**The relationship between personality traits and moral distress among nurses**

**Short title: personality traits and moral distress among nurses**

**Authors:** Zahra Molazem(PhD)1, Nahid Tavakol(MSc)2, sareh keshavarzi(phD)3

Arash Mani(phD)4

**Affiliation:** 1Associate professor, Community Based Nursing & Midwifery Research Center, Faculty of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran email: [molazem@sums.ac.ir](mailto:molazem@sums.ac.ir).

2 corresponding authors, Shiraz University of Medical Sciences, Shiraz, Iran, email: [tavakkol2769@yahoo.com](mailto:tavakkol2769@yahoo.com), Phone number: (+98)9336930385, (+98) 7116474254-6 Fax number: (+98) 711-6474252, Post box: 71345-1359, postal code: 71936-13119

3 Assistant professor of Biostatistics Department of Epidemiology Faculty of Health & Nutrition Shiraz University of Medical Sciences, Shiraz, Iran. Phone: +98(711)7251001-6 , E-mail: [biostat.keshavarzi@gmail.com](mailto:biostat.keshavarzi@gmail.com) , [skeshavarz@sums.ac.ir](mailto:skeshavarz@sums.ac.ir)

4Asisstant professor, Department of psychiatry, Shiraz University of Medical Sciences, Shiraz, Iran. email: [mania@sums.ac.ir](mailto:mania@sums.ac.ir)

**Conflict of interest**

The authors declare that there is no conflict of interest.

**Funding**

The present article was financially supported by Psychiatry and Behavioral Sciences Research center of Shiraz University of Medical Sciences grants No 93-7482.

**Acknowledgments**  
The researchers need to appreciate all nurses who participated in this study and thank of Psychiatry and Behavioral Sciences Research center of Shiraz University of Medical Sciences for its support.

Word Counts of Text with abstract: 2920 words

Number of Pages: 13

Number of Tables: 3

Number of Figures: 0

**The relationship between personality traits and moral distress among nurses**

**Abstract**

The purpose of this study was to investigate the relationship between personality traits and moral distress among the nurses working in the Coronary Care Unit in Shiraz, Iran. In this cross-sectional and descriptive study, 60 nurses participated and two questionnaires of Moral Distress Scale and NEO Five Factor Inventory were used. Data were analyzed using SPSS software and descriptive and inferential statistics. The results indicated moderate to high levels of moral distress among the nurses in the CCU. No significant relationship was observed between the demographic variables and the mean of moral distress and personality traits. Considering the high incidence of moral distress in nurses, besides examining the their personality traits in larger sample sizes and in different parts of the country, examining the environmental, organizational, and management factors that may contribute in creating ethical distress is recommended.

**Keywords**

Coronary Care Unit, Ethic, moral distress, nurses, personality traits

**Introduction**

Moral distress is a kind of ethical phenomenon in which nurses are engaged in the daily care of patients (1). Nurses always have to make moral choices in their care, and ethics plays a major role in this profession (2). Moral actions is a critical aspect of nursing care, and the development of moral competence is essential in nursing for current time and future (3). There is a probability of moral distress in an individual that makes him/her commit an act contrary to his/her moral beliefs (4). Moral distress is one of the major aspects of moral conflict, which has damaging effects on health care organizations through the impact on organizational culture, quality and success in care (5, 6). Today, due to more complex nursing care and increased expectations, nurses encounter with higher moral distress. Numerous studies have emphasized the intensity and frequency of this phenomenon in critical care units than other wards due to the special conditions of the patients (6,7,8,9). Few studies have been conducted on moral distress among nurses working in CCU. Iranian nurses in CCU, internal and psychiatry wards, experience more moral distress (2). The experience is directly related to the incidence of occupational burnout, and inversely correlated with psychiatric hardiness. In a study conducted in Iran, showed that a lot of nurses feel moral distress due to lack of nursing support, disrespect for the rights of the patient, lack of professional and functional competences in physicians and carrying out unnecessary tests for patients, thus critical care nurses experience much more moral distress more than other wards (9). Since moral distress is a multi-cultural phenomenon, which comes in different levels of health care system (10), it seems necessary to investigate this phenomenon in Iranian nurses too.

