# Journal of Medical Ethics and History of Medicine



# The relationship between moral distress, professional stress, and intent to stay in the nursing profession

Fariba Borhani<sup>1</sup>, Abbas Abbaszadeh<sup>2</sup>, Nouzar Nakhaee<sup>3</sup>, Mostafa Roshanzadeh<sup>4\*</sup>

### Corresponding Author:

Mostafa Roshanzadeh

Address: Birjand, Ghafare Avenue, Birjand University of Medical Sciences, Birjand, Iran.

Email: mroshanzadeh62@gmail.com

Tel: 98 09397952522 Fax:98 05618825875

Received: 26 Aug 2013 Accepted: 12 Dec 2013 Published: 18 Feb 2014

J Med Ethics Hist Med, 2014, 7:3

© 2014 Fariba Borhani et al.; licensee Tehran Univ. Med. Sci.

# Abstract

Moral distress and professional stress are common problems that can have adverse effects on nurses, patients, and the healthcare system as a whole. Thus, this cross-sectional study aims to examine the relationship between moral distress, professional stress, and intent to stay in the nursing profession. Two hundred and twenty full-time nurses employed at teaching hospitals in the eastern regions of Iran were studied. A 52-item questionnaire based on Corley's Moral Distress Scale, Wolfgang's Health Professions Stress Inventory and Nedd Questionnaire on Intent to Stay in the Profession was used in the study. Additionally, demographic details of the study population were collected. No significant correlation was observed between the intensity and frequency of moral distress, professional stress, and intent to stay in the profession among nurses (P > 0.05). There was a significant correlation between moral distress, professional stress, and age, number of years in service and work setting (P < 0.05). Given the important effect of moral distress and professional stress on nurses, in addition to the educational programs for familiarization of nurses with these concepts, it is recommended that strategies be formulated by the healthcare system to increase nurses' ability to combat their adverse effects.

Keywords: moral distress, professional stress, intent to stay, nursing profession, nursing ethics

<sup>&</sup>lt;sup>1</sup> Assistant Professor, Faculty of Nursing & Midwifery, Medical Ethics and Law Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran;

<sup>&</sup>lt;sup>2</sup> Professor, Faculty of Nursing & Midwifery, Shahid Beheshti University of Medical Sciences, Tehran ,Iran;

<sup>&</sup>lt;sup>3</sup> Professor, Kerman University of Medical Sciences, Kerman, Iran;

<sup>&</sup>lt;sup>4</sup> Faculty member of Birjand University of Medical Sciences, Birjand, Iran.

### Introduction

There is a high level of human contact in the nursing profession, and therefore nurses are inevitably faced with issues like moral distress and professional stress. Moral distress is created when the conditions contradict an individual's beliefs and inner moral values, and he or she has to act against those values as a result of those conditions and real limitations (1). The occurrence of moral distress can entail different repercussions for nurses, patients, and healthcare organizations (2). In facing these conditions, nurses may experience sadness, contradiction, futility, and affliction, Prolonging these conditions can lead to exhaustion of their resistance resources and cause dissatisfaction with the workplace. Those who continue to work despite these conditions experience stress and burnout along with dissatisfaction (3). Stress is a wellknown phenomenon in the nursing profession that can entail positive as well as negative consequences. Professional stress can be created under different conditions such as moral distress, nursing shortages, and organizational limitations, and affect nurses directly, followed by the patients and finally the healthcare system (4). The dissatisfaction of nurses with their workplace resulting from moral distress and professional stress may lead to absenteeism, and strengthen the thought and desire to resign and leave the profession (5). In addition to these conditions, limited human resources, lack of support systems for nurses in clinical environments, organizational pressures, and the feeling of guilt when they are unable to provide quality care, can all cause the thought and desire to leave the profession to turn into action (6).

Leaving the profession can have different effects on the healthcare system. Shortage of skilled human resources can cause a decline in the quality of care and cause financial and legal challenges for the health service providers, and in a vicious circle, increase moral distress and professional stress in the remaining nurses (7).

