Moral Distress Related Factors Affecting Critical Care Nurses

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Abstract: Background: Moral distress has been identified as a major factor influencing the physical and emotional well being of the nurses. It is a serious problem among critical care nurses, it may make the nurses avoid the patient and do not act as an advocate. While its impact on the nurses themselves is burn-out, resignation from their position, or abandonment of nursing. The impact that moral distress has on the institution is high nurse turnover, low patient satisfaction, and decreased quality of care. The aim of this study was to identify the moral distress related factors affecting the critical care nurses. Method: The study was conducted in six intensive care units (ICUs) of kafr-Elsheikh hospitals. Subjects: All of the critical care nurses providing direct patient's care and working in the mentioned ICUs included in the study (70 nurses). Tool: Moral distress intensity scale was used for data collection, it was adopted from Corey. Results: The physician practice category is found to be the highest moral distress factor followed by the nursing practice category and then the institutional category. Conclusion: Moral distress including several factors is a critical problem that affects the critical care nurses and it needs more attention. [Maysa Abdalla Hassan, Hayam Ibrahim Asfour and Nagwa Ahmad Reda. Moral Distress Related Factors Affecting Critical Care Nurses. J Am Sci 2013;9(6):184-196]. (ISSN: 1545-1003).

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1. Introduction

Problems of ethics have been a part of nursing practice. Moral distress has been identified as a factor influencing the physical and emotional well being of the nurses. It was documented that ethical problems have been divided into three categories. The first category is moral uncertainty; the second one is ethical dilemma; and the moral distress is the third category. Moral uncertainty is described as being unsure whether a course of action is moral or not; but the ethical dilemma is described as a conflict between one or more ethical theories or principles. While moral distress arise when one knows the right thing to do, but institutional constraints make it almost impossible to pursue the right course of action (1,2).

Critical care units (CCUs) are primarily designed to save the lives of the people who are critically ill and/or dependent on life-sustaining support. As patients are at risk of life-threatening problems, they need continuous intensive monitoring by the most technological sophisticated support that health care team can offer. Because these units care for patients at the brink of death, they are also places where patients, families, and the health professionals caring for them struggle with decisions about the appropriateness of aggressive care. Critical care units are often stressful place for nurses, patients and families (5-7).

Nurses working in the critical care unit often encounter a great deal of pain and suffering with patients through weeks and months of life support and burdensome treatments and care that nurses perceive as being futile or non-beneficial to the patients (5-7). The care of critically ill patients requires the integration of highly technical skills with psychosocial and spiritual support for patients and families. This care often presents the critical care nurse with challenging moral/ethical decision (8,9). These nurses are often faced with ethical dilemmas associated with the management of patients’ care, as increasingly advanced technology and changes in healthcare delivery combine to create difficult treatment decisions and add new responsibilities to nurses’ roles as caregivers and patients’ advocates (5-7). Moral situations are always present in the CCUs and this is not likely to change. Critical care nurses will and should continue to make moral decisions about their actions and regularly face moral situations and are distressed by them (10).

In an ever-increasingly complex healthcare arena, critical care nurses (CCNs) are faced with ethical challenges in their delivery of nursing care. Critical care nurses reported that they often feel compelled to make ethical decisions that are encountered to their professional and personal values in relation to various situations that arise in the clinical setting. These clinical issues include care-related decision making that nurses believe is counter to the expressed desires of the patient, aggressive or futile treatment of terminal patients, issues related to informed consent, working with incompetent nurses and physicians, and working under institutional
and increased length of stay result inadequate and inappropriate care for these patients; this can prohibit the person from acting in what he or she believes is the morally correct manner (16). Obstacles encountered in morally distressing situations may be in the form of institutional constraints or conflicts with coworkers that prohibit the person from acting in what he or she believes is the morally correct manner. It was indicated that greater than 50% of critical care nurses are reported to experience moral distress (17), as a result, such nurses may physically withdraw from the bedside, barely meeting the patient's basic physical needs, or may choose to leave their positions or the profession in response to moral distress (18-24). Feelings of those nurses with moral distress can have a direct impact on patient care. Nurses may actually find themselves avoiding some patients; this can result inadequate and inappropriate care for these patients leading to increased level of pain, suffering and increased length of stay (25).