**Background**

***Moral Distress***

Professor Jameton for the first time in 1984; defined moral distress as the painful feelings or lack of balance and mental relaxation. This phenomenon occurs when the nurse is unable to convert his/her choices or moral norms into moral acts (1). Moral distress as psychological imbalance and state of negative emotion such that moral decision does not lead to moral actions(11).

Moral distress is either mental or emotional pain and discomfort, in which while people are aware about the moral issues; they try to make moral judgment about an appropriate moral action. However in practice, they commit moral wrong doing due to real or mental limitations (2).

Many qualitative and quantitative studies have so far been conducted on the concept of moral distress, consequences and strategies for overcoming it. Researchers investigated the moral distress levels and its prevalence in nurses and reported moderate to high levels of moral distress(11,12,13). Corley designed moral distress scale in 2000 using the concepts suggested by Jameton and the conflict role theory proposed by House and Rizzo (14).

Wasted nursing services for the patient, prolonging patient’s suffering, performance out of clinicians’ regulations, incompetency of colleagues, inability of nurses to understand the physicians and lack of nursing knowledge in patients’ care, lack of executive supports including salary, working hour, benefits, and inappropriate working conditions such as improper management are powerful sources of distress(2,15).

In addition, the severity of illness of patients, the ratio of patients to nurses and ability of nurses to provide safe care for patient are involved in creating moral distress among nurses (15).

Failure in providing effective and proper physical care, reduction of capacity in providing care for the patients, avoiding eye contact with the patient, and incidence of problems such as lack of sleep, overeating, poor social relationships, reduced cooperation, defensive acts, loss of confidence, and loss of job satisfaction have been pointed out as the symptoms of moral distress in nurses(6,16,17). Researchers have pointed out that moral distress leads to a shift of working unit and even to leave the nursing profession (13,18,19).

Moral distress has an impact on the quality of patient care. Thus, the quality of care provided by the nurses decreases due to moral distress, which ultimately creates health secondary problems in patients (5,19,20).

***Personality Traits***

Moral distress is a multilateral phenomenon and several factors can deteriorate it. Moral distress has a direct relationship with its incidence. One of the most important factors in nursing profession addressed in several studies is occupational stress (1,6,21,22).

Understanding the patterns of stressors and dealing with them are different in different individuals. The nurses’ characteristics play a major role in understanding stress and the experience of moral distress in nurses (21,23).

Personality is a set of psychological traits that individuals are classified according to them. These traits have lasting influences on professional behavior, and the specific behaviors of individuals can be determined in various occupational positions based on them (24).

McCrae and Costa describe personality as big five including neuroticism, extraversion, openness experience, agreeableness, and consciousness. Neuroticism refers to tendency to experience anxiety, stress, hostility, shyness, irrational thoughts, depression, and low self-esteem. Extraversion refers to desire to be positive, decisiveness, mobile, kindness, and sociability. Openness to experience is described as tendency to curiosity, wisdom, flexibility, innovation and intellectuality. Agreeableness is considered as the desire for forgiveness, kindness, generosity, trust, accountability, compassion, obedience, dedication, and loyalty. Finally, conscientiousness is regarded as the tendency to be organized, efficient, reliable, trustworthy, logic-oriented and reflective (25,26).

The type and severity of reaction against stress does not always have a direct relationship with the severity of the stressor factors; rather it is primarily related to how to understand the event and the degree of danger and threat. A specific stress can create different consequences in different people (24), and specification of personality plays a significant role in the process of dealing with moral distress ([27](#_ENREF_15)). It is probable that personality traits of nurses may help the prediction of their moral distress, and mitigate the negative effects of this phenomenon. Since no study seems to have detected this relationship, here, we attempted to examine such relationship.

**The study**

***Aims***

The purpose of this study is to examine the degree of nurses' moral distress and determine the relationship between personality traits and moral distress among the nurses in CCU ward in Shiraz, Iran.

***Method***

In this cross-sectional and descriptive study, the Moral Distress Scale (MDS) and NEO Five Factor Inventory (NEO-FFI) questionnaires were used to achieve the research objectives.

