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The Effect of a Positive Work Culture in Emergency Service Nurses: An EBP Proposal

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Contents

Acknowledgments

First, I am thankful for God's opportunities and guidance in bringing me this far. His endless love comforts me even when unsure of the world and myself. Serving is not what healthcare workers do. A servant is who we are called to be. When we serve, we represent Jesus-style leadership with autonomy, beneficence, justice, and nonmaleficence.

I want to express my profound appreciation to the UT Tyler College of Nursing and Soules College of Business faculty. Graduate school helped me learn how to use my strengths to lead others who also choose to be community servants. Now, I can apply Band-Aids and count them, too.

I want to give special thanks to my comrades who have influenced my decision to pursue a career as a change agent for the healthcare system. The knowledge and skills I learned in school do not compare to the wealth of information I have been exposed to while working shoulder-to-shoulder in the trenches of behavioral health and intermediate care.

Most importantly, I have been reminded that my husband and family are always there for and supporting me in any way possible. I am beyond grateful to the most incredible husband, Grant Fitzgerald, for his love and patience. The amount of time sacrificed for our careers will not compare to the lifetime we will spend together. Ultimately, his patience will pay off when he can retire early to tend to his "honey-do" list.

I would like to acknowledge my family, who have always been a constant support system and understand the goals I have to achieve. Even though they might not fully understand why (neither have I the majority of the time), they have always been there to listen, accept, and cheer me on. I am where I am today with those mentioned. I am grateful to those while I take on the next adventure of creating a formidable voice for quality, affordable, and accessible healthcare.

Executive Summary

This paper aims to address the spirit of inquiry of the effect a safe work environment has on compassion fatigue in nurses in the emergency department (ED). The World Health Organization promotes an eager approach to the battle of compassion fatigue in frontline healthcare workers, stating, "Unless this is addressed, it will further add to the global nursing workforce shortage." (Stafford et al., 2022, p. 1853). Unfortunately, 69% of nurses under the age of 25 report burnout from working conditions (American Nurses Association, 2022). Improving nurses' job satisfaction and motivation levels is necessary to increase the effectiveness of nursing services (Goktas et al., 2022). Hospital organizations must strive for a supportive social climate to achieve the most effective outcome to reduce the pressure on nurses and negative personal emotions (Hu et al., 2022).

To investigate the effect of intervention strategies on compassion fatigue, the prognosis research question was formed: For nurses in the ED, how does a positive work environment, compared to a hostile work environment, decrease compassion fatigue? This research question guided this literature review to discover successful techniques to promote a work culture of success. After the literature synthesis, a plan was created to implement the Caring Mentorship Model, a formal mentoring program for all nurse leaders to create an environment where nurses can excel, promoting quality and efficiency of care. The implementation plan consists of leadership training opportunities and the implementation of the Caring Mentorship Model to measure ED nurses' level of compassion fatigue, burnout, and compassion satisfaction using the Professional Quality of Life Scale. As evidence suggests, data obtained from pre- and post-intervention surveys can be used to measure the effect of leader training and determine if it

improves the work culture in the ED. Expected outcomes of this evidence-based project include

improved work engagement, job satisfaction, and reduced compassion fatigue.

The Effect of a Positive Work Culture in Emergency Service Nurses: An EBP Proposal

This paper addresses the effect work culture has on compassion fatigue in nurses in the ED. Our fast-paced society has increased employee performance expectations, especially for healthcare workers. Compassion fatigue results from nurses harming their emotional well-being and ability to provide compassionate care. Nurses must take pleasure in their work to allow patients the right to the most effective care. The goal of stimulating nurses' work engagement brings us closer to accomplishing the triple aim of population health: better patient care, reduced cost, and better health for the population (Jonas et al., 2019). This proposal includes a literature review, implementation plan, and expected results. Evidenced based recommendations for nurses in the ED to combat compassion fatigue in the work environment are also provided.

Rationale for the Project

The objective is the effect a safe work environment has on compassion fatigue in nurses in the ED. Stafford et al. (2022) suggest poor work environments, defined as unsafe staff-to-patient ratios due to staff shortages, poor mental health support, neglect from employers, and assault from patients, contribute to the increased rate of compassion fatigue in nurses. The focus on the ED is due to evidence that nurses working in the ED are four times more likely to suffer an assault than other hospital employees, further contributing to emergency nurses' intention to leave and decreased job satisfaction (Stafford et al., 2022).

