Marianne C. Chiafery, Patrick Hopkins, Sally A. Norton, and Margie Hodges Shaw, "Nursing Ethics Huddles to Decrease Moral Distress among Nurses in the Intensive Care Unit," *The Journal of Clinical Ethics* 29, no. 3 (Fall 2018): 217-26.

Nursing Ethics Huddles to Decrease Moral Distress among Nurses in the Intensive Care Unit

Marianne C. Chiafery, Patrick Hopkins, Sally A. Norton, and Margie Hodges Shaw

ABSTRACT

Background

Moral distress (MD) is an emotional and psychological response to morally challenging dilemmas. Moral distress is experienced frequently by nurses in the intensive care unit (ICU) and can result in emotional anguish, work dissatisfaction, poor patient outcomes, and high levels of nurse turnover. Opportunities to discuss ethically challenging situations may lessen MD and its associated sequela.

Objective

The purpose of this project was to develop, implement, and evaluate the impact of nursing ethics huddles on participants' MD, clinical ethics knowledge, work satisfaction, and patient care among ICU nurses.

Sample and Setting

The sample, 32 nurses from three ICU settings in an 800-bed tertiary academic medical center, participated in six nursing ethics huddles over a two-month period.

Methods

Alvita K. Nathaniel's Theory of Moral Reckoning guided development of the nursing ethics huddle process.[1] The Moral Distress Thermometer was administered at three data points: baseline level of MD, and pre- and post-huddle to determine changes in the subjects' level of MD.[2] Focused content analysis was used to analyze qualitative responses from questionnaires about the subjects' perception of the effect of the huddles on work satisfaction and patient care. Knowledge attainment was evaluated via open-ended short-answer questions.

Results

Overall, use of nurse-ethicist-led nursing ethics huddles was associated with improved quality of work life, patient care, and clinical ethics knowledge. The change in pre- and post-nursing ethics huddles MD scores was statistically significant ($p < 0.0001$).

Marianne C. Chiafery, DNP, MS Clinical Bioethics, PNP-C, is an Assistant Professor of Clinical Nursing at University of Rochester School of Nursing; and is an Assistant Professor of Medical Humanities and Bioethics at the University of Rochester School of Medicine in Rochester, New York. *Marianne_Chiafery@urmc.rochester.edu*

Patrick Hopkins, DNP, NNP, RN, is an Assistant Professor of Clinical Nursing at the University of Rochester School of Nursing. *Patrick_Hopkins@urmc.rochester.edu*

Sally A. Norton, PhD, RN, is an Associate Professor of Nursing at the University of Rochester School of Nursing. *Sally.Norton@urmc.rochester.edu*

Margie Hodges Shaw, JD, PhD, is an Assistant Professor at the University of Rochester School of Medicine and Dentistry. *Margie_Shaw@urmc.rochester. edu*

The nature of nursing requires that ethical decisions are made and enacted daily. Nurses are members of a healthcare team, and individual team members may have differing values, beliefs, and obligations in a situation. Moreover, the values and beliefs of the patient and his or her family are paramount and contribute to decision making. With so many stakeholders, conflict about what is the right course of action is not uncommon. Ultimately, the nurse may not agree with the final decision, yet must enact the decision, creating a personal ethical dilemma.[3] Nurses may witness actions they believe violate ethical standards of care and behavior, and may feel conflicted as to how to proceed. This conflict was first described by Andrew Jameton as "moral distress" (MD), which he defined as the emotions that a nurse feels when the nurse believes that she or he knows the right action to take, but is constrained from taking that action due to perceived institutional obstacles.[4] The definition has evolved to the recent one by Carina Fourie as the "psychological response to morally challenging situations such as those of moral constraint, moral conflict, or both."[5]

The impact of MD on the nurse can be significant and includes physical and emotional responses such as anger, sleeplessness, and guilt.[6] Nurses report a direct relationship between MD and patient care and outcomes.[7] Elizabeth Gingell Epstein and Ann Baile Hamric note that unresolved MD may result in moral residue, defined as an accumulation of MD that continues to build, or "crescendo" to high levels.[8] Unmitigated or unresolved MD may result in nurses leaving the environment and, ultimately, the profession.[9] Causes of MD include:

1. Poor interprofessional communication,[10]
2. Actions that prolong the patient's death,[11]
3. Actions that violate patients' autonomy,[12] and
4. Medical interventions that are viewed as futile or nonbeneficial.[13]

Courtenay R. Bruce, Susan M. Miller, and Janice L. Zimmerman noted that intra-team disagreements create MD and are often the result of poor communication about patients' prognosis and provision of nonbeneficial treatment.[14]

Nurses use multiple means to attempt to ease MD, including conscientious objection,[15] informal discussion with peers, education, and formal ethics debriefings.[16] There are few reports in the literature of evaluation of the effectiveness of interventions to decrease MD. Most reports focus on case studies and anecdotal reports. Efforts are being made to address this gap in knowledge. A small pilot study by Rose Allen and Eve Butler indicated that formal ethics education may decrease MD and intent to leave among ICU nurses.[17] Lucia D. Wocial and colleagues found that MD among staff decreased with the implementation of unit ethics rounds.[18] These studies are helpful to suggest effective ways to decrease MD, and more work is necessary. Thus, evaluation of an intervention intended to diminish MD was identified as an area that needs more study and quantitative analysis. The purpose of this article is to describe the implementation and evaluation of nursing ethics huddles as an intervention to decrease MD.

