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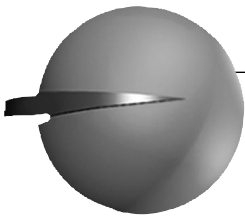Sirilla, Janet
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Moral Distress in Nurses Providing Direct Patient Care at an Academic Medical Center

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ABSTRACT

Background: Moral distress is the psychological response to knowing the appropriate action but not being able to act due to constraints. Previous authors reported moral distress among nurses, especially those that work in critical care units.

Aims: The aims of this study were: (1) to examine the level of moral distress among nurses who work at an academic health system, (2) to compare the level of moral distress in nurses who work across specialty units at an academic health system, (3) to compare moral distress by the demographic characteristics of nurses and work experience variables, and (4) to identify demographic characteristics and type of clinical setting that may predict which nurses are at high risk for moral distress.

Methods: A cross-sectional survey design was used with staff nurses who work on inpatient units and ambulatory units at an academic medical center. The moral distress scale-revised (MDS-R) was used to assess the intensity and frequency of moral distress.

Results: The overall mean MDS-R score in this project was low at 94.97 with mean scores in the low to moderate range (44.57 to 134.58). Nurses who work in critical care, perioperative services, and procedure areas had the highest mean MDS-R scores. There have been no previous reports of higher scores for nurses working in perioperative and procedure areas. There was weak positive correlation between MDS-R scores and years of experience (Rho = .17, p = .003) but no correlation between age (Rho = .02, p = .78) or education (Rho = .05, p = .802) and moral distress.

Linking Evidence to Action: Three variables were found useful in predicting moral distress: the type of unit and responses to two qualitative questions related to quitting their job. Identification of these variables allows organizations to focus their interventions.

BACKGROUND AND SIGNIFICANCE

Moral distress has been described as a negative emotional response that happens when a nurse knows morally what should be done but is prevented from taking that action, possibly because of restrictions that do not allow for the appropriate ethical choice in the nurse's view (Jameton, 1984). The inability to determine the right action in the first place may also lead to moral distress (Schluter, Winch, Holzhauser, & Henderson, 2008; Sirilla, 2014).

The American Association of Critical Care Nurses (2008) described the consequences of moral distress as the nurse distancing him or herself from the patient, a decreased capacity to care, decrease in quality of communication with other healthcare providers, failure to provide good care, emotional distress, and the development of symptoms of burnout. Severe consequences can result and are associated with decreased job satisfaction and decreased job retention organizationally.

Previous authors (Dodek et al., 2016; Hamric & Blackwell, 2007; Hamric, Borchers, & Epstein, 2012; Oh & Gastmans, 2015; Trautman, Epstein, Rovnyak, & Snyder, 2015) reported that 10% to 52% of nurses considered leaving or had left a position because of feelings of moral distress. The nurse with moral distress may also withdraw from patients, develop depression or substance abuse problems (Corley, Elswick, Gorman, & Clor, 2001; DeVeer, Francke, Struijs, & Willems, 2013). Whitehead, Herbertson, Hamric, Epstein, and Fischer (2015) studied moral distress among healthcare providers and concluded while professions may vary in what causes moral distress, it occurs in clinicians from all healthcare professions.

Moral distress is often unrecognized by the individual nurse experiencing it (Wilson, Goettmoeller, Bevan, & McCord, 2013). Situations that often lead to moral distress in the nurse include: providing end of life care, incompetency in coworkers, lack of communication, poor organizational

ethical climate, and witnessing suffering that the nurse feels could have been prevented (DeVeer et al., 2013; Varcoe, Pauly, Storch, Newton, & Makaroff, 2012; Woods, Rodgers, Towers, & La Grow, 2015). Oh and Gastmans (2015) clarified the difference between frequency and intensity of the moral distress experienced by nurses. This study found that the frequency of moral distress was low but the intensity of the experience was moderate, leading to a more significant impact when incidents of moral distress do occur.

The ethical environment can be a possible etiology of moral distress. It is impossible for the nurse practicing today to avoid ethical dilemmas and conflicts. Pavlish, Brown-Saltzman, Fine, and Jakel (2015) found that healthcare providers may remain silent about ethical concerns because of a culture of avoidance. This may impact relationships, cause an emotional toll for the staff, and create issues with continuity of care and shared decision making. It is vitally important for the nurse to be able to identify when he or she is experiencing moral distress and to know how to intervene in his or her moral distress.

