# Mindful Ethical Practice and Resilience Academy: Equipping Nurses to Address Ethical Challenges

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**CE 1.0 Hour**

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**Background** Ethical challenges in clinical practice significantly affect frontline nurses, leading to moral distress, burnout, and job dissatisfaction, which can undermine safety, quality, and compassionate care.

**Objectives** To examine the impact of a longitudinal, experiential educational curriculum to enhance nurses' skills in mindfulness, resilience, confidence, and competence to confront ethical challenges in clinical practice.

**Methods** A prospective repeated-measures study was conducted before and after a curricular intervention at 2 hospitals in a large academic medical system. Intervention participants (192) and comparison participants (223) completed study instruments to assess the objectives.

**Results** Mindfulness, ethical confidence, ethical competence, work engagement, and resilience increased significantly after the intervention. Resilience and mindfulness were positively correlated with moral competence and work engagement. As resilience and mindfulness improved, turnover intentions and burnout (emotional exhaustion and depersonalization) decreased. After the intervention, nurses reported significantly improved symptoms of depression and anger. The intervention was effective for intensive care unit and non–intensive care unit nurses (exception: emotional exhaustion) and for nurses with different years of experience (exception: turnover intentions).

**Conclusions** Use of experiential discovery learning practices and high-fidelity simulation seems feasible and effective for enhancing nurses' skills in addressing moral adversity in clinical practice by cultivating the components of moral resilience, which contributes to a healthy work environment, improved retention, and enhanced patient care. (*American Journal of Critical Care.* 2021;30:e1-e11)

A healthy nursing workforce is integral to the delivery of health care services. Data from national surveys and other sources indicate that nurses are stressed; many are burned out and leaving their jobs or the profession.[1-3] Increased patient acuity, the demands of a high-intensity work environment, and limitations of staffing, time, and resources contribute to moral distress and burnout.[4-7] Repeated exposure to morbidity, mortality, ethically challenging situations, and prolonged patient suffering exacerbate moral distress and burnout.[4-7] Subsequently, job performance, work engagement, communication, and teamwork all suffer, negatively influencing patient care and quality outcomes. This situation threatens nurses' well-being and leads to high turnover rates, impacting organizations' bottom line.[4,6,7]

The American Nurses Association Code of Ethics mandates that nurses have an obligation to protect and foster their own well-being and integrity to serve patients.[8] Resilience, the ability to be buoyant, flexibly adapt, or potentially grow in response to stressors or adversity,[9-12] can be a protective factor to support nurse well-being. Many nurses lack the skills and tools to be resilient in the complexity of the health care environment and to effectively confront ethical challenges they regularly face.[13] Less-experienced nurses are thought to be more vulnerable because they report increased stress associated with greater exposure to ethical conflicts.[13] When

> When nurses are chronically stressed or morally distressed, their ability to remain engaged, constructive, and nonreactive may be diminished.

job demands exceed resources, burnout can ensue.[14] In a study of emotional exhaustion (EE), a key element of burnout, nurses with burnout reported lower levels of resilience, whereas their resilient counterparts were more protected from EE.[15]

Nurses report gaps in ethical competence and confidence to recognize and skillfully address ethical issues with effective communication and advocacy skills.[16] (In this article, we use the terms *ethical competence* and *moral competence* interchangeably.) Many feel powerless to implement ethically justified actions for fear of reprisal, ridicule, or shame, producing an array of negative emotions and physical consequences.[17-21] This distress leads to patterns of silence, avoidance, lack of self-awareness, and lack of self-regulatory skills needed to navigate high-stakes, emotionally charged ethical situations.[18,19] Nurses may conform to the decisions of others, creating dissonance by acting contrary to their ethical standards under conditions of constraint or duress.[18,20] When nurses are chronically stressed or morally distressed, their ability to remain engaged, constructive, and nonreactive may be diminished.[18,22]

Nurses who confront ethical challenges in their work are also carrying job-related stress and workload fatigue.[2] The combination of these types of adversity and stress likely compounds the impact on their already taxed nervous systems. Mindfulness, the practice of being aware of what is happening in the present moment somatically, emotionally, and cognitively, develops new neuropathways to support self-regulation and awareness.[23-26] Mindfulness practices can enable clinicians to downregulate their nervous systems and create conditions for insight, discernment, and action.[10,27-29]

Developing skills to mitigate the detrimental effects of ethical challenges and moral distress and to foster moral resilience can help nurses confront the moral adversity in everyday practice.[30-32] Comprehensive programs are needed to reverse these