INTERVENTION

Nursing ethics huddles (NEH) are confidential, unit-based small group meetings for nurses to discuss ethically troubling cases. Nathaniel's theory of moral reckoning (TMR)[19] and Rosamond Rhodes and David Alfandre's model for clinical ethics consultation[20] informed development of the NEH.

Nathaniel's TMR recognizes the complex nature of MD and provides a framework to describe the process a nurse undergoes when faced with an ethical dilemma.[21] (Refer to figure 1 for a schematic diagram of TMR.)

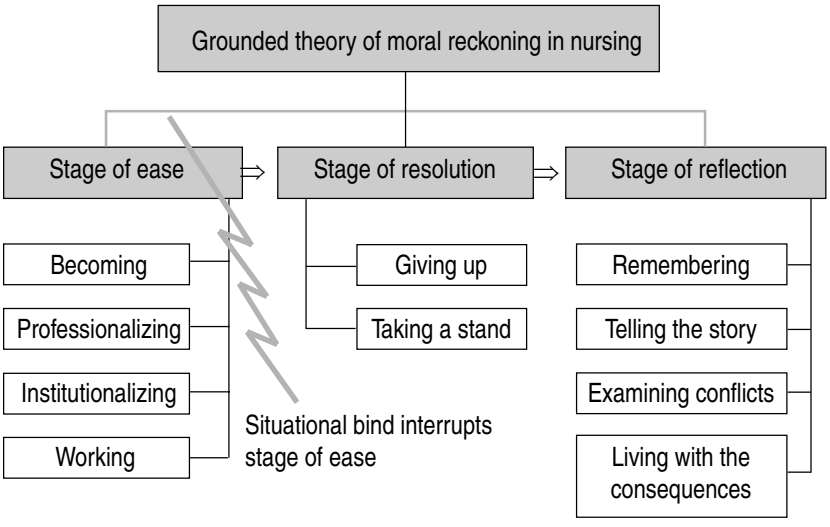
To develop the theory, Nathaniel undertook qualitative analysis of interviews with nurses who recalled important ethically distressing cases from their professional lives. The theory describes the process a nurse undergoes as attempts are made to grapple with an ethically loaded situation. When faced with an ethical dilemma, a nurse weighs multiple factors to make a decision as to how to proceed.[22] After the chosen option has been enacted and outcomes realized, the nurse reflects upon the case in order to come to terms with the consequences. This is a process of "reckoning."[23] The work of "reckoning" is an individual and personal process of making sense of a morally troubling situation, and coming to terms with the consequences of one's own actions. Unresolved feelings of inadequacy or of having perpetuated a wrong may result in persistent MD.[24]

In TMR, an assumption is made that an ethical dilemma has more than one correct solution, thus the nurse experiences uncertainty as to how to proceed and is placed in a "situational bind."[25] Theoretical concepts of TMR include those of ease, situational bind, resolution, and reflection. *Ease* is defined as a state of comfort and freedom from worry about ethical concerns.[26] When in a state of ease, the nurse's core personal and professional beliefs

are aligned with daily work life, and there is a feeling of congruency and integrity. However, an ethical dilemma arises, which Nathaniel terms a *situational bind* that jars the nurse from a state of ease.[27] This bind causes the nurse to question personal and professional identity, role expectations and integrity, and can engender feelings of self-doubt, tension, and anxiety. To relieve moral tension, the nurse explores options and considers new concepts to address the situational bind.[28] Exploration propels the nurse to a stage of *resolution,* in an attempt to "make things right and resolve tension."[29] The nurse evaluates multiple factors in the situation, and makes a decision to "take a stand" or "give up."[30] This is a complex decision, and the outcome has important implications for the future in terms of feeling good about the self, or carrying chronic feelings of regret. *Reflection* is a critical stage of the TMR. Careful post-situational analysis of the events and behaviors and reflection on the chosen plan of action by the nurse occur. Such feelings, especially ones of regret, may "last a lifetime."[31]

Importantly, the actions of "remembering, telling the story, examining conflicts, and living with the consequences" fall under the realm of reflection.[32] Nathaniel notes that a nurse is more likely to tell the story in an environment of sympathetic caring. Telling the story helps the nurse make sense of the experience and fosters personal growth due to self-discovery, understanding other perspectives, and evaluation of conflicts. Positive outcomes include the attainment of wisdom and knowledge and relief of emotional or psychological pain. As personal and professional conflicts are explored, the nurse may reconsider self-image, set limits for future cases of a similar nature, and evolve professional practice to reconcile with the new perception of self.[33] As a result of her work, Nathaniel recommends utilizing structured discussions with nurses about ethical dilemmas as a practice intervention.[34]

FIGURE 1. Nathaniel's Theory of Moral Reckoning in Nursing



Reprinted with permission. A. Nathaniel, "Theory of Moral Reckoning," in *Middle Range Theory for Nursing,* ed. M. Smith and P. Liehr (New York, N.Y.: Springer, 2008), 282.

