Moral distress	
		P value	r *
Professional autonomy	knowledge-based autonomy	<0.001	0.232
	Action-based autonomy	<0.001	0.224
	Value- based autonomy	<0.01	0.175
	Total score of professional autonomy	<0.001	0.256

* Pearson Correlation Coefficient , P <0.05

Discussion

This study aimed to determine the relationship between professional autonomy and moral distress in ICU nurses.

The findings show that the mean professional autonomy score of ICU nurses was high and the highest professional autonomy score was in dimension of performance-based autonomy. Consistent with the findings of this study, Karanikola et.al (2014) study conducted in Italy reported high professional autonomy of ICU nurses (7). However, in Sarkoohi Jebalarzi et.al (2017) study in Iran on PICU nurses, and in another study in Europe, professional autonomy of ICU nurses was low (5, 18). In the current study, sampling was done typically of adults ICU which is another reason for different results. Other reasons can be the difference in the professional competence and knowledge of participants as well as organizational culture, managerial policies in types of hospitals and different views of doctors about delegating authority to nurses in different ICUs. Other studies that confirmed this result showed that increasing the knowledge and skill and consequently, the development of critical

thinking and organizational support, including job stability in nurses, enhances their autonomous function and is an important factor for their professional autonomy (20-22).

Findings of this study indicate the moderate level of moral distress in ICU nurses. Atashzadeh Shoorideh et al. studied the relationship between moral distress and job burnout in ICU patients and reported their moral distress as moderate (9). The results of other similar studies were consistent with this study (23-26). However, there are contradictory findings in this regard such that Dodek et al. reported moral distress of ICU nurses as high (10) and Gonzalez reported it low (27). It seems that the most important cause of this contradiction in all types of the studies is the confounding environmental factors which may lead to different levels of moral distress in nurses under the influence of managerial and organizational policies.

Studies conducted about the moral distress in nurses stated three major causes for moral distress that the most important of them is the internal and organizational factors like lack of professional autonomy, helplessness feeling among nurses, contradiction between the organization expectations and the nurses' values and beliefs, and weakness of organization in preserving ethical atmosphere (28). Azarm et al. reported the nursing shortage and workload increases as well as limited organizational facilities as the major causes of moral distress among nurses (29). The professional communication between nurse and doctor is another important factor in the difference in moral distress in different environments (30). Other studies introduced the effect of financial problems and saving in the necessary costs, and ambiguity in defining and reporting moral distress as the

causes of difference of this phenomenon in different environments (10, 21, 27). Findings of this study indicated the positive and significant relationship between moral distress with total professional autonomy score and all three dimensions of autonomy including knowledge, action and personal values. This means that more autonomous nurses had experienced a higher level of moral distress and vice-versa.

But despite the significance of this relationship, its intensity was weak. This is consistent with the results of Karanikola et al. study (2014) in Italy (7). Consistent with the finding of this study, three similar studies also showed a significant and positive relationship between professional autonomy and moral distress (17, 18, 31). Social cognitive theory of morality of Bandura can be used to interpret this finding that argues when people experience more moral conflicts, they achieve higher autonomy due to higher moral courage (28). Despite this fact, other studies showed the significant but negative relationship between professional autonomy and moral distress in ICU nurses (5, 7). It seems that the cause of this difference is in the organizational supports and managerial policies governing different clinical environments.

The current study reported the significant relationship between the professional autonomy of nurses with their job satisfaction and motivation for working in ICU wards. This means that nurses with higher professional autonomy, were more inclined to continue their work in ICU and had higher job satisfaction and vice-versa. Other studies have also reported the association between professional autonomy and job satisfaction of nurses (2, 32). In this regard, other studies also showed the role of professional autonomy in job satisfaction of nurses (33, 34, 35).

It should be admitted that although the exposure of nurses to stressful and unexpected clinical environments often leads to their dissatisfaction but the presence of professional autonomy can increase their job satisfaction through valuation and mutual communication along with the respect of managers and clinical team members that all of them increases the self-esteem of nurses. The limitation of this study is self-reported questionnaire and impossibility of random sampling due to the limited number of nurses in this research which lead to the use of the census method. Since the research site is teaching hospitals of the university, the results of this study may not be generalized to non-teaching hospitals.