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troubling trends and to build the needed capacity within the profession to address ethical challenges and meet the needs of complex clinical patient care.[33-35]
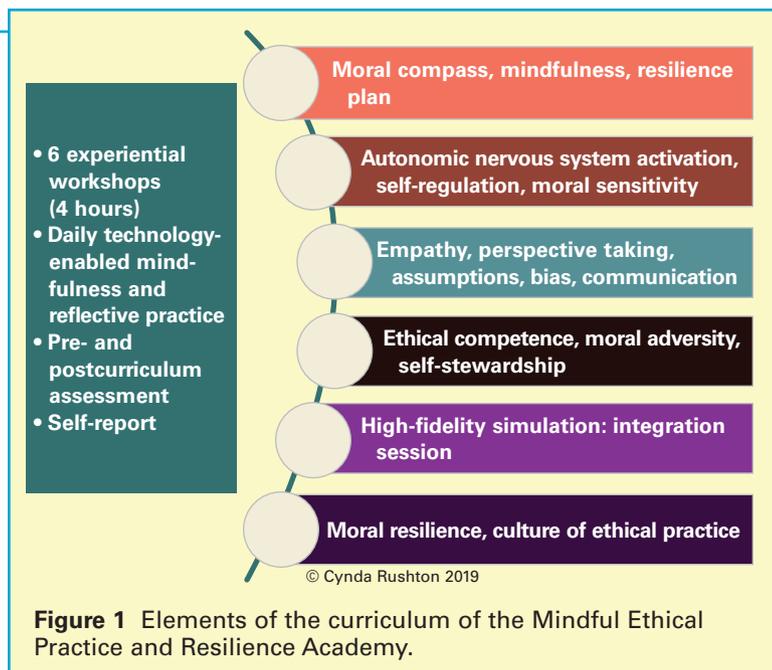
## Methods

Through an academic/practice partnership, the Mindful Ethical Practice and Resilience Academy (MEPRA) was developed to nurture a culture of mindfulness, ethical competence, and resilience among frontline nurses. The program curriculum addressed moral adversity by cultivating moral resilience through knowledge, skills, and practices in self-regulation, mindfulness, moral sensitivity, discernment and action, targeted communication skills to enhance moral efficacy, and methods for translating new skills into everyday practice. MEPRA includes the foundational curriculum, a community of practice, annual retreats, and a champion program. Experts in bioethics, education, communication, mindfulness, simulation, and evaluation developed the experiential discovery learning curriculum.

The conceptual framework was adapted from prior work addressing moral distress, scholarship in moral resilience, and a literature review regarding interventions to build ethical competence, mindfulness, and resilience.[9,22,32,36] The curriculum draws on social learning theory, experiential and discovery learning practices, and high-fidelity simulation. We hypothesized that an experiential educational curriculum would enhance nurses' skills in mindfulness, ethical confidence, ethical competence, and resilience to recognize, respond to, and confront ethical challenges in clinical practice. Secondary outcomes included changes in empathy, psychiatric symptoms, burnout, moral distress, work engagement, and turnover intention.

From 2016 to 2018, a longitudinal preintervention-postintervention design tested the impact of the curriculum on frontline nurses from 2 hospitals in a large academic medical system. A convenience sample of nurses was recruited from diverse clinical areas through brief in-person educational sessions and email invitations.

The program included 6 experiential sessions totaling 24 hours of face-to-face, interactive training based on a variety of educational and evaluative methods. Five sessions incorporated didactic experiential practices, role play, video review, mindfulness practices, and group activities; 1 session involved high-fidelity simulation with trained actors and a facilitated reflective debriefing. Didactic content provided scaffolding to support program outcomes (Figure 1). Participants received 10 minutes of daily technology-enabled, guided mindfulness practices



- 6 experiential workshops (4 hours)
- Daily technology-enabled mindfulness and reflective practice
- Pre- and postcurriculum assessment
- Self-report

- Moral compass, mindfulness, resilience plan
- Autonomic nervous system activation, self-regulation, moral sensitivity
- Empathy, perspective taking, assumptions, bias, communication
- Ethical competence, moral adversity, self-stewardship
- High-fidelity simulation: integration session
- Moral resilience, culture of ethical practice

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**Figure 1** Elements of the curriculum of the Mindful Ethical Practice and Resilience Academy.

(breathing, loving-kindness, difficult emotions, letting go) and reflective questions to reinforce content and engage prosocial attitudes and emotions.

Eleven survey instruments specific to program outcomes, demographics, exposure to ethical experiences, and well-being were used (Table 1).[37-48] Online survey software (Qualtrics) was used for preintervention and postintervention surveys, each of which took less than 30 minutes. We verbally explained research activities to participants and obtained consent. Participants also provided consent when completing the electronic surveys. A unique acrostic code created by participants was linked to longitudinal surveys. The institutional review board provided expedited approval.

