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ER Staff & Burnout: Interventions for Stress Management

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by

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Abstract

Nursing is one of the most difficult professions, not only physically exhausting but the mental and emotional toll can create havoc for the person's life (Scala & Drummond, 2016). This DNP project, "Reset", was founded on the concept of nursing burnout, compassion fatigue, and secondary trauma causing overwhelming stress related to the emergency room nurse and staff. The purpose of this project was to show how a 15-minute mental health reset can play an essential role in stress reduction. By using complementary health modalities such as lavender essential oil with diffuser, visual imagery, and massage while listening to soft calming sounds, this project yielded results that show how vital a mental health reset can de-stress and create a more positive mental state in the nurse's work life.

Keywords: reset, positive, stress, modalities, lavender

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Problem Recognition

In the aftermath of the 2020-2021 COVID-19 pandemic, the number of stressors nurses face in their shifts has been recognized. Not managing stress can lead to burnout, health issues, and stress-related problems (Staten & Wei, 2022). Emergency Department (ED) nurses experience great stress with little or no time to mentally and emotionally "recover" when moving from one task to another. For example, one minute, an ED nurse triages a six-year-old child with a fever; the next, they perform cardiopulmonary resuscitation on someone who has stopped breathing. Then, after spending over an hour in a high-stress situation performing lifesaving interventions, they may go back to triage a patient with a simple broken finger within minutes. Most of the 12-hour shifts in the emergency department can be traumatic and draining. As a result, nursing burnout is becoming an increasing problem and creating a culture of nurses walking away from the profession altogether due to high stress levels with no time to destress from the day.

Problem Statement

Emergency department nurses may experience higher-than-average stressors on any given day that they work. After experiencing a traumatic patient event or a high-stress situation, ED nurses should benefit from a 15-minute break where they can step away from the stressors of the emergency room to help reduce anxiety and stress and promote a positive state of mind.

Literature Review

A literature search using the keywords: reset, positive, stress, and modalities was used in the Gardner-Webb University's Dover library access to databases. The database

used was EBSCO host. Numerous articles resulted in the search and were narrowed by the most recent and most pertinent to support project planning.

Factors Influencing Nursing Burnout

In a study by Hunsaker et al. (2015), a cross-sectional survey using nonexperimental, descriptive, and predictive measures was utilized, along with a self-administered survey to evaluate the factors that influence the development of compassion fatigue, compassion satisfaction, and burnout among emergency room nurses. One thousand ED nurses throughout the United States were mailed a demographic questionnaire and a Professional Quality of Life Scale version 5 (ProQol 5). This study measured the prevalence of compassion satisfaction, compassion fatigue, and burnout and determined which variables could predict the listed issues. The outcomes of this study yielded average to low levels of compassion fatigue and burnout and moderate to prominent levels of compassion satisfaction among this group of ED nurses. Demographic characteristics such as age, educational background, and years of experience as a nurse were factors in the prevalence of compassion satisfaction, compassion fatigue, and burnout among ED nurses. A critical factor that predicted these issues was manager support. One limitation of this study was the low response rate, with only 284 surveys returned.

Holtz et al. (2023) qualitatively analyzed semi-structured interviews with survey data on resilience and traumatic stress among ED nurses who have worked through the past years during the COVID-19 epidemic. Fourteen ED nurses were interviewed on-site, and the remaining three were interviewed elsewhere. The study uses Foli's middle-range theory of nurse-specific traumas to address how ED nurses are already exposed to the

predisposition of trauma. In addition, their study wanted to address how COVID-19 has exacerbated the potential of causing ED nurses further harm to their overall well-being. The two sites for this study were magnet-designated acute care hospitals, with their target participants being ED nurses who had direct care with COVID-19 patients. Nurses admitted to having been significantly impacted by the epidemic and described the experience as exhausting on multiple levels. The primary themes that emerged included losing identity as a nurse, hopelessness, and self-preservation. Unfortunately, the participants were all female, and only two sites were studied, which are examples of this study's limitations.

Protecting ED nurses from burnout requires knowing what is causing these nurses to experience burnout. Salvarani et al. (2019) presented their study with this in mind using a multi-center cross-sectional design. The study was conducted at three hospitals using self-reporting questionnaires to assess burnout intensity, dispositional mindfulness facets, difficulties in emotion regulation, and empathy dimensions. The participants were a convenience sample from these three hospitals, with 120 nurses enrolled in the study but ending with 97 nurses completing the assessment. The study confirms that ED nurses are at high risk for burnout due to elevated levels of work-related distress. However, it is also noted that the survey correlates burnout negatively with dispositional mindfulness, emotion regulation abilities, and cognitive empathic attitude. The main limitation is that the study only focused on ED nurses, no other nursing disciplines were considered.

