[All Publications](#)

2016

Addressing Moral Distress in Critical Care Nurses: A Pilot Study

Rose Allen
Baptist Hospital of Miami, rosea@baptisthealth.net

Eve Butler
Baptist Hospital of Miami, eveb@baptisthealth.net

Follow this and additional works at: https://scholarlycommons.baptisthealth.net/se-all-publications

International Journal of
Critical Care and Emergency Medicine

Addressing Moral Distress in Critical Care Nurses: A Pilot Study

Rose Allen[1]*, Eve Butler[2]

[1]*Bioethics & Palliative Care, Baptist Health South Florida, USA*

[2]*Nursing & Health Service Research, Baptist Hospital of Miami, USA*

*Corresponding author: *Rose Allen, Director, Bioethics & Palliative Care, Baptist Health South Florida, USA, Tel: 786-596-6287, E-mail: rosea@baptisthealth.net*

Abstract

Background: Moral distress can affect critical care nurses caring for complex patients. It can result in job dissatisfaction, loss of capacity for caring, and nurse turnover, resulting in a negative impact on quality care.

Aim: This study purpose was to determine how moral distress impacts critical care nurses (adult and pediatric) and to implement improvement strategies to reduce moral distress, improve job satisfaction, and retention.

Theoretical framework: Nathaniel's Theory of Moral Reckoning was the grounded theory used to show the application of the improvement interventions.

Methods: Phase 1 was a cross-sectional design using the 26-item Hospital Ethical Climate Survey (HECS) and the 21-item Moral Distress Scale-Revised (MDS-R). Phase 2 consisted of a mixed-method design employing focus group interviews, interventions, and pre- and posttest.

Results: Pediatric nurses reported lower mean moral distress composite scores 21.71 (15.47) as compared to the adult nurses 88.75 (64.7). For adult nurses, a strong correlation existed between ethical climate and moral distress (r_s = -0.62, n = 10, p = 0.05), with high levels of ethical climate associated with lower levels of moral distress. The cohort group identified personal and professional impact of moral distress with some differences between the pediatric and adult nurses related to the source of moral distress responses to suffering. The 3-month post survey showed a total moral distress score for one adult critical care nurse decreased from 158 to 74. The remaining three nurses' scores were unchanged. All four nurses were not considering leaving their position now. All participants either agreed or strongly agreed the education and action plan reduced their moral distress.

Conclusion: A blended-learning training to include American Association of Critical Care Nurses' (AACN) 4As, communication and ethical reasoning skills, and personal action plans helped manage moral distress, aided retention, and improved satisfaction of critical care nurses.

Keywords

Moral distress**,** Critical care nurses, Job satisfaction, Quality care, Retention, AACNs 4 As to rise above moral distress

Introduction

In today's challenging health care world advanced technology has improved medical care resulting in people living longer, often with chronic illnesses. As a result health care professionals are increasingly exposed to conflicting personal and professional values. These situations can potentially create moral distress particularly for critical care nurses, caring for our most complex patients in the hospital setting [1-4]. Moral distress was first described in 1984 by Jameton as a phenomenon that occurs when nurses cannot carry out what they believe to be the ethically appropriate actions because of institutional constraints [5]. Moral distress has implications for job dissatisfaction, retention, and negative impact on the delivery of safe and competent quality care [6-8]. Moral distress has become a growing concern in health care, with a push for action to address it.

In a position statement, the American Association of Critical Care Nurses (AACN, 2008) noted that moral distress is a frequently ignored problem in the health care environment [9]. The position statement reported that among 760 nurses, nearly 50% had acted against their conscience in providing care for terminally ill patients. Nurses lose their capacity for caring, avoid patient contact, and fail to give good physical care as a result of moral distress. Nurses also physically withdraw from the bedside, barely meeting the patient's physical needs, or they leave the profession all together [9].

The critical care environment where the sickest, most complex patients are cared for puts both adult and pediatric nurses at the highest risk for moral distress. Epstein and Hamric (2009) explored effects of moral distress on nurses and physicians in the neonatal intensive care unit (NICU) and revealed that moral distress, if not addressed, is likely to lead to moral residue, which is referred to as a lingering feeling after a morally problematic situation has passed, resulting in a loss of moral integrity. Repeated experiences of moral distress with moral residue and loss of moral integrity, is manifested personally as feelings of anxiety and depression, and professionally as avoidance of patients and families, and job dissatisfaction. Unresolved moral distress with moral residue can lead to crescendo effects, which occur when increasing problematic situations are encountered. The response is to withdraw from involvement in ethically challenging patient situations, which often leads to burnout or leaving the job or profession [3]. Lawrence (2011), examined how critical care nurses' (medical intensive care (MICU), pediatric intensive care (PICU),

ClinMed
International Library

NICU) moral distress, education level, and critical reflective practice (CRP) related to their work engagement [10]. A non-experimental, descriptive, correlational design was used to examine the relationship among the variables. The results showed a positive relationship between CRP and work engagement (r = 0.56, p = 0.01, r^2 = 0.31) and a negative relationship between moral distress and work engagement (r = - 0.48, p = 0.05, r^2 = 0.23) [10]. CRP activities such as allowing time for nurses to discuss clinical conflicts improved work engagement [10].

