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### Impact of Self-Care Techniques on Nurse Burnout

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Impact of Self-Care Techniques on Nurse Burnout

A Paper Submitted in Partial Fulfillment of the Requirements

For NURS 5382: Capstone

In the School of Nursing

The University of Texas at Tyler

by

Macie Mayrell

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**Contents**

Acknowledgements

Executive Summary

**Implementation and Benchmark Project**

1. Rationale for the Project
2. Literature Synthesis
3. Project Stakeholders
4. Implementation Plan
5. Timetable/Flowchart
6. Data Collection Methods
7. Cost/Benefit Discussion
8. Discussion of Results

Conclusions/Recommendations

References

Appendix

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### **Executive Summary**

Professional exhaustion or nurse burnout is a serious problem for the nursing community. Often times, nurses neglect caring for themselves which can multiply burnout rates. More than half of nurses have reported moderate burnout and 28% of nurses are experiencing high degrees of burnout (Kelly et al., 2021). The United States is currently witnessing valuable and talented professional nurses leaving the bedside to pursue other careers outside of the healthcare industry entirely. A turnover rate averaging around 27% in 2021 is referred to as the “Great Resignation” (NSI INC., 2022). High turnover rates add to the widespread nursing shortage. Nurse turnover rates and burnout only inhibit the quality of care that patients are given. Additionally, burnout correlates with increased job dysfunction, potentially affecting patient safety (Dyerbye et.al, 2017). The healthcare industry needs seasoned nurses at the bedside and within the healthcare system to give quality patient care. It is of utmost importance to reduce nursing turnover rates and improve nurse burnout rates.

After a systematic search of literature suggested that self-care techniques reduce nurse burnout, a benchmark study was created to combat nurse burnout rates. This study proposes implementing an evidence-based practice project in which a relaxation room is established on a nursing unit with the objective of encouraging self-care among acute care nurses to reduce burnout. The relaxation room will consist of a massage chair, essential oils, yoga mats, noise machine, and music. Nurses will be encouraged to reserve a timeslot during their shift to utilize this room, encouraging allotted breaks and providing a peaceful environment. Furthermore, employee engagement scores and survey tools will gauge the effectiveness of self-care techniques for nurse burnout. Ideally, this implementation will assist an organization in combating nurse burnout.

## Impact of Self-Care Techniques on Nurse Burnout

### **Brief Synopsis of Project**

In the present day, the healthcare community is experiencing an alarming rate of nurse burnout, which contributes to the global nursing shortage. The following PICO question was developed to explore self-care techniques effect on nurse burnout: In acute care nursing (P), how do nurses who practice self-care techniques (I) compared to nurses who do not practice self-care techniques (C affect nursing burnout rates(O). A computer data base searched yielded high level of evidence that cultivated a benchmark study that implements a relaxation room on a nursing unit with the intent of encouraging self-care practices to combat nurse burnout.

### **1. Rationale for the Project**

To provide excellent patient care, nurses must ensure a patient-centered foundation is present. Each individual patient's preferences, values, and needs are important and provide a roadmap for all clinical and evidence-based practice decisions (Melnyk and Fineout-Overholt, 2019). However, studies show patients rate their quality of care lower when being treated by an emotionally burnt-out nurse (Wei et al., 2020). Health care workers who exhibit signs and symptoms congruent with burnout can be perceived as detached from work, thus unable to provide patients with a patient- centered approach ultimately resulting in a potential hazard to patient safety and quality of care. Furthermore, hospitals' financial welfare is greatly affected by patient care quality; health care organizations' reimbursements are dependent on patients' perceptions of care (Wei et al., 2020). Thus, it is essential for nurses to be well, physically and mentally, when caring for patients.

Clinical nursing expertise is a crucial element for a workplace to be rooted in evidence-based practice. Clinical wisdom, judgement, and skills develop over the span of a nursing career

(Melnyk and Fineout-Overholt, 2019). Most nurses believe that being a caretaker is innate and would describe themselves as being selfless, empathetic individuals by nature. These characteristics are what allow nurses to connect with patients and family members to provide exceptional care in a clinical setting. However, being empathetic, caring, and selfless during crises can eventually lead to mental and physical consequences for nurses. Simply stated, how clinicians think greatly influences how they practice (Melnyk and Fineout-Overholt, 2019). Studies have shown that more than half of nurses' report symptoms of burnout (Wei et al., 2020). Moreover, nurse burnout symptoms are linked to an increase rate of medical errors which is now the third leading cause of death in the United States (Sampson et. al, 2019). Practicing self-care techniques and maintaining good mental and physical health is essential for nurses to prevent burnout syndrome.

A popular framework of health care delivery known as the "Triple Aim", which includes enhancing the patient experience, improving population health, and reducing health care costs, has been modified to the "Quadruple Aim". This modification stresses the additional pillar of improving the work life of health care providers. Multiple health care organizations are focusing on improving the wellbeing of healthcare providers in order to ultimately reduce burnout (Wei et al., 2020).

## **2.Literature Synthesis.**

A review of the literature yielded various studies that support self-care techniques to reduce nurse burnout. Many different strategies were observed to promote self-care among nurses. Self-care techniques most commonly studied and selected for this synthesis were mindfulness training, compassion training, and physical activity. Consistently, authors noted that solving nurse burnout remains an understudied topic that should be urgently addressed.

However, the extensive search and critical appraisal of literature produced twelve articles that implemented self-care techniques in acute care nurses while successfully decreasing nurse burnout rates.