Aromatherapy

It has been suggested in recent studies that aromatherapy can have a positive effect on our bodies. With olfactory nerves connected to the central nervous system

(CNS), the CNS stimulates the brain's limbic system, which controls emotion. Kerr et al. (2021) stated that by using a prospective interventional interrupted time series method, the study evaluated the effects of essential oils on improving mood for clinical nurses. The participants were registered nurses employed at least 2 days a week in one of two wards of the facility. Self-reporting questionnaires were used to report data. Three essential oil (EO) scents (Citrus Bliss, Grapefruit, Wild Orange) were diffused in the Cardiac and Colorectal wards and were set to diffuse for 24 hours, day and night. Each scent of EOs was diffused over 2 weeks, with a 1-week washout period between restarting the diffuser with a different scent. This study found that continuous citrus essential oil reduced stress and depression and enhanced the mood of the nurses. Nurses also reported that the EO diffusion created a more positive work environment. The limitations of this study were that as time went on, researchers received fewer surveys, and this study was done at only one facility.

Zamanifar et al. (2020) performed a randomized, double-blind clinical trial on 120 clinic nurses at Besat Hospital in Sanandaj, Iran. The aim was to show if music therapy combined with aromatherapy could reduce nurses' anxiety. For 20 minutes per shift during three consecutive shifts, participants were provided headphones with their choice of music (classic, rock, pop, etc.) and placed in a room with chamomile-lavender essential oil for inhalation. Three intervention groups included aromatherapy only, music therapy only, and music with aromatherapy. The control group was not given any interventions. Instead, anxiety questionnaires were given to participants and the control group after the intervention. The study showed a decrease in anxiety levels in all three intervention groups, a 27% difference post-intervention. However, one of the limitations

of this study was the occurrence of situational problems and mental issues for nurses during the research, which the researchers omitted.

Johnson et al. (2017) studied aromatherapy and how it could promote a more therapeutic nursing milieu using lavender-scented essential oil. The study was performed in the trauma intensive care unit, surgical specialty care, and orthopedic trauma units. By using a quasi-experimental design, participants were given a pre-and post-survey along with pre-post intervention with a quasi-experimental design. After the pre-survey, the lavender EO was diffused for the next 30 days over a 24-hour period in a designated area that could be closed off and was away from patient rooms. Out of the 134 willing participants, 71 met the inclusion criteria and agreed to participate. The inclusion criteria included employees with allergies, asthma, and reactive airway disease. All 71 participants turned in all pre-and post-surveys, and no one opted out of the study. The main limitation of this study was that nurses were aware of the EO diffusion before the survey. The researchers were concerned that this could have created a Hawthorne Effect in which participants could change their behavior because they were active in a research study.

Cooke et al. (2007) wanted to address the effects of aromatherapy massage with music on ER nurses by comparing summer and winter. The study set out to see if these interventions would reduce the stress and anxiety of the ED nurse; sick leave usage was also evaluated during this study. The population used were permanent nurses working in the emergency room at a large tertiary hospital. The design of the study was a one-group pre-test, post-test quasi-experimental, with participants being selected by random selection. The intervention was performed by a certified massage therapist who would

begin a session with aromatherapy spray misted over the participant and perform a 15-minute massage of the head, neck, shoulders, and mid-back. Then, the participant would sit in a regular chair in a quiet room, fully clothed, and listen to new-age music through headphones. Sixteen massage sessions were performed weekly within 12 weeks in the summer and another series of winter sessions with eight ED participants.

The study results concluded no stress levels change between winter and summer, with no differences in the amount of sick leave taken. The intervention showed effectiveness in decreasing stress levels in both seasons. The intervention had an immediate positive impact on ED staff. An example of one of their limitations was that only one facility was studied.

Mind & Body Modalities

The mental health of nurses in all aspects of nursing is crucial. Nursing burnout tends to be one of the top reasons nurses leave the profession, especially in the wake of the COVID-19 epidemic. Jung et al. (2021) performed a systematic review to assess if Mind-Body modalities help improve the mental health of nurses. The selection was based on randomized controlled trials using mind-body modalities on the mental health of nurses. Studies were assessed using the Cochrane Risk of Bias tool. Examples of mind-body modalities include yoga, tai chi, and meditation. After obtaining 39 potential articles for review, only 17 met the criteria for a qualitative assessment. It was found that mind-body modalities showed great benefits, including a sense of power and positive and negative outcomes. Still, there were no significant effects on mindfulness, well-being, posttraumatic stress, or insomnia. On the other hand, there was evidence of substantial benefits for stress, fatigue, and coping styles for relaxation. Limitations of this review

included the small number of studies reviewed, poor methodology, and biological data such as heart rate, serum cortisol, and blood pressure lacking in the studies reviewed.

