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Staff Education to Improve Mental Health Knowledge Among Critical Care Staff

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Executive Summary: Staff Education Project

Staff Education to Improve Mental Health Knowledge Among Critical Care Staff

by

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Summary

Mental health literacy is increasingly recognized as a critical component of nursing practice, particularly in high-acuity environments. At a local healthcare organization, leadership identified a gap in staff education related to mental health, contributing to elevated incidences of anxiety, depression, posttraumatic stress disorder (PTSD), burnout, and diminished patient outcomes. In response, I conducted this Doctor of Nursing Practice project to evaluate whether a structured educational intervention could enhance mental health knowledge and competency among critical care staff. Participants completed pre- and postintervention assessments to evaluate core concepts in mental health awareness and clinical application, with supplementary qualitative feedback gathered to explore their perceptions and experiences. Fifty staff members were invited to participate, 20 attended the educational workshop, and 15 completed both assessments and were included in the final analysis. Data were analyzed using descriptive statistics and thematic coding. Findings revealed participants' increased knowledge scores and greater confidence in managing mental health concerns. The mean score from the pre-education surveys (M = 45.7) increased to a post-education mean score of 57.3, resulting in a 25% learning gain from the education provided. These findings suggest that targeted mental health education for staff enhances knowledge and competency. I recommend that mental health education be incorporated into annual training requirements for critical care staff to enhance provider well-being, bolster team resilience, and improve patient outcomes. Broader implications of this project include the advancement of healthcare equity and psychological safety, ultimately fostering positive social change.

Background

Critical care environments are marked by intense physical and emotional demands, often exposing staff to ethically complex scenarios, life-threatening emergencies, and high patient acuity. These stressors significantly increase the risk of psychological distress, including anxiety, depression, PTSD, and burnout, and these conditions, in turn, diminish staff effectiveness and threaten patient safety (Hall et al., 2016; Moss et al., 2016).

Despite the widespread nature of these challenges, mental health education remains scarce in many critical care settings. This educational gap persists even as national organizations, such as the American Association of Critical-Care Nurses (2023) and the National Academy of Medicine (NAM) (2022), have emphasized clinician well-being as a strategic imperative for quality care and workforce sustainability. The American Nurses Association (AACN) (2021) further highlighted emotional exhaustion as a major contributor to staff attrition and compromised care quality in critical care settings.

The gap in practice addressed by this project is the lack of structured mental health education among critical care staff. This absence contributes to increased vulnerability to occupational stress disorders and undermines both personal resilience and clinical outcomes. Mealer et al. (2017) highlighted that nearly 45% of intensive care unit nurses report symptoms consistent with PTSD, a rate significantly higher than in other clinical specialties. Without formal training to recognize and manage psychological distress, staff are less equipped to maintain performance under pressure, collaborate effectively, or provide safe patient care.

The purpose of this Doctor of Nursing Practice project was to implement a targeted educational program aimed at improving mental health literacy among critical care staff. With the initiative, I sought to empower clinicians with knowledge and coping strategies to mitigate stress, recognize emotional distress in themselves and colleagues, and foster healthier work environments. The guiding project question was: Will a staff education program in critical care mental health improve staff knowledge and support better patient outcomes?

Multiple sources validate the need for mental health education in high-acuity clinical environments. The American Nurses Association (2021) reported strong associations between emotional exhaustion and increased turnover, decreased job satisfaction, and poorer safety outcomes in critical care settings. National guidelines from the AACN (2021) and NAM (2022) endorsed mental health support as a foundational pillar of clinical safety and advocate for system-wide adoption of resilience-building initiatives. Mealer et al. (2017) reinforced this call by identifying critical care nurses as disproportionately affected by PTSD, often lacking institutional resources to address emotional strain. These findings establish a compelling rationale for introducing structured mental health education in environments most prone to psychological burdens.