The results of this study showed that there is a positive and significant relationship between professional autonomy and moral distress of ICU nurses. Concerning that the development of professional autonomy is always an essential approach to improve the nursing profession, the results of this study can increase the awareness of nursing managers and healthcare policy-makers to try to promote the professional autonomy of nurses by considering the increase in their moral stresses and provide approaches to reduce the adverse effects of these challenges and preserve the physical and mental health of the nurses and their satisfaction which is an important issue in improving the quality of care. As higher professional autonomy was associated with higher satisfaction and motivation in ICU nurses, the organizational managers can satisfy ICU nurses in their stressful wards by using approaches to improve professional autonomy.

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Conflicts of Interest

Authors have declared that no competing interests exist.

References

1. Skår R. The meaning of autonomy in nursing practice. Journal of clinical nursing. 2010 Aug;19(15-16):2226-34.
2. Iliopoulou KK, While AE. Professional autonomy and job satisfaction: survey of critical care nurses in mainland Greece. Journal of advanced nursing. 2010 Nov;66(11):2520-31.
3. Deci EL, Ryan R M. Self-Determination Theory: A Macrotheory of Human Motivation, Development, and Health. Canadian Psychology 2008;49(3):182-5.
4. Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a moral distress scale. Journal of advanced nursing. 2001 Jan 26;33(2):250-6.
5. Papathanassoglou ED, Karanikola MN, Kalafati M, Giannakopoulou M, Lemonidou C, Albarran JW. Professional autonomy, collaboration with physicians, and moral distress among European intensive care nurses. American Journal of Critical Care. 2012 Mar 1;21(2):e41-52.
6. Vafadar Z, Vanaki Z, Ebadi A. Barriers to implementation of team care and interprofessional education: The viewpoints of educational managers of iranian health system. Iranian Journal of Medical Education. 2015 Feb 15;14(11):943-56.
7. Karanikola MN, Albarran JW, Drigo E, Giannakopoulou M, Kalafati M, Mpouzika M, Tsiaousis GZ, Papathanassoglou ED. Moral distress, autonomy and nurse–physician collaboration among intensive care unit nurses

in Italy. Journal of nursing management. 2014 May;22(4):472-84.

8. Yeganeh MR, Gholami S, Tabari R, Atrkar Roshan Z, Rimaz S. The effect of controlled sedation based on the Richmond scale on the duration of mechanical ventilation and the changes of blood pressure in patients following coronary artery bypass graft surgery: A randomized clinical trial. Journal of hayat. 2018 Jan 15;23(4):372-86.

9. Shoorideh FA, Ashktorab T, Yaghmaei F, Alavi Majd H. Relationship between ICU nurses' moral distress with burnout and anticipated turnover. Nursing ethics. 2015 Feb;22(1):64-76.

10. Dodek PM, Wong H, Norena M, Ayas N, Reynolds SC, Keenan SP, Hamric A, Rodney P, Stewart M, Alden L. Moral distress in intensive care unit professionals is associated with profession, age, and years of experience. Journal of critical care. 2016 Feb 1;31(1):178-82.

11. Mealer ML, Shelton A, Berg B, Rothbaum B, Moss M. Increased prevalence of post-traumatic stress disorder symptoms in critical care nurses. American Journal of Respiratory and Critical Care Medicine. 2007 Apr 1;175(7):693-7.

12. Iranmanesh S, Rezaei HH, Rafiei H, Eslami H. Critical care nurses' moral distress in South-East of Iran. Asian Journal of Nursing Education and Research. 2013 Jul 1;3(3):1.

13. Heck C. A. Study of Moral Distress in Novice and Experienced Nurses. United States: Villanova University; 2016[thesis].

14. Maylone MM, Ranieri L, Griffin MT, McNulty R, Fitzpatrick JJ. Collaboration and autonomy: Perceptions among nurse practitioners. Journal of the American Academy of Nurse Practitioners. 2011 Jan;23(1):51-7.

15. Varjus SL, Leino-Kilpi H, Suominen T. Professional autonomy of nurses in hospital settings–a review of the literature. Scandinavian Journal of Caring Sciences. 2011 Mar;25(1):201-7.

16. Papathanassoglou ED, Tseroni M, Karydaki A, Vazaiou G, Kassikou J, Lavdaniti M. Practice and clinical decision-making autonomy among Hellenic critical care nurses. Journal of nursing management. 2005 Mar 1;13(2):154-64.