Suleiman-Martos et al. (2020) introduces a practice known as mindfulness training, which instructs individuals to act intentionally and take self-control of immediate responses to stressful situations. Once a week, a simple 45-minute intervention of mindfulness training among nurses produced a large reduction in nurse burnout and an improvement in nurse exhaustion scores (Suleiman-Martos et al., 2020). Luken & Sammons (2016), a systematic review, concluded that mindfulness-based practice is an effective remedy for job burnout and stress response among nurses and teachers. In eight randomized controlled trials, participants completed either an abbreviated or entire Mindfulness Based Stress Reduction (MBSR) course and expressed increased personal achievement as well (Luken & Sammons, 2016). Cognitive behavioral therapy (CBT), a subcategory of mindfulness, guides individuals to gain control of automatic thoughts that induce negative emotions, such as anxiety and depression (Sampson et. al., 2018). The authors' research demonstrates that CBT is an effective strategy to decrease nurse burnout (Sampson et. al, 2018). Sallon et. al.'s, (2015) multimodal stress-reduction program, Caring for the Caregivers (CCG) addressed the various ways that stress can manifest, such as cognitively, somatic, and emotionally. Caring for the Caregivers (CCG) observed significant improvement in burnout scores after participants completed an eight-month intervention, thus emphasized mindfulness-based practice can combat nurse burnout. Lastly, a highly effective form of self-care called Emotional Freedom Techniques (EFT) was implemented in May of 2020 during the COVID-19 pandemic. EFT is similar to Sallon et al, (2015) Hands-on component of CCG, as acupressure points are stimulated by a tapping maneuver that essentially relaxes and

calms the mind, body, and emotions. A RCT was conducted and analysis of data revealed a significant improvement in nurse burnout and stress (Dincer & Inangil, 2021). Additionally, Ghawadra et al., (2020), Salvado et al., (2021) and Slatyer et al., (2017) noted that mindfulness based intervention courses, which varied in length, are both feasible and practical approaches to improve nurse burnout rates among healthcare workers. Mastering mindfulness is a way to develop ones' emotional intelligent and self-resiliency, which can positively affect interactions in personal and professional environments. Self-compassion, a similar concept to mindfulness, can increase resiliency when encountering stressful situations, like working a shift as a nurse during the COVID-19 pandemic (Franco & Christie, 2021). Increased adaptability can lessen the effects of everyday stressors and was noted to decrease symptoms congruent with nurse burnout (Franco & Christie, 2021).

Alexander et al., (2015) studied the effects of physical activity and movement on nurse burnout. The authors analyzed an eight week- yoga intervention among a sample size of twenty nurses. In this study, rates of emotional exhaustion and depersonalization decreased in the control group after the intervention (Alexander et al., 2015). Practicing yoga implements mindfulness as well, as individuals are encouraged to be conscious of their breathing and thought processes, ultimately reducing stress. Furthermore, Hilcove et al.'s (2021) holistic nursing study implemented a yoga intervention among a control group and found that post-intervention surveys utilizing instruments such as the Perceived Stress Scale (PSS) and Mashlach Burnout Inventory (MBI) highlighted significant improvements. Additionally, the control group reported having a better quality of sleep, and felt more serenity (Hilcove et al., 2021). Cocchiara et al.'s (2019) systematic review evaluated the effectiveness of yoga interventions by analyzing data from eleven articles. Documented levels of stress, sleep quality, quality of life, and burnout decreased

after the intervention (Cocchiara et al., 2019). The discipline of yoga has many positive effects in the prevention and management of physical and mental wellness, and can be utilized as a self-care technique to reduce nurse burnout (Alexander et. al, 2016; Cocchiara et al., 2019; Hilcove et al., 2021). (See Appendix A)

### **3.Project Stakeholders**

Stakeholders' involvement, support, and interest in an evidence-based practice project is essential for a change process (Melnyk & Fineout-Overholt, 2019). The stakeholders for this benchmark study include members of the senior leadership team, specifically the Chief Nursing Officer (CNO), Chief Financial Officer (CFO), Director of Quality and safety, Director of Acute Care, and Director of Human Resources. Senior leadership would grant permission for this project and would aide in the project development and facilitation. Human resources will be essential for obtaining data such as employee engagement scores pre- and post-implementation. Additionally, mid-level management such as the nurse manager, nursing supervisors, charge nurses, and house supervisors buy in is critical for translating this study's evidence into practice. Mid-level managements' priority would be educating staff nurses on the project, implementation, reinforcement, and evaluation. The gatekeepers of this benchmark study would be staff members suffering from a high degree of nurse burnout as they would likely not be interested in positive change. However, select change champions would provide reinforcement of practice change, participate in the practice change, and provide additional support as needed. Most importantly, patients are stakeholders as they will benefit from nurses who are less stressed, and mentally and physically refreshed, which can positively influence rates of medical errors (Sampson et al., 2019).

### **4.Plan for Implementation**

In order to achieve best outcomes, an evidence-based practice team will begin by defining the goals and purpose of this study. The goals of this implementation process are to (1) disseminate education to stakeholders on the need for practice change and gain approval to implement this benchmark study; (2) Create a relaxation room on a nursing unit that provides and promotes various self-care measures; (3) influence a culture change among clinical leadership to advocate, promote, and ensure that nursing staff have opportunities within their shift to utilize a relaxation room. The purpose of this study is to implement self-care techniques that can be utilized during a nurse's shift, ideally improving the morale, culture, and burnout rates among a unit of acute care nurses.

After an evidence-based practice team (EBPT) achieves stakeholders' buy in and approval for this benchmark study, the team should obtain the entities' employee engagement scores, retention, and vacancy rates from the previous quarter. Human resources will provide this data which will establish baseline levels of nurse burnout rates. the EBPT will create a paper-based, qualitative survey to acquire additional data from the staff nurses of the unit (Appendix A). This qualitative survey will be completed before and after the implementation to measure the effects of the intervention. Additionally, the EBPT will create a professional poster that highlights (1) the importance of self-care; (2) the prevalence of nursing burnout, turnover rates, and national nursing shortage; (3) the benefits of self-care noted in research; (4) different types of effective self-care techniques noted in the research. This poster will then be submitted to the hospital system's internal nursing research team for approval. The EBPT should ensure that all internal and external acquisitions of approval are followed per specific hospital policies and procedures. After all necessary approvals are granted, the EBPT will coordinate with stakeholders on the process and progress of establishing a relaxation room in the designated area.