APPLICATION OF NATHANIEL'S THEORY TO PROPOSED PROJECT

Nathaniel's theory and descriptions of the experiences of nurses facing ethical dilemmas informed the development of, and provided the framework for, the proposed project. The project involved the creation of a structured intervention—nursing ethics huddles (NEH)—to address nurses' MD. The NEH is a unit-based tailored intervention that uses active cases identified by the nurses as causing MD for discussion, including analysis of conflicting values and beliefs, application of ethical principles, and brainstorming positive ways to address the perceived problem. The NEH is a route, or method, for nurses to actively explore and attempt to work through a troubling ethical situation. The timing of the intervention is important, and designed to coincide with Nathaniel's stage of resolution,[35] the desire to act upon an ethically distressing situation. As Nathaniel notes, nurses may choose to "take a stand," yet some of the actions that nurses use when taking a stand may be in violation of professional practice, such as enacting a slow code. (A slow code is the purposeful act of responding to a patient in cardiac arrest without the usual timeliness and rapidity because of the nurse's personal belief that providing cardiopulmonary resuscitation to this patient is wrong, and the patient should be allowed to die peacefully.) Other ways to take a stand include conscientious objection or outright refusal to implement a physician's order.[36] A goal of the NEH process is to assist nurses to find ways to take a stand that do not violate professional practice standards or that come at great cost to the nurse or the institution. Nathaniel notes that taking a stand and giving up, the two possible pathways in the resolution stage, can occur within the same situation.[37] She notes that nurses may

initially give up if the struggle to make things right is fraught with personal danger (loss of job, the anger of a team member or members), but then may come back to tackle the problem when better prepared.[38] Thus, a goal of the NEH is to help nurses who may have given up to find new or alternative ways to address the ethical problem in a way that is professional and positive. During the NEH process, the participants openly discuss the underlying values, beliefs, and ethical principles that are in conflict, with the goals of clarifying misunderstandings and hearing other points of view. When relevant, the facilitator also shares information about other factors that contribute to ethical decision making, such as laws, pivotal historic court cases, and exemplar ethical cases. This educational content about clinical ethics and the law is an important component of the NEH.

The NEH also provides nurses the opportunity to navigate Nathaniel's third stage, reflection, when nurses remember vividly the emotions and circumstances surrounding the ethical problem and tell and retell the story as they try to come to terms with, and work through, the unresolved ethical problem that lingers in their mind.[39] Nurses often share their stories of remembering and living with the consequences of their actions, even as the situation continues to unravel, so it may be helpful for nurses to have the opportunity via NEHs to remember, tell the story, and examine conflicts while the case is still active. These opportunities are included in the NEH process in the hope that nurses may find ways to improve the situation, rather than give up. Thus, NEH is an intervention developed to help nurses take a positive stand during an active and unresolved case. The ability to achieve this may result in fewer and less negative outcomes of living with the (bad) consequences of an ethically troubling situation, thus decreasing moral residue over the longer term. As noted earlier, the literature on TMR suggests that facilitated discussion, reflection, and shared group knowledge of a current or recent ethically charged case may empower the nurse to initiate a positive and helpful response to address a perceived ethical problem instead of simply giving up. The act of giving up, or not addressing the problem, may result in a nurse harboring feelings of regret for not taking purposive action, and a sense of hypocrisy for not being true to personal and/or professional values.[40] The goals of the unit-based NEH were to decrease moral residue or lingering doubts about self and professional role for the participants, increase feelings of empowerment, and boost positive feelings about the work environment.

Rhodes and Alfandre's Model for Clinical Consultation provided structure for the NEH. Key steps of the model are:

1 Collect all relevant data,
2. Identify ethical principles,
3. Discuss conflicts and information gaps,
4. Determine the ethical question,
5. Decide which principle has priority,
6. Ascertain if more information is needed,
7. Evaluate the decision or outcome, and
8. Determine next steps to address the concerns.[41]

Each NEH starts with the nurses selecting the case and presenting history and key points. A nurse-ethicist facilitates group discussion that includes reflection, clarification of values of all stakeholders, ethical principles in tension, identification of conflicts, and pertinent educational points such as medical information, law, policy, and historical case precedents. The NEH concludes with identification of "next steps" and development of a plan of action to address the concerns in a constructive and professional way.

METHOD

Study Question

What effects do NEH have on nurses' experience of moral distress, clinical ethics knowledge, work satisfaction, and patient care in three adult critical care units in a university-affiliated medical center in upstate New York?

Purpose

The purpose was to evaluate a nurse-led unit-based approach to alleviate moral distress and increase ethics knowledge and work satisfaction among critical care nurses.

Approvals

The project was assigned exempt status by the institution's Research Subjects Review Board. The hospital's chief nursing officer and key nursing leaders approved and supported the project.