To find a correlation between progressive muscle relaxation and music therapy on the stress and coping styles among nurses, Ozgundondu & Metin (2019), performed a randomized controlled study on 56 participants over 8 weeks. The setting of this study took place at a Training and Research Hospital using nurses in the Internal Medicine, Anesthesia, and Coronary ICU. The participants were put into two groups, the intervention (28) and the control group (28). The intervention group received a 20-minute session of progressive muscle relaxation combined with music for 8 weeks in the form of group sessions. On the other hand, the control group received only a 20-minute single-time, face-to-face attention-matched education. The progressive muscle relaxation technique is stretching and relaxing all body muscle groups from head to toe. The stress and fatigue scores were significantly lower, with the copying styles resulting in higher scores than the control group. One example of a limitation is that the researcher collected the data for both groups and administered all the interventions. This could result in a potential bias.

An Act of Kindness

Research suggests that workers can experience compassion fatigue, burnout, and secondary traumatic stress after stressful, traumatic events in healthcare. In 2017, a study by Davidson et al. wanted to evaluate the feasibility of Code Lavender. Code Lavender was a pilot project study kit that included chocolate, comfort words, a lavender essential oil sampling, and employee health referral information. This study was done at a university teaching hospital in San Diego with 500 participants, including staff and

providers from four target areas of the hospital, with all participants provided pre- and post-surveys. The four units were Neuro ICU, Telemetry Unit, ER, and Neonatal ICU. The study's premise was to have staff give, receive, or recommend Code Lavender to other coworkers after any stressful or traumatic event in their respective units to help improve overall job satisfaction and increase the feeling of being cared for in the workplace. For this pilot project, the results showed that those who received a Code Lavender found it helpful. Though no changes were made before and after the intervention in job satisfaction, the feeling of being cared for increased. However, only a few physicians completed the surveys, and program managers sent the online survey using their email groupings which caused some limitations.

Needs Assessment

PICOT Statement

For emergency department nurses (P), sensory therapy and deep breathing techniques (I) can decrease stress levels, give a sense of mental renewal, and create of more positive state of mind (O) from baseline (C), and when performed at least twice a week for 4 weeks (T).

Target Population and Community

The targeted population for this project was emergency department staff including registered nurses, certified nursing assistants, clerks, staff members of the Crisis Response Team (CRT), and providers in a 13-bed Emergency Department in a rural setting. A total of 33 staff were identified as potential volunteer participants in the quality improvement (QI) project implementation.

Available Resources

The resources available for this project included a small office space with a closed door out from the emergency room entrance, a massage pad placed in a reclining chair, one sound machine with a variety of sounds (i.e., waves, birds, soft music), one essential oil diffuser, essential oil in Lavender, one lamp with soft purple lighting & pictures with calming scenes such as the beach, rivers, and mountains. The room used for this project was labeled "Reset". Exclusion criteria includes anyone with asthma or other respiratory issues which would cause exacerbation. The expense of this project is minimal due to the student having personal possession of all needed materials except office space and furnishings, which were provided by the hospital. The team leader obtained clearance from the hospital maintenance department to use a diffuser and sound machine that was used in the electrical outlet and establish participant safety.

Desired/Expected Outcomes

The desired outcomes of this project were for participants to experience an overall reduction in stress by reporting a sense of mental renewal, to feel a sense of calm, to feel distressed, and to feel mentally recharged and in a more positive state of mind. Therefore, the primary expected outcome of this project was for participants to be in a calmer and re-energized state of mind. These outcomes have been proven to be effective in having a positive effect on stress levels according to the study done by Ozgundondu & Gok Metin (2019) with music therapy and muscle relaxation modalities.

Team Selection

The project leader was a Gardner-Webb University student enrolled in the Doctor of Nursing Practice-Family Practitioner program. The DNP-FNP student was the project

team leader, implementing the QI project, collecting, and evaluating the responses given by each ED staff member participant. In addition, the project leader had a practice partner with a master's level education to aid in helping to achieve the vision of the project and advise on the mental/behavioral health aspect of the project. The supervisor for the Crisis Response Team (CRT) for the emergency department was chosen as the practice partner and has the following credentials: MSW, LCSW, LCAS. The CRT members are utilized to evaluate any patient with a mental/behavioral health crisis. The team also included the ED manager, who gave initial project approval.

