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Moral Distress among Jordanian Critical Care Nurse and their Perception of Hospital Ethical Climate

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Abstract

Moral distress is associated with perceptions of ethical climate, which has implications for nursing practice and patient outcomes. The purpose of this study was to describe nurses' level of moral distress, their perception of the hospital ethical climate, and the relationship between their level of moral distress, and their perception of ethical climate and selected demographic variables. Moral Distress Scale, Hospital Ethical Climate Scale and a demographic data form were administered to a random sample of 150 critical care staff nurses at 12 hospitals in Jordan. As a result the registered nurses in critical care units reported moderate level of moral distress. No significant correlation was indicated between moral distress intensity and frequency and nurses' perception of hospital ethical climate except the mild negative correlation between moral distress frequency and the relationship with the physicians.

In conclusion moral distress is a common encounter for nurses regardless of age, gender, work experience, or the years of experience though they are not familiar with the term which implies that solutions to relieve their distress are unexplored. There is a pressing need for conceptual work to generate a more robust understanding of moral distress in nursing practice and the relationship between moral distress, ethical climate, decisions to leave positions or nursing, and the impact on patient care.

Key words: Moral distress, hospital ethical climate, Nursing ethics, Ethical dilemma, critical care unit.

1. Introduction

Nurses, especially those working in critical care units, are often faced with ethical dilemmas associated with the management of patients' care. Critical care nurses experience a great deal of pain and suffering as they accompany their patients the weeks and months of burdensome treatments that nurses perceive as being non-beneficial (Erlen, 2004). Advances in technology and changes in healthcare delivery make treatment decisions more difficult and add new responsibilities to nurses as care providers and patients' advocates (Meltzer & Huckabay, 2004; Elpern, Covert, & Kleinpell, 2005). Moreover, the highly stressful life-and-death issues that nurses often encounter could contribute to the experience of moral distress (Corley, 1995).

Moral distress was first defined by Jameton (1984, 6) as "painful feelings and/or the psychological disequilibrium that occurs when nurses are conscious of the morally appropriate action a situation requires, but cannot carry out that action because of institutional obstacles; lack of time, lack of supervisory support, exercise of medical power, institutional policy, or legal limits". More recently, Pendry (2007, 217) defined moral distress as "the physical or emotional suffering that is experienced when constraints (internal or external) prevent one from following the course of action that one believes is right" .According to Olson (1998, 345) moral distress is organizationally induced, and is associated with the perceptions of ethical climate of the work environment.

Ethical climate has been described by Olson as "the perceived environment within an organization that promotes ethical reflection, and allows for inquiry, debate, and expression of differing viewpoints, while promoting each individual's values and mutual trust".

Perception of the ethical climate of one's workplace is based on the relationships with peers, patients, managers, physicians, and hospital administration when encountering ethical problems (Kelly, 1998). These relationships, according to Olson (1995), are influenced by many conditions such as varying levels of power, trust, inclusion, role flexibility, and inquiry that is necessary for ethical problem-solving.

Corley's moral distress theory stressed the need for an in-depth examination of the environment of care and a better understanding of the environmental correlations and relationships. Assessing the nurses' perception of the ethical climate is one component of the environment of care that may be useful (Corley, 2002). Within her

explication of a theory of moral distress, 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 correlation and prediction upon the experience of moral distress (Corley, 2002; Fogel, 2007; Pauly, Varcoe, Storch, & Newton, 2009). Research to date suggests that the ethical climate contributes to moral distress, nurses' decreasing job satisfaction, attrition and unsafe patient care (Hart, 2005; Elpern, et al., 2005).

In Jordan many studies highlighted problems of nurses' Job dissatisfaction and withdrawal (Suliman & Abu Gharbieh, 1996), nursing shortage (Mrayyan, 2005), job satisfaction (Mrayyan, 2006), and turnover (Mrayyan, 2007). None of the studies, however, aimed to investigate in depth, the level of moral distress and perception of ethical climate among nurses. Therefore, this study is considered the first study directed at identifying the level of moral distress among Jordanian nurses, nurses' perception of the hospital ethical climate, and the relationship between the level of moral distress and nurses' perception of ethical climate and selected demographic variables.