Patient care is suffering due to the negative effects of providing care associated with burnout, depression, and posttraumatic stress disorder (Stamm, 2010). Patients have the right to receive high-quality treatment from a healthcare team that can focus exclusively on the plan of care. The proposal below will discuss the impact of a supportive professional practice environment for nurses in the ED.

Literature Synthesis

A systematic search was conducted across CINAHL, PubMed, and APA

PsycINFO to find literature, such as randomized controlled trials, controlled trials, case-control

studies, cohort studies, descriptive studies, qualitative studies, systematic reviews, and meta-

analyses. The research question guiding the literature review: For nurses in the ED, how does a

positive work environment, compared to a hostile work environment, decrease compassion

fatigue? Keywords identified from the research questions include *emergency department*,

nursing, and *compassion fatigue*. Articles containing keywords in the title, abstract, or subject

heading were considered for evaluation. The search began with compassion fatigue and the effect

of work culture on ED nurses. The search was limited to full-text English from 2018 through

2023 to find evidence of the current environment. The research identified twelve articles that met

inclusion criteria.

A literature review identified that hostile work culture, including exposure to

traumatizing events, increases burnout and stress and decreases compassion satisfaction and

occupation commitment in emergency services nurses (Copeland and Henry, 2018; Hinderer et

al., 2014; Kiymaz and Zeliha, 2022; Wilson et al., 2019). Increased rates of compassion fatigue

result primarily from psychological stress often felt by nurses in the workplace (Gustafsson and

Hemburg, 2022; Partlak et al., 2021). Nurses with higher burnout scores tended to have higher

compassion fatigue scores; higher burnout and compassion fatigue scores were associated with

lower compassion satisfaction scores (Copeland and Henry, 2018; Hinderer et al., 2014; Wilson

et al., 2019).

Conversely, increased work engagement was associated with improved professional

practice and more substantial organizational commitment (Adams et al., 2019; Kiymaz and

Zeliha, 2022). High compassion satisfaction rates correlate with social support from personal and environmental characteristics, such as, age, gender, ethnicity, martial statues, education, and years of experience in nursing (Hinderer et al., 2014; Ruiz-Fernandez et al., 2021). Mindfulness-based interventions allow an opportunity to promote a healthy professional quality of life to identify or support the risk of compassion fatigue in ED nurses through promoted psychological well-being and reduced stress levels and burnout (Park et al., 2022; Ramachandran et al., 2022; Xu et al., 2020; Xu et al., 2022). Overall, the literature review illuminates the impact of work culture on compassion fatigue in emergency service nurses.

Project Stakeholders

More than ever, nurses request change to provide safe, quality care. Therefore, ED nurses and ED nurse leaders (charge nurses, nurse managers, and directors) are key stakeholders who need to be involved with this implementation project. Leadership is responsible for providing an environment for success. Hospital organizations must strive for a supportive social climate to reduce the pressure on nurses and negative emotional influences (Hu et al.,2022). Motivation is the top contributor to the proficient and excellent performance of nurses responsible for patient care and job satisfaction (American Nurses Association, 2023).

Implementation Plan

To reinforce the importance of leaders' influence on a safe environment in healthcare, hospital organizations must implement a formal mentoring program for nurse leaders to enable a supportive and motivating work environment. The Caring Mentorship Model builds relationships among staff through task-oriented, interactive, and transformative mentoring (Hookmani et al., 2021). The model includes a framework for a mentoring program to create a team, identify areas of improvement, and coordinated shift huddles to frame and address preconditions such as

recruiting staff, staff competency, and addressing frontline concerns (Hookmani et al., 2021). A

meaningful relationship between nurses and nurse leaders allows for improved employee

experience and increased patient experience (Hookmani et al., 2021).

　　The estimated duration of the implementation plan is ten weeks. Due to human subjects

being included in the research, IRB (Institution Review Board) approval is required. First, an

IRB registration number will be obtained from the appropriate agency. The Food and Drug

Administration (1998) requires the submission of a proposal for the plan and completion of a

mandatory online certification. In addition, the IRB research project application has to be

submitted, including attachments of study instruments, recruitment material, informed consent,

and other pertinent documents (Food and Drug Administration, 1998). After IRB approval, the

study may begin. Any changes made during the study have to be reported to the IRB. The IRB

expects a project closure forum with the project's final results (Food and Drug Administration,

1998).