The importance of moral distress and professional stress, and their relationship with intent to stay in the nursing profession are reviewed in this article. Studies conducted on the moral distress reveal its high prevalence in nurses with different rates of intensity and frequency in different clinical environments. Evidence shows that there is a much higher level of moral distress in special care units where conditions of patients are more critical and nurses have higher responsibility (8-14).

In their 2005 study, Elpern et al. investigated moral distress in critical care units. While reporting high levels of moral distress among nurses, they stated that conditions conducive to moral distress

created a kind of reluctance in nurses for performing nursing care (8). Lazzarin et al. reported high levels of moral distress in nurses in oncology and pediatric hematology units (9). Corley also stated that the moral climate in nurses' working environment plays an important role in their level of moral distress (10). Also, the ethical climate in the workplace is identified as a factor affecting moral distress with consequences like burnout, job dissatisfaction, and professional stress, forcing nurses to leave their profession (1, 15, 16).

Review of studies in connection with stress indicates that stress is a common phenomenon in the nursing profession. A person's mental status and self-satisfaction are directly related to the intensity of stressful factors, and circumstances such as inadequate logistics and work pressure are identified as important factors in creating professional stress (17-19). Healy et al. investigated workplace stressors and their effects on job satisfaction in nurses, and concluded that this effect existed (20).

Cummings investigated the relationship between moral distress, professional stress, and critical care unit nurses leaving the profession, and concluded that high levels of moral distress and professional stress are associated with nurses leaving the profession (3).

Considering the religious and cultural differences between Iranian nurses and nurses from other countries, and given the different organizational structures and managerial patterns in the healthcare system in Iran, this study was conducted to examine levels of moral distress and professional stress and their relationship with the intent to stay in the profession in Iranian nurses.

Theories of moral distress and intent to stay Moral distress theory

Moral distress is a concept first introduced by Jameton (21). He believed that when a person is aware of the right ethical course of action but is prevented by organizational constraints from taking that course, he is faced with moral distress (21). The organizational constraints in his opinion were: time limitations, lack of support of nurses by the management, organizational policies procedures, and legal limitations. Jameton identified different conditions that cause moral distress including: unnecessary actions, inadequate performances, entanglements and conflicts with the patient's family requirements, and making the decision to end a dying patient's life. He then expanded the concept of moral distress and expressed it as initial and reactive distress. Initial distress involves feelings of frustration, anger, and anxiety when people face organizational constraints and come into conflict with others about values.

Reactive distress occurs following initial distress and its negative consequences where the person is unable to perform his duties (20). Based on Jameton's concept of moral distress, Corley et al. presented the theory of moral distress in 2002. They considered the following points in Jameton's theory: 1) nursing is an ethical profession, and 2) a nurse is an ethical person. They considered nursing as an ethical profession with vast moral standards that are reflected in caring and performance standards. When nurses perform as ethical means, they are exposed to moral distress. In their theory, Corley et al. stated how moral distress can affect nurses, patients, and healthcare organizations. When facing moral distress, nurses experience exclusion, depression, and misfortune, and if these conditions persist, they may experience frustration and dissatisfaction with work, and ultimately leave. Also, moral distress can affect the quality of the care provided by nurses and cause nurses to avoid facing the patients in need of quality care. Corley et al. believed that the effects of distress on organizations are connected with job resignations, reduced job satisfaction and quality of care. They also stated that the intensity and frequency of moral distress are different in different situations (21).

Intent to stay in the profession theory

This theory was presented by Kim et al. in 1996 and was formed on the basis of Vroom's theory of expectancy (22). The main idea is that employees come to an organization with certain expectations and values, and the assumption is that if these expectations are met, then they stay with the company, and if not, they begin to consider leaving. Disinclination to remain can preempt leaving the profession (23). Kim et al. argued that there are three main variables that lead to job satisfaction and organizational commitment including environment, organizational structure, and the individual. Job satisfaction and organizational commitment determine a person's behavior regarding staying in the profession. The environmental variable includes two main factors of relations and opportunities. Relation is associated with the family and a person's responsibility within the group. Opportunity relates to the job market and the ability of workers to adapt to a new profession. The more available the opportunities in other work environments, the less the desire and intention of employees to stay in a profession. The individual variable in this theory includes general education, work motivation, individuals' expectations and positive and negative emotions. Motivation refers to pleasant and unpleasant emotional experiences and whom they may affect. Expectations refer to whether the job can meet a person's beliefs about that job. Other variables include authority, justice, occupational hazards, job stress, salaries, professional growth, advertizing opportunities, and social support. These