Extensive scholarship supports the urgency of integrating mental health literacy into professional development for critical care staff. In a systematic review, Alharbi & McKenna (2025) identified mental health training as a key strategy for reducing critical care nurse distress, with documented improvements in coping, peer support, and clinical focus. Vogt et al. (2024) reinforced these findings by showing that structured education directly correlates with increased staff confidence and improved patient safety indicators.

Similarly, Anger et al. (2024) synthesized meta-analytic data demonstrating that mental health education programs yield statistically significant reductions in burnout and PTSD symptoms across healthcare roles.

Recent research has consistently highlighted the practical and emotional benefits of targeted mental health education in critical care. Carleton et al. (2020) described staff-led improvements in dialogue and support culture following training initiatives, while Rezayi et al. (2022) underscored how interdisciplinary education fosters collaborative resilience among healthcare teams. Chang et al. (2025) found that structured programs improved the recognition of mental health warning signs and helped reduce stigma among participants. Building on these findings, Lee et al. (2020) and Ramnarain et al. (2015) provided insight into how educational efforts strengthen organizational culture by promoting morale and trust. Patel et al. (2019) further affirmed that mental health education in critical care settings yields favorable outcomes in emotional readiness and supports the delivery of patient-centered care.

The evidence supporting this project is grounded in a robust hierarchy of research, as classified according to the John Hopkins Nursing Evidence-Based Practice Evidence Level and Quality Guide. This framework reflects moderate to strong strength across multiple methodological designs. West et al. (2016) provided Level I evidence through a comprehensive systematic review and meta-analysis, demonstrating that interventions incorporating education, mindfulness, and peer support significantly reduce clinician burnout. This high-level synthesis offers the most rigorous form of evidence, integrating findings from across studies to establish consistent effectiveness. Dyrbye et al. (2019) contributed Level II evidence via a randomized controlled trial that showed that wellness programs with structured educational components led to statistically significant reductions in emotional exhaustion and improvements in staff engagement, reinforcing causal impact and internal validity. In a Level III quasi-experimental study, Bergman & Rushton (2025) reported that mental health training enhanced coping strategies and reduced stigma among critical care nurses, offering practical insight into real-world implementation.

Staff Education Project Development

This project engaged a diverse interdisciplinary group of 15 healthcare professionals actively working within a critical care unit. Participants represented a broad spectrum of roles, including day and night shift nurses, physical therapists, patient care technicians, and unit coordinators, to ensure inclusion of perspectives that influence both patient outcomes and staff dynamics. Development of the initiative began with a targeted needs assessment that validated a significant gap in mental health education across disciplines. In response, I curated evidence-based content from current clinical guidelines and peer-reviewed literature, focusing on trauma-informed care principles, stress-reduction techniques, early recognition of burnout, and mental health first aid practices. Educational modules were designed for adult learners and delivered through a multimodal approach, including live in-person workshops, scenario-based case discussions, and digital resource access, to accommodate variable shift schedules and optimize engagement.

Implementation procedures prioritized both quantitative and qualitative data collection. I used pre- and postintervention surveys to assess participants' baseline mental health knowledge and retention, while Likert-scale items captured their confidence in addressing psychological stressors in clinical settings. Knowledge quizzes quantified participants' improvement through descriptive statistics, including mean score changes and percentage increases. I also conducted thematic analysis of participants' open-ended responses to explore changes in perceptions, emotional readiness, and practical application of mental health strategies. Postintervention results demonstrated marked improvements in staff knowledge and reported confidence, with participant feedback underscoring the relevance and necessity of sustained mental health training. These findings informed a formal recommendation to institutional leadership for ongoing integration of mental health education into critical care staff development.

Results

Following the implementation of the staff education initiative, postintervention data demonstrated a marked improvement in mental health literacy among participants. Their knowledge quiz scores increased on average by 25% (see Table 1), and postintervention surveys revealed heightened confidence in recognizing early signs of psychological distress, both in oneself and colleagues. Qualitative feedback highlighted the program's relevance, with staff reporting greater comfort in discussing mental health and seeking support when needed. Many participants expressed appreciation for having tangible coping strategies and emphasized that the initiative helped normalize mental health conversations in the workplace.