　　Creating and implementing the Caring Mentorship Model will occur in four phases over

ten weeks. Phase one of the implementation plan is the recruitment stage. It includes one week of

seeking approval and informing ED nurses and ED nurse leaders of leadership strategies that

influence the work environment, promoting involvement in the participation of the study, and

securing their commitment to the study.

　　Phase two consists of the preparation stage, which includes nurses and nurse leaders

completing a pre-implementation Professional Quality of Life Scale (ProQOL-V) survey to

measure compassion fatigue, burnout, and compassion satisfaction, see Appendix B. Nurse

leaders' compassion plays a critical role in the work culture; therefore, their level of compassion

is also pertinent to their performance (Hookmani et al., 2021). The mentorship team must obtain

the hospital organization's expectations for managerial requirements for frontline support to clarify the amount of attention the organization allows for improving the hospital work environment in the ED. At this stage, the nurse leader will create a well-organized team dedicated to improving employee motivation and relations within the unit.

The pre-implementation survey will be emailed to floor nurses in the ED to measure the effectiveness of supportive leadership styles on symptoms of compassion fatigue related to the workplace environment. For this study, the participants must complete their surveys within two weeks. The surveys may be returned through email or at a designated drop box located in the ED. The surveys can be submitted anonymously as they will be presented anonymously. For this study, participation requirements include a minimum Level V Trauma Center designation. Trauma categories vary state by state; however, the American College of Surgeons requires that Level V Trauma Centers be able to provide initial evaluation, stabilization, and diagnostic capabilities and prepare patients for transfer to higher levels of care (American Trauma Society, 2024). Level V is determined as the minimum requirement for participation in this study due to the accessibility of Level I-V Trauma Centers in the United States.

Phase three is the implementation stage of the Caring Mentorship Model. The implementation should begin when all participants have completed their ProQOL-V survey. The mentorship team established by the nurse leader will identify areas of improvement and address solutions for preconditions such as recruiting staff, staff competency, and addressing frontline concerns. The nurse leader will then enable and motivate a supportive social climate for frontline staff to improve the unit work environment for a total of five weeks. A supportive social climate includes high levels of support, self-care, and a positive work environment (Hinderer et al.,

2014). Mentoring can be in the form of supporting, guiding, teaching, role modeling, counseling, and sharing experience (Hookimani et al., 2021).

Phase four is the concluding stage, in which post-implementation surveys will be sent to ED nurses to measure the intervention's effectiveness. Participants will have two weeks to complete their surveys. After data is collected, the results will be presented to ED nurses and ED nurse leaders to demonstrate the effectiveness of the intervention.

Timetable/Flowchart

Appendix C features the implementation plan's timeline, including each phase and the tasks associated with each phase of the four-phase project. Phase one, identified as the recruitment stage, includes week 1. Phase two, the preparation phase, includes weeks 2-3. Phase three is the implementation stage during weeks 4-8. Weeks 9-10 will include collecting the final data and completing phase four, the final stage.

Data Collection Methods

The study's primary outcomes are compassion fatigue, burnout, and compassion satisfaction. These outcomes will be evaluated by the ProQOL-V, which is used in the pre- and post-implementation surveys; questionnaire is attached in Appendix B. The ProQOL-V includes three 10-item subscales: compassion fatigue, burnout, and compassion satisfaction. Completing the ProQOL-V involves selecting response choices on a 0 (never) to 5 (very often) Likert scale. The scale's total score is not calculated; each subdimension is evaluated separately (Copeland and Henry, 2018; Hinderer et al., 2014; Partlak et al., 2021; Xu et al., 2020). While the compassion fatigue scale is definite, Stamm (2010) explains that burnout and compassion fatigue share variance reflecting the adverse effects to both conditions, yet they are different constructs. During the analysis of the ProQOL-V pre- and post-intervention surveys, the mean of

compassion fatigue, burnout, and compassion satisfaction is calculated. In addition, the values of low (≤18), medium (19-26), and high rates (≥ 27) of each dimension are measured for comparison of the pre- and post-intervention survey scores. These data points allow for descriptive data analysis to determine the effectiveness of the Caring Mentoring Model. A successful intervention would indicate decreased compassion fatigue and burnout and an increase in compassion satisfaction.