We administered a 1-time comparison group survey to nurses who did not participate in the MEPRA program at 1 of the study hospitals. The purpose of this survey was to help identify differences between nurses who enrolled in MEPRA and the general nursing workforce at that organization to adjust for possible selection bias.

> MEPRA was developed to nurture a culture of mindfulness, ethical competence and resilience in response to moral adversity.

## Results

The 192 MEPRA participants completed preintervention and postintervention surveys; 223 non-MEPRA participants completed the comparison survey. Ninety-four percent of participants attended MEPRA sessions, and 88% completed the simulation session. We did not collect data on use of guided daily mindfulness

## Table 1
## Survey instruments

| Tool | Description |
|---|---|
| Perceived Ethical Confidence Scale[37] | This tool is a modified version of the 9-item perceived ethical confidence scale to assess the ability to recognize, understand and manage ethical situations. Several of the questions (fiscal responsibility, informed consent, reproductive health) were not relevant to frontline nurses and therefore were not included. The score was computed according to the mean of 3 items on a scale of 1 (very low) to 5 (very high). Example questions included "confidence in the ability to recognize genuine ethical problems" and "reach sound decisions when facing a problem in clinical ethics." The $\alpha$ coefficient was .77. |
| Moral Sensitivity Questionnaire[38] | This survey tool measures moral decision-making. The score is obtained by calculating the mean of 9 items measured on a scale from 1 (completely disagree) to 6 (completely agree). Example questions included "I find it difficult to deal with my feelings that are aroused when a patient is suffering" and "when caring for patients, I am always aware of the balance between the potential of doing good and the risk of causing harm to them." The $\alpha$ coefficient was .56. |
| Moral Competence Questionnaire[39] | This tool is a self-measure of moral competence in nursing practice. It measures moral reasoning and moral judgement and is computed as the mean of 3 items measured on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Based on the factor analysis of this 15-question survey for public health nurses, our survey questions focused on the will of the individual to face difficult situations. Questions included "I have the courage to directly face problems or opposition," "I have the persistence to directly face problems or opposition," and "I can convey my views frankly without faltering in front of any person." The $\alpha$ coefficient was .83. |
| Brief Resilience Scale[40] | This tool is a validated scale that measures the ability of an individual to "bounce back after stress." It is computed by the mean of 6 items, 3 of which are reverse scores. The scale of the items ranges from 1(strongly disagree) to 5 (strongly agree). Questions included "I tend to bounce back quickly after hard times" or "I usually come through difficult times with little trouble." The alpha coefficient was .88. |
| Multidimensional Emotional Empathy Scale[41] | The scale is a general measure of emotional empathy with subscales. It is computed as the mean of 30 items measured on a scale of 1 (strongly disagree) to 5 (strongly agree). Six items are reverse coded. Questions included "The suffering of others deeply disturbs me" and "When I'm with other people who are laughing I join in." The $\alpha$ coefficient was .85. |
| Work Engagement[42] | This validated 9-item tool measures fulfillment at work related to vigor, dedication, and absorption. A scale ranging from 0 (never) to 6 (every day) is used. Example questions included "I am enthusiastic about my job" and "I am proud of the work that I do." The $\alpha$ coefficient was .86. |
| 2-Item burnout questions[43,44] | Two items derived from subscales of the Maslach Burnout Inventory focused on emotional exhaustion and depersonalization measured on a scale ranging from 0 (never) to 6 (every day). The emotional exhaustion question describes the individual stress component of burnout and the feeling of emotional and physical depletion ("I feel burned out from my work"). The depersonalization question describes the interpersonal response (callous, negative, or detached) to characteristics of the job ("I have become more callous toward people since I took this job"). The $\alpha$ coefficient was .69. |
| Single item: turnover intentions (modified)[45] | A 1-item question measured turnover intentions: "In the past week, I have seriously thought about looking for a new job." The score ranged from 1 (strongly disagree) to 5 (strongly agree). The time frame for considering this question was condensed to better capture experiences over the 3 months between data points. |
| Moral Distress Thermometer[46] | This tool is a visual analog scale ranging from 0 (none) to 10 (worst possible) that measures moral distress in the work environment. The question was "Moral distress is a form of distress that occurs when you believe you know the ethically correct thing to do, but something or someone restricts your ability to pursue the right course of action. How much moral distress you have been experiencing related to work in the past week including today?" |
| Ilfeld Psychiatric Symptom Index[47] | This validated survey measures psychiatric symptoms. The tool includes 29 items measuring negative mood, which are rated from 0 (never) to 3 (very often), and 4 subscales measuring cognitive disturbance (4 items, $\alpha=.83$), anxiety (11 items, $\alpha=.83$), depression (10 items, $\alpha=.81$), and anger (4 items). The score was computed by mean of all items and each subscale was transformed to a 0 to 100 scale. Example questions included "During the past week how often did you have tension in your neck, back or other muscles?" (anxiety) and "During the past week how often did you feel downhearted or blue?" (depression). The $\alpha$ coefficient was .81. |
| Mindful Attention Awareness Scale[48] | This validated 15-item scale assesses the state of attention and awareness of what is occurring in the present moment (a core component of mindfulness). Items are rated on a scale ranging from 1 (almost always) to 6 (almost never). Example questions included "It seems I am 'running on automatic,' without much awareness of what I'm doing" and "I find myself doing things without paying attention." Scores are computed by taking the mean of all items. The $\alpha$ coefficient was .89. |