Critical care nurses and managers alike to be conscious of the effects of moral distress by working together to identify areas and factors of potential distress, and mutually planning to eliminate or reduce these areas and related factors, yet, moral distress may be reduced. Reducing the level of moral distress experienced by nurses caring for critically ill patients would be a significant step toward developing a healthier environment for the care giver to care. There are no studies conducted in Egypt to explore moral distress related factors in the critical care units. Hence, this study was carried out to identify moral distress related factors affecting nurses in the critical care units.

The aim of this study was: to identify moral distress related factors affecting the critical care nurses. Research questions: What are the moral distress related factors affecting critical care nurses? What is the intensity of the critical care nurses' moral distress?

2. Materials and Method

Research design: Descriptive design was used in this study.

Setting:
This study was conducted in the intensive care units (ICUs) of Kafr-Elsheikh hospitals, namely: General intensive care unit in Desouque hospital (Ministry of health), that contain 8 beds. General intensive care unit in Kafr-Elsheikh hospital (Ministry of health), that contain 12 beds. Intensive care unit in Sedi Salem hospital (Ministry of health), that contain 6 beds. Intensive care unit in Fowa hospital (Ministry of health), that contain 6 beds. Intensive care unit in Elebour Hospital (Health insurance) that contains 12 beds.

Subjects:
Subjects of this study included all critical care nurses providing direct patient care and have experience more than one year working in the above mentioned ICUs (70 nurses).

Tool:
The tool of this study is: Moral Distress Scale (MDS), it is adopted from Corley 2002 (16) it was used to measure the intensity of nurses' moral distress, its sources and the related factors. It consists of 38 items including six different categories:

- Physician practice: It is the first category that contains 12 items describing physician practice as: Assisting a physician who performs a test or treatment without informed consent; ignoring situations of suspected patient abuse by caregivers; ignoring situations in which patients have not been given adequate information to insure informed consent; Let medical students perform painful procedures on patients solely to increase their skill; Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful; 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 “pull the plug”; Follow the physician’s order not to tell the patient the truth when he/she asks for it; Assist a physician who in your opinion is providing incompetent care; Providing care that does not relieve the patient’s suffering because physician fears increasing dose of pain medication will cause death; Follow the physician’s request not to discuss Code status with patient; Follow the physician’s request not to discuss Code status with the family when the patient becomes incompetent and Work with physicians who are not as competent as the patient care requires.
Nursing practice: It is the second category that contains 9 items describing nursing practice as: Carry out a work assignment in which nurse does not feel professionally competent; Avoiding taking action when nurse learn that a nurse colleague has made a medication error and does not report it; Work with levels of nurse staffing that nurse consider “unsafe”; Observing without taking action when health care personnel don't respect patient's privacy; Work with nurses who are not as competent as the patient care requires; Work with non-licensed personnel who are not as competent as the patient care requires; Work with support personnel who are not as competent as the patient care requires; Be required to care for the patients nurse is not competent to care for; and Work with nursing assistants who are not as competent as patient care requires.

Institutional factors: it is the third category that contains 4 items describing institutional factors as: carry out orders or institutional policies to discontinue treatment because the patient can no longer pay; not being able to offer treatment because the costs will be not covered by the insurance company, Discharge a patient when he has reached the maximum length of stay based on Diagnostic Related Grouping (DRG) although he has many teaching needs and Provide better care for those who can afford to pay than those who cannot.

Futile care: it is the fourth category that contains 7 items describing futile care as: follow the family’s wishes for the patient’s care when nurse do not agree with them but do so because hospital administration fears a lawsuit; Follow the family’s wishes to continue life support even though it is not in the best interest of the patient; Initiate extensive life-saving actions when nurse think it only prolongs death; Carry out the physician’s orders for unnecessary tests and treatments for terminally ill patients; Prepare an elderly man for surgery to have a gastrostomy tube put in, who is severely demented and a ‘No Code’ and Follow the family’s request not to discuss death with a dying patient who asks about dying.

Deception: it is the fifth category that contains 3 items describing deception as: Give medication intravenously during a Code with no compressions or intubation; Follow the physician’s request not to discuss death with a dying patient who asks about dying; and Follow orders for pain medication even when the medications prescribed do not control the pain.