Evaluation

The literature review identified that work culture influences burnout, stress, and compassion satisfaction in emergency services nurses (Copeland & Henry, 2018; Hinderer et al., 2014; Kiymaz and Zeliha, 2022; Wilson et al., 2019). Preventative measures are needed to foster staff well-being to establish an engaging working environment and employee wellbeing-focused organizational culture (Xu, 2022). Conversely, increased work engagement was associated with improved professional practice and more substantial organizational commitment (Adams et al., 2019; Kiymaz and Zeliha, 2022). Hinderer et al. (2014) disclosed that compassion satisfaction results from high levels of support, self-care, and a positive work environment. Gustafsson and Hemburg (2022) suggest that management's responsibility is to provide a healthy work environment and institute limitations for patients and staff to prevent compassion fatigue. Nurse leaders can implement the Caring Mentoring Model in support for nurses and positive coworker relationships to increase compassion satisfaction (Hinderer et al., 2014). The desired outcomes include improved compassion satisfaction and reduced symptoms of compassion fatigue, which can be achieved by leadership utilizing effective mentoring to provide a safe and supportive environment for employees to perform their daily duties.

Cost/Benefit Analysis

The cost of implementing the Caring Mentorship Model for leaders is limited to employee wages, considering their time to improve their work culture. Unit leaders are typically on a salary. Therefore, a cash incentive may be used to implement the change project. For hospital organizations that participate in pay-for-performance rewards programs like Leapfrog Hospital Rewards Program and Bridges to Excellence, performance improvement allows for an opportunity for merit pay increases or pay programs. The benefit of the Caring Mentorship Model is increased work engagement and job satisfaction, ultimately decreasing turnover. The estimated turnover costs can range from $10,000 to $88,000 per vacant registered nurse position (Adams et al., 2019). Therefore, retaining employees who share a common goal with the organization is essential for future success. Ultimately, the result will include increased employee retention due to compassion satisfaction and decreased burnout and compassion fatigue.

Discussion of Results

As the ED work climate improves, nurses become more engaged and innovative with patient care practice. This project requires sufficient time to complete and create an environment of excellence. Challenges to expect when implementing a leadership training program include acquiring project stakeholders and reliability of submitting data reports from pre- and post-implementation surveys using the ProQOL-V. Confounding elements contributing to a poor nursing culture include frustration and a loss of control because one cannot achieve one's target and the fundamental urgency to 'do something' and eliminate others' sufferings (Hookmani et al., 2021).

To ensure the sustainability of a safe work environment for nurses in the emergency department, healthcare organizations must provide a formal mentoring program, such as the

Caring Mentorship Model, for all nurse leaders that allows an opportunity for appropriate

positioning in their pivotal role in creating and sustaining healthy work environments.

Stakeholders recognizing the influence of nurse leadership on the work environment is

imperative to the success of nursing performance and is vital for future organizational success.

For long-term success, the frontline has to share the organization's vision and feel supported as

they perform day-to-day operations.

Conclusions/Recommendations

Hospital organizations with thriving work cultures encompass nurse leaders who embrace

the value of a healthy work environment, authentically live it, and engage others in its

achievement. Along with improved work engagement, job satisfaction, and reduced compassion

fatigue, better patient care, reduced cost, and better health for the population are expected

findings that will impact the world outside hospital organizations. Also, patient outcomes and

satisfaction improve by providing a solid foundation for success and innovative care. Therefore,

healthcare organizations should nurture nurse leaders' efforts to maintain a healthy work

environment by actively mentoring nurses in all roles and levels of experience. A formal

mentoring program, such as the Caring Mentorship Model, for all nurse leaders is a cost-

effective intervention to positively influence healthcare work culture and decrease compassion

fatigue in nurses.