This process will include (1) cleaning out the area; (2) transporting the donated massage chair to the room and ensuring it remains operational; (3) supplying the room with approved self-care measures such as essential oils, air diffuser, noise machine, yoga mat, and cleaning supplies; (4) creating an educational flyer that instructs staff on how to create outlook reservations via email as well as cleaning procedures post- usage. An additional meeting with stakeholders, specifically mid-level leadership staff, will be the next step. In this meeting, the EBPT will educate and demonstrate the intervention, specifically reserving the relaxation room. Moreover, the EBPT will stress the importance of ensuring that staff nurses have knowledge and access to the relaxation room during their scheduled shift. Although a crucial conversation, this step is essential in inspiring a culture change among the unit. After the planning stage and feedback with the stakeholders, the EBPT team will present the poster to staff nurses during a departmental meeting. After disseminating education on self-care to staff nurses, the EBPT, as well as unit supervisors, will demonstrate the intervention with emphasis on the various self-care techniques that the room provides. Moreover, the team will ensure staff understand how to reserve the room via outlook manager. Automatic follow up surveys, created via outlook email, will be generated and sent to every participant who reserves a time slot for the relaxation room.

### **5. Timetable/Flowchart**

Roussel et al., (2020) states that nurse leaders are responsible for identifying factors that contribute to nurse burnout, low job satisfaction, and disengagement. Organizations and nurse leaders must contribute in the fight against nurse burnout by creating healthy work environments (Roussel et. al, 2020). Therefore, a PICO question was developed during the nurse graduate fall semester of 2020 to explore if self-care techniques positively impact nurse burnout rates. A systematic search of literature was conducted in September 2020. Evidence suggested that self-

care techniques can improve nurse burnout rates. Therefore, during the following three semesters, literature was continually appraised, and extensive planning led to the creation of an evidence-based benchmark study on the Impact of Self-Care Techniques on Nurse Burnout. The study was scheduled to be presented to stakeholders during the fall semester of 2021.

Unfortunately, due to the strain that the COVID 19 pandemic placed on healthcare systems, the presentation was deferred indefinitely. This benchmark study can be resumed when deemed appropriate.

An EBPT should expect approximately two months to be spent on fine tuning the plan and tailoring it to meet specific hospital standards and achieve stakeholders' buy in. During this time, the team will also solidify and prepare the relaxation room. Next, the proposed timetable suggests that approximately one month will be allotted to (1) gain internal data from Human Resources; (2) conduct a paper-based survey; (3) educate stakeholders on specifics of the intervention; (3) present the intervention via the departmental staff meeting. The intervention will proceed for approximately two months with utilization being monitored in person and via outlook reservations. During this phase, EBPT will conduct face-to-face rounds biweekly with unit leadership and select change champions to address concerns and gain feedback to reinforce the intervention and promote utilization. The study suggests that the EBPT remain visible and accessible to staff by rounding on the unit once a week, at minimal. Furthermore, the team will review the automatic generated post surveys via outlook. After 60 days, the EBPT will (1) instruct study participants to complete the qualitative post- intervention survey; (2) analyze and prepare to present findings of the intervention; (3) meet with all stakeholders to review current findings; (4) request feedback from stakeholders; (5) determine effectiveness. Next, if the study is producing desired effects, the EBPT will create a professional poster that discusses the

evidence-based practice project in detail during a quarterly town hall. At this time, the EBPT can review project progress and lessons learned. (See Appendix B).

### **6.Data Collection Methods**

The EBPT will collect data by analyzing the most recent employee engagement scores, supplied by Human Resources. The original hospital system intended for this study conducts quarterly employee engagement scores via a web-based platform. All surveys are anonymous and data is retracted and compiled in a report by the web-based platform. Engagement levels, overall job satisfaction, and intent to remain in current job role are key categories for determining a baseline. Additionally, the EBPT will utilize a qualitative instrument that measures pre- and post-indicators of overall job satisfaction, burnout symptoms, and perception of unit morale (Appendix C). This survey measures qualitative data by a 5-point Likert scale, which is a statistical instrument that has been utilized since the 1930s (Norman, 2010). Participants will answer each question by selecting one of the following answers: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Pre-and post-intervention surveys will be assessed by the EBPT. Furthermore, data will be extracted from the automatic outlook assessments after a participant reserves a time slot for the relaxation room. This survey will consist of two questions only, a strategy that will theoretically increase participation rates. The outlook survey will ask participants to rate their experience in the relaxation room with answer choices being excellent, good, poor, or very poor. The final questions will be open ended and allow participants to provide feedback, if they wish. Completed outlook surveys, face to face observations, and reviewing the number of reservations will provide data on utilization, peer recommendations, and opportunities for improvement. After sixty days of the intervention, data generated by pre- and post-intervention surveys will be analyzed for effectiveness. Furthermore, if this study is

conducted in a hospital organization that preforms quarterly employee engagement scores, data from post intervention employee engagement scores will be assessed. The evidence-based benchmark study on the Impact of Self-Care Techniques on Nurse Burnout will be deemed successful if post-intervention surveys reveal any of the following: (1) increased job satisfactions scores; (2) decreased burnout symptoms; (3) improved morale.