variables provide a framework for a person's adjustment with working conditions, expectations, independence, a sense of fairness and justice, and opportunity for professional growth. Workers expect to be protected from workplace hazards and stress and be paid well for the job they do. In addition, they prefer to have promotional opportunities and be successful in the system. Ultimately, a social support system affects employees and their decision to stay in the healthcare system.

In any case, the desire to stay in the profession depends on numerous factors, and the relationship between these factors is also important. The main factors are ethical distress and job stress. Professional stress emphasizes personal and organizational factors like occupational motivation, general education, authority, wages and expenses, and professional growth. It appears that organizational structure plays an important role in the accumulation of stressful factors. Ethical distress essentially affects factors like expectations and positive and negative emotions. Generally, this theory is closely related with the individuals' expectations and experiences (21).

#### Method

This study was a cross-sectional study aiming to examine the relationship between moral distress, professional stress, and intent to stay in nursing. The participants were assessed in terms of intensity and frequency of moral distress and professional stress, and then the correlation between moral distress, professional stress, and the desire to stay in the profession was analyzed.

Study population and sampling

Study units included 220 nurses selected by census from two teaching hospitals (Imam Reza and Valiasr) in the city of Birjand. Inclusion criteria included at least one year's experience in clinical wards, minimum level of education as bachelor's degree in nursing, and full-time employment. Study nurses were selected from all clinical wards in these hospitals.

**Tools** 

Research tools consisted of a 52-item questionnaire containing demographic information as well as three sub-questionnaires based on Corley's Moral Distress Scale (21 questions) (24), Wolfgang's Health Professions Stress Inventory (30 questions) (25), and Nedd Questionnaire on Intent to Stay in the Profession (1 question) (7).

The first section was the Moral Distress Scale, designed by Corley et al. in 1995. The preliminary form of this questionnaire comprises 38 items, but in this study, the 21-item brief form developed by Corley & Hamrick in 2007 was used (10). The second section consisted of a 30-item Professional Stress Questionnaire, designed by Wolfgang in 1998 (25). The third section included one 4-option question that assessed the desire to continue working as nurses, designed by Nedd in 2006 (7). The validity and reliability of the 51-item moral distress and professional stress questionnaire were determined by Cummings in 2009 (3). Its reliability was determined to be 95% using Cronbach's alpha. The moral distress and professional stress questionnaire was in the form of 51 continuous questions with 6-point Likert answers including 6 options in intensity and 6 in frequency dimensions. The options in the intensity dimension were (0 to 5) from "not at all" to "very much", and in the frequency dimension were (0 to 5) from "never" to "frequently". The original questionnaire was in English and was translated in backward-forward fashion. The validity was confirmed using content validity method and the opinions of 10 faculty members familiar with ethical issues. The reliability was calculated using internal consistency method (Cronbach's alpha) and reported to be 0.93.

Data collection

After obtaining written legal permissions and ethical codes from affiliated hospitals, the questionnaires were given to the nurses, and collected by the researcher after completion. This process took 14 days (from March 29th to April 12th, 2012). All participating nurses completed the questionnaire, and all questionnaires were collected. Data obtained from questionnaires were registered in the SPSS version 16 software, and descriptive statistics (mean, standard deviation, frequency, frequency percentage) and inferential statistics (Pearson's correlation, independent t-test, one-way ANOVA, and so on) were used to analyze the data to achieve the study objectives.

Ethical considerations

The study proposal was approved by the Ethics Committee of Kerman University of Medical Sciences (Ethical Code: K90.477) and legal permissions were obtained prior to collection of data. The participants were briefed on the voluntary nature of their participation in the study and were provided with all the necessary information on study objectives and how to complete the questionnaires before beginning to do so. Furthermore, participants were asked not to write their names on questionnaires and were informed that their personal information would be confidential.