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Appendix A
Evidence Table

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
1. Adams, Hollingsworth & Osman (2019). The implementati on of a cultural change toolkit to reduce nursing burnout and mitigate nurse turnover in the emergency department.	N/A	QI project	Sample: n=38 ED nurses total, n=30 ED nurses for data analysis (n=6 did not complete the postintervent ion on survey, n=2 had missing information on post intervention survey) Setting: 41-bed ED in SETX	IV: CCT implementa tion DV1: TI DV2: DE DV3: EX DV4: BO	Means Paired Student's t-test analysis	ATS (TI) OBI (DE, EX, BO)	ATS - Means - Pre: 3.133 - Post: 2.989 - t-test: not SS OBI (DE) - Means - Pre: 2.246 - Post: 2.100 - t-test: SS OBI (EX) - Means - Pre: 2.563 - Post: 2.363 - t-test: SS OBI (BO) - Means - Pre: 4.808 - Post: 4.463 - t-test: SS	Strength: Applicability Limitations: small sample size, short implementation period for study analysis, does not measure phenomena longitudinally, study performed at only location Feasibility: CCT is feasible Risk of Harm: None LOE: IV Quality of Evidence: Moderate USPSTF Grade: B
2. Copeland, Henry (2018). The Relationship between workplace violence, perceptions	ProQOL model	Single Cohort Quantita tive cross sectional design	147 people completed survey with 63% response rate. Roles of people included:	DV1: CS DV2: BO DV3: STS IV1: general threats IV2: name calling	ProQOL: CS and Fatigue v. 5 tool	CF (BO, STS) CS	general threats (CS p = .012, BO p = .001, STS p = .035), name calling (CS p = .041, BO p = .021, STS p = .018), and threats of lawsuit (CS p = .001, BO p = .001, STS p =	Strength: Valid & Applicable Limitations: small sample size, short implementation period for study analysis,

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
of safety, and Professional Quality of Life among emergency department staff members in a Level 1 Trauma Center.			RNs, psychiatric assessor, providers, ancillary staff, clerical staff	IV3: threats of lawsuit IV4: Tolerance to violence was associated IV5: PoS			.02). Tolerance to violence was associated with BO (p = .004) and CS (p = .001); PoS was associated with BO (p = .018).	does not measure phenomena longitudinally, study performed at limited number of locations Feasibility: Create a PoS is feasible Risk of harm: None LOE: Level II Quality of Evidence: Moderate USPSTF Grade: A
3. Gustafsson, & Hemburg, (2022) Compassion fatigue as bruises in the soul: A qualitative study on nurses.	N/A	Qualitative. Use of content analysis.	Interviews with 7 nurses in various contexts	DV1:CF IV1: CO IV2: EX IV3: VI IV4: SC IV5: life itself and multifaceted factors	All interviews were transcribed verbatim by the first researcher and all personal information was replaced with codes.	CF relation with CO, EX, VI, SC, life itself and multifaceted factors	-Compassion as an empathic gift and CF as a result of CO - CF as exhausting the nurse as a professional and private person - CF as a crisis with potentially VI - CF can be handled by SC and focus on self	Strength: Validity Limitation: small sample size of only female participants, short implementation period for study analysis, does not measure phenomena longitudinally, study performed at limited number of locations Feasibility: Decreasing rate of CF is feasible

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
							- CF is affected by life itself and multifaceted factors.	Risk of harm: None LOE: Level IV Quality of Evidence: Moderate USPSTF Grade: C
4. Hinderer, VonRueden, Friedmann, McQillan, Gilmore, Murray (2014) Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses.	Dutton and Rubinstein's 26 theory of STS reactions	Single Cohort cross-sectional descriptive design	trauma center nurses working in direct patient care roles (n = 262). The response rate for this study was 49% (n = 128).	DV1: BO DV2: CF DV3: CS IV1: ETE IV2: Coping strategies	Penn inventory demographic/behavioral instrument. ProQOL scale	ProQOL scale (BO, CF, CS)	35.9%, had ProQOL scores consistent with BO or high risk of BO, 27.3% reported CF	Strength: Valid & Applicable Limitations: small sample size, short implementation period for study analysis, does not measure phenomena longitudinally, study performed at limited number of locations Feasibility: Decrease ETE and promote coping strategies is feasible Risk of harm: None LOE: Level II Quality of Evidence: Moderate USPSTF Grade: B

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
5. Kiymaz, Zeliha (2022) Workplace violence, occupational commitment and intention among emergency room nurses: A mixed-methods study.	N/A	Qualitative/Quantitative	202 of 300 ED nurses of five hospitals where research was performed between Jan. 15, 2020 and May 15, 2021.	DV1: ITR DV2: OC IV1: VE	TCMCS POPAS	ITR OC	VE directly influence ITR and OC	Strength: Valid & Applicable Limitations: small sample size, short implementation period for study analysis, does not measure phenomena longitudinally, study performed at limited number of locations Feasibility: Decrease VE is feasible Risk of harm: None LOE: IV Quality of Evidence: Moderate USPSTF Grade: B
6. Park (2022), The effectiveness of e-healthcare interventions for mental health of nurses	N/A	SR	-Inclusion Criteria: only 7 RCTs were included; participants: nurses, regardless of sex, age,	DV: BO IV: e-healthcare intervention	SUD STAI Burnout Scale Cochrane's Risk of Bias tool	BO	online form of the EFT significantly improved BO severity compared with no intervention	Strengths: Applicable Limitations: high heterogeneity between studies, bias, methodological quality of the included studies Feasibility: e-healthcare interventions is feasible