Setting and Population

Hospital nursing administrators in an 800-bed university-affiliated tertiary care medical center in upstate New York were aware that ICU nurses were experiencing difficult ethical situations frequently, and sought a means to address the problem. Three units volunteered to participate and were included in the initial NEH program: adult burn-trauma ICU (BTICU); adult mixed surgical ICU, which consists

of six ICU beds and eight progressive care beds (SICU); and adult medical ICU (MICU). Nurses who work in the selected settings were invited to participate. Participation was voluntary. The NEH was held during work hours, so the 32 nurses who agreed to participate were scheduled to work, or voluntarily participated during their time off, indicating cooperation and a readiness to engage in the NEH. Two nurses left before the NEH started, due to patient care needs. The demographic data of the sample was similar to the ICU hospital nurse employee population. (Refer to table 1 for demographic data.) Data included information about years worked, to examine relationships between MD/moral residue, and length of time practicing as an RN, and information about number of NEHs previously attended to assess if there might be a "dose effect," that is: Does the number of exposures to huddles effect the level of MD?

Mixed Methods Study Design

The Moral Distress Thermometer, developed by Lucia D. Wocial and Michael Weaver,[42] a visual analog scale that ranges from zero to 10 (with 10 indicating the highest level of MD) was used to obtain a quantitative measure of MD at three points (refer to figure 2, project design overview). Nurses may present to the NEH with moral residue that might affect reported level of MD for the case at hand; therefore before the case was selected, the nurses reported how much MD they experience in general in their work setting (MD baseline). Participants completed a pretest/post-test to measure moral distress before (MD pre) and immediately after (MD post) the NEH. To determine changes in MD before and after the NEH, the difference between the pre-huddle MDT score (MDT pre) and post-NEH MDT score (MD post) was calculated. A negative number indicated a decrease in level of MD. A positive number indicated that the nurse felt increased level of MD after completion of the NEH. To examine relationships, paired *t*-tests were utilized.

Qualitative data were collected to ascertain the effect of the NEH on nurses' experiences, perceived clinical ethics knowledge attainment, and sense of work satisfaction. Immediately after the NEH, nurses were asked to describe what they learned, what was surprising, and what still troubled them. One-week post-NEH, an email questionnaire was sent to all participants to elicit perceptions of the effect, if any, on work life satisfaction and patient care. Following the NEH, the facilitator interviewed the nurse managers to elicit perceptions about benefits, burdens, and challenges as a manager to facilitate attendance. Participants' feedback and nurse managers' responses were analyzed for content, the responses were coded, and the content themes analyzed using well-established content analytic techniques. (Refer to figure 2 for project timeline.)

TABLE 1. Demographic characteristics of project sample ($n = 29$)

Characteristic	*n*	%
Degree		
Associate	3	10.4
Bachelor's	21	72.4
Master's	2	6.8
Missing	3	10.4
Employment status		
Full-time	25	86.2
Part-time	2	6.9
Missing	2	6.9
Area employed		
Medical ICU	12	41.4
Mixed surgical ICU	7	24.1
Burn-trauma ICU	10	34.5
Attended a NEH the previous month		
Yes	7	24.1
No	19	65.6
Missing	3	10.3
Number of NEH attended previously		
0	7	24.1
2 - 4	12	41.4
5 - 8	6	20.7
> 10	2	6.9
Missing	2	6.9

RESULTS/ANALYSIS

Quantitative Results

The number of participants changed in different parts of the study because nurses attended the huddle during work time, and some arrived a few minutes late or were called away before the end of the huddle. Overall, 32 nurses participated in some capacity; 30 signed in for the post-huddle impact evaluation; 29 completed the demographic data entirely; 27 completed all of the data points and the other five completed portions of the data collection.

Of the 32 participants, 30 reported baseline MD scores that ranged from one to eight prior to initiation of the NEH case discussion. The MDT change range was -6 to +2.3; the mean was -1.4; the median was -2.0; the mode was -2.0; the standard deviation (SD) = 2.1. Of the 30 nurses who reported baseline MD scores, 68 percent ($n = 19$) reported a decrease

in MD scores after participation in a huddle; 18 percent reported increased MD scores (n = 5), and 14 percent were unchanged (n = 4). MDT scores are shown in table 2.

Correlations

There was a significant difference in the scores for MDT pre (M = 5.13, SD = 1.93) and MDT post (M = 3.73, SD = 2.09) conditions; t (27) = 3.55, $p < 0.001$. Cohen's d = 0.7, indicating a moderate effect.

There were no statistically significant associations between number of years worked as a nurse and perceived levels of baseline MD, number of huddles attended and baseline MD scores, and baseline level of MD and years worked in the current unit.

Qualitative results

The NEN were analyzed for general themes as well as participants' and nurse managers' process and content evaluation.

Nursing Ethics Huddles Themes

Major themes noted during the huddles were:

1. Ambiguity in a situation resulting in confusion about the right action to take,
2. Poor intra-team communication,
3. Nurses' perception of limitations on sphere of influence and ability to advocate for patients,
4. Lack of knowledge about ethics, and
5. Concerns about patients' autonomy.

