

# Moral Distress and Turnover Intention among Critical Care Nurses in Saudi Arabia

Bilal Abumayyaleh<sup>1,\*</sup>, Omar Khraisat<sup>1</sup>, Shaher Hamaideh<sup>2</sup>, Adnan Ahmed<sup>3</sup>, ImadThultheen<sup>4</sup>

<sup>1</sup>Nursing Department, Almaarefa Colleges, Kingdom of Saudi Arabia, Riyadh

<sup>2</sup>Nursing College, Hashemite University, Jordan, Az-Zarqa

<sup>3</sup>Nursing College, King Saud University, Kingdom of Saudi Arabia, Riyadh

<sup>4</sup>Nursing Department, Alfarabi Colleges, Kingdom of Saudi Arabia, Riyadh

## Email address

bmayyaleh@yahoo.com (B. Abumayyaleh)

\*Corresponding author

## To cite this article

Bilal Abumayyaleh, Omar Khraisat, Shaher Hamaideh, Adnan Ahmed, ImadThultheen. Moral Distress and Turnover Intention among Critical Care Nurses in Saudi Arabia. *International Journal of Nursing and Health Science*. Vol. 3, No. 6, 2016, pp. 59-64.

**Received:** November 20, 2016; **Accepted:** December 19, 2016; **Published:** January 12, 2017

## Abstract

The study aimed is to identify the relationship between moral distress and turnover intention among critical care nurses. A convenient sample of 200 critical care nurses was surveyed by Revised Moral Distress Scale and Turnover Intention Scale as a descriptive correlational cross-sectional study at teaching university hospital located in Riyadh the capital of Kingdom of Saudi Arabia. The result revealed that, critical care nurses reported a moderate level of moral distress. No significant association was indicated between moral distress intensity and frequency and nurses' turnover intention except a significant association between age ( $r = 0.17$ ,  $P < 0.05$ ), years of nursing experience ( $r = 0.19$ ,  $P < 0.05$ ), years of critical care experience ( $r = 0.18$ ,  $P < 0.05$ ) and turnover intention. There is a pressing need for conceptual work to generate a more vigorous understanding of moral distress in nursing practice and the relationship between moral distress and decision to leave position or nursing and the impact on patient care.

## Keywords

Critical Care, Moral Distress, Turnover

## 1. Introduction

Distress is a serious problem to nurses; the deepest source of distress that nurses experience have been arisen because of the variation between nurses' values and reality of daily nursing practice [1]. This type of distress could result in acute events of intense moral distress, something not uncommon in the nursing arena, particularly in critical care areas and acute care for the terminally ill patients [1].

Nurses, especially those working in critical care units, are often confronted with ethical dilemmas associated with the management of patients' care. Critical care nurses experience a great deal of pain and suffering as they go with their patients the weeks and months of onerous treatments that nurses perceive as being no beneficial [2]. Advances in

technology and changes in healthcare delivery make treatment decisions more difficult and increase new responsibilities to nurses as care providers and patients' advocates [3, 4]. Likewise, the highly stressful life-and-death matters that nurses often confront could share in the experience of moral distress [5].

Moral distress has been defined as "an emotion that is provoked within individuals when they are constrained from fulfilling obligations or responsibilities that they believe to be morally correct" [6]. Consequently, when nurses have moral distress, they will act in a manner contradict to their personal and professional values [7].

It is clear that nurses' today experience much more moral distress than before due to rise in complexity of the health-care system and nursing shortages [7]; this mark the need to know more about moral distress at present-day.

Moral distress as a type of pressure may lead to psychological problems to nurse that revealed by feeling of fear, frustration, anger, withdrawal, anger, guilt, depression, and anxiety (8). Similarly, it may lead to physical problems, such as: headache [9] and sore muscles [10].