Euthanasia: it is the sixth category that contains 3 items describing euthanasia as: Increase the dose of intravenous morphine for an unconscious patient that nurse believe will hasten the patient’s death; Respond to a patient’s request for assistance with suicide when patient has a poor prognosis and ask the patient's family about donating organs when the patient's death is inevitable.

Nurses' response was measured using likert scale ranging from 1 (none) to 5 (great extent) for the Intensity scale; (13,17,21,26) 1=none; 2=almost none; 3=small extent; 4=moderate extent and 5=great extent. The total score is the sum of all items (Range1-190) which was classified the results as the following; mild from 1 to 64; 64 to 127 moderate and 128 to 190 sever.

In addition to the demographic data such as: critical care nurses age, sex, educational level, marital status, income and experience in intensive care.

Method
An official letter was directed to the hospitals’ directors in order to obtain the acceptance to collect the necessary data from the selected settings after providing explanation of the aim of the study.

The tool used in this study was adopted from Corley 2005 (26). It was translated into Arabic, tested for content validity by five nursing experts in the field of the study and the necessary modifications were done. It was tested for internal consistency and reliability using the coefficient alpha (Cronbach’s alpha for intensity was 0.98).

A pilot study was carried out on 5 nurses that was not included in the study before embarking into the actual study in order to ascertain the feasibility and applicability of the study tool and to identify obstacles that may be faced during data collection.

Nurses’ informed consent was obtained prior to data collection after explanation of the aim of the study. Nurses’ anonymity and confidentiality were ascertained and voluntary participation and the right to participation refusal in the study was emphasized to the subjects.

Critical care nurses were interviewed on an individual basis during their break time in the morning or evening shift for data collections using the tool of the Moral Distress Scale (MDS), and nurses’ responses were recorded by the researcher. The time for each interview took approximately 30 minutes for each nurse. Data collection took approximately 3 months starting from the mid of January till the beginning of April 2012. All the data were coded and entered in statistically program to be analyzed.

Statistical Analysis:
The raw data were coded and transformed into coding sheets. The results were checked. Then, the data were entered into the Statistical Package for Social Sciences SPSS system files (SPSS package version 18) using personal computer. Output drafts were checked against the revised coded data for typing and spelling mistakes. Finally, analysis and interpretation of data were conducted.

The following statistical measures were used:

- Descriptive statistics including frequency, distribution, mean, and standard deviation were used to describe different characteristics.
- Kolmogorov – Smirnov test was used to examine the normality of data distribution.
- Univariate analyses including: t-test and ANOVA test were used to test the significance of results of quantitative variables.
- Linear correlation was conducted to show relation between moral distress scale score and the studied variables.
- The significance of the results was at the 5% level of significance.

3. Results

Table (I) shows the distribution of the critical care nurses according to their demographic characteristics. In relation to their age, more than three quarters of the critical care nurses (80.0 %) are between 20 to less than 30 years old. The majority of them (95.7%) are females. More than three quarters (75.7%) are married and as their educational level nearly two third of the CC nurses (44.3%) graduated from secondary nursing school, 34.3 % of them have bachelor degree of nursing; and the technical nurses in the present study are 21.4 %.

Table (I): Demographic characteristics of the studied critical care nurses.

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>Nurses (n=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
</tr>
<tr>
<td>&lt; 20</td>
<td>1</td>
</tr>
<tr>
<td>20-</td>
<td>56</td>
</tr>
<tr>
<td>30-&lt;40</td>
<td>13</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>67</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>53</td>
</tr>
<tr>
<td>Single</td>
<td>17</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
</tr>
<tr>
<td>Secondary nursing school (Diploma)</td>
<td>31</td>
</tr>
<tr>
<td>Technical nursing institute</td>
<td>15</td>
</tr>
<tr>
<td>Bachelor degree of nursing</td>
<td>24</td>
</tr>
</tbody>
</table>

Table (II) indicates the characteristics of the critical care nurses in relation to the ICU workplace; it illustrates that about 26% of the nurses working in the ICUs that contain 11-20 beds. It was observed that all the nurses in all settings have not any previous education or in-service training courses about health care ethics, or have no any ethical committees.