**Table 2**
**Demographic characteristics by sample**

| Variable | MEPRA participants | | | | | | Non-MEPRA comparison group at hospital A (n=223) | | |
| | Hospital A (n=163) | | Hospital B (n=29) | | | | | | |
| | n | Mean (SD) | n | Mean (SD) | t | P | n | Mean (SD) | t | P |
|---|---|---|---|---|---|---|---|---|---|---|
| Age, y (range, 22-67 y) | 163 | 32.21 (9.80) | 29 | 40.17 (12.15) | −3.34 | .002 | 216 | 41.15 (12.36) | 7.86 | <.001 |
| Regularity of ethical situations[a] | 160 | 5.47 (2.17) | 26 | 4.46 (2.27) | 2.18 | .03 | 218 | 5.05 (2.38) | −1.77 | .08 |
| | n | % | n | % | $\chi^2$ | P | n | % | $\chi^2$ | P |
| Female | 162 | 90.1 | 29 | 89.7 | 0.0 | .94 | 215 | 93.0 | 1.0 | .31 |
| Race/ethnicity | 162 | | 29 | | 2.5 | .29 | 221 | | 3.1 | .21 |
|   White | | 70.4 | | 62.1 | | | | 77.4 | | |
|   Black | | 8.0 | | 17.2 | | | | 4.5 | | |
|   Other | | 21.6 | | 20.7 | | | | 18.1 | | |
| Marital status | 163 | | 29 | | 9.8 | .008 | 221 | | 37.2 | <.001 |
|   Single | | 58.9 | | 27.6 | | | | 29.9 | | |
|   Married | | 38.7 | | 69.0 | | | | 57.5 | | |
|   Divorced or separated | | 2.5 | | 3.4 | | | | 12.7 | | |
| Employment | 162 | | 29 | | 2.9 | .09 | 221 | | 0.0 | .92 |
|   Part-time/as needed | | 17.2 | | 7.4 | | | | 7.7 | | |
|   Full-time | | 82.8 | | 92.6 | | | | 92.3 | | |
| Shift | 163 | | 29 | | 25.6 | <.001 | 222 | | 36.4 | <.001 |
|   Day | | 30.1 | | 79.3 | | | | 56.3 | | |
|   Night | | 17.2 | | 6.9 | | | | 19.8 | | |
|   Both equally/other | | 52.8 | | 13.8 | | | | 23.9 | | |
| Encountered ethical situation | 163 | 97.5 | 29 | 86.2 | 7.9 | .005 | 222 | 93.7 | 3.1 | .08 |
| Ethical program participation | 163 | 14.7 | 29 | 17.2 | 0.1 | .73 | 221 | 13.1 | 0.2 | .65 |

Abbreviation: MEPRA, Mindful Ethical Practice and Resilience Academy.

[a] Regularity of ethical situations is rated from 0=never to 10=all the time.

practices. Longitudinal results are not reported. MEPRA participants were 90% female, their mean age was 33.09 years, and most were White (70.6%) and single (55.9%). Most participants (90.8%) worked full-time, 46.1% worked 12-hour day and 12-hour night shifts equally, 32.5% worked only day shifts, and 18.8% worked only night shifts. Although 16% reported prior ethics training on the preintervention survey, 96% had encountered ethical situations at work.