### **7. Cost/Benefit Discussion**

According to Willard-Grace et al. (2019), a clinician experiencing burnout is 1.5 times more likely to leave their job, contributing to an organizations' turnover rates. Moreover, in 2021 staff RN turnover rates increased by 8.4% and remain at 27.1% today (NSI INC., 2022). NSI Nursing Solutions INC.'s, (2022) national survey concluded that one Register Nurse resigning from their positon costs a hospital \$46,100, which with the current turnover percentage results in a comprehensive cost of \$5.2m-\$9.0m per year for a hospital organization. Over eighty percent of hospitals report a vacancy rate greater than ten percent, therefore are forced to rely on contract labor, which is costly for a hospital organization (NSI INC.,2022). In 2021, travel nurse hourly rates averaged between \$ 154/hr. to \$225/hr., compared to the median \$40/hr. rate for a full time staff RN (NSI INC., 2022). Failing to address nurse burnout will severely impact an organizations' financial welfare.

This proposed benchmark study is financially feasible as the supplies for the relaxation room, including the massage chair, are being donated by a member of the EBPT. Moreover, office supplies are far cheaper than replacing even one registered nurse position. This project could decrease nurse burnout, improve retention rates, and change the morale on a nursing unit. The benefits of this project can positively impact all stakeholders, especially the patient population and community. The community expects to have access to emergency services,

elective procedures, and a safe inpatient stay if necessary. Nurse burnout, high turnover rates, and increased vacancy rates can negatively impact community expectations of a hospital organization. It is imperative for healthcare organizations to combat nurse burnout, and one feasible strategy is implementing the Impact of Self-Care Techniques on Nurse Burnout Benchmark Study.

### **8. Discussion of Results**

This benchmark study was placed on hold indefinitely due to the COVID 19 pandemic, therefore does not have an official evaluation. However, without official endorsement, the CNO has provided positive feedback and interest in the study. The EBPT will continue to promote the project and implement when the organization returns to normal operations.

### **Conclusions/Recommendations**

Nurse burnout is a persistent and concerning problem that consequentially affects individual professionals, hospital organizations, patients and communities. Furthermore, strategies to alleviate nurse burnout remains an understudied field of research (Kelly, L.A., 2021). Extensive research on burnout prevention and management solutions should be a top priority for Nurse Scientists.

Individual nurses must maintain their mental health by adapting a self-care strategy that aligns with personal preference. Although not all inclusive, some examples of self-care techniques include practicing mindfulness, participating in yoga, and massage therapy. It is important for nurses to become self-advocates and explore healthy and effective solutions that manage professional and personal stressors.

Effective nurse administrators promote a healthy work environment by placing emphasis on safety and quality measures (ANA, 2016) With the current nursing shortage and staffing crisis

around the nation, evidence recommends hospital organizations utilize retention programs that support the wellbeing of employees. Furthermore, workplaces must facilitate a culture that is proactively preventing and managing nurse burnout. Evidence suggests that self-care practices mitigate nurse burnout, therefore hospital organizations should demonstrate a vested interest in the Impact of Self-Care Techniques on Nurse Burnout Benchmark Study.

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Appendix A

Synthesis Table

Article Citation	Conceptual Framework	Design/Method/Purpose	Sample/ Setting/	Major Variables or Phenomena Studied for Levels I-VI articles.	Measurement of Major Variables	Data Analysis	Study Findings	Strength of the Evidence: is = to the level of evidence + quality [study strengths and limitations]
<p><b>ARTICLE #1</b>  (Suleiman-Martos et al., 2020) The effect of mindfulness training on burnout syndrome in nursing: A systematic review and meta-analysis.</p>	<p>N/A</p>	<p>SR &amp; meta-analysis  To study the effect of mindfulness training on levels of burnout among nurses</p>	<p>N= 17 studies  Total of 632 nurses  Age range ( 29- 52)</p>	<p>IV1: MBSR  DV1: EE/ BO</p>	<p>MBSR/CBI  ProQOL  MBSR/MBI</p>	<p>PRISMA</p>	<p>IV1: EE/BO decreased</p>	<ul style="list-style-type: none"> <li>● Level I Evidence</li> <li>● <b>Strengths:</b> no adverse effects, all studies showed decreased EE with MBSR</li> <li>● <b>Limitations:</b> lack of RCTs</li> <li>● <b>Feasibility:</b> Cost efficient</li> <li>● <b>Risk:</b> little to no risk</li> <li>● Conclusion: MBSR is effective in reducing EE among nurses.</li> <li>● <b>Strength of Evidence:</b></li> <li>● High</li> <li>● USPSTF grade: A</li> <li>● <b>Recommendation:</b></li> <li>● MBSR should be used by ACN to reduce EE/BO</li> </ul>