Table (II): Characteristics of the studied critical care nurses in relation to the ICU workplace.

<table>
<thead>
<tr>
<th>ICU workplace</th>
<th>Nurses (n=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Number of beds</td>
<td></td>
</tr>
<tr>
<td>Less than 11</td>
<td>52</td>
</tr>
<tr>
<td>From 11 – 20</td>
<td>18</td>
</tr>
<tr>
<td>Presence of ethics committee in organization</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>70</td>
</tr>
<tr>
<td>Present</td>
<td>0</td>
</tr>
<tr>
<td>Previous education courses in health care ethics</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>70</td>
</tr>
<tr>
<td>Yes</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure (1) presents the CC nurses perception of the moral distress intensity scale regarding physician practice. It indicates that 68.6% of CCNs perceived the item (5) "Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful" by great extent; followed by item (4) “Let medical students perform painful procedures on patients solely to increase their skill” by 60%; and then the item (9) “Providing care that does not relieve the patient’s suffering because physician fears increasing dose of pain medication will cause death” by 57.1% of the studied CCNs.

Figure (2) demonstrates the CC nurses perception of the moral distress intensity scale regarding nursing practice. It illustrates that the highest value of perception is related to the item (2) "Avoid taking action when I learn that a nurse colleague has made a medication error and does not report it" by 68.6% of the nurses; followed by item (4)“Observe without taking action when health care personnel do not respect the patient’s privacy” by 58.6% of them.

Figure (3) demonstrates the moral distress intensity scale regarding institutional factors among CC nurses. It presents that the highest value is found to be for the item (4) "Not being able to offer treatment because the costs will not be covered by the insurance" by 71.4% of the nurses.

Figure (4) presents the moral distress intensity scale regarding futile care among CC nurses. It illustrates that the highest value is perceived by the nurses related to the item (6) "Prepare an elderly man for surgery to have a gastrostomy tube put in, who is severely demented and a “No Code” by 38.6% of them.

Figure (5) indicates the moral distress intensity scale regarding deception and euthanasia categories among the CC nurses, the highest value is related to the item "Respond to a patient’s request for assistance with suicide when patient has a poor prognosis" perceived by 65.7% of them.
Figure (3) Distribution of the studied CC nurses according moral distress intensity scale regarding the institution factors.

Figure (4) Distribution of the studied CC nurses according moral distress intensity scale regarding futile care.

Figure (5) Distribution of the studied CC nurses according the moral distress intensity scale regarding deception and euthanasia items.
Table (3) presents the score of the moral distress intensity scale regarding the different categories among the critical care nurses. The highest score in the scale is related to physician practice items (47.1±5.5), while the lowest score in the scale is related to euthanasia items (148.0±17.7); it was observed that the majority of ICUs nurses have severe moral distress (97.2%), while 1.4% of them have moderate, and the same percent for mild moral distress.

Figure (6) presents the score of the moral distress intensity scale regarding the different studied categories among the critical care nurses. The majority of ICUs nurses have severe moral distress (97.2%), while 1.4% of them have moderate level, and the same percent for mild moral distress.

Table (4) shows the relationship between the score of moral distress intensity scale and the critical care nurses’ age and the level of education; no significant relationships were found for the both items.

Table (5) indicates a significant relationship between moral distress intensity score and the bed-nurse-ratio \((r=0.25\& p=0.037)\), and the years of experience of the CC nurses in the working CC units \((r=0.285\& p=0.019)\). The same table presents significant relation between the bed-nurse-ratio and the increase moral distress scale score, when the patient ratio increase to the nurses' number will lead to increase the workload and the moral intensity score too. Moreover, the table shows a significant relation between the experience in intensive care and the increase moral distress, with the increase in the years of experience will lead to increase the moral distress scale score.

Table (3): Moral distress intensity scale score of the critical care nurses regarding the different categories.