The findings of this study may assist hospital and nurse managers in identifying factors contributing to moral distress from the nurses' perspective. The findings may also assist in planning and implementing strategies to reduce moral distress among nurses in critical care units consequently contribute to improving the quality of nursing car. Furthermore, the findings could help the critical care nurses themselves, to recognize their moral distress as the first step to act upon it.

Study Questions

1. What is the level of moral distress experienced by Jordanian critical care nurses?
2. How do Jordanian critical care nurses perceive their hospital ethical climate?
3. What is the relationship between the level of moral distress and the perception of hospital ethical climate?
4. What is the relationship between selected demographics (age, gender, education, years of professional experience, and employment years in the same hospital) and the level of moral distress?

2. Methodology

2.1. Study Design

A descriptive correlation design was used to examine the level of moral distress and the perception of ethical climate among critical care nurses in Jordan.

2.2. Setting

This study was conducted in critical care units in twelve Jordanian (seven public and five private). The bed capacity and the number of critical care nurses were the criteria set to select the hospitals. Only hospitals with the highest bed capacity (> 150 beds for public) and (> 140 beds for private) and the largest number of critical care nurses (≥ 20 nurses) were included.

2.3. Sample

The sample size of (118) participants was estimated for this study using a computer program developed by Faul and Erdfelder (1992), with a medium effect size 0.15, power of 0.8, and α (the risk of Type I error) at 0.05. Yet, 180 participants were selected to produce better power and more reliable findings and to compensate for uncompleted questionnaires. The stratified disproportional random sampling was used to select the study participants. Equal numbers of nurses (60) were selected from each selected hospital in each sector; 30 nurses from each teaching hospital, and 12 from each governmental and each private hospital. Finally, equal numbers of nurses were selected from each critical care unit in the selected hospitals. Nurses were selected from each sector according to the following inclusion criteria:

1. Being a Jordanian registered nurse with a minimum BSC degree;
2. Working in a critical care unit;
3. Working in the current institution for at least six months.

2.4. Ethical Considerations

Approval for conducting the study was obtained from the ethical committee at the University of Jordan, Ministry of Health (MOH), and each selected hospital. The selected nurses were informed that participation is voluntary, and that they have the right not to answer a specific question, and that they can withdraw from this study at any time without penalty. They were told that completing the questionnaire will be considered as a consent for participation.

2.5. Study Instrument

The study instrument includes three parts:

2.5.1. The demographic data sheet (DDS)

The DDS was developed by the researcher based on a review of the literature. Demographic data included gender, age, education, and experience as registered nurses, and length of current employment.

2.5.2. Moral Distress Scale (MDS)

The MDS was developed by Corley (1995) to assess the nurses' level of moral distress. The MDS is a 38-item scale measuring moral distress intensity and frequency. Two 6-point Likert scales are included in front of each statement to assess the level of moral distress in terms of intensity (ranging from 'none' to 'great extent') and frequency (ranging from 'none' to 'very frequently').

2.5.3. Hospital Ethical Climate Scale (HECS)

The HECS was developed by Olson (1998) to assess nurses' perception of hospital ethical climate (HEC). The HECS is a 26-item self-administered survey that asks participants to rate their responses using a 5-point Likert scale ranging from 1 to 5 (1 = almost never true to 5 = almost always true). The items of the HECS are included under five subheadings including relationships with peers, patients, managers, hospital administrators, and physicians.

2.5.4. Pilot study

Although the instrument had been tested for validity and reliability (Corley, et al., 2005) (Olson, 1998) yet it was submitted to a panel of Jordanian experts. Few changes were suggested by the panel of experts concerning rephrasing of some words, wording of sentences in some items, and removing some items that were not culturally acceptable.