<p><b>ARTICLE #2</b>  (Alexander, G.K. et al., 2015) Yoga for self-care and burnout prevention among nurses.</p>	<p>N/A</p>	<p>RCT  To examine the efficacy of yoga to improve self-care and reduce burnout among nurses</p>	<p>N= 40  ACN no prior YE, WTC 8-week study  Exclusion: OI, CHI  RCT  CS</p>	<p><b>IV1:</b> YSC  <b>DV1:</b> EE/BO</p>	<p>HPLP II  MBI  FMI</p>	<p>ANOVA</p>	<p>ANOVA =  EE/BO (P=0.28)</p>	<p>Level II Evidence  <b>Strengths:</b> feasible to implement; little risk for implementation  <b>Limitations:</b> no active control group, small sample size  <b>Conclusion:</b> YSCT reduce EE/BO  Low Risk of Harm  <b>Strength of Evidence:</b>  a. High b. USPSTF grade: A <b>Recommendation:</b> YSCT should be used by ACN to reduce EE/BO</p>
<p><b>ARTICLE #3</b>  (Sampson, M. et al., 2019).  Intervention effects of the MINDBODY STRONG skills building program on newly licensed registered nurses' mental health, healthy lifestyle behaviors, and job satisfaction</p>	<p>CBT</p>	<p>2 – group cluster RCT  “Evaluate the effects of a cognitive behavioral therapy (CBT)-based skills-building program entitled MINDBODY STRONG ...participating in a nurse residency program”.</p>	<p>N=93  PS  Inclusion:  Consenting NLRN in NRP</p>	<p><b>IV:</b> MBSIG  <b>DV:</b> MHV/JS</p>	<p>PSS (Cronbach's <math>\alpha</math>=.84)  GAD-7 (Cronbach's <math>\alpha</math>=.86)  PHQ  (Cronbach's <math>\alpha</math>=.92)  HLBS  (Cronbach's <math>\alpha</math>=.82)  JSS</p>	<p>ANOVA  Cohen d  Pearson r</p>	<p>PSS= P.022  GAD-7=  P=0.22  HLBS= p=0.15  JSS= Cohen d= 1.33  CBT and MBSIG improve MHV/JS</p>	<ul style="list-style-type: none"> <li>• Level II evidence</li> <li>• <b>Strengths:</b></li> <li>• CBT to improve MHV/JS of NLRN in a NRP</li> <li>• High level of evidence</li> <li>• Feasible</li> <li>• Little to no harm anticipated</li> <li>• <b>Limitations:</b></li> <li>• Small sample size</li> <li>• No evaluation of individual participant's level of resiliency.</li> <li>• <b>Strength of Evidence:</b></li> <li>• High</li> <li>• USPSTF grade: A</li> <li>• <b>Recommendation:</b></li> <li>• MBS programs teaches self-care techniques that can prevent nurse</li> </ul>

<p><b>Article #4</b>  (Dincer &amp; Inangil, 2021).  The effect of Emotional Freedom Techniques on nurses' stress, anxiety, and burnout levels during the COVID-19 pandemic: A randomized controlled trial. Explore,</p>	<p>none</p>	<p>RCT  To investigate the efficacy of brief online form of Emotional Freedom Techniques (EFT) in the prevention of stress, anxiety, and burnout in nurses involved in the treatment of COVID patient.</p>	<p>N= 35  IG= 35  CG= 37</p>	<p><b>IV1:</b> EFT  <b>DV1:</b> EE/BO</p>	<p>SUDS  SM data collection  STAI tx-1</p>	<p>P&lt;0.5</p>	<p>P= &lt;.001) EE/BO</p>	<ul style="list-style-type: none"> <li>● Level II evidence</li> <li>● <b>Strengths:</b></li> <li>● Decrease EE/BO</li> <li>● High level of evidence</li> <li>● Feasible</li> <li>● Little to no harm anticipated</li> <li>● <b>Limitations:</b></li> <li>● Supplementing checklist needed</li> <li>● Small sample size</li> <li>● Follow up on durability of outcomes</li> <li>● EFT therapist apart of research team- could be bias</li> <li>● Strength of Evidence: high</li> <li>● USPSTF grade: A</li> <li>● <b>Recommendation:</b></li> <li>● Utilize EFT to combat nurse burnout</li> </ul>
<p><b>Article #5</b>  (Sallon, S. et al.,2015) Caring for the Caregivers: Results of an Extended, Five-component Stress-reduction Intervention for Hospital Staff.</p>	<p>none</p>	<p>Quasi-experimental pre-post study  To evaluate a multimodal approach to stress reduction in hospital staff</p>	<p>N=97  CG=57</p>	<p><b>IV:</b> CCG  <b>DV;</b> EE/BO</p>	<p>PSS  MBI</p>	<p>P value</p>	<p>MBI= p&lt;.001  PSS= P= .004</p>	<ul style="list-style-type: none"> <li>● Level III Evidence</li> <li>● <b>Strengths:</b></li> <li>● CCG improve EE/BO</li> <li>● Feasible</li> <li>● Little to no harm</li> <li>● <b>Strength of Evidence:</b></li> <li>● Moderate</li> <li>● USPSTF grade: B</li> <li>● <b>Limitations:</b></li> <li>● Non randomized</li> <li>● Willing candidates</li> </ul>
<p><b>Article #6</b></p>	<p>none</p>	<p>Systematic Review</p>	<p>N= 8 articles</p>	<p><b>IV1:</b> MBSR</p>	<p>MBSR</p>	<p>Cohen d</p>	<p>Decrease BO</p>	<ul style="list-style-type: none"> <li>● Level I Evidence</li> <li>● <b>Strengths:</b></li> <li>● High level of evidence</li> <li>● Feasible</li> </ul>