Table 1

Learning Gain Results

Participant ID	Pretest score	Pretest %	Posttest score	Posttest %	Learning gain %
A	48	64%	60	80%	25%
B	44	59%	56	75%	27%
C	46	61%	58	77%	26%
D	43	57%	52	70%	23%
E	45	60%	56	75%	25%
F	47	63%	58	77%	22%
G	42	56%	53	71%	27%
H	49	65%	61	81%	25%
I	44	59%	54	72%	22%
J	46	61%	58	77%	26%
K	48	64%	60	80%	25%
L	43	57%	56	75%	32%
M	45	60%	56	75%	25%
N	47	63%	58	77%	22%
O	46	61%	59	79%	29%
Average	45.7	61%	57.3	76%	25%

The impact on the organization was multifaceted. The program promoted a more supportive unit culture by opening space for empathy, dialogue, and early intervention. Leaders noted reduced interpersonal tension, improved staff morale, and a more cohesive interdisciplinary team dynamic. While long-term outcomes, such as reduced turnover or patient safety incidents, would require continued tracking, the immediate shift in workplace climate and mental health engagement suggests a foundational improvement in psychological safety and professional resilience.

However, the project faced several limitations. Participation was voluntary, which may have introduced selection bias, with those already interested in mental health may have been more likely to engage. Scheduling educational sessions across multiple roles and shifts proved challenging, sometimes limiting attendance and continuity. The short postimplementation evaluation window also limited the ability to measure sustained behavior change or broader clinical outcomes. Despite these constraints, the project still revealed meaningful changes in knowledge and attitudes.

Beyond the local site, this project holds significant potential for replication in other high-stress healthcare settings. Mental health challenges among clinicians are a widespread concern, and this initiative serves as a scalable, evidence-informed model for building workforce resilience. The project also aligns with national priorities around clinician well-being and health equity, especially as emotional strain disproportionately affects underrepresented groups in healthcare (NAM, 2022). By framing mental health literacy as a core competency, this project supports a shift toward more inclusive, compassionate, and sustainable healthcare systems across diverse practice environments.

Conclusions

The implementation of the staff education initiative brought about a significant cultural and psychological shift within the project site critical care unit. Participants reported increased knowledge, confidence, and comfort in addressing mental health topics, which translated into a more empathetic and resilient work environment. Leaders observed enhanced team cohesion, improved morale, and reduced interpersonal tensions, all of which are hallmarks of a healthier, more supportive workplace. These changes signaled not only immediate benefits but also a strong foundation for sustained professional resilience and psychological safety.

To build upon these gains, my future recommendations include integrating mental health training into routine staff development, establishing peer support champions across shifts, and engaging leadership in coaching focused on emotional intelligence.

Additionally, evaluating long-term outcomes, such as retention, absenteeism, and patient safety metrics, would provide a deeper understanding of sustained impact. Expanding the curriculum to address topics, like moral distress, compassion fatigue, and cultural humility, could further enrich the program's relevance and depth.

For nursing practice, this initiative reinforces mental health literacy as an essential component of clinical competency. Nurses stand to benefit from increased confidence in self-care, greater preparedness to support colleagues under stress, and a deeper integration of trauma-informed principles into patient care. These shifts contribute to a more reflective and patient-centered practice.

From a broader perspective, the initiative drives positive social change by normalizing mental health discussions. The inclusive, interdisciplinary design of the project elevates diverse voices and fosters equity, particularly for underrepresented groups who may be disproportionately affected by emotional strain. As a result, the program not only enhances staff well-being but also supports the evolution of healthcare systems toward environments that are more inclusive, compassionate, and sustainable.

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Appendix A: Pre-education Survey

<u>Pre-Education Survey</u>

Instructions: Please complete the following questions to help understand your current knowledge of mental health in healthcare settings. Responses are anonymous and will be used to assess the effectiveness of this educational program.