Corley's moral distress theory directed the need for a comprehensive examination of the environment of care and a better understanding of the environmental associations and connections [1]. Corley stated several research-based propositions related to the relationship between various moral concepts. The hospital ethical climate and the demographic variables of gender, education, ethics education, and work experience were listed as potentially having significant association and prediction upon the experience of moral distress [1].

Reference [1] debated that nurses in critical care units are exposed to higher degrees of moral distress than people in many other professions because of the exclusive decisions and intense environments in which they work. Another reference [11] distinguished that intensive care nurses were extremely reported a moral distress experience. However, a study reported a moderate level of moral distress among critical care nurses [3].

Moral distress is now implicit to be an important problem that threatens the healthcare providers job retention and healthcare system efficiency [12]; that may lead to physically withdraw from the practice, lose capability for caring, avoid patient interaction, fail to give moral physical care and intent to leave job as end result [13].

Furthermore, Nurses reported that following family's wishes for patient care even though the nurse disagree with the plan; continuing life support for patients owing to family wishes despite the patient's poor prognosis; and carrying out orders for unnecessary tests and treatments may lead to moral distress [14]. Moreover, another study investigated the relationship between moral distress and demographic characteristics namely (age, sex, and years of experience as critical care nurse and as nurse and education) which he reported no significant relationship between variables [15]. However, nurses reported a significant negative relationship between age and level of moral distress [16].

Additionally, moral distress might be lead to intent to leave job among nurses working in neonatal intensive care units [17]. Likewise, nurses pointed that level of moral distress may result in turnover from job [18]. The actual behavior may be different from the intention; however, behavioral intention to leave position has been reported to be a predictor of personnel turnover across critical settings and theoretically is supposed to be an important antecedent to turnover [16]. Turnover intention defined as "a conscious and deliberate willfulness to leave the organization". Leaving a position and withdrawal cognitions can be used interchangeably [15].

Moral distress can have important consequences, including stress, burnout, job dissatisfaction and intent to leave job [17]. Limited studies are available in how the moral distress might affect the turnover intention in Saudi Arabia. To fill this gap the aim of this study primarily is to identify the

relationship between moral distress and turnover intention among critical care nurses. Secondly is to identify the relationship between moral distress and demographic variables.

The aim of this study is to identify the relationship between moral distress and turnover intention among critical care nurses. The objective was to:

- a) Identify the relationship between moral distress and demographical variables (age, gender, years of nursing experience, and years of critical care experience, education level and marital status) among critical care nurses.
- b) Identify the relationship between turnover intention and demographical variables (age, gender, years of nursing experience, and years of critical care experience, education level and marital status) among critical care nurses.

## 2. Methods

### 2.1. Study Design

A descriptive correlational cross-sectional design was used to identify the relationship between moral distress and turnover intention among critical care nurses.

### 2.2. Study Sample

The sample was drawn from a population of nurses working in critical care settings in teaching university hospital. All critical care nurses were invited to participate. Participants were recruited from teaching university hospital that considered one of the biggest public referral hospitals located in (Riyadh) the capital of Kingdom of Saudi Arabia using the following inclusion criteria: (a) Be working in the critical care unit for at least one month; (b) agreed to participate in the survey with written consent. The sample size (n= 200) was estimated based on [38] participants are required based on power = 0.80, alpha ( $\alpha$ ) = 0.05, and medium effect size = 0.25.

### 2.3. Instrumentation

A 2-part questionnaire was used to collect data. Part 1 consisted of Hamric [18] MDS designed to measure nurses' experiences of moral distress in 21 clinical situations. Participants were asked to indicate on a 4-point Likert scale of how frequently (0=never to 4=very frequently) they encountered each situation, and they asked to indicate on a 4-point Likert scale (from 0=none to 4=a great extent) the intensity of moral distress they experienced in each situation. Reliability (Cronbach's alpha = .91) and content validity have been established for the MDS.