We used independent t tests or $\chi^2$ tests to determine differences between the 2 organizations (hospital A and hospital B) whose nurses participated in MEPRA and the comparison group from hospital A (Table 2). We found significant differences between the 2 MEPRA groups. Hospital A nurses were younger, more likely to be single, and more likely to work both day and night shifts rather than a fixed shift. Hospital A had a greater percentage of nurses who experienced ethical situations and higher scores on the frequency of ethical situations. Compared with nonparticipants in MEPRA, participants in MEPRA from hospital A were younger, more likely to be single, and more likely to work both day and night shifts rather than a

consistent schedule. We used variables with significant differences (work shifts, marital status, age, and regularity of ethical situations) as control variables in the main analyses.

We evaluated the impact of MEPRA with repeated-measures analysis of covariance with a significance level of .05 (Table 3). Scores that increased significantly after the intervention included ethical confidence, ethical competence, resilience, work engagement, and mindful awareness and attention. Participants had reduced symptoms of depression and anger (subcategories of the Ilfeld Psychiatric Symptom Index). Turnover intentions (TI) also decreased after the curriculum, with a trend toward significance. We found no significant changes in moral sensitivity, empathy, burnout, or moral distress.

We conducted bivariate correlations of resilience and mindfulness with other intervention outcomes (Table 4). Resilience and mindfulness were

> MEPRA improved nurses' ethical confidence, moral competence, resilience, and work engagement.

**Table 3**
**Change from before to after the intervention**[a]

| Variable | Score, mean (SD) | | n | F | P |
| | Preinter-vention | Postinter-vention | | | |
|---|---|---|---|---|---|
| Perceived Ethical Confidence Scale | 3.49 (0.66) | 3.94 (0.53) | 164 | 73.27 | <.001 |
| Moral Sensitivity Questionnaire | 4.39 (0.56) | 4.44 (0.52) | 165 | 0.98 | .32 |
| Moral Competence Questionnaire | 3.57 (0.91) | 4.00 (0.77) | 164 | 28.32 | <.001 |
| Brief Resilience Scale | 3.39 (0.72) | 3.66 (0.70) | 164 | 18.20 | <.001 |
| Multidimensional Emotional Empathy Scale | 3.92 (0.44) | 3.99 (0.42) | 168 | 2.34 | .13 |
| Work engagement | 4.97 (0.95) | 5.28 (0.82) | 166 | 17.53 | <.001 |
| Burnout | | | | | |
|   Emotional exhaustion | 3.76 (1.34) | 3.61 (1.19) | 166 | 1.77 | .19 |
|   Depersonalization | 3.05 (1.56) | 3.03 (1.35) | 166 | 0.04 | .85 |
| Turnover intentions | 2.75 (1.44) | 2.48 (1.41) | 149 | 3.83 | .05 |
| Moral Distress Thermometer | 3.53 (2.39) | 3.49 (2.26) | 156 | 0.04 | .85 |
| Psychiatric Symptom Index | | | | | |
|   Cognitive | 34.69 (21.48) | 31.88 (18.55) | 166 | 2.77 | .10 |
|   Anxiety | 22.75 (14.08) | 23.07 (13.88) | 166 | 0.07 | .79 |
|   Depression | 25.26 (14.37) | 22.39 (13.15) | 166 | 5.78 | .02 |
|   Anger | 34.69 (18.90) | 31.04 (15.52) | 166 | 5.82 | .02 |
| Mindful Attention Awareness Scale | 3.76 (0.79) | 3.90 (0.81) | 166 | 4.78 | .03 |

[a] Control variables included age, marital status, shift, and regularity of ethical situations. Confidence was coded 1 (very low) to 5 (very high). Sensitivity was coded 1 (completely agree) to 6 (completely disagree). Competence, resilience, empathy, and turnover intentions were coded 1 (strongly disagree) to 5 (strongly agree). Engagement and burnout questions were coded 0 (never) to 6 (every day). Moral Distress Thermometer was rated from 0 (none) to 10 (worst possible). Psychiatric Symptom Index was coded as 1 (never) to 4 (very often). The score was computed by mean of all items and each subscale was transformed to a 0-to-100 scale. Mindful Attention Awareness Scale was rated from 1 (almost always) to 6 (almost never).

> **Further exploration is needed to measure the moral dimension of resilience.**

positively correlated with perceived confidence, moral competence, and work engagement and were negatively correlated with EE, depersonalization, TI, Moral Distress Thermometer, and the Ilfeld Psychiatric Symptom Index subscales of cognitive problems, anxiety, depression, and anger.

We examined unit specialty (intensive care unit [ICU] vs non-ICU) and years of nursing experience to determine if these factors moderated the effect of MEPRA on the main outcomes included in Table 3. Unit specialty was not a significant moderator of change in any outcome except EE (P = .04). MEPRA was more effective at decreasing EE for nurses in non-ICU units than for those in ICU units. Turnover intentions decreased the most in nurses with less than 10 years of experience

(Figure 2). Nurses with less than 10 years of experience and higher TI at baseline had a greater decrease in TI than did nurses with 10 or more years of experience and a lower TI at baseline.