The effects of moral distress can linger. Several authors described this lingering distress as "moral residue." The concept of moral residue is a complex concept and identifies the long-term impact of the experience of moral distress. Moral residue is said to be present when feelings ensue despite resolution of the actual event (Epstein & Hamric, 2009; Trautman et al., 2015). It has been hypothesized that repeated experiences of moral distress with lingering moral residue may lead to the "crescendo effect." The "crescendo effect" occurs when an incident of moral distress is not completely resolved. This leaves the nurse more vulnerable the next time he or she is exposed to another situation that could lead to moral distress (Epstein & Hamric, 2009).

Identification of moral distress and development and implementation of interventions to deal with moral distress can lead to a healthier workplace environment (Wilson et al., 2013.) Empowerment leads to less moral distress by promoting decision making that positively impacts patient care (Browning, 2013). Understanding the level of moral distress and then providing education about moral distress are essential to empower the nurse. An organization may enhance the moral efficacy by offering supports such as bioethics committees, ethics consults, and educational initiatives. Nurses need to be aware of the ethical structures in place in their institution and feel supported when they use them (Rathert, May, & Chung, 2016).

AIMS

The aims of this descriptive study were: (1) to examine the level of moral distress among nurses who work at an academic health system as measured by the moral distress scale-revised (MDS-R); (2) to compare the level of moral distress in nurses who work across specialty units and hospitals at an academic health system; (3) to compare moral distress by the demographic characteristics of nurses (age and level of education) and work experience variables (years of experience as a nurse

and years of experience in their current position, and the type of unit where they currently work); and (4) to identify demographic characteristics and type of clinical setting that may predict which nurses are at high risk for moral distress.

METHODS

This study used a cross-sectional survey design to explore the frequency of moral distress and potential relationships between moral distress and demographic and clinical unit characteristics. The opportunity to participate in this study was offered to all nurses who work on inpatient units and ambulatory units at a single academic medical center that includes six hospitals: a general academic hospital; a cancer hospital; a heart hospital; a rehabilitation hospital; a psychiatric hospital; and a community hospital.

The inclusion criteria for participation was employment as a direct care registered nurse at the medical center at a 0.5 full-time equivalent or more. The study excluded advanced practice nurses and anyone in a management role.

Procedures

Permission to conduct the survey was obtained from nursing leadership and was approved by the Institutional Review Board. The developer of the MDS-R granted permission to the researcher to use the instrument.

The MDS-R and a demographic form were distributed to all eligible nurses electronically using Research Electronic Data Capture (REDCap) Survey software. The survey was kept open for 2 weeks and a reminder letter was e-mailed after 1 week. Data were collected in October 2014.

Instruments

Corley et al. (2001) developed the moral distress scale (MDS) that includes 38 items that measure moral distress and the frequency that is encountered. The tool uses a 7-point Likert-type scale with 0 indicating *no moral distress* and 6 indicating *the most moral distress*.

Hamric et al. (2012) revised the MDS to create the MDS-R. The new scale was abbreviated from the original 38 items to 21 items and the responses were modified from the original 0–6 scale to a 0–4 Likert scale. A composite score of the frequency and the level of disturbance was also added. This score is calculated by multiplying the two scores for each item. Each item has a range of 0–16 and the total score has a range of 0–336. Cronbach's alpha coefficient for the 21-item tool was .89. The instrument also includes two questions about intention to leave: "Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled at your institution?" and "Are you considering leaving your position now?"

There are six versions of the scale for use with adult and pediatric populations for nurses, physicians, and other healthcare providers. This study used the version for nurses who work with adult patients, the MDS-R Nurse Questionnaire (Adult).

In addition to the MDS-R scale, subjects were asked to respond to demographic variables of unit type, years of experience, years of experience at current job, highest level of education, age, and hospital.

Statistical Analysis

Descriptive statistics were used to describe the sample (e.g., age, education) and to address the first aim. For aim 2, a one-way ANOVA model was constructed with moral distress as the dependent variable and unit as the independent variable. For aim 3, a one-way ANOVA model was used for the categorical variables (unit and hospital). For the variables of age, education, and years of experience, Spearman correlations were used to assess significance of relationships with moral distress. For aim 4, stepwise regression modeling techniques were used to construct a predictive model.

RESULTS

A total of 338 (338/3,522) surveys were returned for a response rate of 10%. Of these, 9 were incomplete which left 329 surveys for analysis. Cronbach's alpha for this study was .94. The age of the respondents was equally distributed by decade except for the >60 years of age category. The majority (69.3%) of the respondents had a BSN and had a wide range of experience (Table 1).

The majority of the nurses reported low (<100) MDS-R scores (study aim 1) but some respondents reported scores in the moderate (100–200) range and the high (>200) range. The factors that the nurses identified as causing the most distress were "Initiate extensive life-saving actions when I think they only prolong death" (7.67); "Witness diminished patient care quality due to poor team communication" (7.61); and "Witness healthcare providers giving 'false hope' to a patient or family" (7.27). The range for the scores of individual factors is 0–16 (Table S1).