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
			nationality, and ethnicity					Risk of harm: None LOE: I Quality of Evidence: Moderate USPSTF Grade: A
7. Partlak Gunuse (2021) The effect of nurse led intervention program on compassion fatigue, burnout, compassion satisfaction, and psychological distress in nurses: a RCT	N/A	RCT	48 clinical nurses. -Exclude nurses <6 month experience & CF score > 20 on questionnaire - 4 nurses did not participate in posttest questionnaires	DV1: CF DV2: BO DV3: CS DV4: PD IV: NLIP	ProQOL-IV (CF, BO, CS) GHQ-12 (PD)	CF BO CS PD	CF: χ^2 Friedman = 29.878, p = 0.001 BO: χ^2 Friedman = 13.723, p = 0.001 CS: χ^2 Friedman = 1.313, p = 0.519 PD: χ^2 Friedman = 34.208, p = 0.001	Strengths: Valid & Applicable Limitations: small sample size, majority female participants, short implementation period for study analysis Feasibility: NLIP is feasible. Risk of harm: None LOE: I Quality of Evidence: Moderate USPSTF Grade: A
8. Ramachandran, Bin Mahmud, M. Rajendran, Jiang,	N/A	SR and MA	Databases: PubMed, Scopus, Embase, CINAHL, PsycInfo, Web of	IV: mindfulness-based interventions	MBI, BSI, PMS-TA, DASS-21, PCL-C, PANAS, PSS, HADS, PDS, BJSQ, GHQ-	PWB (PD, S, A, D) BO, PTSD	PWB: PD: PC (SMD = −0.86; 95% CI −1.53 to −0.20; p = 0.01) and AC (SMD = −0.96; 95% CI −1.70 to −0.22; p = 0.01); Stress: PC	Strength: Valid Limitations: Small number of studies, studies included had small sample sizes, meta-analysis missing

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
Cheng, & Wang (2022). Effectiveness of mindfulness-based interventions on psychological well-being, burnout, and post-traumatic stress disorder among nurses: A systematic review and meta-analysis			Science from 2005- 2021 RCT s Characteristics: RNs, LPNs, and NAs, mindfulness-based interventions, control group, primary outcome: PWB (PD, S, A, D) & secondary: BO, PTSD	DV: PWB, BO, and PTSD	12, PSDI, GAD-7, DPHQ, SDS, SAS		($SMD = -1.14$; 95% CI -2.20 to -0.08; $p = 0.03$) AC ($SMD = -0.82$; 95% CI -1.67 to 0.02; $p = 0.36$); Anxiety: PC ($SMD = -0.81$; 95% CI -1.68 to -0.06; $p = 0.07$) or AC ($SMD = -0.93$; 95% CI -2.86 to 1.00; $p = 0.34$); Depression: PC ($SMD = -0.68$; 95% CI -1.09 to -0.26; $p = 0.001$) AC ($SMD = -0.52$; 95% CI -1.61 to 0.56; $p = 0.34$) BO: PC (*pooled MD* $= -1.81$; 95% CI -4.09 to -0.47; $p = 0.12$) AC (*pooled MD* $= -0.00$; 95% CI -4.21 to 4.21; $p = 1.00$); PC (*pooled MD* $= -2.22$; 95% CI -13.09 to 8.64; $p = 0.69$) AC (*pooled MD* $= 1.55$; 95% CI -3.44	from some of the studies, included only English studies. Feasibility: MBI is feasible Risk of Harm: None LOE: III Quality of Evidence: Moderate USPSTF Grade: B