## Discussion

The MEPRA curriculum increased participants' ethical confidence, ethical competence, resilience, work engagement, and mindful attention and awareness. MEPRA also decreased reported symptoms of depression and anger and turnover intention.

### Mindfulness

The MEPRA curriculum enhanced the skills of mindful awareness. Self-regulatory and awareness skills engage biological and psychological mechanisms important for responding to various types of adversity.[49,50] Cultivating mindfulness-based skills is important in the process of moral discernment and helps clinicians address moral adversity and develop mediation pathways for emotional competency, cognitive function, and ethical action.[15,49-52] Cultivating mindful awareness and cognitive skills aimed at recognizing, analyzing, and responding to ethical challenges and at fostering moral resilience holds promise for nursing ethics education.[53]

### Moral/Ethical Competence and Confidence

Moral/ethical competence has been defined as embodiment (being ethical), perception or sensitivity, reflection, discernment based on ethical knowledge, and behavior/action.[54] Each element is reflected in the MEPRA curriculum. Moral competence and perceived ethical confidence improved significantly after participation in MEPRA. Baseline scores for perceived ethical confidence were significantly lower in ICU nurses than in non-ICU nurses, yet ICU nurses scored significantly higher in moral sensitivity at onset. These findings could be explained by the greater frequency of exposure to ethical issues in the ICU and such factors as avoidance in identifying and addressing ethical concerns.[19] Many frontline nurses have limited formal or informal ethics education beyond basic prelicensure training.[13] In our study, only 14.7% to 17.2% of MEPRA participants reported receiving formal ethics training, suggesting an opportunity to strengthen ethics education in academic and practice settings. We found no differences between new graduates and experienced nurses in ethics preparation. Programs aimed at enhancing moral agency and moral efficacy and at reducing moral distress have demonstrated similar efficacy in increasing ethical competence and or confidence in both groups.[20,21,55]

## Resilience

We used a general measure of resilience to gain insight into the elements of global resilience that may be harnessed in response to the adversity associated with ethical challenges in clinical practice. Resilience scores significantly improved after MEPRA participation. Of the 10 characteristics of resilience that can be fostered through targeted interventions, MEPRA included the following: (1) developing a personal moral compass; (2) cognitive flexibility, the ability to face one's fears; (3) being optimistic in the face of adversity; (4) altruism; and (5) active coping skills, mentoring, and a supportive social network.[56-59] MEPRA participants appeared to engage their resilient potential in new and expanded ways. Other studies have shown an inverse relationship between resilience and burnout symptoms in nurses.[2,15,60-63] More targeted and refined measurements are needed to understand the relationship of resilience, especially moral resilience, with burnout symptoms.[11,62-64] Further exploration is needed to measure the moral dimension of resilience.[11]

## Work Engagement

Work engagement, a measure of fulfillment in the workplace, is characterized by "vigour, dedication and absorption"[65] and is positively related to work performance.[65-67] Although participants demonstrated relatively high work engagement scores before MEPRA participation, scores improved significantly after the program. Turnover intention scores were relatively low initially and further decreased after MEPRA participation. The MEPRA content broadened nurses' repertoire to exercise moral agency and expanded their commitment to contribute in the work setting. These trends are important in making the financial case for health care organizations to invest in programs such as MEPRA, particularly when coupled with systemic structures that dismantle the factors undermining well-being and nurse engagement.[14,68,69]

## Turnover Intentions

MEPRA participants, specifically nurses with less than 10 years of experience who reported higher TI before the program, reported decreased TI after training. This result demonstrates that the curricular intervention was more useful in lowering TI among participants who had worked as nurses for less than 10 years and had higher TI at baseline than among participants who had worked as nurses for 10 or more years and already had lower TI at baseline. MEPRA may be most effective as a retention intervention for nurses with less than 10 years of experience.