# Results

Demographic characteristics

Demographic characteristics of the study units included age, gender, ward, number of years in service, and type of employment. The age of participating nurses ranged from 23 to 47 years, and the mean age was 31.12 (SD = 5.13) years. The highest number of years in service was 24 years and the lowest was 1 year, with the mean of 6.54 years (SD = 4.4). Seven wards were recognized and

nurses were divided into 7 groups accordingly (table 1), and in terms of type of employment, nurses were divided into 3 groups of official, contractual, and project-based (table 2).

**Table 1 - Responses by clinical unit** 

| Work setting    | No. | (%)    |
|-----------------|-----|--------|
| Surgical        | 65  | (29.5) |
| Critical Care   | 81  | (36.8) |
| Pediatrics      | 7   | (3.2)  |
| Medical         | 33  | (15)   |
| Emergency       | 20  | (9.1)  |
| Obstetrics      | 6   | (2.7)  |
| Psycho-Medicine | 8   | (3.6)  |
| Total           | 220 | (100)  |

In terms of education level, all participants had bachelor's degree in nursing.

Table 2- Responses by type of the employ-

| Type of employment | No. | (%)    |  |  |  |
|--------------------|-----|--------|--|--|--|
| Official           | 105 | (47.7) |  |  |  |
| Contractual        | 85  | (38.6) |  |  |  |
| Project-Based      | 30  | (13.6) |  |  |  |
| Total              | 220 | (100)  |  |  |  |

Intensity and frequency of moral distress, professional stress, and intent to stay in nursing profession

The results reveal mean moral distress intensity of 2.25 (SD = 0.6) and a mean moral distress frequency of 2.11 (SD = 0.56) (total intensity and frequency ranged from 0 to 5). In terms of stress, the mean intensity of professional stress was 2.21 (SD = 0.58) from a total range of 0 to 5, and the mean frequency of stress was 2.26 (SD = 0.63) from a total range of 0 to 5.

In terms of intent to stay in the profession, study units were divided into 4 groups: 12.3% were inclined to leave the profession as soon as possible, 26.8% stated that they may leave the organization in the coming year, 22.7% expressed that under no circumstances would they leave the organization voluntarily, and 32.3% said that they had plans to stay with the organization for as long as possible.

There was a significant correlation between the mean total moral distress and the mean total professional stress (P < 0.05), and the correlation coefficient was calculated at 0.6. No significant correlation was observed between the total scores of moral distress, professional stress, and intent to stay in the profession (P > 0.05) (tables 3 & 4).

Table 3- Analysis of variance examining the relationship between the mean score of moral distress and intent to stay

| Intent to stay  | NO    | Mean   | (SD) | Mean (MD intensity) | (SD) | MD<br>Frequency) |
|---|-------|--------|------|---------------------|------|------------------|
| I plan to leave the institution as soon as possible               | 27.06 | (12.3) | 2.16 | (0.57)              | 2.2  | (0.53)           |
| I may leave the organization within the next year                 | 58.96 | (26.8) | 2.24 | (0.57)              | 2.13 | (0.56)           |
| Under no circumstances would I voluntarily leave the organization | 49.94 | (22.7) | 2.32 | (0.65)              | 2.04 | (0.56)           |
| I plan to stay with this organization for as long as possible     | 71.06 | (32/3) | 2.24 | (0.63)              | 2.11 | (0.57)           |
| No response   | 12.98 | (5.9)  |      |                     |      |                  |
| Total   | 220   | (100)  |      |                     |      |                  |

NO=Frequency; MD= moral distress; SD= standard deviation.