A pilot study was conducted to determine the psychometric properties of the research instrument and feasibility of the research design, and to identify reading and understanding difficulties, and the length of time required for completing the instrument. The results of the pilot showed that Cronbach's alpha = .91 for the MDS and α =.91 for the HECS. Also the results of the pilot study showed that nurses found the items in the two parts of the questionnaire easy to understand, they verbalized no need for translation from the English to the Arabic Language, and spent a mean of 20 minutes for completion of the instrument.

3. Data Collection Procedure

Meetings with the nurse managers in all 12 selected hospitals were conducted to inform them about the study and to gain their cooperation. Also, each unit was visited to meet every staff nurse, who was selected randomly, to explain the purpose of the study and to answer questions about the process. The instrument, accompanied with an envelope and a cover letter attached to each envelope, was distributed by the principal researcher to the selected sample in critical care units after a full explanation of the study.

Data were collected during a 10 week time period from 1st May to mid-July, 2010. Of the 180 nurses selected, 10 questionnaires were not returned and 10 were not completed so they were excluded, and 10 questionnaires were excluded because they were partially completed (missing 20% or more of the responses). The response rate was 83.3 % (n=150). Descriptive (mean, standard deviation, frequencies, ranges, & percentages) and inferential statistical (Pearson correlation and point biserial) were used to analyze the data.

4. Results

Table (1) shows that of the sample (N=150), 57% was males and 43% was females with a mean age of 27 years old (SD=4.5, R=21-45). The majority of participants hold a Bachelor degree (n=143, 95%). Furthermore, participant of this study had an average of 4 years experience as registered nurses, and average of 3.3 years of

employment in the same hospital.

Table (2) shows the participants' perceived moral distress in terms of intensity and frequency, as indicated by the scores obtained on the Subscale on each, and the total moral distress. The moral distress intensity ranged from 0.50 to 5.20 and the mean of 2.76 was moderate with a SD of 0.92 for all participants. The highest mean score for moral distress intensity was for item #2 "Follow the family's wishes to continue life support even though it is not in his/her best interest "(3.52). The lowest mean score was for item # 29 "Work with nurses who are not as competent as the patient care requires" (2.03).

Table (2) also shows that the moral distress frequency score ranged from 0.80 to 4.90 and an overall moderate mean of 2.55 with a SD of 0.82 for all participants. The highest mean score for frequency was for item #3 "Carry out a physician's order for unnecessary tests when the patient's death expected" (3.40). The lowest mean score was for #20 "Provide better care for those who can afford to pay than those who cannot" (1.76).

The total moral distress score ranged from 2.00 to 25.4 with a moderate mean score of 7.54 and a SD of 4.44 for the participants were presented in table (2). The highest mean score for total moral distress was for item # 15 (13.54) which was also the second highest mean score for intensity and the third highest score for frequency. The lowest mean score for total moral distress was for item #20 (5.66); the lowest mean score for frequency and the third lowest score for moral distress intensity.

Table (2) reflects that the items rated high for total moral distress were also rated high for both intensity and all were related to the end of life issues (15, 3, 5, 2, and 12).

Table (3) shows the rank order of the five highest and five lowest scores of perception of hospital ethical climate. It shows that the lowest scored item was for item #9 (2.67) "Physicians ask nurses for their opinions about treatment decisions." while the highest scored item was for item #23 (3.75) "Safe patient care is given on my unit". The total perception was neutral with a mean of 3.33, SD of 0.58, and a range from 1.54 to 4.

Table (4) shows the correlations of moral distress intensity, frequency, and total moral distress and demographics and contextual variables. The correlation between total moral distress and hospital ethical climate had no significant correlation on the overall level of moral distress including peers ($r = -0.018$, $P< 0.05$), patient ($r = -0.081$, $P< 0.05$), hospital administrators ($r = -0.128$, $P< 0.05$), managers ($r = -0.003$, $P< 0.05$), and total HECS result ($r =- 0.111$, $P< 0.05$). Similar results were found for the correlation between moral distress intensity and hospital ethical climate. Whilst, results show mild negative significant correlation between the moral distress frequency ($r = - 0.177$, $P< 0.05$) and physicians.