***Participants***

Totally, 60 nurses participated in the study from the Heart Center of Shiraz as the largest public heart hospital. The participants announced their readiness to participate in the study in a public call. Inclusion criteria were having at least a bachelor's degree in nursing, a minimum of 6 months of working experience in coronary CCU, and willingness to participate in the study.

***Instruments***

In this study, the moral distress questionnaire of Corley (MDS) was used. Its validity and reliability have been evaluated in nurses' community (9). The questionnaire has 30 questions in a 7 points likert scale. Numbers 1 and 7 indicate the minimum and maximum stress, respectively. The NEO- FFI questionnaire, prepared by McCrae and Costa in five major factors, provides a great possibility of adult personality traits. The test has been normalized by Haghshenas on 502 Iranian people and its reliability and validity have been determined (25). In addition, the researcher-made questionnaire was considered for this study, which contained demographic information including age, gender, work experience, average weekly work hours, and marital status.

***Process***

After reaching the minimum number of participants, the NEO-FFI and MDS questionnaires were completed by the participants from April 2012 to June 2012.

***Ethical considerations***

Permission to conduct the research was taken from the Ethics Committee of Shiraz University of Medical Sciences (CT-P-9372-7482) as well as the hospital authorities. Prior to completing the questionnaires, the participants were asked to fill out consent form anonymously to voluntarily participate in the study. They were informed about the aim of the study, the confidentiality of their information, and that they could withdraw from the study whenever they wanted to.

***Data analysis***

Collected data were analyzed using SPSS software (version 15). To calculate and compare the mean scores of moral distress and personality traits, the repeated measures analysis ANOVA (Analysis Of Variance) was used. Chi-square test was used for qualitative variables, and independent sample t-test, ANOVA test and Pearson test were used for quantitative variables.

**Results**

The total of 60 nurses participated in the study, 58 females and 2 males. 30 were married and 30 others were single. Their mean age was 29.72 years. The mean score of work experience was 5.6 ± 3.75 years and the working hour average was 44.89 ± 10.65. There was no significant relationship between demographic variables with moral distress and personality traits (Table 1).

The range of moral distress was 7.10- 2.69 and the mean of moral distress of the participants was 4.5± 0.88 (Table 2).

The range of scores was 10-41 for the personality trait of neuroticism, 19-38 for the personality trait of extraversion, 16-32 for the personality trait of openness to experience, 22-44 for the personality trait of agreeableness, and 25-39 for the personality trait of conscientiousness. Reviewing the mean of moral distress in people with the lowest and highest scores in personality traits, no significant relationship was observed based on the Pearson's correlation test (Table 3).

**Discussion**

The results indicated moderate to high levels of moral distress among the nurses in CCU in Shiraz Heart Center and the finding of numerous studies confirm this finding; some studies have reported the moral distress as moderate (23,28,29), and some others reported it as high (30,31). Accordingly, we can conclude that the level of moral distress in nurses is moderate to high, which deserves more attention.

In this study, no relationship was observed between the demographic variables and the level of moral distress. Ebrahimi et al. conducted a study on 418 nurses in North West of Iran in 2013 and came to the conclusion that there is no significant relationship between the mean of moral distress and the variables of gender, age and experience (31). This shows the importance of teaching moral distress to all health care providers, regardless of their age, gender and experience. Also it can be inferred that the multidimensional phenomenon of moral distress and different environmental, occupational, organizational, managerial and personality factors play a role in its incidence; thus, new investigation can be conducted based on further review of these factors.

However there are other some studies that confirm the existence of a relationship between moral distress and demographic variables32 (8,19,32). Corley et al.and Jolaee et al. found that there is a negative correlation between age and moral distress; these correlations may be caused by the accumulation of experiences in dealing with the moral distress over the time (14, 29). Abbasszadeh found a positive relationship between moral distress and nursing work experience (33). Positive relation between moral distress and work experience among nurses may be caused by their increased moral sensitivity during their services; however, this compatibility can be achieved after years of failing and frequent and bitter experiences of moral distress and perhaps a large number of nurses fail to achieve the compatibility in which our study confirms.