17. Ohnishi K, Ohgushi Y, Nakano M, Fujii H, Tanaka H, Kitaoka K, Nakahara J, Narita Y. Moral distress experienced by psychiatric nurses in Japan. Nursing Ethics. 2010 Nov;17(6):726-40.

18. 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 Sciences. 2017 Apr 10;4(2):117-21.

19. Varjus SL, Suominen T, Leino-Kilpi H. Autonomy among intensive care nurses in Finland. Intensive and Critical Care Nursing. 2003 Feb 1;19(1):31-40.

20. Motamed-Jahromi M, Jalali T, Eshghi F, Zaher H, Dehghani SL. Evaluation of professional autonomy and the association with individual factors among nurses in the Southeast of Iran. Journal of Nursing and Midwifery Sciences. 2015 Oct 1;2(4):37-42.

21. Gaudine A, LeFort SM, Lamb M, Thorne L. Ethical conflicts with hospitals: The perspective of nurses and physicians. Nursing Ethics. 2011 Nov;18(6):756-66.

22. Motamed-Jahromi M, Jalali T, Eshghi F, Zaher H, Dehghani SL. Evaluation of professional autonomy and the association with individual factors among nurses in the Southeast of Iran. Journal of Nursing and Midwifery Sciences. 2015 Oct 1;2(4):37-42.

23. Joolaee S, Jalili H, Rafiee F, Haggani H. The relationship between nurses' perception of moral distress and ethical environment in Tehran University of Medical Sciences. Iranian Journal of Medical Ethics and History of Medicine. 2011 Jul 15;4(4):56-66.

24. Lawrence LA. Work engagement, moral distress, education level, and critical reflective practice in intensive care nurses. InNursing forum 2011 Oct (Vol. 46, No. 4, pp. 256-268). Malden, USA: Blackwell Publishing Inc.

25. Rabiee S, Khatiban M, Cheraghi MA. Nurses distress in intensive care unit: a survey in teaching hospitals. Iranian Journal of Medical Ethics and History of Medicine. 2012 Apr 15;5(2):58-69.

26. Abbaszadeh A, Nakhaei N, Borhani F, Roshanzadeh M. Moral distress in clinical function of nurses: A descriptive-periodic Study. J Morl Hist Med. 2012;6(21):113-30.

27. Gonzalez J. Exploring the Presence of Moral Distress in Critical Care Nurses.[Master's Theses]. [Island]:School of Nursing Rhode Island College:2016.184p.

28. Rathert C, May DR, Chung HS. Nurse moral distress: A survey identifying predictors and potential interventions. International journal of nursing studies. 2016 Jan 1;53:39-49.

29. Azarm A, Hasanlo M, Hojt Ansari M, Mohammadi F, Ebrahimi H, Asghari Jafarabadi M. Moral distress and the nursing care quality: A correlational study in teaching hospitals. Health, Spirituality and Medical Ethics. 2017 Aug 15;4(3):38-47.

30. Burston AS, Tuckett AG. Moral distress in nursing: contributing factors, outcomes and interventions. Nursing ethics. 2013 May;20(3):312-24.

31. Abdolmaleki M, Lakdizaji S, Ghahramanian A, AllahBakhshian A, Behshid M. Relationship between autonomy and moral distress in emergency nurses. Indian journal of Medical Ethics. 2018 Oct 6:1-5.

32. AllahBakhshian M, Alimohammadi N, Taleghani F, Nik AY, Abbasi S, Gholizadeh L. Barriers to intensive care unit nurses' autonomy in Iran: A qualitative study. Nursing Outlook. 2017 Jul 1;65(4):392-9.

33. Labrague LJ, McEnroe-Petitte DM, Tsaras K. Predictors and outcomes of nurse professional autonomy: A cross-sectional study. International journal of nursing practice. 2019 Feb;25(1):e12711.

34. Amini K, Negarandeh R, Ramezani-Badr F, Moosaeifard M, Fallah R. Nurses' autonomy level in teaching hospitals and its relationship with the underlying factors. International journal of nursing practice. 2015 Feb;21(1):52-9.

35. Mirkamali SM, Javanak Liavali M, Yeganeh MR. Correlation between Organizational Culture with Clinical Governance in Public Hospitals in Rasht. Hayat, Journal of School of Nursing and Midwifery, Tehran University of Medical Sciences. 2014 Mar 1;20(1).