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
							to 6.55; $p = 0.54$); PC (in favor of MBI) (*pooled MD = 5.82*; 95% CI 0.27 to 11.37; $p = 0.04$) AC (*pooled MD = −0.74*; 95% CI −2.68 to 1.21; $p = 0.46$) PTSD ($p = .0002$)	
9. Ruiz-Fernandez, Ramos-Pichardo, Ibanez-Masero, Sanchez-Ruiz, Fernandez-Leyva, Ortega-Galan (2021). Perceived health, perceived social support and professional	N/A	Single Cohort cross-sectional	253 ED nurses in Andalusia, Spain	DV1: CF DV2: BO DV3: CS DV4: PH IV: PSS2	ProQOL-IV (CF, BO, CS) GHQ-12 (PH) Duke-UNC-11 (PSS2)	CF BO CS PH	CF (62.5%) BO (58.5%) CS (45.1%)	Strengths: Valid & Applicable Limitations: small sample size, short implementation period for study analysis, The study was performed in a single geographic area with unique worker demographics Feasibility: PSS2 is feasible Risk of harm: None LOE: II Quality of Evidence: Moderate USPSTF Grade: B

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
quality of life in hospital emergency nurses.								
10. Wilson, Belloli, Jeffery, Lohse, Sunga (2019). Shift Based Emotional Stress Reactions in Emergency Nurses After Traumatizing Events.	N/A	Quantitative descriptive	203 responses by 94 nurses	IV: TE DV: SBESR	ESRQ	TE	The mean preshift ESRQ score was 11.3 (SD= 5.2), mean postshift score 6.8 (SD= 7.4), and mean change -4.4 (SD= 8.2; t=-7.26; P < 0.001). TE (correlation coefficient of 0.31; P < 0.001). The mean without TE was -1.4 (SD= 6.0) compared with -5.0 (SD= 8.5) for shifts with at least 1 event (t= 2.27; P= 0.03).	Strength: Valid & Applicable Limitations: include a correlational design and a nonrandom convenience sample of respondents, study was performed in a single institution with culturally and geographically unique worker demographics Feasibility: Eliminating TE is feasible Risk of harm: None LOE: IV Quality of Evidence: Moderate USPSTF Grade: C

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
11. Xu, Eley, Kynoch, Tuckett (2020). Effectiveness of interventions to reduce emergency department staff occupational stress and/or burnout: a systematic review.	N/A	SR	14 studies (4 RCT, 10quasi-experimental). -10 IFI (4 MBI/ 6 educational style interventions) -4 ODI (3 quasi, 1 mixed method) Published in English between January 1, 2008, and February 1, 2019	DV1: OS DV2: BO IV1: IFI IV2: ODI	PSS MBI ProQOL	OS BO	Educational IFI were found to reduce OS & BO levels ODI were found to reduce OS levels but increase BO.	Strengths: Applicable Limitations: Response bias. Limited sample size. Limited search between 2008-2019 & English language only Feasibility: IFI is feasible Risk of harm: None LOE: I Quality of Evidence: Moderate USPSTF Grade: B
12. Xu, Eley, Kynoch, Tuckett (2022) Effects of	N/A	RCT	Of 148 enrolled participants 98 completed all the surveys, but	DV1: PSL DV2: BO (EE, DP, PA) DV3: M	PSS MBI MAAS WEMWS	PSL BO (EE, DP, PA) M WBL	PSL (F = 15.70, P < 0.001); BO (EE [F = 14.22, P < 0.001], DP [F = 3.62, P = 0.030], PA	Strengths: Valid & Applicable Limitations: Response bias. Information only garnered from current

Citation:	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables Studied	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence
mobile mindfulness on emergency department work stress: A randomized controlled trial			only 48% reported continuous use of the app 4 weeks	DV4: WBL IV: app guided mindfulness practice			[F = 7.51, P < 0.001]); M (F = 8.83, P < 0.001); WBL (F = 10.71, P < 0.001)	events, does not measure phenomena longitudinally Feasibility: mobile mindfulness is feasible Risk of Harm: None LOE: II Quality of Evidence: Moderate USPSTF Grade: B