Scope of Project

This project was performed with voluntary participants only who met the project criteria. This project did not coerce or mandate participants to partake. No money, bribes, or gifts were given to participants. This project did not endorse products used before, during, or after the project was completed. This project did not promise to cure participants of any medical ailments. This project provided surveys for participants to give feedback on quality improvement initiatives before and after participation. This project adhered to participant confidentiality, meaning no identifying information will be used for data collection.

This project gathered survey data for use for academic purposes only. The project site was a 13-bed emergency department of an acute care hospital located on the Cherokee Reservation, a native Indian reservation located in Western North Carolina, United States of America. Gardner-Webb University and hospital administration will have access to collected data, which will be used for the project leader's final project dissemination and determination of project sustainability.

Objectives

The objectives of this project were for ED staff to recognize individual high-stress levels and to utilize sensory therapies to decrease stress levels, give a sense of mental renewal, and create of more positive state of mind in the ED environment with 4 weeks of voluntary participation in the Reset room at least twice a week. The use of a pre-and post-survey via Gardner-Webb's Qualtrics systems aided in identifying stressors of ED staff and evaluating how the use of the Reset room and sensory therapy impacted the objectives through descriptive analysis.

- **Specific –** Emergency department staff will benefit from the Reset room and sensory therapies to "de-stress" from high-intensity situations in the ED department of an acute hospital over 4 weeks.
- **Measurable –** Data collection included pre- and post-surveys anticipating showing a stress reduction of at least 50% after the use of offered modalities.
- **Actionable –** Of the 33 staff (potential participants), participation in attempts to reach an overall decrease of stress levels using sensory therapy and purposeful deep breathing techniques in a calm, private environment to increase self-perceived mental renewal and a more positive state of mind.
- **Realistic –** By increasing mental renewal, ED staff are anticipated to be in a more positive mental state in order to provide quality care for future patients without signs of burnout.
- **Timed –** The timeline to accomplish objectives was 4 weeks with the use of the Reset room encouraged at least twice a week by each of the potential participants.

Theoretical Underpinnings

Roger's Science of Unitary Human Beings is a nursing theory created by Martha Rogers to show that the goal of nursing practice is to promote well-being (Zaccagnini & Pechacek, 2021, p 20). According to Rogers (1970), "Nursing is a humanistic science dedicated to compassionate concern for maintaining and promoting health, preventing illness, and caring for and rehabilitating the sick and disabled". If nurses are to be dedicated to providing the best patient care, then the nurse should be their best selves in order to give 100% of their focus to their patients. Using Roger's theory, the project can use the adage "You need to practice what you preach" (Zaccagnini & Pechacek, 2021, p 20). Roger's theory points out several assumptions about humans. One of which is that "Humans and their environment are continuously exchanging energy" (Zaccagnini & Pechacek, 2021, p 20). When working with patients, a nurse should be cognizant of their "energy", which can lead to the assumption that, if a nurse is stressed out or agitated, the patient will pick up on that negative energy thus creating the negative "environment" by making the patient feel as though they are an inconvenience to the nurse. By using Roger's theory concept, the project can demonstrate how essential it is for a nurse to be in a more positive state of mind.

The Reset room project used the foundation of Nursing as Caring theory as a concept to help promote the understanding of the importance of nurses not losing their caring. The mental well-being of a nurse is the cornerstone of keeping the "caring" in their work. A nurse who is stressed out or burned out could experience a mental "block" which could lead to mediocre or lackluster care of their patients. By demonstrating the importance of nurses being able to de-stress, take a mental break, and process the

situations that arise in their environment, it can be revealed that the interventions shown in research can have a positive effect on the mental health of nurses.