### Table 4
### Correlations of moral resilience and mindfulness with other outcomes

| Variable | Correlation, r | |
|---|---|---|
| | Resilience | Mindful Attention Awareness Scale |
| Perceived Ethical Confidence Scale | 0.31[a] | 0.21[b] |
| Moral Sensitivity Questionnaire | 0.09 | 0.05 |
| Moral Competence Questionnaire | 0.33[a] | 0.36[a] |
| Multidimensional Emotional Empathy Scale | −0.04 | −0.03 |
| Work engagement | 0.33[a] | 0.38[a] |
| Emotional exhaustion | −0.35[a] | −0.33[a] |
| Depersonalization | −0.27[a] | −0.41[a] |
| Turnover intentions | −0.18[c] | −0.20[b] |
| Moral Distress Thermometer | −0.26[a] | −0.31[a] |
| Psychiatric Symptom Index | −0.50[a] | −0.63[a] |
| Cognitive | −0.34[a] | −0.53[a] |
| Anxiety | −0.51[a] | −0.50[a] |
| Depression | −0.38[a] | −0.52[a] |
| Anger | −0.36[a] | −0.56[a] |
| Mindful Attention Awareness Scale | 0.31[a] | |

[a] $P < .001$.
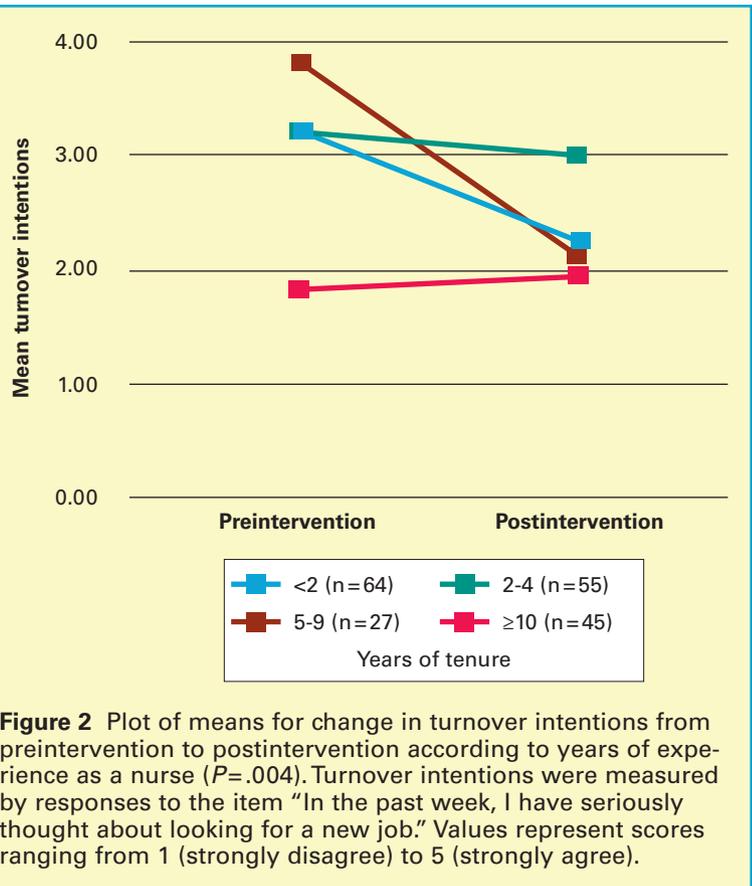[b] $P < .01$.
[c] $P < .05$.



**Figure 2** Plot of means for change in turnover intentions from preintervention to postintervention according to years of experience as a nurse ($P = .004$). Turnover intentions were measured by responses to the item "In the past week, I have seriously thought about looking for a new job." Values represent scores ranging from 1 (strongly disagree) to 5 (strongly agree).

### Psychiatric Symptoms

The Ilfeld Psychiatric Symptom Index is a self-reported measure of an individual's feelings of specific symptoms, not a diagnosis of a psychiatric illness.[47] Participants in MEPRA reported a significant decrease in symptoms in the subcategories of depression and anger. Intensive care unit nurses reported decreased symptoms of anxiety. These findings mirror those of studies that linked resilience to lower levels of depression and anxiety in critical care nurses, associated increased mindfulness with reduced anxiety and depression in practicing nurses and nursing students, and tied burnout to depression in nurses.[3,29,70-73] Because the prevalence of depression among nurses is twice the national average, reducing depression is an important adjunct to supporting nurse well-being and performance.[74-78]

### Moral Sensitivity, Empathy, and Moral Distress

Moral sensitivity is the capacity to identify moral conflicts and the morally salient aspects of a situation, including how actions affect others.[38] MEPRA participants consistently experienced ethical issues, and their moral sensitivity scores remained high both before and after MEPRA participation. Frontline nurses, particularly in critical care settings, face ethically challenging situations that require them to identify moral conflicts and their moral responsibilities. Nurses are highly attuned to ethical situations in practice but lack the confidence and competence to address them in ways that preserve their integrity.[79] The lack of variability of the scale items may have contributed to the low reliability and inability to demonstrate a change in this measure as a result of MEPRA. Moral sensitivity may be embedded in the measurement of ethical confidence and competence.