Of the 30 participants, 24 responded to the question of what bothered nurses most as they left the NEH; 38 percent (n = 9) expressed concern of ambiguity surrounding the case, 25 percent noted communication concerns (n = 6) and 38 percent (n = 9) noted decisions not in their control. A summary of the issues, education topics, and ethics content for each NEH are summarized in table 3.

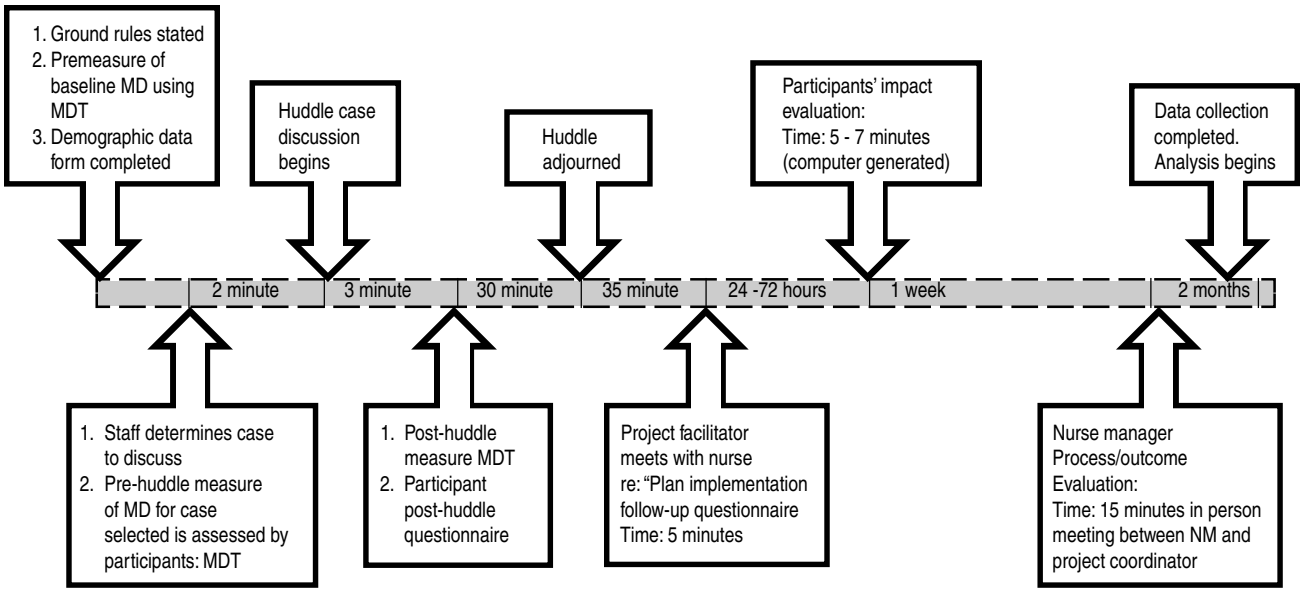
Participants' Email Survey Responses and Themes

The email survey response rate was 50 percent. All of the nurses indicated that they would attend a NEH again, and would recommend it to a peer. A majority of respondents expressed a sense of relief at discovering that others shared similar concerns and experienced MD. Some (40 percent) commented on the benefits of sharing emotions and feelings about ethically laden situations. Nurses noted that perspectives on a situation often changed as a result of the discussion (n = 14, 75 percent).

TABLE 2. Summary statistics for moral distress thermometer scores

Data collection point	*n*	Range	Mean	SD
Baseline score	27	1 - 8	4.1	1.9
MDT pre-score	29	1 – 9	5.1	1.9
MDT post-score	28	0 – 8.5	3.7	2.1
MDT change score	28	(-6) - 2.3	-1.4	2.1

FIGURE 2. Project design overview: ethics huddle process and evaluation



Nurses also commented on the knowledge they gained from the NEH about ethics and policy. Many noted that it was helpful to look at a case from different points of view and to gain ideas and knowledge that could be applied to future cases (n = 10, 63 percent).

One survey question sought to ascertain if the nurses felt that the NEH improved patient care. Of the 30 surveyed, 14 nurses responded to the question and half reported patient care was helped; half reported no help. None reported that patient care was worse. No participants reported that the NEH caused harm. A majority of nurses reported that the NEH helped them be better patient advocates, improved their ability to think through an ethical problem, and enabled staff to formulate effective plans of care, communicate more effectively, and use available resources more frequently.

There was an incidental finding from the project: some nurses reported higher levels of MD after the NEH (n = 5). Analysis of this group's responses indicated interesting findings and themes of high levels of empathy and moral residue. The members of this group were at the far opposite ends of the spectrum in regards to time worked in nursing: four were senior expert nurses who had worked mostly in the ICU and one was a novice nurse who had been in practice for less than one year.

Empathy for Peers

One novice nurse stated, "I did not realize how hard this has been for my peers. It makes me feel badly." The literature identifies the progression of internal focus in a novice nurse to the development of a professional identity that includes a deeper awareness of the concerns of colleagues.[43] This comment indicates a progression along that development through a realization of a team ethos and the needs of team members, as well as others. Other nurses echoed this sentiment, but none quite so poignantly.