When examining demographic variables in relation to total moral distress; results show that gender ($r = -0.005$, $P< 0.05$), educational level ($r = -.031$, $P< 0.05$), age ($r =.088$, $P<0.05$), years of professional experience ($r =-.103$, $P< 0.05$), and employment years in hospital ($r =-.113$, $P< 0.05$) were not significantly correlated with overall moral distress. Similarly, no significant correlation was found between demographic variables and moral distress intensity and frequency. These findings suggest that a multiplicity of factors studied may affect perceptions of the ethical climate and that there is an implicit complex relationship between the experience of moral distress and variables of the ethical climate, and demographic variables which required the need of further exploration.

5. Discussion

For the current study the total moral distress and the two subscales Intensity and Frequency had moderate mean scores. The findings of this study were congruent with many other studies (Kane, 2000; Corley, 1995; Fogel, 2007; Wheeler, 1994; & Chambers, 1996). Conversely, the results of Corley and Goren (1998), and Pauly (2009) 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 Wheeler (1994) and Corley (1995) 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.

Wilkinson (1985) 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. This was also reported by several other studies that reported the frequency scores for moral distress (Corley,

1995; Chambers, 1996; Wheeler, 1994; Pauly et al., 2002; Corley et al., 2005; & Zuzelo, 2007). Similarly, the most frequent distressful situation (based on highest mean score on frequency Subscale) in this current study was "Carry out a physician's order for unnecessary tests and treatment when the patient's death is expected". 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.

The top five items with the highest total distress scores were related to the "end of life issues". The item regarding "Continue to participate in care for a hopelessly injured person who is being sustained on a ventilator, when no one will make a decision to turn off the life support machine." had the first place for the Total Subscale scores. Issues regarding items in the end of life factor and nursing workload can be very complex and it is clear that they should be given consideration. They held the highest level of concern for the majority of the nurses in this study. The concept of moral distress is best explicated via the specific situations that are reported as most upsetting or most frequently faced.

On the other hand, 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". But unexpectedly the same item rated as the fifth highest frequent situation encountered by nurses in critical care units. In fact, this represents an issue that worth attention especially that Jordan is encouraging health care tourisms and is enjoying a good reputation in the field of health care services.

The perception of hospital ethical climate is associated with registered nurses' decisions to leave their job or to leave the nursing profession (Ulrich et al., 2007). The participants in the current study did not reflect neither negative nor positive perception of their ethical climate. This overall neutral perception makes it difficult to explain the high turnover rate (44%) reported by the Jordanian Nurses' Council (JNC, 2008) . 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 (Olson, 1995). According to Olson, a positive ethical climate is needed to support professional nursing practice.

Regarding relationships among the health care team within the work environment, the highest positive perception was related to the nurses' views of their colleagues and the perceptions that safe care was being given to patients. Similar results were reported by Ulrich et al. (2007). On the other hand, the relationship with physicians received the lowest scores. According to Storch, & Kenny, (2007) communication between professions has long been known to be a discord in facilitating an ethical climate among physicians and nurses. "Physicians and nurses are too often in conflict and/or separated from joint work for good patient outcomes" (Storch, & Kenny, 2007, p.488).

Regarding mild negative relationship between physicians and the moral distress frequency, the results supported negative perception reported by the participants in this study, which was also related to physicians. This may be explained as a large number of young aged participants alongside of having lack of experience especially in communicating effectively with the physicians. Winland, Chiarenza, and Dobrin (2010) found that younger nurses have not developed critical communication skills to deal with physicians.