Table 4- Analysis of variance examining the relationship between mean score of professional stress and intent to stay

| Intent to stay (SD)   | NO    | Mean   | (SD) | Mean (MD intensity) | (SD) | MD<br>Frequency) |
|---|-------|--------|------|---------------------|------|------------------|
| I plan to leave the institution as soon as possible               | 27.06 | (12.3) | 2.29 | (0.58)              | 2.26 | (0.56)           |
| I may leave the organization within the next year                 | 58.96 | (26.8) | 2.14 | (0.57)              | 2.11 | (0.55)           |
| Under no circumstances would I voluntarily leave the organization | 49.94 | (22.7) | 2.35 | (0.73)              | 2.27 | (0.53)           |
| I plan to stay with this organization for as long as possible     | 71.06 | (32/3) | 2.27 | (0.64)              | 2.21 | (0.67)           |
| No response   | 12.98 | (5.9)  |      |                     |      |                  |
| Total   | 220   | (100)  |      |                     |      |                  |

NO=Frequency; MD= moral distress; SD= standard deviation.

Mean and standard deviation of study units answering the questionnaire:

In assessing moral distress, the highest means in distress intensity and frequency were related to the question "I find myself caring for the emotional needs of patients" (for intensity ( $2.65 \pm 1.41$ ), and for frequency ( $2.52 \pm 1.48$ ). The lowest means in distress intensity and frequency were related to the question "I have experienced conflicts with supervisors and/or administrators at work" (for intensity ( $1.78 \pm 1.33$ ), and for frequency ( $1.77 \pm 1.31$ ). In assessing professional stress, the highest means in stress intensity and frequency were

related to the question "I have found myself in situations where there was not enough staff to adequately provide the necessary services" (for intensity (2.83  $\pm$  1.66, and for frequency (2.83  $\pm$  1.66). In terms of stress, the lowest level of stress was related to the question "I have let medical students perform painful procedures on patients solely to increase their skill." (1.59  $\pm$  1.48) and in terms of frequency, the lowest level of stress was related to question "I have increased the dose of intravenous morphine in end of life situations that I believe will hasten the patient's death" (1.7  $\pm$  1.51) (table 5).

Table 5- Mean and standard deviation of study units answering the questionnaire

| Question  | Intensity<br>Mean (SD) | Frequency<br>Mean (SD) |
|---|------------------------|------------------------|
| 1-I find myself providing less than optimal care due to pressures to reduce costs.  | 2.14 (1.56)            | 2.16 (1.43)            |
| 2-I have so much work to do that I cannot do everything well.   | 2.17 (1.46)            | 2.15 (1.4)             |
| 3-I have asked the patient's family about donating organs when the patient's death is inevitable.   | 2.05 (1.58)            | 1.93 (1.5)             |
| 4-I have experienced conflicts with supervisors and/or administrators at work.  | 1.78 (1.33)            | 1.77 (1.31)            |
| 5-I find myself caring for the emotional needs of patients.   | 2.65 (1.41)            | 2.52 (1.48)            |
| 6-I have let medical students perform painful procedures on patients solely to increase their skill.  | 1.65 (1.56)            | 1.66 (1.54)            |
| 7-I find myself dealing with "difficult" patients.  | 2.59 (1.31)            | 1.37 (2.62)            |
| 8-I have provided care that does not relieve the patient's suffering because I fear that increasing the dose of pain medication will cause death. | 2.1 (1.41)             | 1.9 (1.38)             |
| 9-I have found myself in situations where there was not enough staff to adequately provide the necessary services.                                | 2.83 (1.66)            | 2.83 (1.66)            |

Correlation between moral distress and professional stress and demographic characteristics

There was a significant correlation between moral distress and age (P< 0.05, r = -0.2) as well as between professional stress and age (P < 0.05, r = -3). There was a significant correlation between moral distress and number of years in service (P < 0.05, r = -0.3) and between professional stress and number of years in service (P < 0.05, r = -0.4). There was a significant correlation between moral distress and work setting (P < 0.05) and also between professional stress and work setting (P <

No significant correlation was observed between moral distress, professional stress, and sex or type of employment (P > 0.05).

The highest mean score of moral distress was observed in the pediatric ward (2.63  $\pm$  0.26), and the lowest in emergency (1.37  $\pm$  0.45). Moreover, the highest mean score of professional stress was observed in the psychiatric ward (2.85  $\pm$  0.3), and the lowest in emergency  $(1.64 \pm 0.5)$ .