<p>(Luken, M. &amp; Sammons, A., 2016)</p> <p>Systematic Review of Mindfulness practice for Reducing Job Burnout</p>		<p>Evaluate the evidence for practicing mindfulness to treat job burnout</p>		<p><b>DV1:</b> EE/BO</p>		<p>MBI</p>	<p>P= 0.04</p>	<ul style="list-style-type: none"> <li>● Little to no harm</li> <li>● Decrease EE/BO consistently</li> <li>● <b>Strength of Evidence</b></li> <li>● High</li> <li>● USPSTF Grade: A</li> <li>● <b>Limitations</b></li> <li>● MBI was not consistent</li> <li>● Assessing quality of studies</li> </ul>
<p><b>Article #7</b></p> <p>(Cocchiara et al., 2019)</p> <p>The use of yoga to manage stress and burnout in Healthcare Workers: A systematic review.</p>	<p>none</p>	<p>Systematic Review</p> <p>Analyze and summarize all the current knowledge concerning yoga as an effective technique for the prevention and management of stress and burnout among healthcare workers.</p>	<p>N= 11 articles</p>	<p><b>IV1:</b> YSCT</p> <p><b>DV1:</b> EE/BO</p>	<p>HPLP II</p> <p>MBI</p> <p>PSS</p> <p>CD-RISC</p>	<p>Cohen d</p> <p>P value</p>	<p>Decreased BO</p> <p>P=0.04</p> <p>Decreased Stress</p>	<ul style="list-style-type: none"> <li>● Level I evidence</li> <li>● <b>Strengths:</b></li> <li>● High level of evidence</li> <li>● Feasible</li> <li>● Little to no harm</li> <li>● Decrease EE/BO consistently</li> <li>● Efficient solutions</li> <li>● <b>Limitations:</b></li> <li>● Small sample size</li> <li>● Low numerical consistency of studies</li> <li>● Average quality</li> </ul>
<p><b>Article #8</b></p> <p>(Slatyer et al., 2017)</p> <p>Evaluation of a meditation intervention to reduce the effects of stressors</p>	<p>none</p>	<p>Control trial</p> <p>(Nonrandomized)</p> <p>Assess the effectiveness of MSCR</p>	<p>N=65 intervention</p> <p>N=26 control</p> <p>Total N= 91</p> <p>Australian hospital</p>	<p><b>IV1:</b> MSCR</p> <p><b>DV1:</b> EE/BO</p> <p><b>DV2:</b> STSS</p>	<p>ProQOL</p> <p>CD-RISC</p> <p>GAD-7</p> <p>WHO</p> <p>STSS</p>	<p>Cohen's d</p> <p>P value</p>	<p>ProQOL= (p=.003, partial <math>\eta^2</math>= .04, a small to moderate effect size)- Decreased BO</p> <p>(d=0.38)- significant decreased BO</p> <p>WHO significantly improved-moderate size effect</p>	<ul style="list-style-type: none"> <li>● Level III evidence</li> <li>● <b>Strengths:</b></li> <li>● Brief intervention-significant effects</li> <li>● Feasible</li> <li>● Little to no harm</li> <li>● Decreased BO</li> <li>● Good reliability measured</li> <li>● <b>Limitations:</b></li> </ul>

associated with compassion fatigue among nurses.		interventi on in reducing BO, STSS,						<ul style="list-style-type: none"> <li>• Participants not randomized</li> <li>• No control comparison data @ 6-month follow up</li> <li>• Limited research in subject</li> </ul>
<p><b>Article #9</b> (Ghawadra et al., 2020)</p> <p>The effect of mindfulness-based training on stress, anxiety, depression and job satisfaction among Ward Nurses</p>	None	<p>RCT</p> <p>To assess the effect of a 4-week mindfulness-based training intervention on improving stress, anxiety, depression and job satisfaction among nurses</p>	<p>N= 249 total Randomly distributed</p> <p>Intervention: n=118</p> <p>Control: n= 106</p> <p>Convenience sample</p>	<p>IV1: MBT</p> <p>DV1: JS</p>	<p>DASS-21</p> <p>JSS</p>	<p>Chi Square</p> <p>P-value</p>	<p>NNT for stress (20)</p> <p>NNT for anxiety (12)</p> <p>NNT for job satisfaction (9)</p> <p>Effect size was moderate for anxiety reduction (0.465)</p> <p>And small to medium effect for job satisfaction (0.221)</p> <p>JS (p&lt;.001)</p>	<ul style="list-style-type: none"> <li>• Level 2 evidence</li> <li>• <b>Strengths:</b></li> <li>• Brief intervention</li> <li>• Small to medium effect</li> <li>• Significant effect on anxiety</li> <li>• Feasible</li> <li>• Practical</li> <li>• Little to no harm</li> <li>• Reduced burnout</li> <li>• <b>Limitations:</b></li> <li>• high level of drop-out for unknown reasons.</li> <li>• Need additional research on subject</li> </ul>
<p><b>Article #10</b> (Franco &amp; Christie, 2021)</p> <p>Effectiveness of a one day self-compassion training for pediatric</p>	None	<p>Controlled trial (nonrandomized)</p> <p>Understand if offering SCHC in a 1-day format could</p>	<p>Convenient sampling</p> <p>Urban pediatric hospital in central Texas</p> <p>Level 1 trauma center</p> <p>N= 22 intervention</p> <p>N=21 comparison study</p> <p>Primarily female</p> <p>Average age 46</p> <p>Average years in healthcare: 17</p> <p>Primarily clinical staff</p>	<p>IV1: SCHC</p> <p>DV1: BO, Anxiety, Stress</p>	<ul style="list-style-type: none"> <li>•Self-compassion scale (SC)</li> <li>•Cognitive and Affective Mindfulness Scale (CAMS)</li> <li>•Compassion Scale (CFO)</li> </ul>	<p><b>Cohen D</b></p> <p><b>P-value</b></p>	<p>Medium effect sizes at three month follow up, 64-87% of the intervention group's score changes were larger than the mean score changes in the comparison group when evaluating measures</p> <p>decrease: burnout, anxiety, and stress. Decreases were</p>	<ul style="list-style-type: none"> <li>• Level 3 evidence</li> <li>• <b>Strengths:</b></li> <li>• Medium effect size achieved</li> <li>• Significant decrease on burnout</li> <li>• Feasible</li> <li>• Practical</li> <li>• <b>Limitations:</b></li> <li>• Non randomized</li> <li>• Small sample size</li> <li>• Participants in study are from one hospital-may</li> </ul>