<table>
<thead>
<tr>
<th>Score of the Moral distress scale of the different categories</th>
<th>Score of nurses (n=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min-Max</td>
</tr>
<tr>
<td>Score of physician practice (max=60)</td>
<td>18-54</td>
</tr>
<tr>
<td>Score of nursing practice (max=45)</td>
<td>11-45</td>
</tr>
<tr>
<td>Score of Institutional factors (max=20)</td>
<td>4-20</td>
</tr>
<tr>
<td>Score of futile care (max=35)</td>
<td>7-33</td>
</tr>
<tr>
<td>Score of deception (max=15)</td>
<td>3-14</td>
</tr>
<tr>
<td>Score of euthanasia (max=15)</td>
<td>3-15</td>
</tr>
<tr>
<td>Total score (max=190)</td>
<td>46-172</td>
</tr>
</tbody>
</table>

Mild (less than 60) 1 (1.4%)
Moderate (60<120) 1 (1.4%)
Severe (120 or more) 68 (97.2%)

Table (4) shows the relationship between the score of moral distress intensity scale and the critical care nurses’ age and the level of education; no significant relationships were found for the both items.
Table (4): Relationship between the studied CC nurses mean moral distress scale score and their personal characteristics

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>N</th>
<th>Moral distress scale score (mean ± SD)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>57</td>
<td>146.5±18.5</td>
<td>t=1.455</td>
</tr>
<tr>
<td>30 or more</td>
<td>13</td>
<td>154.4±11.9</td>
<td>P=0.15</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary nursing school (Diploma)</td>
<td>31</td>
<td>148.6±11.5</td>
<td>F=0.224</td>
</tr>
<tr>
<td>Technical nursing institute</td>
<td>15</td>
<td>149.8±13.1</td>
<td>P=0.8</td>
</tr>
<tr>
<td>Bachelor degree of nursing</td>
<td>24</td>
<td>146.1±25.5</td>
<td></td>
</tr>
</tbody>
</table>

*: t-test; F: ANOVA test

Table (5): Relationship between moral distress scale score and the bed-nurse-ratio and the years of experiences of the critical care nurses

<table>
<thead>
<tr>
<th>ICU characteristics</th>
<th>Moral distress scale score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
</tr>
<tr>
<td>Bed- nurse ratio</td>
<td>0.25</td>
</tr>
<tr>
<td>Experience in emergency department</td>
<td>0.002</td>
</tr>
<tr>
<td>Experience in Intensive care unit</td>
<td>0.285</td>
</tr>
</tbody>
</table>

r: Spearman Rho correlation coefficient; *significant at p ≤0.05

4. Discussion

Moral distress has been a highly raised topic in the healthcare for the last two decades. It is a serious issue in the workplace and deserves urgent and extended attention, and it is thought to be a serious problem among nurses; particularly those who practice in the critical care units that faced with increasingly patients’ acuity, shorter length of stays, staffing challenges, and utilization pressure. Moral distress has been associated with job dissatisfaction and loss of nurses from the workplace and even leave the profession (24,34). AACN (34,36) indicated that unaddressed moral distress restricts nurse's ability to provide optimal patient care and diminishes her job satisfaction.

Moral distress in the nursing practice has been named despite the intensity of morally distressing encounters by the critical care nurses, although moral distress impacts other types of clinicians, nurses report greater intensity levels of moral distress (33). Researches of nurses’ experiences of moral distress have been limited (24). Therefore this study was conducted to identify moral distress related factors affecting the critical care nurses.

Moral distress of the critical care nurses:

Moral distress has been associated with loss of moral integrity among nurses, and it is a powerful; leading to overall impediment to ethical practice. The term moral integrity means soundness, reliability, wholeness, and integration of moral character over time. This signifies being faithful to coherent, integrated moral values and actively defending them when they are threatened. A person of moral integrity is not disordered or disoriented by moral conflict and is faithful to the standards of the common morality as well as to personal moral ideals (15,37,38).

Moral distress is a serious problem in nursing. Previous studies documented high percentage of nurses who are reported high level of moral distress and about quarter of those nurses who are quitted the profession indicated that they did so because of the high intensity of the moral distress. With a current nursing shortage, the health care system and the nurse leaders have a call to action to decrease or eradicate such moral distress (38). Hamric (2006) (12) stated three sources of moral distress, these sources were clinical situations, factors internal to the caregiver, and factors external to the caregiver but inherent in the environment in which the moral distress occurs. A lot of negative effects of moral distress can be occurred, and can affect the psychological and physiological health of the critical care nurses; the moral integrity; job satisfaction causing turnover and burnout of the CCNs; and all can affect the quality of patient care (38).