Legend: (A) anxiety, (AC) active comparator, (AR) Adjusted residuals, (ATS) Anticipated Turnover Scale, BJSQ) Brief Job Stress Questionnaire, (BO) burnout, (BSI) Brief Symptom Inventory, (CCT) Cultural Change Toolkit, (CF) compassion fatigue, (CFRP) Compassion fatigue resilience program, (CI) Confidence Interval, (CINAHL) Cumulative Index of Nursing and Allied Health Literature, (CO) compassion overload, (COREQ) Consolidated criteria for Reporting Qualitative Research, (CS) compassion satisfaction, (D) Depression, (DASS-21) Depression, Anxiety and Stress Scale, (DE) disengagement, (DP) depersonalization, (DPHQ) Depression Personal Health Questionnaire, (ED) Emergency Department, (EE) emotional exhaustion, (EI) Educational intervention, (ESRQ) Emotional Stress Reaction Questionnaire, (ETE) exposure to traumatic events, (EX) exhaustion, (FET) Fischer Exact Tests, (GAD-7) Generalized Anxiety Disorder Scale, (GHQ-12) General Health Questionnaire, (HADS) Hospital Anxiety and Depression Scale, (IFI) Individual Focused Interventions, (IQRs) interquartile ranges, (ITR) intention to resign, (LOE) Level of Evidence, (LPNs) Licensed Practical Nurses, (M) mindfulness, (MA) Meta-Analysis, (MAAS) Mindfulness Attention Awareness Scale, (MBI) Maslach Burnout Inventory, (MD) mean difference, (MM) Mixed Methods, (NA) Nursing Assistants, (NLIP) nurse led intervention program, (NSS) Nursing Stress Scale, (OBI) Oldenburg Burnout Inventory, (OC) occupational commitment, (ODI) organizational directed interventions, (OS) Occupational Stress, (PA) personal accomplishment, (PANAS) Positive and Negative Affect Schedule, (PC) passive comparator, (PCL-C) PTSD Checklist-Civilian, (PD) psychological distress, (PDS) Posttraumatic Diagnostic Scale, (PH) perceived health, (PHQ) Personal Health Questionnaire, (PMS-TA) Profile of Mood- Tension and Anxiety, (PNAS) Positive and Negative Affect Schedule, (POMS-TA) Profile of Mood States-Tension-Anxiety subscale, (POPAS) Perception of the Prevalence of Aggression Scale, (PoS) perception of safety, (ProQOL) Professional Quality of Life Scale, (PSDI) Positive Symptom Distress Index, (PSL) Perceived Stress Level, (PSS) Perceived Stress Scale, (PSS2) perceived social support, (PTSD) Post-Traumatic Stress

Disorder,(PWB) psychological well-being, (RCT) Randomized Control Trial, (REM) Random Effect Model, (RN) Registered Nurse, (S) Stress, (SAS) Self Rating Anxiety Scale, (SBESR) Shift based emotional stress responses, (SC) self-care, (SD) Standard Deviations, (SDS) Self rating Depression Scale, (SETX) Southeast Texas, (SMD) standardized mean difference, (SR) Systematic Review, (STAI) State Trait Anxiety Inventory, (STS) secondary traumatic stress, (SUD) Subjective Units of Distress, (TCMCS) Three-Component Model of Commitment Scale, (TE) Traumatic events, (TI) turnover intention, (VE) violence experienced, (VI) valuable insights, (WBL) Wellbeing level, (WEMWS) Warwick Edinburgh Mental Wellbeing Scale, (WV) workplace violence

Appendix B

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the <u>*last 30 days*</u>.

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often

1. I am happy.
2. I am preoccupied with more than one person I *[help]*.
3. I get satisfaction from being able to *[help]* people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I *[help]*.
7. I find it difficult to separate my personal life from my life as a *[helper]*.
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
9. I think that I might have been affected by the traumatic stress of those I *[help]*.
10. I feel trapped by my job as a *[helper]*.
11. Because of my *[helping]*, I have felt "on edge" about various things.
12. I like my work as a *[helper]*.
13. I feel depressed because of the traumatic experiences of the people I *[help]*.
14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a *[helper]*.
20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
24. I am proud of what I can do to *[help]*.
25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a *[helper]*.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

Appendix C

Implementation Flowchart

- **Recruitment Phase**
  - Provide information of the implementation plan and the expected outcomes.
  - Promote and recruit ED nurses and ED nurse leader participants.

Week 1

Week 2-3

- **Preparation Phase**
  - ED nurses and nurse leaders complete pre-implementation survey.
  - Nurse leader creates mentorship team.

- **Implementation Phase**
  - ED nurse leader implements Caring Mentorship Model in the work environment

Weeks 4-8

Weeks 9-10

- **Concluding**
  - ED nurses and higher-level management complete post-implementation surveys to measure the intervention's effectiveness.