Due to the lack of ethical issues in nursing curriculum in Iran, inclusion of professional ethics issues in the educational content of nursing students and involving the nurses working in hospitals in these discussions are recommended as other studies have emphasized the issue of moral distress for the nurses(2,34).

The results of this study showed no significant relationship between personality traits and moral distress, but other studies have shown that factors involved in causing moral distress are associated with personality traits. For example, the level of occupational burnout in nurses reported in various studies (34,29) demonstrates a significant positive relationship with increased moral distress. In other word, it is one of the determinants and consequences of moral distress and varies in different personality traits of nurses.

Meltzer and Hukabay also speak of personal factors as the main components of intolerance, inflexibility, and lack of assertiveness in dealing with others are all related to occupational burnout (32).

In addition, psychological hardiness as a personal trait in moderating the relationship between stress and physical and mental diseases has a negative relationship with moral distress (2).

Ebrahimi Nikravesh et al. considers the nurses’ personality as the key factor in the experience of stress and moral distress so that the nurses who possess conscious performance and sacrifice to the patients and are placed in an imposed overload or have multiple and long shifts may suffer more moral distress and occupational stress (21).

Nurses’ experience of moral distress is not only wide spread, but also their responses to moral distress are diverse. Those nurses, who use problem solving skills, are more able to deal with moral distress (34); however the nurses who use avoidant coping styles such as distraction and avoidant situations which causing moral distress experience physical complications (35).

In 2010, Burgess examined the personality traits and levels of environmental stress among 46 ICU nurses in Northwest England. He reached the conclusion that those who obtained high score on openness personality traits and extroversion had less stress in taking care of critically ill patients and encountering the patient s’ families. In addition, those with high scores on the personality trait of conscientiousness have experienced less environmental stress; in fact, the personality traits of openness, extraversion and conscientiousness are effective in understanding and mitigating the environmental stressors (22).

Although our study did not show a significant relationship between moral distress and personality traits, as it can be observed from Table 3, the personality traits of openness, extraversion and conscientiousness have gained Pearson scored negatively in relation to moral distress, which is consistent with the results of Burgess Study. In fact, it can be concluded that these three personality traits are in compliance with the environmental stressors, and the less experienced nurses in moral distress are more successful than other nurses. The reason why Burgess has achieved a significant relationship between lower occupational stress and personality traits with lower sample size is probably due to different cultural contexts or the different research ward. Therefore, it is recommended to investigate this relationship in different wards and in different cultural contexts.

Borhani also conducted a study on 220 Iranian nurses and found a positive relationship between professional stress and moral distress. He believes that nurses’ personal traits can have a positive contribution in understanding and giving meaning to stress. The more people are flexible against stress, the less stress they experience (23). Borhani has used the Corley’s moral distress questionnaire with 21 questions, which is shorter than the measuring tool of our study and some questions have been deleted. Also a larger sample size was used in her study; thus, it is recommended to carry out similar studies with much larger sample sizes and in different wards. Regarding the results of this research, moral distress, occupational stress and burnout can be considered as three sides of a triangle, which are linked together and form a defective cycle. These factors will cause and exacerbate each other in the nursing environment. Personality traits of openness, conscientiousness and extroversion can be effective in reducing the environmental stresses, occupational burnout and moral distress, which we recommend as a hypothesis for future studies.

Ebrahimi investigating moral distress among 418 nurses in three big cities in the west of Iran underlines that the shortage of nurses and nurses' inability to deal with moral issues play a significant role in creating moral distress in Iranian nurses (31). Molazem has points out the shortage of nurses as one of the main reasons of moral distress (37). Also Abbasszadeh examining this phenomenon among 140 nurses reached the conclusion that organizational factors such as lack of support from managers, job dissatisfaction, and lack of collaboration between physicians and nurses are powerful sources of moral distress (33).

**Conclusion**

This study showed that the incidence of moral distress among nurses in coronary CCU is in moderate to high levels. Considering the negative impact of moral distress on nurses and reduction of health care quality in patients, it seems essential to pay due attention to this phenomenon, hold training classes, establish ethical committees in hospitals and include professional ethics in the nursing curriculum of nursing students. Based on the current study results,it is recommended to investigate the environmental, organizational and managerial factors, which play a significant role in creating moral distress, and also personality traits of nurses in big sample sizes in different wards and other parts of the country.