Wiegand and Funk (2012) surveyed 204 adult critical care nurses, using open-ended questions and identified that experiences of moral distress occurred mainly in situations related to end-of-life, (73%; 27/37), over aggressive and futile treatments (59%; 16/27) [8]. In a recent study Allen *et al.*, 2013, identified moral distress as existing among all nurses, and other health care professionals [11]. Additionally, the study demonstrated that moral distress was statistically significantly higher for nurses who had previously considered and actually left a position, compared to those who had not considered quitting or leaving a position (F (2, 193) = 11.797, p < 0.001). Furthermore, moral distress was statistically significantly higher for nurses who were currently considering leaving a position compared to those who were not (t (194) = 4.694, p < 0.002) [11]. This data suggest that interventions and preventative strategies are necessary to maintain a morally healthy workforce that provides the delivery of optimum quality patient care outcomes and patient/family satisfaction.

National organizations like the AACN are challenging health care organizations to address workplace-associated moral distress and implement strategic initiatives such as the AACN's framework, 4 As to Rise Above Moral Distress [12]. McCue (2010) used this framework in a study where a Nurse Executive used the 4 As to Rise Above Moral Distress framework to empower staff suffering from moral distress, to address the issue of a chemically impaired colleague, and to ensure that the provision of quality patient care was achieved [13]. Robichaux (2012) discussed a framework of developing ethical skills in PICU nurses to recognize and engage in everyday ethical situations to facilitate a justifiable action [14]. Silen *et al.* (2011) determined in a study of Swedish nurses, that a significant (p < 0.001), modest (r_2 - 0.328) correlation was found between total frequency of moral distress and sum score of ethical climate, implying the more positive the ethical climate was perceived to be, the less frequently situations involving moral distress occurred [15]. Olson's (1998) Hospital Ethical Climate Survey (HECS) is the widely used survey to measure ethical climate [16]. Corley *et al.* (2001) developed the first widely used instrument to measure moral distress frequency and intensity among critical care nurses [17]. By 2012, a new instrument, the Moral Distress Scale-Revised (MDS-R) was developed and designed to reflect more of the root causes of moral distress to accommodate a broader look at health care providers and health care settings [4]. The purpose of this research study was to determine how moral distress impacts critical care nurses (adult and pediatric) and implement improvement strategies to reduce moral distress, improve job satisfaction, and retention.