nurses' resilience.		improve pediatric nurses' resilience, well-being, and professional quality of life			<ul style="list-style-type: none"> <li>• ProQOL (STSS)</li> <li>• (DASS)</li> </ul>		<p>maintained at three-month follow up.</p> <p>Cohen's D- between groups at pre-test versus three month follow up, ranged from 0.37-1.11</p> <p>Burnout= Cohen's d=0.65</p>	<p>not represent outcomes in other hospitals</p> <ul style="list-style-type: none"> <li>• Additional research needed-specifically RCTs</li> <li>• A more diverse sample could have strengthened study</li> </ul>
<p><b>Article #11</b></p> <p>(Salvado et al., 2021)</p> <p>Mindfulness-based interventions to reduce burnout in primary healthcare professionals: A systematic review and meta-analysis.</p>	None	<p>Systematic Review &amp; meta-analysis</p> <p>Conduct a systematic review and meta-analysis to analyze the effects of Mindfulness-based interventions to reduce burnout in PHCP</p>	<ul style="list-style-type: none"> <li>• <b>Sampling</b> Technique, Sample Size &amp; Characteristics:</li> <li>• <b>Excluded</b> dissertations, theses, letters to the editor, reviews, meta-analyses, observational studies, studies published before 2000, and studies in languages other than English, Portuguese, and Spanish.</li> <li>• Studies included in qualitative analysis (n=10)</li> <li>• Studies included in meta-analysis (n=6)</li> <li>• 4 RCTs</li> <li>• 6 no-RCTs</li> </ul>	<p><b>IV:</b> Mindfulness-based interventions</p> <p><b>DV1:</b> EE/BO</p>	Maslach Burnout Score (MBI)	SMD p-value conducted all analyses in the Review Manager software	<ul style="list-style-type: none"> <li>• Pooled mean difference indicated a significant 5.80-point reduction in emotional exhaustion after MBIs.</li> <li>• Moderate effect size</li> </ul>	<ul style="list-style-type: none"> <li>• Level I evidence</li> <li>• <b>Strengths:</b></li> <li>• Medium effect size</li> <li>• Pooled data shows significant reduction in BO symptoms</li> <li>• Practical</li> <li>• The methodological design of this study was precise and valid.</li> <li>• <b>Limitations:</b></li> <li>• Small sample size</li> <li>• included studies were associated with a risk of bias in measuring the outcome domain by not blinding the participants, instructors, or assessors</li> <li>• Per SORT- the overall evidence and strength of recommendation were rated as limited-quality patient-oriented evidence</li> <li>• Future RCTs are needed to address the risk of bias highlighted in the included studies and increase the strength of recommendation of MBIs for reducing burnout in PCHP.</li> </ul>
<p><b>Article # 12</b></p> <p>(Hilcove et al., 2020)</p> <p>Holistic nursing in practice: Mindfulness-based yoga as an</p>	Theory of environmental adaptation	RCT	<ul style="list-style-type: none"> <li>• Single blinded RCT</li> <li>• Community-based hospital system in the southwestern US as well as in the private homes of selected participants per the instructions provided by the primary</li> </ul>	<p>IV1: MB yoga</p> <p>DV1: EE/BO</p> <p>DV2: Stress</p>	PSS MBI Vitality Scale Global Sleep Quality The Brief Serenity Scale Mindful Attention Awarene	ANOVA Standard Deviation P value	<ul style="list-style-type: none"> <li>• Significant improvement in stress and burnout in the individuals participating in the 6-week MB yoga intervention compared with the control group (p&lt;.01)</li> </ul>	<p>Level II evidence</p> <p>Strengths:</p> <ul style="list-style-type: none"> <li>• Significant reduction in BO</li> <li>• Significant reduction in stress</li> <li>• Practical intervention</li> <li>• Feasible</li> </ul>

<p>intervention to manage stress and Burnout</p>		<p>of well-being among nurses and health care professionals (HCPs)</p>	<ul style="list-style-type: none"> <li>• investigator</li> <li>• Primarily female in both intervention and control</li> <li>• Ages 24-69</li> <li>• Mostly Caucasian</li> <li>• 75.61% were Registered Nurses in the Intervention group</li> <li>• 70.27% were Registered Nurses in the Control group</li> </ul> <p>Inclusion: Participants were</p> <ul style="list-style-type: none"> <li>• nurses,</li> <li>• nursing assistants</li> <li>• therapist</li> <li>• physician</li> <li>• social workers,</li> <li>o all older than 18 years of age</li> </ul> <p>Exclusion criteria:</p> <ul style="list-style-type: none"> <li>• joint or muscle problems that limited mobility</li> <li>• having routinely practiced yoga or any other MB intervention in the past 6 months,</li> <li>• Currently on medication that might interact with the results of the salivary cortisol measures</li> </ul>		<p>ss Scale Manual Blood pressure Salivary cortisol samples-diurnal slope</p>		<p>Limitations:</p> <ul style="list-style-type: none"> <li>• Assessment tools were self-report tools</li> <li>• Short-term intervention</li> <li>• Additional high quality research needed on self-care techniques to reduce nurse burnout</li> </ul>
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\* Melnyk, B.M. & Fineout-Overholt, E. (2019). *Evidence-based practice in nursing and healthcare: A guide to best practice*. Philadelphia: Wolters