The mean, median, and standard deviation varied across type of unit (study aim 2, Table 2). The nurses who worked in the perioperative units had the highest mean and median score (mean = 134.58; median = 144) and those who worked in rehabilitation had the lowest scores (mean = 44.57; median = 43.53). The one-way ANOVA (Table 3) indicated that there was a significant difference in the MDS-R scores of the nurses who worked in critical care and those who worked in rehabilitation (p = .01), ED (p = .05), medical units (p = .0005), medical/surgical units (p < .0001) and ambulatory units (p < .0001).

The mean and median for the MDS-R scores also varied between the different hospitals (Table S2). The nurses who worked at the rehabilitation hospital had the lowest scores (mean = 34.20; median = 41) whereas nurses who worked at the heart hospital (mean = 108.88; median = 105) and the general academic hospital (mean = 108.77; median = 104) had similarly high scores. Nurses who worked at the academic hospital had significantly higher MDS-R scores than those at the

community hospital (p = .04) and those at the cancer hospital (p = .003).

For study aim 3, MDS-R scores were compared to education, age, years of experience as a nurse, and years of experience in their current position. There was no significant correlation between age (Rho = .02, p = .78) or education (Rho = .05, p = .802) and MDS-R scores, but there was a weak positive correlation between MDS-R scores and years of experience as a nurse (Rho = .17, p = .003) and years of experience in their current position (Rho = .12, p = .04).

Study aim 3 was also addressed by comparing MDS-R scores with responses to two qualitative questions regarding nurses' choice to quit their job due to moral distress. Because each of these questions involved categorical responses, one-way ANOVA tests were conducted. Scores varied significantly across responses to "Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled at your institution?" (p < .0001). The scores of the nurses who considered leaving their position were an average of 60.01 points higher than those who had not considered quitting (p < .0001) whereas the scores of those that actually quit were an average of 64.27 points higher than those that never considered quitting (p < .0001; Table 4) There was also a significant difference in responses to the question, "Are you considering leaving your position now?" The scores for the nurses who were considering quitting at the time of the survey were an average of 54.14 points higher than those who were not considering quitting (p < .0001).

In order to identify demographic characteristics that collectively predict which nurses are at risk for moral distress (study aim 4), a stepwise regression procedure was used. Of all the demographic characteristics, only three variables were significantly useful for collectively predicting moral distress: the type of unit (p < .0001), the answer to the "Have you ever left or considered quitting" question (p < .0001), and the answer to "Are you considering leaving your position now?" (p < .0001).

A summary of these results consisted of identifying the significant contrasts, that is, the unit types that differed significantly from the other unit types as well as response categories to each question that corresponded to significantly different MDS-R scores. These are provided in Table 5. With all other demographic characteristics held constant, nurses in critical care units scored 52.37 points higher than ED nurses (p = .017), 44.60 points higher than medical nurses (p = .017), and 39.01 points higher than medical/surgical nurses (p < .001); nurses in ambulatory units scored 63.40 points lower than critical care nurses (p < .0001) and 67.45 points lower than procedure area nurses (p = .025). Similarly, nurses who have ever considered quitting scored significantly higher than those who had not: 59.31 points higher for those that did not actually quit (p < .0001) and 61.25 points higher for those that went through with quitting. Finally, nurses who were considering quitting at the time of the survey scored 30.33 points higher (p < .0001) than those who were not.

Table 1. MDS-R Scores by Demographics—All Subjects (*N* = 329)

Category	Number (%)	Mean MDS-R	Median MDS-R
Age			
20-29 years	66 (20.0)	81.77	75.50
30-39 years	87 (26.4)	106.42	92.00
40-49 years	82 (24.9)	98.76	97.50
50-59 years	65 (19.8)	93.16	91.00
60-70 years	17 (5.2)	85.80	60.00
Missing data	12 (3.6)	81.44	82.50
Education			
Diploma, nursing	15 (4.6)	86.06	82.00
AD, nursing	44 (13.4)	94.43	80.00
BS, other field	10 (3.0)	95.23	88.63
BSN	228 (69.3)	93.25	85.00
Master's degree	19 (5.8)	108.89	104.00
PhD/DNP	1 (0.3)	256.00	256.00
Missing data	12 (3.6)	105.02	95.77
Experience as a nurse			
0-2 years	41 (12.4)	70.03	66.00
3-5 years	57 (17.3)	84.57	84.00
6-10 years	58 (17.6)	100.57	90.50
11-20 years	61 (18.5)	105.41	101.00
>20 years	100 (30.4)	103.81	100.50
Missing data	12 (3.6)	75.77	69.50
Years at current job			
0-2 years	95 (28.9)	88.14	79.00
3-5 years	78 (23.7)	88.16	81.00
6-10 years	58 (17.6)	100.16	98.00
11-20 years	63 (19.1)	102.02	96.14
>20 years	21 (6.4)	114.65	98.99
Missing data	14 (4.3)	96.49	95.77