#### Discussion

The results obtained in this study indicate that despite a medium level of moral distress, nurses did not wish to stay in the profession. Results of other similar studies, however, report a positive correlation between moral distress and the intent to stay in the profession (3, 11, 16, 19). There may be a number of reasons that can explain the difference between this study and similar ones. One of these reasons is that there are several obstacles a person leaving his or her profession in Iran has to face. Special organizational conditions do not make it easy for personnel to leave as and when they decide to. Thus, sometimes complicated stages and hard clerical and legal processes may deter personnel from leaving, which can be due to difficult employment regulations and huge costs of employing and training these people. As there is a shortage of jobs compared to demands in Iran, it is likely that people leaving their jobs may not be able to find another suitable one. People leaving employment can face several problems including financial hardships, and the inability to find another job would make daily life extremely difficult for them. All these situations and obstacles reduce nurses' motivation and desire to leave the profession and force them to remain in the profession despite all the moral distress they may have to tolerate in the workplace.

Investigation of the intensity and frequency of moral distress in study units shows they are in average range. In order to investigate the level of moral distress, 21 questions were posed, and question number 12 "I find myself caring for the emotional needs of patients" was the most relevant and attracted the highest mean intensity and frequency of moral distress in nurses, and was related to concern for patients' feelings and emotions. In the opinion of study units, emotional involvement with patients' problems and their relatives is an important source of stress. The lowest mean score for distress in terms of intensity and frequency pertained to question 4 "I have experienced conflicts with supervisors and/or administrators at work". Previous studies also considered the emotional problems of patients and their relatives and conflicts with supervisors and management as important factors in moral distress (26, 27). The level of effectiveness of these factors in creating distress depends on the type of workplace and characteristics of people. In general, the level of moral distress in this study was in the medium range. In most studies, the level of moral distress was different depending on the type of ward, and in most cases it ranged from medium to high (8, 28). In this study, the moral distress score related to all wards was medium, whereas in other studies this score appears to be higher. This may have been due to assessment of the nurses in special wards such as special care units where ethical distress would surely be higher compared to other wards.

Investigation of the intensity and frequency of professional stress in study units revealed a medium level of professional stress in nurses. Other studies place this level in the medium to high range {30-32}. For assessment of professional stress, 30 questions were posed {21 to 51}, of which the highest stress in terms of intensity and frequency was related to question number 35 "I have found myself in situations where there was not enough staff to adequately

provide the necessary services" (29). In fact, shortage of human resources can be one of the most important factors in creating stress. Many studies introduce shortage of human resources and high workload as important factors in creation of stress in workplace (29, 30).

The lowest level of stress in terms of intensity was related to question 26 "I have let medical students perform painful procedures on patients solely to increase their skill". This question created the least amount of stress in the nurses under study. The lowest level of stress in terms of frequency pertained to question 34 "I have increased the dose of intravenous morphine in end of life situations that I believe will hasten the patient's death". In his study, Burnard et al. also regarded patient care complications as an effective factor in creation of professional stress (30). Given the particular belief system in the nurses in the present study, cases of euthanasia do not occur in Iran because they contradict religious beliefs, and consequently in terms of frequency of professional stress, they are unimportant.

The correlation between moral distress and professional stress proved significant. According to previous studies, conditions creating distress are also effective in creation of professional stress. Case studies investigating distressing conditions introduce these conditions as effective factors in incidence of professional stress, and find a positive correlation between these variables (27, 29, 31).