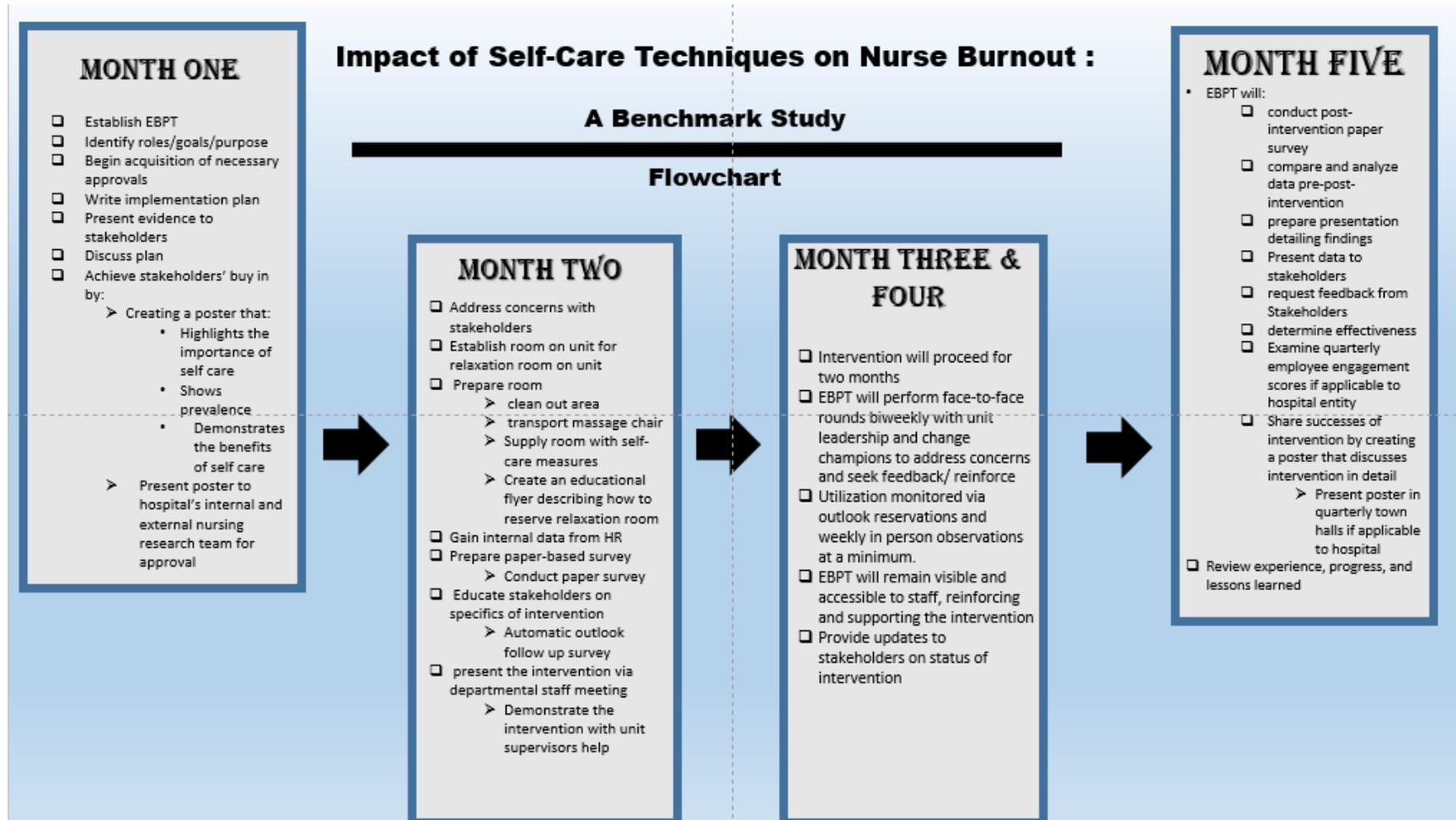
(Appendix A continued) Legend:

Abbreviations: ACN= Acute Care Nurse; BO=Burn Out; CBI= Copenhagen Burnout Inventory; CBT= Cognitive Behavior Therapy; CD-RISC= Connor-Davidson Resilience Scale-10; CHI= Chronic Health Issue; CRMIG= Community Resiliency Model Intervention group; CS= Convenience Sample; DASS-21= Depression, Anxiety, and Stress Scale-21; DV= Dependent Variable; EE= Emotional Exhaustion; EFT= Emotional Freedom Techniques; FMI= Freiburg Mindfulness Inventory; FT= Full time; FTFIDI= Face-to-Face- In-Depth-Interview; GAD-7= Generalized Anxiety Disorder Scale; HCPs= Health care providers; HLBS= Healthy Lifestyle Beliefs Scale; HPLP II= Health Promoting Lifestyle Profile II; IV= Independent Variable; JS= Job Satisfaction; JSS= Job Satisfaction Scale; MBI= Maslach Burnout Inventory; MBSIG= MINDBODYSTRONG Intervention Group; MBSR=

Mindfulness Based Stress Reduction; MD=Medical Doctor; MHV= Mental Health Variables; MSCR= Brief mindful self-care and resiliency ; N= Number of Participants; NLRN= Newly Licensed Registered Nurse; NRP: Nursing Residency Program; OI= Orthopedic Injury; PHG= Personal Health Questionnaire; PHCP= Primary healthcare providers; POSCS= Perception of Self- Care Strategies ; POT= Phenomenological Overtone ProQOL= Professional Quality of Life Scale PS= Participation Sample; PSS= Perceived Stress Scale; QDA= Qualitative Descriptive Analysis; QDS= Qualitative Descriptive Study; RCT= Randomized Controlled Trial; R= Resilience; REDCap= Research Electronic Data Capture; SCHC= Self-Compassion for Healthcare Communities; SM= Survey monkey; SR= Systematic Review; STSS= Secondary Traumatic Stress Scale; STAI TX= State-Trait Anxiety inventory; SSS-8= Somatic Symptom SUSC= Usual Self-Care; SUD= subjective units of distress scale ; WB= Well-being; WHO= Who=5 Well-being Index; WTC= Willingness to Complete; YE= Yoga Experience; YSCT= Yoga Self Care Techniques

Appendix B

Flowchart



Appendix C

**Instrument**

This is an anonymous survey. Please answer **honestly** and place an "X" in the column that best describes how the statement makes you feel. After complete please place in box. Thank you for your participation.

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I enjoy being a nurse and am excited to come to work everyday.					
I love to care and advocate for my patients.					
I have good coping skills and rarely feel stressed at work.					
I have no intent to leave my current place of work.					
I feel rested and refreshed after a night of sleep.					
I have difficulty concentrating					
I work out frequently.					
I feel I am capable of investing in coworkers and patients.					
Leaders of my organization support me and advocate for my needs.					
My career is fulfilling and rewarding.					
I eat healthy and get enough sleep each day.					
I feel burnout and stressed at my job.					
I struggle with the daily workload and the stress is overwhelming.					
I frequently get in conflicts with my coworkers.					