Moral Reckoning Theory Applied to Improvement Strategies

Alvita Nathaniel's Theory of Moral Reckoning in Nursing, is a logical, systematic, and explanatory theory of moral distress and its consequences as seen in figure 1 [18]. The first stage is the stage of ease
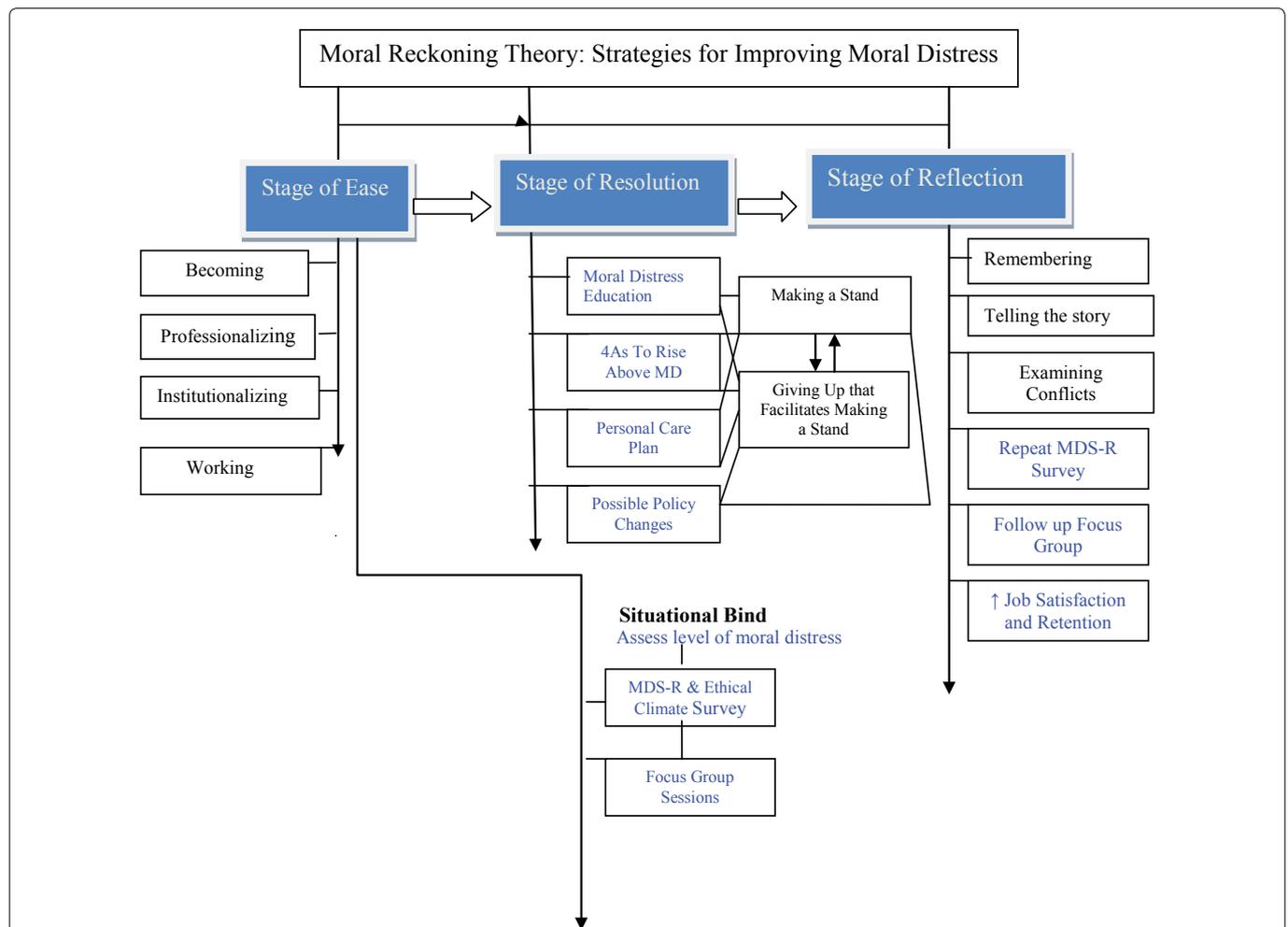

Figure 1: Moral reckoning theory applied to improvement strategies.

Note: This demonstrates how Rose Allen applied interventions using Moral Reckoning Theory to identify root causes of moral distress at the Situation Bind and implemented improvement strategies at the Stage of Resolution that achieved positive outcomes at the Stage of Reflection with reduced moral distress, improved job satisfaction, and aided retention. Adapted from Nathaniel, A.K. (2006). Moral reckoning in nursing, Western Journal of Nursing Research, 28(4), 419-438.

which has four conditions. The first condition of becoming, nurses' core beliefs are evident from their experiences in caring for others, their commitment to upholding professional and institutional norms, and the interruptions that occur when core values are challenged [18]. The second condition professionalizing, involves adhering to professional and ethical standards. Next, institutionalizing involves the work environment and culture which can be congruent with nurses' core beliefs and professional norms, but sometimes they are not. Working is the fourth condition, and the type of work varies for each nurse with challenges and great rewards [18]. The conditions of becoming, professionalizing, institutionalizing, and the work of nursing are all incorporated in the act of patient care that nurses enjoy in a balance of the stage of ease. Nevertheless, a morally troubling event may challenge the integration of core beliefs with professional and institutional norms, resulting in "situational binds" that create a juncture in the nurses' lives. Binds involve serious conflicts within individuals resulting in moral ethical dilemmas. Nurses are caught in these situational binds and often experience a sense of helplessness. Unresolved situational binds result in negative personal and patient care consequences of moral distress [18]. The subsequent stage of resolution results in a choice of either making a stand (confronting the situational binds) or giving up [18]. The final stage of reflection allows nurses to reflect on their behaviors and actions which may last a lifetime and include remembering, telling the story, examining conflicts, and living with consequences [18].

The situational bind is the stage that highly correlates with the moral distress identified in studies such as Epstein and Hamric [3]. This juncture, therefore, was the most effective point to implement this research project improvement strategy as outlined in figure 1. At this level of situational bind, the principal investigator (PI) identified the personal and professional effects of moral distress through focus group sessions and survey of the nurses using Hamric *et al.*'s (2012) MDS-R tool [4]. It provided rich baseline objective data that facilitated the implementation of quality improvement strategies.

Methods

Study design

This study was conducted in two phases. Phase 1 was a cross-sectional survey design using self-reported questionnaires. Olson's (1998) HECS was used to assess the adult and pediatric critical care nurses' perception of the ethical climate of their work setting [16]. Hamric *et al.* (2012) MDS-R survey was used to assess the frequency and intensity of moral distress among these nurses [4]. Phase 2 was a mixed-method design employing focus group interviews, an intervention, and a pre- and posttest.