High Levels of Moral Residue

Responses from more experienced nurses indicated lingering distress about unresolved issues, es-

TABLE 3. Summary of NEH topics, ethical principles, and education content

Primary issues/concerns discussed	Ethical principles	Education
1 Withholding information from a patient	Truth-telling, veracity, and trust Paternalism	Research findings on patients' wishes re: disclosure Cultural considerations Ethically permissible reasons to withhold information
2 Patient denied liver transplant	Allocation of resources Justice Responsibility of recipient as steward of scarce resource	Transplant screening process Requirements of recipient Grieving process
3 MOLST form interpretation	Quality of life Autonomy Benefit versus burden Futility and nonbeneficial treatment	Proxy role and advance directives Futility and nonbeneficial treatment
4 Rescinding DNR order for OR procedure	Interprofessional communication Patient autonomy	Hospital policy re: temporary lifting of DNR status
5 Adult with developmental disability and disagreement with parents' decisions	Parental authority Standard of care Professional duty Beneficence Nonmaleficence	Capacity assessment Insights into parental actions Limits of parental authority
6 Patient seems to want to stop treatment, medical team planning surgery	Paternalism Autonomy Benefit versus burden Beneficence Nonmaleficence	Proxy role Goals of care Role of palliative surgery to provide symptom relief

pecially in interactions with other members of the healthcare team. Comments such as "Nothing ever changes" may indicate long-term unresolved ethical issues and a sign of moral residue. One nurse expressed frustration that suggestions to other team members were not taken seriously or were ignored. Another nurse reported that physicians respect contributions except when it is suggested that palliative care be involved in the care of critically ill patients.

The findings raises further questions: Is a group format not helpful for everyone? Does the NEH process need revision? Further study is needed. As a result of this new awareness, the NEH process expanded to include the facilitator asking if anyone feels worse at the conclusion of the NEH, and, if so, the participant is offered extra time to stay to talk individually with the facilitator.

Nurse Managers' Survey Results

The nurse managers (NM) focused on scheduling concerns and the impact of the NEH on staff, noting the importance of flexible scheduling. The NMs' comments were overwhelmingly positive, and all indicated that they would continue the NEH on their units. All noted that the NEH provided staff with the opportunity to think about ethical issues in a new way and to express concerns in a way that alleviates emotional stress, burnout, and compassion fatigue. One NM noted that the NEH helped staff distinguish an ethical issue that can be addressed by nursing action, from issues of policy or law. Additional benefits noted by the NMs were:

1. Provides support for staff,
2. Educational questions are answered,
3. Brings about a solution or plan for improvement,
4. NM learns of issues that may not have been disclosed otherwise,
5. Defuses tension, stress, compassion fatigue, and burnout.

DISCUSSION

Overall, the findings provide support that the NEH had positive effects: NEH lowered the levels of MD among most participants, participants noted knowledge acquisition that could be applied in the work environment, and improved patient care. The outcomes of this project are consistent with the literature on factors that trigger MD as evidenced by the themes of ambiguity about a situation, ineffective communication on matters that are important to nurses, and feelings of empathy for patients and peers that result in MD and moral agency. The indications from the subgroup of nurses who had higher MD scores after the NEH and evidence of moral residue are consistent with study findings by Cynda H. Rushton, Joyce Batchellor, Kaia Schroder, and Pamela Donohue, that suggest that nurses' level of MD increases with length of time worked.[44] The literature also indicates that nurses who have significant MD and moral residue must find ways to cope each work day, and may bury or ignore persistent MD, resulting in moral dulling. It is possible that the NEH broke down personal coping mechanisms and reopened old MD issues that remained unresolved. This is an area for further exploration.

Consistent with Nathaniel's model, NEH provide a forum for participants to reflect via remembering, telling the story, examining conflicts, exploring professional role, and forging a plan to take a stand or find ways to cope with problems that are not within their realm of influence.

The NEH also provided a mechanism for participants to develop important skills to address MD, evidenced by the unexpected finding that many reported learning better communication skills from the NEH. Terri Traudt, Joan Liaschenko, and Cynthia Peden-McAlpine explored the practices of nurses who do not display evidence of MD, to ascertain why they seem immune.[45] The authors found that nurses who are aware of their obligations as a moral agent, are able to take into consideration multiple perspectives and alternate views, explore possible alternative responses to a situation, and value good communication and relationships with key stakeholders are less likely to suffer from MD.[46]

Recent literature suggests that MD can be viewed as an indication of moral integrity and moral strength, and so should not be viewed as necessarily bad. Edmund G. Howe noted, "we may want to strive, over time, to change our present professional-cultural view, from one that sees an expression of moral distress as a threat, to a professional-cultural view that welcomes these challenges."[47] Providing nurses with a forum to voice concerns promotes professional integrity and a more transparent ethical culture. The work of Ann Baile Hamric and Elizabeth Gingell Epstein provides further evidence of the effectiveness of unit-based debriefings to elicit and address unit or system problems that contribute to MD.[48] The authors describe an MD consultation system that provides help on an as-requested basis. The structures of the meetings are similar to the format of this project: listen and clarify, discuss concerns and constraints, and develop a plan to move forward to address concerns. The authors found that nurses who participated in MD consulta-

tions described being more empowered, better able to engage on important issues, collaborate with other key stakeholders, and work to implement change.[49]

This project provides evidence that nurse participation in a forum to discuss troubling ethical cases, such as the NEH, may lower aggregate and individual levels of MD. An intervention that can diminish the amount of moral residue that persists after each individual ethical dilemma may decrease the acceleration trajectory of moral distress. The end results of lower moral residue and improved work satisfaction may enable nurses to remain in the work environment longer and, ultimately, decrease staff turnover.