None of the demographic variables (age, gender, years of professional experience, education, and employment years in the same hospital) were significantly correlated to total moral distress. This result was congruent with others (Corley, 1995; Corley et.al, 2001; Corley, 2002; Corley, et al., 2005; Pauly, et al., 2009; & Winland et al., 2009). Yet, some studies, reported negative correlation between age, education, and years of professional experience and moral distress (Hamric, 2000; Aiken, et al., 2001; Meltzer & Huckabay, 2004; Hart, 2005; Kalvemark, et al., 2006) and some reported positive correlation between moral distress and both age and years of nursing experience (Elpern, et al., 2005) and education Radzvin (2011).The sample of this study involved nurses who were young, holding BSc degree, having relatively low professional experience and short length of employment in the same hospital. This may explain poorer correlation between moral distress and the demographic characteristics. Further, number of male and female nurses who participated in this study were comparable, which also adds on no significant differences and further consistency of their practice and perceptions in relation to hospital ethical climate and moral distress. It seems that Jordanian critical care nurses perform several tasks consistent to their job description and adherent to hospital policies regardless gender, work experience, or relations ships with patients, peers, and/ or health care professionals.

5.1. Study limitations

Considering the importance of the issue studied, and that this is the first study that tackled this issue, it's worth

mentioning that generalization should be cautionly considered. The nature of the study, being descriptive, and the reliance on self reports of the respondents also carries the potential for demand characteristic effects. According to Waltz, Strickland, and Lenz (1991), "demand characteristic effects refer to respondents' deliberately monitoring responses to fit perceived demands…either those of the interviewer or of society" (p. 326). This potential for socially desirable responses may have been countered with the assurance of confidentiality and anonymity of all participants.

6. Conclusions

As the first study that investigated issues related to moral distress and hospital ethical climate, the finding provided a foundation for the development of evidence-based interventions, designed to improve the nursing profession. This study has revealed that:

- Nurses in Jordan experience moral distress regardless of age, gender, work experience, or the years of experience in same hospital.
- Moral distress is a common encounter for nurses though they are not familiar with the term which implies that solutions to relieve their distress are unexplored.
- Jordanian nurses' concerns about end of life issues are associated with the higher levels of moral distress intensity and frequency which is consistent with previous studies.
- Nurses' own perception of hospital ethical climate is not correlated with moral distress.
- Data in the current study point to the importance of moral distress and the ethical climate in ICUs as variables worthy of further investigation.

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Table 1: Description of demographic characteristics

N=150

Variables	*Range*	*Mean*	*Standard deviation*	% (n)
Gender				
Female	-	-	-	43% (65)
Male				57% (85)
Educational Level				
BSC	-	-	-	95% (143)
MSN				5% (7)
Sector				
Governmental	-	-	-	33% (49)
Private				33% (50)
Teaching				34% (51)
Age in years	21-45	27	4.2	-
Years of Professional Experience	6 months-20 years	4 years	3.9	-
Employment years in same hospital	6 months-20 years	3.3 years	3.4	-

Table 2: Rank order of the five highest and five lowest scores of moral distress intensity, frequency, and total moral distress

Variables		Related factor	Mean	Standard deviation
• Follow the family's wishes to continue life support even it is not in the best interest of the patient	Highest Intensity items	End of life care	3.52	1.73
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator		End of life care	3.33	1.94
• Carry out a physician's order for unnecessary test when the patient's death expected		End of life care	3.25	1.80
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	3.22	1.89
• Carry out the physician's orders for unnecessary tests for treatments for terminally ill patients		End of life care	3.08	1.71
• Work with nurses who are not as competent as the patient care requires	Lowest Intensity items	Quality of care by others	2.03	1.77
• Let medical students perform painful procedures on patients only to increase their skill		Justice	2.11	1.83
• Provide better care for those who can afford to pay than those who cannot		Justice	2.17	1.88
• Ask the patient's family about donating organs when the patient's death expected		End of life care	2.35	1.90
• Be required to care for patients I am not competent to care for		Quality of care by self	2.49	1.82
Moral distress intensity Score			**2.76**	**0.92**
• Carry out a physician's order for unnecessary tests when the patient's death expected	Highest Frequency items	End of life care	3.40	1.89
• Follow the family's wishes to continue life support even it is not in the best interest of the patient		End of life care	3.30	1.69
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator		End of life care	3.23	1.94
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	3.15	1.91
• Work with nurses who are not as competent as the patient care requires		Quality of care by others	3.01	1.76
• Provide better care for those who can afford to pay than those who cannot	Lowest Frequency items	Justice	1.76	1.64
• Ask the patient's family about donating organs when the patient's death expected		End of life care	1.87	1.73
• Work with non-licensed personnel who are not as competent as the patient care requires		Quality of care by others	2.02	1.75
• Let medical students perform painful procedures on patients to increase their skill		Justice	2.15	1.69
• Be required to care for patients I am not competent to care for		Quality of care by self	2.15	1.76