Part 2 of the questionnaire was Turnover Intention Scale designed to measure turnover intention in 3-item scale adapted from [19]. Participants were asked to indicate on a 5-point Likert scale (from 1= Agree Strongly to 5=Disagree Strongly) the turnover intention they encountered the items. Reliability (Cronbach's alpha =.86) and content validity have

been established for the Turnover Intention Scale.

## 2.4. Ethical Considerations

Institutional Review Board approval was obtained from teaching university hospital that located in Riyadh (No. E-14-1078). The researchers explained the study aims and methods to potential participants along with privacy, confidentiality, and the right to withdraw at any time before obtaining written consent to participate. All data were kept in a secured cabinet.

## 2.5. Data Analysis

The data were coded numerically and subjected to descriptive and inferential statistical analysis using statistical software (SPSS version 17). Significance was set at  $p < 0.05$ . Means were computed from intensity and frequency ratings for each item on the MDS. An item score was computed for each of the 21 items. Each item score was calculated by multiplying the mean of the moral distress

intensity (MDI) ratings by the mean of the moral distress frequency (MDF) ratings for that item. The range of possible item scores was 0 to 16. The range of possible values for the moral distress scores was 0 to 336.

## 3. Results

### 3.1. Demographic Characteristics of Participants

Of the 200 questionnaires distributed, 135 were returned (response rate 67.5%). One questionnaire was incomplete and was excluded from analysis. Demographic characteristics of participants are given in (Table 1). Participant's average age was 33.5 (5.95), were predominately female 98.5%, were educated at the Diploma level 87.4%, and had a mean of 12.1 (5.50) years of nursing experience. The majority of participants were married 85.2% and had a mean of 11.2 (4.90) years of critical care experience.

**Table 1.** Characteristics of Participants ( $N = 135$ ).

| Characteristics categories        | Frequency (%)     | Mean (SD)   | Range      |
|-----------------------------------|-------------------|-------------|------------|
| Age                               |                   | 33.5 (5.59) | 24-54      |
| Gender                            | Male (1.5) 2      |             |            |
|                                   | Female 133 (98.5) | -           | -          |
| Years of nursing experience       | -                 | 12.1 (5.50) | 3-31 years |
| Years of critical care experience | -                 | 11.2 (4.90) | 3-27 years |
| Education level                   |                   |             |            |
| Diploma                           | (87.4) 118        | -           | -          |
| Associate                         | (2.2) 3           |             |            |
| Bachelor                          | 14 (10.4)         |             |            |
| Marital status                    |                   |             |            |
| Married                           | (85.2) 115        | -           | -          |
| Single                            | 20 (14.8)         |             |            |

### 3.2. Levels and Relationships Among Main Study Variables

The mean MDI rating for all participants for all items was 1.32 (range .73-2.15; SD.80), indicating a moderate intensity of moral distress overall. The mean MDF score was 1.16 (range .36-2.51; SD.53), indicating that, overall, situations associated with moral distress did not occur frequently (Table 2).

Item scores revealed situations most associated with moral distress. Items with item score of 4 or greater (possible range 0-16) and MDI and MDF scores for each item are italicized and boldfaced in Table 2. MDI scores for these situations were all greater than 2; MDF mean ranged from 2.02 to 2.51. Items related to provision of aggressive care thought not to be in a patient's best interest were the source of the greatest distress and were associated with the highest intensity and frequency of moral distress (Table 2).