Examining the relationship between moral distress, professional stress, and parameters of age and number of years of service revealed a significant and inverse relationship. These results indicate decreasing moral distress and professional stress with increasing age and service years. Studies revealed a significant correlation between these parameters (20, 32-35). These studies state that with increased age and years of service, nurses gain more experience, and in facing moral challenges and stressors, they use effective defensive mechanisms, and thus, they are less affected. Also, with increasing service years, nurses prefer to work in easier environments and avoid moral challenges and high stress. Moreover, in the beginning of their service years, nurses are not sufficiently experienced to face moral challenges and stress, and are often involved and influenced by crisis and confusion. In assessing the relationship between moral distress and type of the ward, the highest level of distress was seen in the pediatric ward (28. 36). However, studies generally consider critical care units as having the highest level of distress for nurses (29, 36). The height of distress in these units is due to particularly acute conditions in these treatment settings that in turn are associated with higher challenges in moral terms. Perhaps in this study, special conditions and vulnerability of children was a factor for higher moral distress in participating nurses. The highest level of professional stress was observed in the psychiatric ward. Studies in this area revealed that stress level is generally higher in treatment settings, and this level is higher still in acute care conditions like critical care units. Psychiatric wards can also have high levels of stress due to peculiarities of treatment and encountering special patients. While our study shows that the level of moral distress and professional stress in the emergency ward is low; other studies regard emergency ward nurses to be faced with high levels of moral distress and professional stress (30, 28, 36). In the present study, it could perhaps be stated that the special characteristics of this ward have made less time available for nurses to interact with patients, and also higher levels of experience of the emergency ward nurses in facing stressful cases has elevated their capabilities to cope with stressful conditions with less distress and stress.

The present study was carried out in a particular region in Iran and it is necessary to study other parts of the country. Also, sampling was conducted in census method. All these affect the generalizability of results. Given the study method and its analysis, it is no possible to assess the cause and effect relationship between variables.

### Conclusion

This study reveals medium levels of moral distress and professional stress in nurses and that the majority of nurses do not intend to leave their profession. On the other hand, there is a significant correlation between moral distress and professional stress. These can be due to different healthcare system structures and working environments, as well as characteristics of people in different geographical locations in Iran. In the present atmosphere, to prevent the spread of moral distress and professional stress and their consequences, the following means ought to be considered: educating and familiarizing nurses with ethical distress and professional stress and factors causing them, setting up ethical committees in clinical and university centers for research into various dimensions of ethical distress, drawing the attention of management particularly in clinical settings to identify cases of ethical distress and professional stress in nurses, and finding suitable means to improve nurses' ability to cope in such situations. While further study is needed to cover other parts of the country, it is recommended that the correlation between leaving the profession and variables like financial status of personnel as well as people's desire to enter the profession be investigated.

## Acknowledgements

The authors wish to thank all participating nurses from the teaching hospitals in the city of Birjand. This article is the result of a master's degree thesis.

# References

- Corley M, Minick P, Elswick RK, Jacobs M. Nurse moral distress and ethical work environment. Nurs Ethics 2005; 12(4): 381-90
- 2. Corley M. Nurse moral distress: a proposed theory and research agenda. Nurs Ethics 2002; 9(6): 636-50.
- Cummings CL. The effect of moral distress on nursing retention in the acute care setting [dissertation]. Florida (USA). University of North Florida; 2009.
- 4. Currid TJ. The lived experience and meaning of stress in acute mental health nurses. Br J Nurs 2008; 17(4): 880-84.
- 5. Epstein EG, Hamric AB. Moral distress, moral residue, and the crescendo effect. J Clin Ethics 2009; 20(4): 330-42.
- 6. Zuzelo PR. Exploring the moral distress of registered nurses. Nurs Ethics 2007; 14(3): 344-59.