> Health care organizations must invest in individual and systemic solutions so that ethical practice is routine and not the exception.

Participants consistently showed moderately high levels of empathy, with a modest but not significant increase after the intervention. Empathy involves the ability to be attuned to the experience of another person, to partially feel the emotions of the other person while regulating one's own response (affective empathy), and to take the perspective of another person in understanding their experience (cognitive empathy).[80] Higher empathy and lower moral distress scores suggest that nurses, confronted with ethical challenges, were able to maintain empathy and regulate their emotions in response to distressing situations, avoiding empathic overarousal and nervous system dysregulation.[22,81] Developing these skills enables participants to accurately identify the source of their ethical tension, confusion, or unrest and respond to it in a way that reflects their professional values.[81]

More than 96% of participants indicated that they had experienced an ethically distressing situation in their clinical practice. Although a significant number of participants worked in critical care settings, where levels of moral distress using other measures are reported to be high, Moral Distress Thermometer scores in this study remained low and unchanged after MEPRA participation.[46,82] Future research is needed to understand the relationship between moral distress and moral resilience.

### Burnout

Contrary to reported burnout data in nurses, participants did not report high levels of EE or depersonalization at baseline.[2,83-85] Emotional exhaustion decreased modestly but not significantly, and depersonalization remained unchanged after MEPRA participation. Compared with ICU nurses, non-ICU nurses had a greater decrease in EE after MEPRA participation. Other factors could have influenced these findings; ICU nurses might have become more aware of their EE or needed more focused strategies to specifically address the sources of EE. Studies suggest that nurses who experience moral distress also experience symptoms of burnout, especially EE.[15] Findings from this and other studies have shown that mindfulness-based interventions are inversely correlated with burnout, particularly EE and depersonalization.[86-88] Developing mindfulness skills offers nurses protective tools to modulate burnout.

The 2-item burnout screening questions (EE and depersonalization) derived from the Maslach Burnout Inventory were selected to reduce survey burden.[43,44,89] It is unclear whether the longer Maslach Burnout Inventory, which is used primarily in a physician population, would have revealed significant differences in nurses.[44,89] Single-item scales are prone to lower reliability than are multi-item scales. The 2-item survey may not have been sensitive enough to detect a change in burnout in nurses. Further investigation is needed to assess the efficacy of the 2-item burnout questions in comparison with the longer Maslach Burnout Inventory or other validated burnout measures among nurses.

## Limitations

Ethical and financial constraints precluded a randomized controlled trial that could confirm and strengthen the study results. A voluntary program might recruit a skewed sample of highly engaged nurses. Nurses who participated in MEPRA were compared with a general sample of nurses from the same institution. The few differences found were used as covariates in the analyses. All measures were self-reported. Without a formal control group, the effect of repeat testing could not be independently assessed. The positive results, consistent across multiple cohorts, offers evidence that MEPRA affects key outcomes. Frequency of ethical challenges occurring in a single large academic medical system may not be generalizable to other hospital settings.

## Conclusions

Nurses are leaving their jobs and the profession at alarming rates.[90] During the coronavirus disease 2019 crisis, a nationwide survey of 1200 nurses showed that 67% were planning to leave their organization.[91] Health care organizations cannot afford to lose talented nurses or continue to expect high-quality performance without an investment in building individual and collective resilience and an infrastructure to support ethical practice. Investment by health care organizations in individual and systemic solutions is needed to build a culture where ethical practice is routine, safe havens for raising ethical concerns are used and safeguarded, and a healthy work environment is sustained.[14,35,92] Individual-focused solutions such as MEPRA must be aligned with unit-based and systemwide reforms to sustain progress and change practice patterns.[9] Future research may consider evaluating the effect of adapting the MEPRA format to determine if differences in session length, frequency, cohort composition, and online modalities can reproduce these results or improve the effectiveness of the interventions used. Further research is needed to fully understand the unique moral domain of resilience and the complexity that influences individual and team responses to ethical challenges. Delivering high-quality patient-centered care and retaining the best and brightest nurses in the profession is an ethical mandate we must uphold.

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# CE 1.0 Hour Category B

## Notice to CE enrollees:

This article has been designated for CE contact hour(s). The evaluation demonstrates your knowledge of the following objectives:

1. Describe the consequences of moral adversity on nurses.
2. Discuss the elements of the Mindful Ethical Practice and Resilience Academy (MEPRA).
3. Discuss the implications of the findings of the MEPRA program on building moral resilience and ethical practice on health care.

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