**Table 2.** Moral Distress Scale items associated with highest levels of moral distress ( $N = 135$ ).

| Item  | Moral Distress Frequency | Moral Distress Intensity | Moral Distress score |
|---|--------------------------|--------------------------|----------------------|
| Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support. | 2.51                     | 1.98                     | 4.97                 |
| Carry out the physician's orders for what I consider to be unnecessary tests and treatments.  | 2.22                     | 2.15                     | 4.77                 |
| Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient.                                  | 2.02                     | 2.02                     | 4.08                 |
| Initiate extensive life-saving actions when I think they only prolong death.  | 1.79                     | 1.67                     | 2.99                 |
| Follow the physician's request not to discuss the patient's prognosis with the patient or family.   | 1.61                     | 1.50                     | 2.42                 |
| Assist a physician who, in my opinion, is providing incompetent care.   | 1.60                     | 1.79                     | 2.86                 |
| Follow the family's request not to discuss death with a dying patient who asks about dying.   | 1.29                     | 1.19                     | 1.54                 |
| Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit.                                 | 1.22                     | 1.22                     | 1.49                 |
| Witness medical students perform painful procedures on patients solely to increase their skill.   | 1.05                     | 1.39                     | 1.46                 |

| Item   | Moral Distress Frequency | Moral Distress Intensity | Moral Distress score |
|--|--------------------------|--------------------------|----------------------|
| Be required to care for patients I don't feel qualified to care for.   | 1.04                     | 1.19                     | 1.24                 |
| Ignore situations in which patients have not been given adequate information to insure informed consent.   | 1.01                     | 1.47                     | 1.49                 |
| Witness diminished patient care quality due to poor team communication.  | 0.99                     | 1.31                     | 1.30                 |
| Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death. | 0.93                     | 1.15                     | 1.07                 |
| Watch patient care suffer because of a lack of provider continuity.  | 0.81                     | 1.29                     | 1.05                 |
| Work with levels of nurse or other care provider staffing that I consider unsafe.  | 0.73                     | 1.09                     | 0.80                 |
| Work with nurses or other healthcare providers who are not as competent as the patient care requires.  | 0.72                     | 0.73                     | 0.53                 |
| Provide less than optimal care due to pressures from administrators or insurers to reduce costs.   | 0.67                     | 0.99                     | 0.66                 |
| Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing.  | 0.65                     | 0.73                     | 0.48                 |
| Witness healthcare providers giving "false hope" to a patient or family.   | 0.59                     | 1.10                     | 0.65                 |
| Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it.                                | 0.53                     | 0.95                     | 0.50                 |
| Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death.                                   | 0.36                     | 0.79                     | 0.28                 |

Demographic variables analyzed in relation to moral distress were age, gender, educational level, years of nursing experience, years of critical care experience and marital status no significant associations were found (Table 3). As well as, demographic variables analyzed in relation to turnover intention scores were age, gender, educational level, years of nursing experience, years of critical care

experience and marital status. The age ( $r = .17$ ;  $P < 0.05$ ), years of experience in nursing ( $r = .19$ ;  $P < 0.05$ ), and years of critical care experience ( $r = .18$ ;  $P < 0.05$ ) were positively associated with turnover intention scores (Table 3). No other significant associations were found. No significant association was indicated between moral distress intensity and frequency and nurses' turnover intention.

**Table 3.** Correlations of moral distress intensity, frequency, total moral distress, turnover intention and demographics ( $N=135$ ).

| Variables                         | Moral distress frequency | Moral distress intensity | Total moral distress | Turnover intention |
|-----------------------------------|--------------------------|--------------------------|----------------------|--------------------|
| Age                               | -.05                     | .01                      | -.01                 | .17*               |
| Gender                            | -.06                     | -.07                     | -.07                 | -.04               |
| Years of nursing experience       | -.02                     | .05                      | .03                  | .19*               |
| Years of critical care experience | -.04                     | .01                      | -.01                 | .18*               |
| Education level                   | .03                      | .06                      | .07                  | .04                |
| Marital status                    | .02                      | .08                      | .06                  | -.11               |
| Turnover intention                | -.11                     | -.02                     | -.06                 | -                  |

\*Correlation is significant at  $\alpha=0.05$  (2-tailed)