1. **How would you rate your understanding of mental health conditions commonly encountered in healthcare environments?** (Scale: 1 = Not at all familiar, 5 = Extremely familiar)

(1) Not at all familiar

(2) Slightly familiar

(3) Moderately familiar

(4) Very familiar

(5) Extremely familiar

2. **List three mental health conditions you believe are most common among healthcare professionals.**

   1. ____________

   2. ____________

   3. ____________

3. **Briefly describe one way a mental health condition could affect a healthcare provider's ability to deliver patient care.**

4. **Is the following statement true or false?**

Burnout is a formally classified mental health disorder.

☐ True ☐ False

5. **In your own words, why do you believe mental health awareness is important in critical care environments?**

6. **Do you feel confident in your understanding of how stress affects both the body and the mind?**

   ☐ Yes ☐ No

7. **True or False:** *Addressing staff mental health has no measurable impact on teamwork or clinical outcomes.* ☐ True ☐ False

Appendix B: Post-education Survey

Instructions: Now that you've completed the training program, please respond to the following items. This survey evaluates knowledge growth and program impact.

1. **How would you now rate your understanding of mental health disorders in the healthcare setting?** (Scale: 1 = Not at all familiar, 5 = Extremely familiar)

   (1) Not at all familiar

   (2) Slightly familiar

   (3) Moderately familiar

   (4) Very familiar

   (5) Extremely familiar

2. **Name three mental health disorders discussed during the training that commonly affect healthcare staff.**

   1. ___________

   2. ___________

   3. ___________

3. **Identify two ways mental health issues may influence a healthcare provider's interactions with patients.**

   1. ___________

   2. ___________

4. **Is the following statement true or false?**

   Burnout is a medically classified mental health disorder.

   ☐ True ☐ False

5. **Based on what you have learned, explain the importance of understanding mental health in high-stress care settings.**
6. **After completing this training, are you now familiar with the physical and psychological effects of occupational stress?**

   ☐ Yes ☐ No
7. **True or False:** *Improving mental health awareness among staff contributes to stronger team performance and better patient outcomes.*

   ☐ True ☐ False

Appendix C: Participant Handout

Mental Health in Critical Care Settings: Participant Handout

Understanding Common Mental Health Disorders in Healthcare

Healthcare workers are at increased risk for the following conditions:

- **Anxiety Disorders**: Characterized by excessive fear, nervousness, or avoidance behaviors; often linked to high-stress environments.
- **Depression**: Marked by persistent sadness, loss of interest, fatigue, and impaired concentration—can lead to absenteeism or reduced engagement.
- **Post-Traumatic Stress Disorder (PTSD)**: Can occur after repeated exposure to traumatic clinical events; symptoms include flashbacks, hypervigilance, and emotional numbness.
- **Burnout** (not classified as a mental health disorder): A syndrome resulting from chronic workplace stress, leading to emotional exhaustion, cynicism, and reduced efficacy.

Why Mental Health Matters in Critical Care

Mental health directly affects:

- **Patient Safety**: Impaired judgment due to mental strain increases risk of medical errors.
- **Team Performance**: Staff under distress may struggle with communication, collaboration, and empathy.
- **Staff Retention**: Mental health challenges contribute to high turnover rates and absenteeism.

Physiological and Psychological Effects of Stress

Stress impacts the body and mind in multiple ways:

Physiological: Elevated blood pressure, disrupted sleep, fatigue, gastrointestinal problems

Psychological: Anxiety, irritability, memory loss, poor concentration, emotional withdrawal

Quick Knowledge Check (with answers)

1. **What are three mental health disorders common among healthcare workers?** *Anxiety, Depression, PTSD*
2. **How might mental health disorders impact patient care?** *Can lead to errors, delayed responses, poor communication, and reduced empathy.*
3. **True or False: Burnout is a mental health disorder.** *False – It's a syndrome, not a classified mental illness.*
4. **True or False: Addressing staff mental health improves patient outcomes.** *True – It improves safety, satisfaction, and teamwork.*