Moral distress intensity among the critical care nurses:

High level of moral distress is perceived by nearly all of the critical care nurses in the current study, this may be attributed to that critical care nurses feel moral conflicts when providing exceptionally aggressive medical care to patients; treating the patients as objects in order to meet institutional requirements; harm to patients in the
form of pain and suffering, and poor pain management; and when the patients or their families are given inaccurate or incomplete information regarding treatment, outcomes and prognosis.

Moreover, none of those nurses had any previous education or in-service training programs about the health care ethics; and their work settings did not include ethical committees, also the increased emotional demands of the critically ill patients and their families and inadequate staffing and resources may complicate the problem. Furthermore, most of the critical care nurses are in the same age group and their experience to deal with situations of moral conflicts is not enough, and their communication skills are diminished. This finding is supported by Corley et al. (2001) (13), Corley et al. (2005) (26), and Pauly et al. (2009) (35), they assessed the variables that resulted in exacerbation of the intensity of moral distress among CC nurses; they reported that the presence or absence of an ethical work environment is a strong predictor of moral distress intensity. Specifically, they indicated that nurses who are working in environments perceived as unethical or in which they are forced to make professional choices they considered incongruent with their personal and professional ethics are likely to experience moral distress.

It was documented that nurses who work in the critical care units faced with some situations that may cause increased level of moral distress as those concerned with prolonging life, situations involving lying to patients, and incompetent or inadequate treatment by a physician (25). Schluter et al. (29) addressed another causes, or sources that founded to be of high distressing, as working with the physicians who were not as competent as the patient care requires; and the following of pain regiments that were not as competent as the patient care requires, increased workload, inadequate staffing and resources, inadequate experience in dealing with the ethical aspects of life-sustaining technology, and exposure to death and dying of the critically ill. Moreover, sometimes they may be forced to perform some actions because they fear of punishment. Therefore, the CCNs should be supported from their leaders, find colleagues who support them or who support acting to address moral distress, speak with one authoritative voice and build support networks. They need support from the managers to find the root causes of moral distress and create a plan for action, develop policies to encourage open discussion, interdisciplinary collaboration, and the initiation of ethics consultations.

It was documented a statistical significant relationship between the intensity of moral distress and the nursing practice category of the futile care and institutional factors (12,27). Other previous studies were found to be in line with this findings, they reported the highest moral distress intensity resulted from items related to “carrying out medical orders for unnecessary tests or treatments on the terminally ill patients” (futile care) (24,25,33). They were attributed that to the heightened awareness of the critical care nurses regarding the needs for the critically ill patients to move more readily from curative to palliative care models, and therefore nurses should be observing fewer to the unnecessary treatments for terminally ill patients in critical care units and withdrawal of treatment without nurse participation in the decision (19).

Therefore, the nurse managers and the CCNs should be focusing on the work environment and be more productive than focusing on an individual patient. Remember, similar problems tend to occur over and over. It’s not usually the patient, but the system, that needs changing; many causes of moral distress are interdisciplinary. Nursing alone cannot change the work environment. Multiple views and collaboration of the all health care team are needed to improve a system, especially a complex one, such as what is present in a critical care environment (12,27).

The present study revealed no significant difference between ages of the participated CCNs and the level of moral distress, as the majority of nurses was found to be less than 30 years old, and most of them had high level of moral distress regarding the different studied categories. This may
be related to that the less experienced nurses may not have the developed skills and the capacity to cope with these difficult ethical circumstances, therefore, the need for ethical committee is very important to focus on the ethical dilemmas and how to manage them. New nurses’ orientation, and senior nurses’ rotations and open discussions about ethical problems may help the nurses to develop the ability to advocate the patients and to manage the ethical situations, then reduce their moral distress.

The current study finding is in line with Mobley’s et al. (17) they indicated that no significant association was found between the intensity of moral distress and the age of the nurses. Other studies also supported this finding, they pointed out that the nurses’ age and their years of experience did not make a difference in relation to the intensity of the moral distress (13,40).