Setting

This study was conducted at a 702-bed, not-for-profit, tertiary care hospital within a six hospital health system, that houses an adult and pediatric critical care unit on its campus. This was a contributing factor for studying both adult and pediatric critical care nurses.

Sample/inclusion/exclusion criteria

In Phase 1, all adult and pediatric critical care nurses (120) excluding those in leadership positions, were invited to voluntarily participate in the HECS Survey [16] and the MDS-R survey [4].

For Phase 2, adult and pediatric critical care nurses who participated in Phase 1 were invited to participate in the second phase of the project. Participation included attending two focus group sessions to determine how moral distress affected him or her personally and professionally as well as participation in intervention strategies to address moral distress and improve satisfaction and retention.

After institutional review board approval was granted, study procedures commenced. There were no incentives or compensation offered to participants of this study. Data were collected between November 2014 and March 2015.

Study procedure

Recruitment for Phase 1 involved email announcements, flyers posted in the units, and researcher attended staff meetings. At the start of the study, a link to the survey (Survey Monkey.com) via email to all critical care nurses, with a cover letter explaining their voluntary participation in the study. De-identified electronic survey data were stored in a password-protected database, only accessible to the research team. Upon completion of Phase 1, flyers were posted and an email was sent to all adult and pediatric critical care nurses, requesting voluntary participation for Phase 2 study, of only those nurses who completed Phase 1.

Three months post implementation of the 2-hour education blended-learning training, the study participants' were invited to retake the MDS-R survey that included the job satisfaction question and an additional question evaluating the effectiveness of the education training, and personal action plan development, on reducing moral distress. Additionally, a final focus group session was conducted at 3 months post blended-learning training with personal action plan, to gather qualitative feedback on effectiveness of these interventions.

Instrumentation/Focus Group Interview

Phase 1

Demographic questions included gender, years of experience as an adult or pediatric critical care nurse, ethnicity, race, and prior ethical training.

The HECS survey consisted of 26 items measuring nurses' perceptions of ethical climate in five dimensions: nurses' relationships with peers, patients, managers, physicians, and the hospital. The respondents were asked to indicate on a 5-point Likert scale (1 = almost never true to 5 = almost always true) the most appropriate response for each item. Internal consistency reliability using Cronbach's alpha was 0.91 for the whole scale (range 0.68-0.92 for the subscale) [16]. Permission to use the HECS was obtained from the author of the instrument.

The 21-item MDS-R Survey measured individuals' perceptions to a situation based on:

(a) Intensity of moral distress from 0 (*none*) to 4 (*great extent*) and

(b) Frequency of the encountered situation from 0 (*never*) to 4 (*very frequently*) [4].

It included six parallel versions, with three focusing on the adult setting (nurses, physicians, and other health care professionals) and three focusing on the pediatric setting (nurses, physicians, and other health care professionals). Data was computed into a composite score (actual moral distress) resulting in a range of 0 to 336 where a low composite scores indicate less actual distress and a higher composite scores more actual moral distress [4]. Internal consistency was established via Cronbach's alpha for nurses (0.89), physicians (0.67-0.88), and all participants combined (0.88) [4]. Permission to use the MDS-R survey was granted from the author of the instrument.

For this research study, the PI used the MDS-R adult and pediatric nurses' surveys. The following item was added to this survey and assessed using a Likert scale: "Moral distress affects my job satisfaction." A retention question was inclusive of the 21-item MDS-R survey.

Phase 2

The PI developed a moderator's guide containing topical areas (constructs) with sample questions that were used as a guide during each focus group session (adult and pediatric), to gather information and determine the personal and professional impact of moral distress on the participants.

Three months post implementation of the blended learning training the 21-item MDS-R survey with the job satisfaction question were offered to participants requesting voluntarily participation

Allen et al. Int J Crit Care Emerg Med 2016, 2:015

• Page 3 of 6 •

along with the following question to evaluate the effectiveness of the education and other interventions: "The education training, and personal action plan development, helped reduce my moral distress." This question was evaluated using a Likert scale.

Ethical Consideration

Addressing moral distress in critical care nurses creates unique ethical concerns. The first ethical concern is the confidentiality of information disclosed by nurses participating in this study. A structured process was established to ensure that information provided by nurses was stored in a password-protected database. Participants did not have personal identifiers linking them to the study but instead created their own "unique identifier" when they voluntarily agreed to participate in the study. The survey link via SurveyMonkey.com was disseminated to all critical care adult and pediatric nurses, via the hospital's critical care address group list, located on the hospital's password-protected computer. For Phase 2 focus groups, de-identified audiotapes were stored in a locked cabinet located in the PI's office and were only accessible by the study personnel. The principle of respect for person is another ethical concern and requires individuals to make autonomous decisions about participating in research. Phase 1's informed consent was in the form of a cover letter which provided full disclosure regarding the research and allowed participants the opportunity to ask questions before making an informed decision.