## 4. Discussion

We did this study because we suspected that moral distress was an important problem for nurses practicing in critical care settings. Although the participant's individual experiences varied considerably, we confirmed that nurses experienced moderate levels of moral distress overall. We sought to determine clinical situations associated with high levels of moral distress. Nurses reported that highly frequent and intense distressful situation occurred when nurses feel they were providing aggressive care to patients who would not benefit. These findings were not surprising because nurses have long identified distress in this perspective. It is congruent with many other studies [3, 5, 20, 22]. Conversely, the results of [23, 25] studies showed low frequency and high intensity of moral distress. When more specifically looking at the intensity subscale of the MDS, the situations that were considered the highest in intensity in causing moral distress were those related to the "suffering often seen in patients with complex, life threatening illnesses".

The highest scoring Intensity Subscale items for two other studies [5, 22] demonstrated a similar type of concern reflected in this study about appropriate patient care. According to Wheeler, participation in aggressive technological care of a hopelessly injured person was the most problematic. For Corley, giving intravenous medication without circulatory support during resuscitation was the most distressing item.

A study indicated that the most frequently reported situations in patients' care that were associated with moral distress included prolonging life and performing unnecessary tests and treatments on terminally ill patients [11]. This was also reported by several other studies that reported the frequency scores for moral distress [3, 5, 14, 20, 24, 26, 27].

This result may reflected a lack of communication between nurses and physicians that may lead to unshared decision regarding the best care for patients, which further widening of the gap between nurses and physicians and cause recurrences of same situations. Patients who are critical ill mostly confronted compound diseases that needed

involvement of several different specialties of physicians. Among these separate groups of specialties, there are frequent differences in opinion regarding the plan for a patient's treatment. These separate specialists often fail to communicate or collaborate effectively with each other, further fragmenting care [28].

Further, issues that appear to cause the least intensity of distress relate to the item that reads: "Work with nurses who are not as competent as the patient care requires". In fact, this represents an issue that worth attention especially that Saudi Arabia issupporting health care system to treat patients as partner not consumer.

The perception of moral distress is associated with registered nurses' decisions to leave their job or to leave the nursing profession [29]. The participants in the current study did not reflect neither negative nor positive perception of their moral distress to turnover intension. It makes it also difficult to predict the nurses' intention to stay. Moreover, the way nurses perceive their work environment can affect their attitudes about ethical issues and their ethical decision-making [30].

According to Olson [30] a positive ethical climate is needed to support professional nursing practice. With regards, none of the demographic variables (age, gender, years of nursing experience, years of critical care experience, and education) were significantly associated to moral distress. This result was congruent with others [1, 5, 24, 27, 31].

Yet, some studies [4, 32], reported negative association between age, education, and years of nursing experience and moral distress and some reported positive association between moral distress and both age and years of nursing experience [3] and education [33].

The sample of this study involved nurses who were middle age, holding Diploma degree and senior in professional experience and critical care in the same hospital. This may explain poorer association between moral distress and the demographic characteristics.

With regards, the demographic variables (age, gender, years of nursing experience, and years of critical care experience) were significantly associated to turnover intension. Regarding nurses' turnover intention, our findings were congruent with a study of [34], which reveals a significant positive association between turnover intention and demographic variables of age, professional and specialty experience. However, our findings were conversely the prediction for age, professional and specialty experience by showing an inverserelationship between them and turnover [35, 36] and converse with career theory predicting that the person jobfit will improve over time [37] and turnover intentions will diminish once the employee has reached a good fit and seniority. These results it seems that critical care nurses perform several tasks not consistent to their job description and adherent to hospital policies regardless age, seniority, or relations ships with patients, peers, and/ or health care professionals.

#### 4.1. Limitations

Considering the importance of the issue studied. The

limitations of this descriptive study must beconsidered in interpreting the results. The study involved a small sample of nurses from a single critical care unit, and the findings may not be representative of the experiences of moral distress of critical care nurses in other settings then it's worth mentioning that generalizability should be considered.