**Conflict of interest**

The authors declare that there is no conflict of interest.

**References**

1. Gallagher, A. Moral distress and moral courage in everyday nursing practice. OJIN: The Online Journal of Issues in Nursing 2010; 16.

2. Shakerinia I. Relationship between moral distress, psychological hardiness and occopational burnout in the nursing. Iranian J Med Ethics Hist Med 2010; 4: 56-69.

3. Schroeter, K., Ethics in perioperative practice-patient advocacy. AORN Journal 2002; 75(5): 941-949.

4. Austin, W, Rankel, M, Kagan, L, Bergum, V, Lemermeyer, G. To stay or to go, to speak or stay silent, to act or not to act: Moral distress as experienced by psychologists. Ethics & Behavior 2005; 15(3): 197-212.

5. Rice EM, Rady MY, Hamrick A, Verheijde JL, Pendergast DK. Determinants of moral distress in medical and surgical nurses at an adult acute tertiary care hospital. J Nurs Manag 2008; 16(3): 360-373.

6. Maiden J, Georges JM, Connelly CD. Moral distress, compassion fatigue, and perceptions about medication errors in certified critical care nurses. Dimens Crit Care Nurs 2011; 30(6): 339-345

7. Pendry PS. Moral distress: Recognizing it to retain nurses. Nursing Economics 2007; 25(4): 217.

8. [Mobley MJ](http://www.ncbi.nlm.nih.gov/pubmed/?term=Mobley%20MJ%5BAuthor%5D&cauthor=true&cauthor_uid=17681468), [Rady MY](http://www.ncbi.nlm.nih.gov/pubmed/?term=Rady%20MY%5BAuthor%5D&cauthor=true&cauthor_uid=17681468), [Verheijde JL](http://www.ncbi.nlm.nih.gov/pubmed/?term=Verheijde%20JL%5BAuthor%5D&cauthor=true&cauthor_uid=17681468), [Patel B](http://www.ncbi.nlm.nih.gov/pubmed/?term=Patel%20B%5BAuthor%5D&cauthor=true&cauthor_uid=17681468), [Larson JS](http://www.ncbi.nlm.nih.gov/pubmed/?term=Larson%20JS%5BAuthor%5D&cauthor=true&cauthor_uid=17681468). The relationship between moral distress and perception of futile care in the critical care unit. Intensive Crit Care Nurs 2007; 23: 256-263.

9. Khoiee EM, hossein Vaziri M, Alizadegan S, Motevallian SA, Goushegir SA, Ghoroubi J. Developing the moral distress scale in the population of Iranian nurses. Iranian Journal of Psychiatry. 2008;3(2):55-8.

10. [Maluwa VM](http://www.ncbi.nlm.nih.gov/pubmed/?term=Maluwa%20VM%5BAuthor%5D&cauthor=true&cauthor_uid=22277794), [Andre J](http://www.ncbi.nlm.nih.gov/pubmed/?term=Andre%20J%5BAuthor%5D&cauthor=true&cauthor_uid=22277794), [Ndebele P](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ndebele%20P%5BAuthor%5D&cauthor=true&cauthor_uid=22277794), [Chilemba E](http://www.ncbi.nlm.nih.gov/pubmed/?term=Chilemba%20E%5BAuthor%5D&cauthor=true&cauthor_uid=22277794). Moral distress in nursing practice in Malawi. Nursing Ethics 2012; 19(2): 196-207.

11. Wilkinson JM. Moral distress in nursing practice: Experience and effect. Nursing Forum 2007; 23: 16-29.

12. Corley MC. Moral distress of critical care nurses. Am J Crit Care 1995. 4(4): 280-285.

13. [Redman BK](http://www.ncbi.nlm.nih.gov/pubmed/?term=Redman%20BK%5BAuthor%5D&cauthor=true&cauthor_uid=9078858), [Hill MN](http://www.ncbi.nlm.nih.gov/pubmed/?term=Hill%20MN%5BAuthor%5D&cauthor=true&cauthor_uid=9078858). Studies of ethical conflicts by nursing practice settings or roles. West J Nurs Res 1997; 19(2): 243-260.