Analysis

Phase 1

SPSS statistical software package, version 19.0, was used to analyze the data. Descriptive statistics including frequencies, percentages, measures of central tendency, and measures of variability were calculated for demographic data, ethical climate scores, ranking common sources of moral distress, and intentions to leave the profession. Spearman's Rank Order Correlations were performed to analyze relationships between ethical climate and moral distress.

Phase 2

Focus group data were analyzed using Krueger and Casey's "the classic analysis strategy" [19]. The transcripts were first read in their entirety, and then, each line was numbered to facilitate quick location of quotes within a transcript. The transcripts were reviewed several times to understand the themes that were emerging. As these reviews continued, similar phrases were identified that resulted in the formation of similar identified categories across questions and across the groups. Throughout the review process two independent researchers reviewed the transcripts to strengthen credibility and trustworthiness.

The three months post survey was analyzed using SPSS statistical software package, version 19.0. Descriptive statistics including frequencies and measures of variability were calculated for moral distress and intentions to leave the profession.

Results

Phase 1

Of the surveys sent to 100 adult critical care nurses, a total of 15 nurses (15%) participated. However, three completed only the demographic portion with the remaining 12 nurses completing both survey instruments. Twenty pediatric critical care nurses were eligible

to participate. Of the twenty, eight (40%) participated. One nurse completed only the demographic section. The remaining seven nurses completed both survey instruments.

The majority of respondents were females: 93% in the adult group, 75% in the pediatric group. The adult nurses' years of experience as critical care nurses ranged from 1 to 40 years, and the pediatric nurses' years of experience as critical care nurses ranged from 4 to 18 years. Ethnicity in the adult group was primarily identified as non-Hispanics (53%) with race as 67% White, followed by 27% Blacks/African American, and 6% more than one race. The pediatric nurses identified their ethnicity as primarily non-Hispanic (63%) with race as 50% White, 25% Black/African American, 13% Asian, and 12% more than one race. Participants were also asked whether they had prior ethics training. Those who responded "yes" accounted for 53% of adult nurses and 75% of pediatric nurses.

The overall moral distress mean composite score for pediatric critical care nurses was 21.71 (SD =15.47) with a range of 1-43. This was considerably lower than the overall mean composite score for the adult critical care nurses, of 88.75 (SD = 64.7) range of 0-207. Table 1 provides the three most common sources of moral distress identified by the adult and pediatric group of nurses. The number one most common source of moral distress for the adult nurses was "follow the family's wishes to continue life support even though it is not in the best interest of the patient." Pediatric nurses' number one source of moral distress was "watch patient care suffer because of lack of provider continuity." Both groups identified the same item as their second source of moral distress "witness health care providers giving 'false hope' to patient or family."

Only the adult nurses responded to the question that asked whether moral distress affected job satisfaction and the questions related to intentions to leave a job. Thirty-three percent of the adult nurses reported that moral distress affected their job satisfaction all the time. Those who considered quitting a clinical position but never left represented 53%. Additionally, 47% of the adult nurses were considering leaving now.

The mean ethical climate score for pediatrics was 110.00 (SD = 10.3) with a range of 93-122. This was slightly higher than the mean adult ethical climate score of 91.45 (SD = 17.2) range of 64-122. The relationship between the ethical climate and moral distress was investigated using Spearman's Rank Order Correlation. For the adult critical care nurses, there was a strong negative correlation between the two variables, r_s = -0.62, $n = 10$, $p = 0.05$, with high levels of ethical climate associated with lower levels of moral distress (Table 2). There was no correlation between ethical climate and moral distress scores for pediatric nurses, but this could be due to the small sample size, r_s = 0.36, $n = 7$, $p = 0.43$.

Phase 2

Of the 15 eligible adult critical care nurses invited to participate, two voluntarily attended and participated in the adult focus group interviews. Both were female nurses, and their nursing experience ranged from 9½ years to 26 years. From the eight eligible pediatric critical care nurses who were invited to participate, two voluntarily attended and participated in the pediatric focus group interviews. Both were females and their years of nursing experience ranged from 12 to 14 years. The adult and pediatric interviews were conducted on different days, and lasted 2 hours. A total of six categories emerged: rewarding; attributes of a critical care nurse; source of moral distress; suffering;

Table 1: Most common sources of moral distress.