The study has some limitations. The sample size was small, potentially limiting replication. Nurses who attended the NEH were a self-selected group who may have a greater interest in ethics than their peers. The time frame for the huddles and evaluation was limited, and, since nurses were pulled away from patient care, their attention may have been only partially focused on the discussion, or they may have felt self-imposed pressure to return to their assigned patient. Thus their responses to the surveys may have been rushed, which may have resulted in less descriptive responses and some uncaptured data.

Some limitations must be considered in regards to the facilitator. The facilitator knew some participants from previous interactions, which may have affected some responses and resulted in participant bias, for example, participants who desired to help the facilitator have a successful project. Also, the facilitator has qualifications (graduate level education in clinical bioethics, clinical experience with the hospital ethics consultation team, and funding support from Nursing Practice) that may be challenging to replicate in other settings. Finally, interpretation of qualitative data is subject to personal bias by the facilitator.

CONCLUSION

The problem of MD is well described in the literature and continues to be a major topic of concern for the nursing profession; however, effective and proven interventions to ameliorate the problem are few. Outcomes from this intervention-based project indicate that the NEH diminished MD, increased ethics knowledge, and improved work satisfaction and patient care. The findings from this project indicate that other institutions may want to consider developing interventions that are similar to NEH, as a program to help nurses cope with ethical dilemmas in ICU settings.

ACKNOWLEDGMENTS

This project was completed at the University of Rochester School of Nursing and Strong Memorial Hospital, Rochester, New York.

Study data were collected and managed using REDCap electronic data capture tools hosted at the University of Rochester Clinical Translational Science Institute Grant support grant # ULITR000042 from the National Institutes of Health.

The author thanks Patricia Witzel, Lydia Rotondo, MD, and Mary Carey, MD, for their important contributions to and support for this project.

NOTES

1. A. Nathaniel, "Theory of Moral Reckoning," *Middle Range Theory for Nursing*, ed. M. Smith and P. Liehr (New York: Springer, 2008), 277-91.

2. L. Wocial and M. Weaver, "Development and psychometric testing of a new tool for detecting moral distress: The Moral Distress Thermometer," *Journal of Advanced Nursing* 69, no.1 (2013): 167-74.

3. E. Epstein and S. Delgado, "Understanding and Addressing Moral Distress," *Online Journal of Issues in Nursing* 15, no. 3 (2010): manuscript 1.

4. A. Jameton, *Nursing Practice: The Ethical Issues* (Upper Saddle River, New Jersey: Prentice-Hall, 1984).

5. C. Fourie, "Moral distress and moral conflict in clinical ethics," *Bioethics* 29, no. 2 (2015): 91-7.

6. L. Meltzer and L. Huckabay, "Critical care nurses' perceptions of futile care and its effect on burnout," *American Journal of Critical Care* 13, no. 3 (2004): 202-8; A. Walsh, "Pulling the heartstrings, arguing the case: A narrative response to the issue of moral agency in moral distress," *Journal of Medical Ethics* 36 (2010): 746-9, doi:10.1136/jme.2010.036079.

7. J. Baggs et al., "Association between nurse-physician collaboration and patient outcomes in three Intensive Care Units," *Critical Care Medicine* 27, no.9 (1999): 1991-8; M. Corley, "Nurse moral distress: A proposed theory and research agenda," *Nursing Ethics* 9, no. 6 (2002): 636-50.

8. E.G, Epstein and A.B. Hamric, "Moral Distress, Moral Residue, and the Crescendo Effect," *The Journal of Clinical Ethics* 20, no. 4 (Fall 2009): 330-42.

9. D. Huffman and L. Rittenmeyer, "How professional nurses working in a hospital environment experience moral distress: A systematic review," *Critical Care Nursing Clinics of North America* 24, no. 1 (2012): 91-100.

10. J. Baggs and M. Schmitt, "Nurses' and resident physicians' perceptions of the process of collaboration in an MICU," *Research in Nursing and Health* 20, no. 1 (1997): 71-80; M. Karanikola et al, "Exploration of association between professional interactions and emotional distress of intensive care unit nursing personnel," *Dimensions of Critical Care* 31, no. 1 (2012): 37-45.

11. C. Polish et al., "Nursing priorities, actions and regrets for ethical situations in clinical practice," *Journal*

of Nursing Scholarship 43, no. 4 (2011): 385-95; C. Varcoe et al., "Nurses' perceptions of and responses to morally distressing situations," *Nursing Ethics* 19, no. 4 (2012): 488-500; P. Zuzelo, "Exploring the moral distress of registered nurses," *Nursing Ethics* 14, no. 3 (2007): 344-59.