Moral distress frequency Score			**2.55**	**0.82**
Variables		Related factor	Mean	Standard deviation
• Continue to participate in care for a hopelessly injured who is being sustained on a ventilator	Highest Total moral distress items	End of life care	13.54	11.7
• Carry out a physician's order for unnecessary tests when the patient's death expected		End of life care	13.15	10.9
• Initiate extensive life-saving actions when I think it only when I think it only prolongs death		End of life care	13.05	11.5
• Follow the family's wishes to continue life support even it is not in the best interest of the patient		End of life care	12.94	10.7
• Carry out the physician's orders for unnecessary tests for treatments for terminally ill patients		End of life care	11.38	10.7
• Provide better care for those who can afford to pay than those who cannot	Lowest Total moral distress items	Justice	5.66	7.54
• Ask the patient's family about donating organs when the patient's death expected		End of life care	6.11	7.62
• Let medical students perform painful procedures on patients to increase their skill		Justice	6.53	8.48
• Work with non-licensed personnel who are not as competent as the patient care requires		Quality of care by others	6.79	8.58
• Be required to care for patients I am not competent to care for		Quality of care by self	7.05	8.40
Total Moral distress score			**7.54**	**4.44**

Table 3: Rank order of the five highest and five lowest scores of perception of hospital ethical climate

Variables		Related factor	Mean	Standard deviation
• Safe patient care is given on my unit.	Highest items	Peer	3.75	1.06
• My manager is someone I respect.		Manager	3.59	1.17
• Nurses use the information necessary to solve a patient care issue/problem.		Patient	3.58	0.92
• When I'm unable to decide what's right or wrong in a patient care situation, my manager helps me.		Manager	3.57	1.06
• I am able to practice nursing on my unit as I believe it should be practiced.		Hospital A.	3.53	1.16
• Physicians ask nurses for their opinions about treatment decisions.	Lowest items	Physician	2.67	1.15
• Conflict is openly dealt with, not avoided.		Hospital A.	2.90	1.04
• The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions.		Hospital A.	3.23	0.89
• Nurses and physicians here respect each others' opinions, even when they disagree about what is best for patients.		Physician	3.07	1.16
• Nurses and physicians trust one another.		physician	3.23	1.10
Total Hospital Ethical Climate Score			3.33	0.58

Table 4: Correlations of moral distress intensity, frequency, and total moral distress and demographics and contextual variables N=150

variables	Moral distress intensity	Moral distress frequency	Total moral distress
Gender	.090	.022	-.005
Educational Level	.103	.056	-.031
Age	.073	.071	.088
Years of professional experience	-.096	-.080	-.103
Employment years in hospital	-.144	-.008	-.113
Peers	-.002	-.003	-.018
Patients	-.004	-.003	-.081
Hospital administrators	-.064	-.096	-.128
Physicians	-.127	-.177*	-.146
Managers	-.014	-.034	-.003
Hospital ethical climate score	-.071	-.067	-.111

* Correlation is significant at α=0.05 (2-tailed)