Situation	Adults (N = 12)		Pediatrics (N = 7)	
	Mean (SD)	Rank	Mean (SD)	Rank
Follow the family's wishes to continue life support even though it is not in the best interest of the patient	8.83 (6.89)	1	0.86 (1.22)	11
Witness healthcare providers giving "false hope" to a patient or family	8.17 (7.50)	2	2.00 (2.38)	2
Continue to participate in care for a hopelessly ill person who is being sustained on ventilator, when no one will make a decision to withdraw support	8.00 (8.00)	3	1.29 (1.71)	8
Watch patient care suffer because of lack of provider continuity	6.00 (3.50)	8	4.14 (4.98)	1
Provide less than optimum care due to pressure from administrators or insurers to reduce costs	6.00 (4.50)	7	1.86 (3.29)	3

The relationship between ethical climate and moral distress was investigated using Spearman's Rank Order Correlation. There was a strong negative correlation between the two variables, rho = -0.62, n = 10, p = 0.05, with high levels of ethical climate associated with lower levels of moral distress.

Table 2: Correlations (Adult ICU).

			Total Ethical Climate	Total Moral Distress Score
Spearman's rho	Total Ethical Climate	Correlation Coefficient	1.000	-0.624
		Sig. (2-tailed)	.	0.054
		N	11	10
	Total Moral Distress Score	Correlation Coefficient	-0.624	1.000
		Sig. (2-tailed)	0.054	.
		N	10	12

improving moral distress; and words of wisdom. The overarching theme for these participants was "perseverance." This theme encompasses the verbatim transcripts that outlines while these nurses are constantly facing moral challenges when caring for the critically ill patients, they remain constantly committed to the profession of critical care nursing. With continued review, descriptive subthemes emerged under each category. Figure 2 outlines the categories and subthemes developed from both focus group interviews.

Three-month Post Survey

Due to the small number of participants, inferential statistical analysis could not be performed. Nevertheless, the post MDS-R survey showed a decrease in the composite moral distress score for one adult critical care nurse (158 to 74). The remaining three nurses' moral distress composite scores were unchanged. Two of the four nurses had considered quitting in the past due to moral distress but never left. All four nurses were not considering leaving their position at the time of the survey. When asked the following question, using a Likert scale: "The education training and personal action plan development helped reduce my moral distress," three nurses scored 7 (*strongly agree*) and one nurse scored 6 (*agree*).

Three-month Follow-up Focus Group

All participants shared examples of how they utilized the skills learned to help reduce their individual moral distress. All nurses shared satisfaction with the 2-hour blended-learning training. They found the most value in having small group participation, with application of the skills through personal action plan development and utilization, and then follow-up sessions with the PI and group participants. One nurse stated:

The nice thing about this is not that we learned something then walked out the door. It was an opportunity for the same group of people to keep talking about what was really helpful. We had time to use it, talk about, use it, and talk about it. I would not change anything.

Discussion

The lower moral distress scores among pediatric nurses may be a reflection of the low acuity in the pediatric unit compared to the consistently high level of acuity in the adult unit. Due to the small sample size, the effects of having prior ethics training could not be determined. The ethical climate scores and low moral distress scores could be attributed to the organization's Magnet culture where bedside nurses are involved in shared decision-making and are represented at departmental and leadership committees. A monthly conversation in ethics series is also coordinated by the Bioethics department, which facilitates ongoing ethics awareness and education. Nevertheless, it was important to identify how moral distress impacted these critical care nurses personally and professionally and provide them with the tools and skills necessary to address moral distress and promote a healthy work environment.