14. [Corley MC](http://www.ncbi.nlm.nih.gov/pubmed/?term=Corley%20MC%5BAuthor%5D&cauthor=true&cauthor_uid=11168709), [Elswick RK](http://www.ncbi.nlm.nih.gov/pubmed/?term=Elswick%20RK%5BAuthor%5D&cauthor=true&cauthor_uid=11168709), [Gorman M](http://www.ncbi.nlm.nih.gov/pubmed/?term=Gorman%20M%5BAuthor%5D&cauthor=true&cauthor_uid=11168709), [Clor T](http://www.ncbi.nlm.nih.gov/pubmed/?term=Clor%20T%5BAuthor%5D&cauthor=true&cauthor_uid=11168709). Development and evaluation of a moral distress scale. J Adv Nurs 2001; 33(2): 250-256.

15. Hamric AB, Davis WS, Childress MD. Moral distress in healthcare professionals: what is it and what can we do about it? Pharos Alpha Omega Alpha Honor Soc 2006; 69(1): 16.

16. Beumer CM. Innovative solutions: The effect of a workshop on reducing the experience of moral distress in an intensive care unit setting. Dimens Crit Care Nurs 2008; 27(6): 263-267

17. Nelson WA. Ethical uncertainty and staff stress. Moral distress has negative consequences for healthcare organizations. Healthcare Executive 2009; 24(4): 38.

18. Rodney P, Street A. The moral climate of nursing practice: Inquiry and action. Toward a moral horizon. Nursing Ethics for Leadership and Practice 2004: 209-231.

19. [Corley MC](http://www.ncbi.nlm.nih.gov/pubmed/?term=Corley%20MC%5BAuthor%5D&cauthor=true&cauthor_uid=16045246), [Minick P](http://www.ncbi.nlm.nih.gov/pubmed/?term=Minick%20P%5BAuthor%5D&cauthor=true&cauthor_uid=16045246), [Elswick RK](http://www.ncbi.nlm.nih.gov/pubmed/?term=Elswick%20RK%5BAuthor%5D&cauthor=true&cauthor_uid=16045246), [Jacobs M](http://www.ncbi.nlm.nih.gov/pubmed/?term=Jacobs%20M%5BAuthor%5D&cauthor=true&cauthor_uid=16045246). Nurse moral distress and ethical work environment. Nursing Ethics 2005; 12(4): 381-390.

20. Erlen JA, Moral distress: A pervasive problem. Orthopaedic Nursing 2001; 20(2): 76-80.

21. Ebrahimi H, M Nikravesh, et al. Stress: Major reaction of nurses to the context of ethical decision making. Razi Journal of Medical Sciences 2007; 14(54): 7-15.

22. Burgess L, Irvine F and Wallymahmed A. Personality, stress and coping in intensive care nurses: A descriptive exploratory study. Nurs Crit Care 2010; 15(3): 129-140.

23. Borhani F, Mohammadi S, Roshanzadeh M. Moral distress and its relationship with professional stress in nurses. J Med Ethics Hist Med 2014; 6(6): 10-19.

24. Jafari A, Amiri MM and Esfandiyary Z. Relationship between personality characteristics and coping strategies with job stress in nursesS. Quarterly Journal of Nursing Management 2013; 1(4): 36-43.

25. Haghshnas H. Standardization of neo personality test (NEO PI-R). Iraninan Psychiatry and Clinical Psychology 1999; 4(4): 38-48.

26. Costa PT and McCrae RR. Normal personality assessment in clinical practice: The NEO Personality Inventory. Psychological Assessment 1992; 4(1): 5.

27. Golbasi Z, Kelleci M, Dogan S. Relationships between coping strategies, individual characteristics and job satisfaction in a sample of hospital nurses: Cross-sectional questionnaire survey. Int J Nurs Stud 2008; 45(12): 1800-1806.

28. Elpern EH, Covert B, Kleinpell R. Moral distress of staff nurses in a medical intensive care unit. Am J Crit Care 2005; 14(6): 523-530.