Contrary to that, Pauly et al. (35) and others researchers found that younger nurses had perceptions of higher levels of moral distress in certain situations and more likely to leave their job than older nurses because of the younger nurses do not have the tools to deal with situations involving inter/intra professional situations, nor the skills to deal with difficult patient situations, and they have no developed critical communication skills to deal with physicians and others in the workplace (28,41). Interestingly other studies (17,42) indicated that the predictors of high intensity of moral distress was found to be the age greater than 34 years, specially to the factor of futile care. While Corley (2005) (26) and Radzvin (2011) (39) documented that the older nurses reported less moral distress, and they related this finding to the increase in their experience and the perceived competency that comes with age may contribute to decrease the quick reaction. They indicated that age was inversely correlated with moral distress and that high moral distress was associated with lesser years of experience as a nurse anesthetist suggests that younger anesthetists and novice practitioners should be afforded greater support in ethical decision making. As young and newly graduated nurse anesthetists begin to function more independently following an initial orientation period, autonomous ethical decision making seems to become more stressful (39).

A significant relationship is found in the present study between the years of experience of the CC nurses and the increased intensity of the moral distress; this may be attributed to the lack of support from the organization and the nurses’ leaders, absence of ethical educational programs and in-service training courses for such critical care nurses and withdrawal of treatment without nurse participation in the decision.

Finding’s of Pauly et al. (2009) (35) supported the present study finding, they found a statistical significant relationship between the level of intensity of moral distress with the years of experience of the nurses, those with less experience had perceptions of higher levels of moral distress in certain situations than of more experience. Whereas other researchers found that nurses with greater than 3 years experience had increased intensity of moral distress especially to the physician practice category, futile care and deception. While nursing experience greater than 6 years was associated with increased intensity of moral distress to physician practice, nursing practice (futile care) and (deceptions) (17,42). Moreover, Elpern 2005 (24) reported years of experience were found to be positively correlated with moral distress scale.

Regarding the level of education of the CC nurses, the present study revealed no significant difference between the level of education of the participants and the moral distress intensity scale score. Other study reported significant relationship between educational level and the moral distress of the CC nurses, indicating that nurses with a bachelor’s degree or higher experienced have more painful feelings when confronted with situations of medical futility than did nurses with an associate degree (41).

Schluter et al. (2008) (29) and Jill et al. (2010) (41) supported this result, they indicated a significant relationship between educational level/experience and the moral distress, the educational level of the nursing staff and the peer support have been found to influence the moral distress, and suggesting both that nurses with more education and experience have higher levels of moral distress and also that ethical education may improve coping strategies. They noted that coping strategies are also bolstered by good peer support, in that "the empathic and educated understanding provided by nursing peers who understand the surrounding circumstances was found to be most beneficial.

As for the relationship between moral distress intensity and the previous ethical courses education, all the critical care nurses in the all settings in the current study did not receive any previous educational courses or in-service training programs about health care ethics, and they had not any ethical committees, therefore, they experienced that high level of moral distress when faced with the ethical situations.

The absence of ethical educational courses and ethical committees may be attributing factors of the high level of moral distress. Mobley et al. (2007) (17) has been discussed that utilizing ethical rounds in the critical care units to discuss moral distress situations
and patients’ treatment goals indicating that rounds could serve as a platform for increased collaboration within the healthcare team and potential resolutions for future ethical conflicts to develop mechanisms to migrate the effects of moral distress in the critical care units. Nurses who received professional ethical education and in-service or continuing education programs were more confident in their moral judgments and more likely to use ethical resources and to take moral actions. He indicated that ethical education had a significant positive influence on the moral confidence, and moral actions.

On the other hand, in a previous study, it was documented that about fifty of the respondents whom had formal ethical training in the past; they experienced a significantly increased level of moral distress than those persons had not taken ethical training. With ethical education, one is cognizant of what ‘ought’ to be done and more distressed when it is not. These professionals are more aware of ethically distressing situations and hopefully have the tools and skills to deal with it and that it is realistic to accomplish that so the individual doesn’t get continually frustrated and want to leave the workplace(41).