DISCUSSION

The nurses in this study reported low to moderate MDS-R scores. In the study by Hamric et al. (2012), the mean score for the nurses who worked in critical care units was 91.5. The scores for nurses who work in critical care that participated in this study are higher than the Hamric et al. study (mean = 130.64; median = 86.5).

A previous study that also used the MDS-R questionnaire found that moral distress was negatively correlated with the level of education with moral distress decreasing as the level of education increased (Sirilla, 2014). This was not supported in this study. Several other studies that used the original MDS tool observed a positive correlation between the level of moral distress and the years of experience and age (Elpern, Covert,

Table 2. Mean, Median, and Standard Deviation of MDS-R Scores by Type of Unit

Unit	N	Mean (SD)	Median
Perioperative	9	134.58 (68.05)	144
Critical care	87	130.64 (65.25)	117
Procedure	10	126.86 (78.39)	118.7
Float pool	5	95.20 (19.77)	87
Progressive care	39	93.01 (50.11)	92
Woman & infant	5	85.23 (64.86)	96.15
Surgical	17	78.56 (44.15)	69
Medical/surgical	61	76.04 (52.11)	72
ED	16	75.71 (45.72)	83
Medical	23	67.33 (39.25)	63
Ambulatory	37	65.13 (52.05)	50
Rehabilitation	7	44.57 (43.53)	41

Table 3. Confidence Intervals and Corresponding *p* Values for All Pairwise Comparisons Between Moral Distress and Different Nursing Units

Contrast	Estimated difference	95% CI lower bound	95% CI upper bound	p value
Critical care — rehabilitation	81.89	8.73	155.05	.0136
Critical care — ambulatory	61.33	25.28	97.35	<.0001
Critical care — medical	59.13	15.83	102.43	.0005
Critical care — ED	50.75	0.35	101.15	.0466
Critical care — medical/surgical	50.42	19.97	80.87	<.0001

Table 4. Confidence Intervals and Corresponding *p* Values for Significant Pairwise Comparisons

Contrast	Estimated difference	95% lower CI	95% upper CI	p value
"Yes, but did not leave" — "No, never considered"	60.01	43.24	76.78	<.0001
"Yes, and left" — "No, never considered"	64.27	41.10	87.35	<.0001

& Kleinpell, 2005; O'Connell, 2015; Rice, Rady, Hamrick, Verheijde, & Pendergast, 2008; Shoorideh, Ashktorab, Yaghmaei, & Majd, 2015) whereas Dodek et al. (2016) did not find a correlation with age for nurses but did see a positive correlation with years of experience. In this study, there was also a weak positive correlation between MDS-R scores and years of experience but no correlation was found with age.

Recently, one study compared MDS-R scores of intensive care units (ICU) and non-ICU and reported that the nurses working in ICU had higher MDS-R scores (Whitehead et al.,

Table 5. Summary of Significant Contrasts for Predictive Model With Three Variables

Variable	Contrast	Estimated difference	95% lower CI	95% upper CI	*p* value
"Have you ever considered quitting"	"Yes, but did not" leave — "No, never"	59.31	44.32	74.29	<.0001
	"Yes, and left a position" — "No, never"	61.25	40.79	81.72	<.0001
"Are you considering quitting now?"	"Yes" — "No"	30.33	17.87	42.79	<.0001
	Critical care — ambulatory unit	63.40	29.72	97.08	<.0001
	Procedure area — ambulatory unit	67.45	4.21	130.69	.0249
Unit	Critical care — ED	52.37	4.73	100.02	.0173
	Critical care — medical	44.60	3.95	85.25	.0177
	Critical care — medical/surgical	39.01	10.67	67.34	.0005

2015). This study also detected a correlation between the type of unit with the level of moral distress. Although previous literature reported higher MDS and MDS-R scores for nurses who worked in critical care, this study also showed higher score for nurses who worked in perioperative units.

At the end of the questionnaire, the MDS-R asks the nurse "Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled at your institution?" and "Are you considering leaving your position now?" Dodek et al. (2016) found a correlation between the response to these questions and the level of moral distress. Although not included in the aims of this study, an interesting finding was a positive correlation to a positive response to either of these questions and the level of moral distress ($p < .001$).