The clinical situations includedin the MDS instrument do not necessarily reflect thescope of morally distressing circumstances, and scenarios that result in marked moral distress may have been missed.

#### 4.2. Implications

Additional research is needed related to the experience of moral distress. Face-to-face interviews with criticalcare nurses may be beneficial. In an interview, the researcher can probe the participant and may be ableto add depth to the data obtained. Future studies need to address strategies to reduce the incidence of moral distress and to identify effective strategies to manage moral distress. Understanding the experience of nurses is important in determining how nurses cope with ethically distressing situations and how they intervene ordo not intervene to influence the situations. Future investigations need to examine closely the effects of morally distressing situations on patients and their families.

#### 4.3. Conclusion

This study has revealed that critical care nurses' experience of moral distress is intense and frequent. End of life issues and providing aggressive care to patients not expected to benefit from critical care is a main source of moral distress. Nurses experience moral distress regardless of age, gender, work experience, or the years of experience in same hospital. Nurses' own perception of moral distress is not associated with turnover intension. Hence, critical care nurses can identify important and wide-ranging implications of moral distress that extend well beyond job satisfaction and retention. This might guide the administration and policy makers in hospitals to set up policies that direct the care of patients and families during end of life issues in critical care settings. Moral distress is a serious matter in the critical care settings and earns urgent and extended attention. Research on interventions to address moral distress is also needed.

#### Acknowledgments

The authors gratefully acknowledge the study participants without whom this study could not have been conducted. We also acknowledge the different perspectives shared by the various authors and publishers on the subject matter.

#### References

- [1] Corley MC. Nurse moral distress: a proposed theory and research agenda. *Nursing ethics*. 2002;9(6):636-50.
- [2] Erlen JA. Wanted—nurses: ethical issues and the nursing shortage. *Orthopaedic Nursing*. 2004;23(4):289-92.