Regarding the relationship between the moral distress intensity and the bed-nurse ratio, the present study revealed that the bed-nurse ratio affected the moral distress intensity scale score. It was documented that inadequate staffing, lack of competency of nursing and the patient’s acuity caused some of the most intense levels of the moral distress and also contributed heavily to the nurses’ increased perception of the moral distress (35,43,44). Moreover, other studies found that inadequate staffing, lack of communication about the care options, and quality of life issues were identified not only affect the clinical outcomes of the patients but also increase the moral distress and retain valuable nurses on increasing morally distressing situations as a cost containment strategy(45,46).

Researchers in the previous studies indicated that a clinicians’ lack of knowledge can also be a source of moral distress, as when nurses who are not up to date on managing pain in terminally ill patients become morally distressed when caring for such patients; once they understand new approaches to treat pain and suffering, their distress usually diminishes or disappears(12,16,47).

Hence, the critical care nurse plays a vital role in the critical care unit; she must be able to recognize clues to the problems that may affect the critically ill patients’ outcomes in such complex environment. She must cooperate with other health professionals to develop system and help in quality improvement processes to identify factors that may cause moral distress, gather the facts, and to be prepared to intervene, alleviate and/or prevent their occurrence. Furthermore, caring is vital in achievement of wellness, caring from the nurse managers to manage moral dilemmas, it is essential concept underlying nursing practice. They should develop policies to encourage open discussion, interdisciplinary collaboration, and the initiation of ethics consultations. Train nursing staff to recognize moral distress, identify barriers to change, and create a plan for action. They rely upon a specialized body of knowledge, skills, and experience to provide care to create environments that are healing, humane and caring for positive outcomes.

Conclusion:

Based on the findings of the present study, it can be concluded that: Moral distress is a critical problem in the healthcare work environments and it needs more attention. American Association of Critical Care Nurses indicated that unaddressed moral distress restricts nurse’s ability to provide optimal patient care and diminishes her job satisfaction. High level of moral distress is perceived by nearly all of the critical care nurses in the current study, this may be attributed to that none of those nurses had any previous education or in-service training programs about health care ethics; and their work settings did not include ethical committees. Moreover, most of them in the same age group and their experience to deal with situations of moral conflicts and communications skills are diminished.

The physician practice category is found to be the highest moral distress factor in the present study as the factor of "assist physician who is practicing procedure on a patient after CPR has been unsuccessful"; followed by the nursing practice category as the factor "avoid taking action when I learned that a nurse colleagues has made a medication error and does not report it"; and then the institutional category as the factor " Not being able to offer treatment because the costs will not be covered by the health insurance", these may be related to the absence of ethical training, ethical commitment, and sometimes they may be forced to perform some actions because they fear of punishment. Therefore, CCNs should be supported from their leaders by proper orientation for novice nurses; in-service training programs especially after stressful situations. Furthermore, ethical committees should be included in their work settings, and improving the communications skills between the health care team is mandatory.

The present study revealed no significant difference between ages of the participated CCNs and the level of moral distress, as the majority of nurses
are less than 30 years old, and most of them had high level of moral distress regarding the different studied categories. While a significant relationship is found in the present study between the years of experience of the critical care nurses in the critical care and the increased moral distress; those nurses with had response of higher levels of moral distress in certain situations than of more experience.

Recommendations:
In the light of the current study findings, the following recommendations are suggested:
Clinical practice: CCNs need an awareness of the moral distress and the causing factors that currently exist in the healthcare settings. Professionals should be assisted in creating a caring ethical environment in which professionals are respected, patients’ wishes are honored, all individuals are valued, and persons enjoy going to work and don't want to leave. open interdisciplinary communication should be facilitated.
Administration: the institution should seek out effective role models for novice nurses, provide for an adequate orientation time for new staff; establish health care communities that have a moral responsibility to alleviate and address the harmful situations, make sure that everyone in the health care team knows how to utilize the hospital ethical committees and establish an environment that supports professional autonomy.
Education and training: professional ethical education programs, in-service training and/or continuing education programs, and ethical rounds should be done. Offer ethical seminars which may include Codes of Ethics, ethical principles, and common patient scenarios.
Research: Further researches are needed to measure both moral distress and the coping mechanisms employed by nurses regarding their distress and how they will be able to cope with moral distress in every day practice. Also, further researches are needed to indicate the effects of moral distress on patient’s care and its responses on the nurse.

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