12. M.S. DeWolf Bosek, "Identifying ethical issues from the perspective of the registered nurse," *JONAS Healthcare Law Ethics Regulation* 11, no. 3 (2009): 91- 9.

13. S. Galindo, A. Hamric, N. Henrich, and P. Dodek, "Moral distress in intensive care personnel related to the provision of perceived non-beneficial care," *American Journal of Respiratory and Critical Care Medicine* 193, A7595 (2016): poster session. *http://www.atsjournals.org/doi/pdf/10.1164/ajrccmconference.2016.193.1_MeetingAbstracts.A7595*; T. Cavaliere, B. Daly, D. Dowling, and K. Montgomery, "Moral distress in Neonatal Intensive Care Unit RNs," *Advances in Neonatal Care* 10, no. 3 (2010): 145-56; E. Elpern, B. Covert, and R. Kleinpell," Moral distress of nurses in a Medical Intensive Care Unit," *American Journal of Critical Care* 14, no. 6 (2005): 523-30; E.J. Gordon and A.B. Hamric, "The Courage to Stand Up: The Cultural Politics of Nurses' Access to Ethics Consultation," *The Journal of Clinical Ethics* 7, no. 3 (Fall 2006): 231- 50; R. Piers et al., "Perceptions of appropriateness of care among European and Israeli Intensive Care Nurses and Physicians," *Journal of the American Medical Association* 306, no. 24 (2011): 2694-703.

14. C. Bruce, S. Miller, and J. Zimmerman, "A Qualitative study exploring moral distress in the ICU team: The importance of unit functionality and intra-team dynamics," *Critical Care Medicine* 43, no. 4, (2015): 823-31.

15. S. Davis, V. Schrader, and M. Belcheir, "Influencers of ethical beliefs and the impact on moral distress and conscientious objection," *Nursing Ethics* 19, no. 6 (2012): 738-49.

16. C. Beumer, "The effect of a workshop on reducing the experience of moral distress in an intensive care unit setting," *Dimensions of Critical Care Nursing* 27, no. 6 (2008): 263-7; S. Rogers, A. Babgi, and C. Gomez, "Educational interventions in end of life care: Part I," *Advances in Neonatal Care* 8, no. 1 (2008): 55-65; P. Helft, P.Bledsoe, M. Hancock, and L. Wocial, "Facilitated ethics Conversations," *JONA's Healthcare Law, Ethics and Regulation* 11, no. 2 (2009): 7-33.

17. R. Allen and E. Butler, "Addressing moral distress in critical care nurses: A pilot study," *International Journal of Critical Care and Emergency Medicine* 2, no. 1 (2016): 1-6.

18. L. Wocial et al., "Pediatric Ethics and Communication Excellence (PEACE) Rounds: Decreasing Moral Distress and Patient Length of Stay in the PICU," *HEC Forum* 29, no. 1 (2017): 75-91, doi: 10.1007/s10730-016-9313-0.

19. Nathaniel, " Theory of Moral Reckoning," see note 1 above.

20. R. Rhodes and D. Alfandre, "A systematic approach to clinical moral reasoning," *Clinical Ethics* 2, no. 2 (2007): 66-70.

21. A. Nathaniel, "Moral reckoning in nurses," *Western Journal of Nursing Research* 28, no. 4 (2006): 419-38.

22. A. Nathaniel, "Theory of Moral Reckoning," see note 1 above, 280.

23. Ibid., 281.

24. Ibid., 280.

25. Ibid., 284.

26. Ibid., 285-6.

27. Ibid., 286.

28. Ibid., 287.

29. Ibid.

30. Ibid., 290.

31. Ibid., 285.

32. Ibid., 286.

33. Ibid., 288.

34. Rhodes and Alfandre, "A systematic approach," see note 19 above.

35. A. Nathaniel, "Theory of Moral Reckoning," see note 1 above.

36. Ibid.

37. Ibid.

38. Ibid.

39. Ibid., 286.

40. Ibid., 288.

41. Rhodes and Alfandre, "A systematic approach,"see note 20 above.

42. Wocial and Weaver, "Development and psychometric testing," see note 2 above.

43. Nathaniel, " Theory of Moral Reckoning," see note 1 above.

44. C. Rushton, J. Batchellor, K. Schroder, and P. Donohue, "Burnout and resilience among nurses practicing in high-intensity settings," *American Journal of Critical Care* 24, no. 5 (2015): 412-20.

45. T. Traudt, J. Liaschenko, and C. Peden-McAlpine, "Moral Agency, Moral Imagination and Moral Community: Antidotes to Moral Distress," *The Journal of Clinical Ethics* 27, no. 3 (Fall 2016): 201-13.

46. Ibid., 204-9.

47. E.G. Howe, "Fourteen Important Concepts Regarding Moral Distress," *The Journal of Clinical Ethics* 28, no. 1 (Spring 2017): 3-14.

48. A.B. Hamric and E.G. Epstein, "A health system-wide moral distress consultation service: Development and evaluation," *HEC Forum* 20, no. 2 (June 2017): 127-43, doi 10.1007/s10730-016-9315-y.

49. Ibid.