Limitations

A limitation of this study is the low response rate of 10% ($n = 328$). To predict an effect, 704 participants were needed. This study was also limited to one academic medical center. Therefore, these results may not be generalizable to other academic medical centers. Survey fatigue may be a contributing factor to our low response rate. Repeating this study with nurses who work in other academic medical centers may strengthen the findings.

Implications for Practice

The goal of the study was to determine the source of moral distress in nurses at a large academic medical center using the MDS-R questionnaire. The Nursing Ethics Committee provides education to nurses across the healthcare spectrum.

Our focus as an institution is to provide quality care while maintaining high levels of patient and staff satisfaction, and staff retention.

Because resources are limited, the aim was to identify nursing groups or units with higher perceived levels of moral distress. The results of this study indicate that nurses working in certain specialty nursing units (critical care, procedural, perioperative) and respondents with more years of nursing experience have higher levels of moral distress. The MDS-R survey identified root causes of moral distress as extensive life-saving actions that prolong death, diminished quality patient care due to poor team communication, and providing false hope to patients and families. The Nursing Ethics Committee is now able to prioritize resources, initiate educational efforts on these key topics, and empower the nurses working in these units.

Although not one of the three aims of our study, it was clear that a positive correlation exists between moral distress and intent to leave or previous resignation from a nursing position as a result of emotional suffering, mental burnout, and personal job dissatisfaction. The nurses' responses demonstrated a significantly elevated moral distress scores for those that have "left or considered quitting" or are "considering leaving their current position." This indicates an urgent need for action and intervention to help care for our staff, teach coping skills to deal with emotional needs, and limit the negative consequences that lead to burnout and nurses leaving their current jobs or the nursing profession completely. Formal programs, such as monthly Schwartz Center Rounds Stress, Trauma and Resilience program, Employee Assistance Program, Mental Health Clinical Nurse Specialist and Chaplaincy support, monthly Bioethics Nursing Grand Rounds, and

biannual End of Life Nursing Education Consortium conferences have been implemented with the purpose of providing support to all staff.

Based on previous research in moral distress (Whitehead et al., 2015), we anticipated the MDS-R scores to be the highest in our critical care units, but our results indicated that three units—critical care, procedural, and perioperative—demonstrated a medium risk level for moral distress. Some suggested theories for elevated moral distress levels in these specialty practice areas were: (1) performing advanced surgeries and procedures on patients exhibiting little benefit from a high-risk intervention; (2) low response rates in the perioperative and procedural areas may have skewed results; (3) staff in procedural and surgical areas often have little or no time to develop relationships with the patient and family and may not be aware of the conversations that may have occurred that have brought them to the decision to have an aggressive or heroic treatment; (4) as a large academic medical center, we are able to provide advanced therapies and treatments to patients seeking second opinions and aggressive plans of care that the staff may see from past experience as high-risk and low-benefit; and (5) in the acute care hospital setting, communication of goals, the plan of care, patient and family wishes, advance directives, culture, support, complexity of care, teamwork, and collaboration can present its challenges as we strive to maintain quality, patient safety, and staff satisfaction in the changing environment of healthcare reimbursement.

CONCLUSIONS

The care of complex patients in a dynamic healthcare system will likely lead to a steady volume of morally distressing scenarios. Healthcare organizations, the nursing profession, and other healthcare practitioners must begin to recognize, define, and formally commit resources and efforts to construct coping and resilience-building strategies to combat the detrimental effects of moral distress on the well-being of nurses, other healthcare professionals, and patients and their families.

Although this study only involved one academic medical center and the response rate was low, the results of this study show that nurses experience moral distress about issues that they encounter working in a complex environment. As the acuity continues to rise in healthcare organizations across the country, moral distress should be an expected outcome for many of the nurses being asked to care for these patients. **WVN**

✎ LINKING EVIDENCE TO ACTION

- Nurses experience moral distress especially those nurses who work in critical care, perioperative, and procedure units.

- A positive correlation exists between moral distress and intent to leave or previous resignation from a nursing position as a result of emotional suffering, mental burnout, or personal dissatisfaction.

- A proactive approach to defining and recognizing moral distress may improve nursing satisfaction and job retention.

- Healthcare organizations should initiate resilience-building and education programs on coping and ethics to support nursing staff.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher's web site:

Table S1. Moral Distress Scores for Frequency and Level of Disturbance
Table S2. Mean, Median, and Standard Deviation of MDS-R Scores by Hospital
Figure S1. Overall MDS-R Scores