Phase 2 analysis of the study demonstrated that moral distress impacts adult and pediatric critical care nurses personally and professionally in similar fashion. There were some outstanding differences noted among the groups related to the source of moral distress and responses to suffering. Pediatric participants consistently referenced over-identifying with the child/parent, especially after becoming a mother themselves, which seemed to create significant distress in the pediatric critical care unit. Laughing and smiling were also used consistently as a coping mechanism for the pediatric group. On the other hand, crying was used often as the outlet for the adult group. Some of the nurses shared spiritual responses to suffering as questioning God because of the extent of suffering they see in their units. Work and environmental conflicts were related to inadequate communication
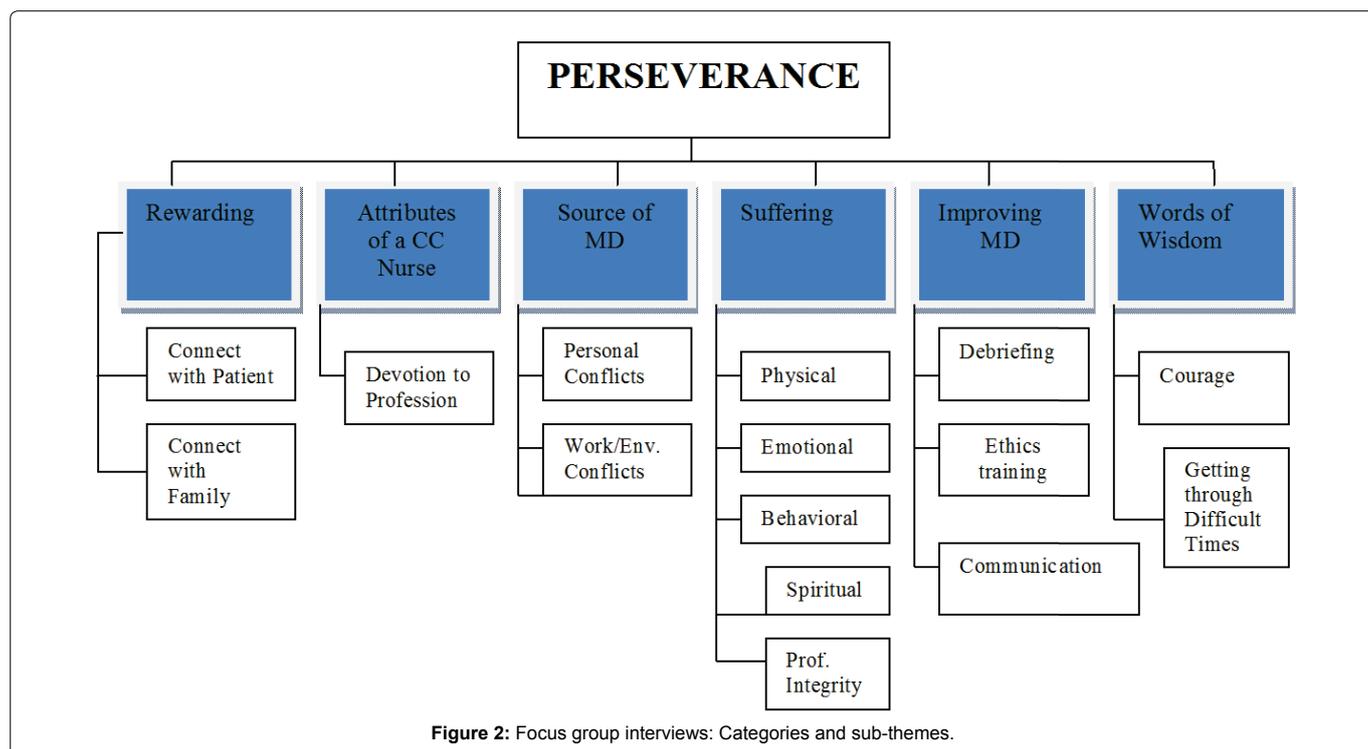

Figure 2: Focus group interviews: Categories and sub-themes.

between families and health care teams and within the health care team themselves. This study supports Lawrence (2011) study of MICU, PICU, and NICU nurses where four major moral distress themes were identified among all nurses: a. death and suffering, e.g. futile care; b. dealing with family clinging to hope; c. medical versus nursing values; and d. self-identification, from developing close friendship bonds [10]. It also supports a more recent study by Whitehead *et al.* (2014) where the top two root causes of moral distress were "watching care suffer due to lack of continuity" and " following family's wishes for life support when not in the best interest of the patient" [20].

The 3-month post survey to assess moral distress showed moral distress in the study group was reduced when they utilized the skills through the creation of a personal action plan and application of the skills in the clinical setting and their personal life. The individual follow-up meeting with the PI following the training was valuable in reinforcing the skills. Additionally, the nurses shared that the follow-up group meeting to discuss the impact and outcomes was most valued. They also recommended that this training should be offered to all critical care nurses as well as one geared towards providing the tools and skills to help leaders address their moral distress.

Blended Learning Education

As a result of information gathered from focus group interviews, the 2-hour blended learning training on moral distress was developed and conducted. The training covered the following objectives that participants would be better able to:

1. Define moral distress.

2. Identify how moral distress impacts them personally and professionally.

3. Utilize communication and ethical reasoning skills to address ethical challenges associated with moral distress.

4. Apply the AACN's framework, 4 As To Rise Above Moral Distress to address encounters with moral distress.

The PI used vignettes from her training as an Education in Palliative and End-of-Life Care (EPEC) trainer and developed interactive role playing cases from tough ethics cases (adult and pediatric) she has had over the years as the Bioethics Director of the health system, which were utilized in the training. Each participant developed a personal action plan for addressing moral distress, incorporating the tools and the skills taught in the session. Action plans were then implemented while the nurses worked in the clinical setting. The PI met with the nurses one month later to assess how they were doing with implementing their action plans and to answer any questions regarding the skills taught and tools provided.

Limitations

This study had several potential limitations. First, it involved only critical care nurses working at one adult and pediatric hospital within a health system; results may not be generalizable to nurses working in other organizations. Secondly, the low response rate and small subgroup resulted in reduced generalizability. One factor that impacted the low response rate was that during Phase 1 of the study, the national Ebola crisis was occurring. All critical care nurses were required to attend mandatory training sessions, and policy and practice changes were implemented in the units. This mandatory Ebola training made it more challenging for the nurses to participate in other activities such as this study.