- 7. Nedd N. Perceptions of empowerment and intent to stay. Nurs Econ 2006; 24(1): 13-19.
- 8. 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.
- Lazzarin M, Biondi A, Di Mauro S. Moral distress in nurses in oncology and haematology units. Nurs Ethics 2012; 19(2): 183-95.
- Corley MC, Hamric, AB. Information on shortened form of Corley's moral distress scale. Unpublished manuscript, University of Virginia. <a href="http://docs.askives.com/what-is-units-of-distress-scale.html">http://docs.askives.com/what-is-units-of-distress-scale.html</a> (accessed in 2014)
- 11. Epstein EG, Delgado S. Understanding and addressing moral distress. Online J Issues Nurs 2010; 15(3).
- 12. Austin W, Lemermeyer G, Goldberg L, Bergum V, Johnson MS. Moral distress in healthcare practice: the situation of nurses. HEC Forum 2005; 17(1): 33-48.
- Anonymous. AACN Public policy statement: moral distress. <a href="http://www.aacn.org/WD/practice/Docs/moral\_distress.pdf">http://www.aacn.org/WD/practice/Docs/moral\_distress.pdf</a> (accessed in 2013).
- 14. Alspach G. When your work conditions are sicker than your patients. Crit Care Nurse 2005; 25(3): 11-14.
- 15. Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. JAMA 2002; 288(16): 1987-93.
- Pauly B, Varcoe C, Storch J, Newton L. Registered nurses' perceptions of moral distress and ethical climate. Nurs Ethics 2009: 16(5): 561-73.
- Hayhurst A, Saylor C, Stuenkel D. Work environment factors and retention of nurses. J Nurs Care Qual 2005; 20(3): 283-8
- 18. Harris N. Management of work-related stress in nursing. Nurs stand 2001; 16(10): 47-52.
- Rossi AM. Occupational stressors and gender differences. In: Rossi AM, Perrewe PL, Sauter SL (eds). Stress and Quality of Working Life: Current Perspectives in Occupational Health. USA: Information Age Publishing; 2009.
- 20. Healy CM, McKay MF. Nursing stress: the effects of coping strategies and job satisfaction in a sample of Australian nurses. J Adv Nurs 31(3): 681-8.
- 21. Jameton A. Nursing Practice: The Ethical Issues. USA: Prentice Hall; 1984.
- 22. Kim SW, Price JL, Mueller CW, Watson TW. The determinants of career intent among physicians at a U.S. air force hospital. Human Relations 1996; 49(7): 947-76.
- 23. Vroom VH. Work and Motivation. New York: Wiley; 1964.
- Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a moral distress scale. J Adv Nurs 2001; 33(4): 250-6.
- 25. Wolfgang AP. The health professions stress inventory. Psychol Reports 1988; 62(1): 220-2.
- 26. Andrews DR, Dziegielewski SF. The nurse manager: job satisfaction, the nursing shortage and retention. J Nurs Manag 2005; 13(4): 286-95.
- 27. Rice EM, Rady MY, Hamrick A, Verheijde JL, <u>Pendergast DK</u>. Determinants of moral distress in medical and surgical nurses at an adult acute tertiary care hospital. J Nurs Manag 2008; 16(3): 360-73.
- 28. Janvier A, Nadeau S, <u>Deschênes M</u>, <u>Couture E</u>, <u>Barrington KJ</u>. Moral distress in the neonatal intensive care unit: caregiver's experience. J perinatol 2007; 27(4): 203-8.
- Sterud T, Hem E, <u>Ekeberg O, Lau B.</u> Occupational stressors and its organizational and individual correlates: a nationwide study of Norwegian ambulance personnel. BMC Emerg med 2008; 8: 16.
- 30. <u>Burnard P</u>, <u>Edwards D</u>, <u>Fothergill A</u>, <u>Hannigan B</u>, <u>Coyle D</u>. Community mental health nurses in Wales: self reported stressors and coping strategies. J Psychiatr Ment Health Nurs 2000; 7(6): 523-8.
- Pinikahana J, <u>Happell B</u>. Stress, burnout and job satisfaction in rural psychiatric nurses: a Victorian study. Aust J Rural Health 2004; 12(3): 120-5.
- 32. Redman B, <u>Hill MN</u>. Studies of ethical conflicts by nursing practice settings or roles. West J Nurs Res 1997; 19(2): 243-
- 33. Al-Omari O, Saber A, Awad A, Atawi. The impact of unit difference gender and years of stress among staff nurses in Jordan,

  http://faculty.ksu.edu.sa/omar%20omari/research%20paper/the%20impact%20of%20unit%20differences.pdf (accessed in 2013).
- 34. Rice PL. Stress and Health. USA: Cengage Learning; 1998.
- 35. Ferrell BR. Understanding the moral distress of nurses witnessing medically futile care. Oncol Nurs Forum 2006; 33(5): 922-30.
- 36. Guitierrez KM. Critical care nurses' perceptions of and responses to moral distress. Dimens Crit Care Nurs 2005; 24(5): 229-41.