- [3] Elpern EH, Covert B, Kleinpell R. Moral distress of staff nurses in a medical intensive care unit. *American Journal of Critical Care*. 2005;14(6):523-30.
- [4] Meltzer LS, Huckabay LM. Critical care nurses' perceptions of futile care and its effect on burnout. *American Journal of Critical Care*. 2004;13(3):202-8.
- [5] Corley M. Moral distress of critical care nurses. 1995.
- [6] Jameton A. *Nursing practice: The ethical issues*. 1984.
- [7] Mrayyan MT, Hamaideh SH. Clinical errors, nursing shortage and moral distress: The situation in Jordan. *Journal of Research in Nursing*. 2009;14(4):319-30.
- [8] Nathaniel AK. Moral reckoning in nursing. *Western journal of nursing research*. 2006;28(4):419-38.
- [9] Nordam A, Torjuul K, Sørlie V. Ethical challenges in the care of older people and risk of being burned out among male nurses. *Journal of Clinical Nursing*. 2005;14(10):1248-56.
- [10] Ursin H, Eriksen H. Cognitive activation theory of stress, sensitization, and common health complaints. *Annals of the New York Academy of Sciences*. 2007;1113(1):304-10.
- [11] Wilkinson JM, editor *Moral distress in nursing practice: experience and effect*. Nursing forum; 1987: Wiley Online Library.
- [12] McClendon H, Buckner EB. Distressing situations in the intensive care unit: a descriptive study of nurses' responses. *Dimensions of critical care nursing*. 2007;26(5):199-206.
- [13] Redman BK, Fry ST. Nurses' ethical conflicts: what is really known about them? *Nursing Ethics*. 2000;7(4):360-6.
- [14] Zuzelo PR. Exploring the moral distress of registered nurses. *Nursing Ethics*. 2007;14(3):344-59.
- [15] Tett RP, Meyer JP. Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel psychology*. 1993;46(2):259-93.
- [16] Gregory DM, Way CY, LeFort S, Barrett BJ, Parfrey PS. Predictors of registered nurses' organizational commitment and intent to stay. *Health Care Management Review*. 2007;32(2):119-27.
- [17] Fry ST, Harvey RM, Hurley AC, Foley BJ. Development of a model of moral distress in military nursing. *Nursing Ethics*. 2002;9(4):373-87.
- [18] Hamric AB, Borchers CT, Epstein EG. Development and testing of an instrument to measure moral distress in healthcare professionals. *AJOB Primary Research*. 2012;3(2):1-9.
- [19] Bluedorn AC. A unified model of turnover from organizations. *Human relations*. 1982;35(2):135-53.
- [20] Chambers J, editor *The effects of collaborative practice on the levels of moral distress in critical care nurses*. Masters Abstracts International; 1996.
- [21] Fogel KM. *The relationships of moral distress, ethical climate, and intent to turnover among critical care nurses*: ProQuest; 2007.
- [22] Wheeler BJ. Neonatal intensive care nurses and the experience of moral distress. 1994.
- [23] 23. Corley MC, Goren S. The dark side of nursing: impact of stigmatizing responses on patients. *Scholarly Inquiry for Nursing Practice*. 1997;12(2):99-118; discussion 9-22.
- [24] Pauly B, Varcoe C, Storch J, Newton L. Registered nurses' perceptions of moral distress and ethical climate. *Nursing ethics*. 2009;16(5):561-73.
- [25] Silén M, Svantesson M, Kjellström S, Sidenvall B, Christensson L. Moral distress and ethical climate in a Swedish nursing context: perceptions and instrument usability. *Journal of clinical nursing*. 2011;20(23-24):3483-93.
- [26] Allari R, Abu-Moghli F. Predictors of Moral Distress among Jordanian Critical Care Nurses. *International Journal of Nursing Science*. 2013;3(2):45-50.
- [27] Corley MC, Minick P, Elswick R, Jacobs M. Nurse moral distress and ethical work environment. *Nursing Ethics*. 2005;12(4):381-90.
- [28] Curtis JR, Shannon SE. Transcending the silos: toward an interdisciplinary approach to end-of-life care in the ICU. *Intensive care medicine*. 2006;32(1):15-7.
- [29] Ulrich C, O'Donnell P, Taylor C, Farrar A, Danis M, Grady C. Ethical climate, ethics stress, and the job satisfaction of nurses and social workers in the United States. *Social Science & Medicine*. 2007;65(8):1708-19.
- [30] Olson L. Ethical climate in health care organizations. *International Nursing Review*. 1994;42(3):85-90.
- [31] Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a moral distress scale. *Journal of advanced nursing*. 2001;33(2):250-6.
- [32] Hamric AB. Moral distress in everyday ethics. *Nursing outlook*. 2000;48(5):199-201.
- [33] Radzvin LC. Moral distress in certified registered nurse anesthetists: implications for nursing practice. *AANA journal*. 2011;79(1).
- [34] Almalki MJ, FitzGerald G, Clark M. The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. *BMC health services research*. 2012;12(1):1.
- [35] Alexander JA, Lichtenstein R, Oh HJ, Ullman E. A causal model of voluntary turnover among nursing personnel in long-term psychiatric settings. *Research in Nursing and Health*. 1998;21(5):415-28.
- [36] Hayes LJ, O'Brien-Pallas L, Duffield C, Shamian J, Buchan J, Hughes F, et al. Nurse turnover: a literature review. *International journal of nursing studies*. 2006;43(2):237-63.
- [37] Kristof-Brown AL, Zimmerman RD, Johnson EC. CONSEQUENCES OF INDIVIDUALS'FIT AT WORK: A META-ANALYSIS OF PERSON-JOB, PERSON-ORGANIZATION, PERSON-GROUP, AND PERSON-SUPERVISOR FIT. *Personnel psychology*. 2005;58(2):281-342.
- [38] Cohen, J. *A Power Primer*. American Psychological Association. 1992;112(1): 155-159.