29. Joolaee, S, et al. Relationship between moral distress and job satisfaction among nurses of Tehran University of Medical Sciences Hospitals. Hayat 2012; 18(1): 42-51. [in Persion]

30. Zuzelo PR. Exploring the moral distress of registered nurses. Nurs Ethics 2007; 14(3): 344-359.

31.  [Ebrahimi](http://ijme.tums.ac.ir/search.php?slc_lang=en&sid=1&auth=Ebrahimi) H, Kazemi A,  [Asghari Jafarabadi](http://ijme.tums.ac.ir/search.php?slc_lang=en&sid=1&auth=Asghari+Jafarabadi) M, Azarm [A.](http://ijme.tums.ac.ir/search.php?slc_lang=en&sid=1&auth=Azarm)  Moral distress in nurses working in educational hospitals of Northwest Medical Universities of Iran. J Med Ethics Hist Med 2013; 6(4): 80-88.

32. Meltzer LS and Huckabay LM. Critical care nurses’ perceptions of futile care and its effect on burnout. Am J Crit Care 2004; 13(3): 202-208.

33. Abbasszadeh A, Borhani F, Kalantari S. Moral distress in nurses of treatment centers, Bam, 2011. Medical Ethic 2011; 5(17): 119-40. [in Persion]

34. Shoorideh FA, Ashktorab T, Yaghmaei F. Responses of ICU nurses to moral distress: A qualitative study. Iranian Journal of Critical Care Nursing 2012; 4(4): 159-168. [in Persion]

35. Borhani F, Abbaszadeh A, Nakhaee N, Roshanzadeh M. The relationship between moral distress, professional stress, and intent to stay in the nursing profession. J Med Ethics Hist Med 2014; **7**(2014): 3.

36. Schreuder J, et al. Self-rated coping styles and registered sickness absence among nurses working in hospital care: A prospective 1-year cohort study. Int J Nurs Stud 2011; 48(7): 838-846.

37. [Molazem](http://www.ncbi.nlm.nih.gov/pubmed/?term=Molazem%20Z%5Bauth%5D) Z,  [Tavakol](http://www.ncbi.nlm.nih.gov/pubmed/?term=Tavakol%20N%5Bauth%5D) N,  [Sharif](http://www.ncbi.nlm.nih.gov/pubmed/?term=Sharif%20F%5Bauth%5D) F, [Sareh Keshavarzi](http://www.ncbi.nlm.nih.gov/pubmed/?term=Keshavarzi%20S%5Bauth%5D) S, [Ghadakpour](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ghadakpour%20S%5Bauth%5D) S. Effect of education based on the “4A Model” on the Iranian nurses’ moral distress in CCU wards. J Med Ethics 2013; 6: 5.

Table 1: Demographic characteristic of the study participants

|  |  |
| --- | --- |
| Mean | Variables |
|  | Gender |
| 58(96.7%) | Female |
| 2(3.3%) | Male |
| 29.72 ± 4.67 | Age |
| 5.60± 3.75 | Years of nursing experience |
| 44.89 ± 10.65 | Average working hours in a week |
|  | Marital status |
| 30(50%) | Single |
| 30(50%) | Married |
| 60 | Total |

Table 2: The participants mean and SD in personality traits and moral distress

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Mean ± SD | MAX | MIN |
| Neuroticism | 22.61±6.30 | 41 | 10 |
| Extraversion | 28.43 ± 3.89 | 38 | 19 |
| Openness | 25.13 ± 3.25 | 32 | 16 |
| Agreeableness | 32.35 ± 4.57 | 44 | 22 |
| Conscientiousness | 31.93 ± 3.53 | 39 | 25 |
| Moral distress | 4.50 ± 0.88 | 7.10 | 2.69 |

Table 3: Personality traits and moral distress based on Pearson's correlation test

|  |  |  |
| --- | --- | --- |
| Personality traits | Moral distress | P-value |
| Neuroticism | 08.0 | 54.0 |
| Extraversion | 59.0- | 65.0 |
| Openness | 85.0- | 51.0 |
| Agreeableness | 0.13 | 0.31 |
| Conscientiousness | -0.03 | 0.78 |