Additionally, the analysis reflects only the views of those nurses who participated in the study. Other critical care nurses may have views that differ from these participants. Normal distribution could not be achieved with the small subgroup, but data analysis remained consistent to achieving the intent of the Olson's HECS [18] and Hamric *et al.*'s MDS-R [4].

Conclusion

Despite the small number of participants in the focus group, the

information gathered was invaluable in identifying the personal and professional effects of moral distress on these nurses. Better tools and skills to address ethical challenges with morally distressing clinical situations and poor communication were identified by the group as improvement strategies to strengthen the nurses' ability to cope with moral distress. Subsequently, a blended learning training was conducted and included AACN's 4As, communication and ethical reasoning skills, and development of personal action plans that helped address moral distress. Another innovative strategy is having "Ethics Rounds" following a very difficult ethics case in critical care. These are scheduled meetings at a time when it is convenient for the staff (breakfast, or lunch), where the ethics team goes back to the unit after the patient has been discharged, to spend time discussing the case, addressing the ethical tensions and allowing the staff (nurses, physicians, and other disciplines) to express their feelings/difficulties. This has been valuable to our staff for the past 3-years and is somewhat similar to the strategy noted in Epstein and Delgado (2010) study recommending moral distress consult service [2].

Nurses also discussed that pressure to meet national quality standards was a contributing factor of moral distress as well as open visitation in the adult critical care unit. To my knowledge these factors have not been noted in previous studies as sources of moral distress and should be explored as future research. Large scale studies need to be conducted to confirm or deny the findings of this study.

References

1. Edward KL, Hercelinskyj G (2007) Burnout in the caring nurse: learning resilient behaviours. Br J Nurs 16: 240-242.

2. Epstein EG, Delgado S (2010) Understanding and addressing moral distress. Online Journal of Issues in Nursing 15: 1091-3734.

3. Epstein EG, Hamric AB (2009) Moral distress, moral residue, and the crescendo effect. J Clin Ethics 20: 330-342.

4. Hamric AB, Borchers CT, Epstein EG (2012) Development and testing for an instrument to measure moral distress in healthcare professionals. American Journal of Bioethics Primary Research 3: 1-9.

5. Jameton A (1984) Nursing practice: The ethical issues. Englewood Cliffs, NJ: Prentice Hall 22: 343.

6. Cavaliere TA, Daly B, Dowling D, Montgomery K (2010) Moral distress in neonatal intensive care unit RNs. Adv Neonatal Care 10: 145-156.

7. Varcoe C, Pauly B, Webster G, Storch J (2012) Moral distress: Tensions and springboards for action. HEC Forum 24: 51-62.

8. Wiegand DL, Funk M (2012) Consequences of clinical situations that cause critical care nurses to experience moral distress. Nurs Ethics 19: 479-487.

9. American Association of Critical Care Nurses. (2008) Position statement on moral distress.

10. Lawrence LA (2011) Work engagement, moral distress, education level, and critical reflective practice in intensive care nurses. Nurs Forum 46: 256-268.

11. Allen R, Judkins-Cohn T, de Velasco R, Forges E, Lee R, et al. (2013) Moral distress among healthcare professionals at a health system. JONAS Healthc Law Ethics Regul 15: 111-118.

12. The 4A's to rise above moral distress (2005) American Association of Critical Care Nurses (AACN).

13. McCue C (2010) Using the AACN framework to alleviate moral distress. Online J Issues Nurs 16: 9.

14. Robichaux C (2012) Developing ethical skills: from sensitivity to action. Crit Care Nurse 32: 65-72.

15. Silén M, Svantesson M, Kjellström S, Sidenvall B, Christensson L (2011) Moral distress and ethical climate in a Swedish nursing context: perceptions and instrument usability. J Clin Nurs 20: 3483-3493.

16. Olson LL (1998) Hospital nurses' perceptions of the ethical climate of their work setting. Image J Nurs Sch 30: 345-349.

17. Corley MC, Elswick RK, Gorman M, Clor T (2001) Development and evaluation of a moral distress scale. J Adv Nurs 33: 250-256.

18. Nathaniel AK (2006) Moral reckoning in nursing. West J Nurs Res 28: 419-438.

19. Krueger RA, Casey M (2009) Focus groups: A practical guide for applied research (4th ed.).Thousand Oaks, CA: Sage.

20. Whitehead PB, Herbertson RK, Hamric AB, Epstein EG, Fisher JM (2015) Moral distress among healthcare professionals: report of an institution-wide survey. J Nurs Scholarsh 47: 117-125.

Allen et al. Int J Crit Care Emerg Med 2016, 2:015

• Page 6 of 6 •