Work Planning

Project Management

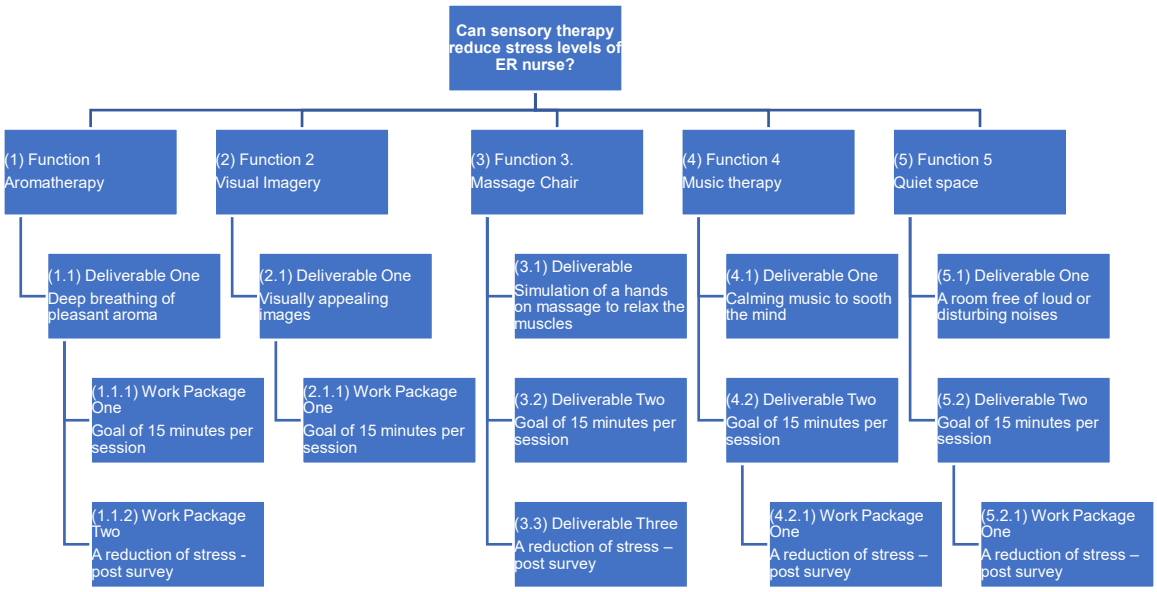
The use of equipment and materials was essential for this project, many of which were supplied by the project leader. The equipment provided by the project lead included lavender essential oil, an essential oil diffuser, a sound machine, visual imagery, a massage pad, and a lamp with soft lighting bulbs. The anonymous surveys were provided with a QR link in which participants could use their smartphones to answer simple questions regarding their stress levels before and after interventions. The use of office space and furnishings were on the project site which was inside the emergency department. The most valuable component of this project was the participants and their willingness to engage on their own accord when time allowed for full engagement. The Reset room was available 24 hours a day, 7 days a week for 4 consistent weeks. Participants were encouraged to engage in their own leisure when time was available for them to step away from patient responsibilities.

Project Breakdown

Precise organization of work for a project requires that the work be broken down into small bundles that can be easily monitored, with each task of the project divided into levels and sublevels (Zaccagnini & Pechacek, 2021, pg. 374). With the use of a simple tree diagram (Figure 1), this project leader defined the scope of the project to team members, stakeholders, and ED staff manager and supervisors.

Figure 1

Scope of Reset Room Project



Cost/Benefit Analysis

The cost of this project included equipment provided by the project chair (Table 1) with the office space, end table, and reclining chair (Table 2) being the exception as they are already located in the emergency room. The survey provided is electronic in which a QR code is scanned by the participants' phone and performed online versus needing to provide pen/pencils and paper.

Table 1

Equipment and Materials Direct Costs

Equipment/Materials	Direct Cost
Essential Oil Diffuser	($21.23, Amazon.com)
Lavender Essential Oil	($28.95, 2- 4oz bottles, Amazon.com)
Sound machine	($19.99, Amazon.com)
Light projector	($39.99, Amazon.com)
Visual imagery/wall art/purple lights	($154.10, Amazon.com
Massage pad attachment	($99.89, Amazon.com)

Table 2

Available Resources/Indirect Costs

Available Resources/Indirect Costs
Reclining Chair
Empty office space
End table

Note: Indirect costs were $0 as they were already located in the emergency room.

Planning for Evaluation

The plan for evaluation to determine if the intervention(s) were successful, this project leader chose the Simple Logic Model (Figures 2 & 3) (Zaccagnini & Pechacek, 2021). Due to the simplicity of the project and the demands of an emergency room, the model chosen to represent the project needed to be in the simplest form. The pre-and post-survey (Appendix A) is accessible through a scannable code in which the participants use their Apple or Droid phones. The quantitative data was collected through an online secure and encrypted database, Qualtrics, provided by Gardner-Webb University. Gardner-Webb University has safety measures in place to ensure data privacy. No identifiable information is collected, just a quick five questions to be

answered as truthfully as possible. Data was submitted by voluntary participants after consent to project participation was confirmed (Appendix B).

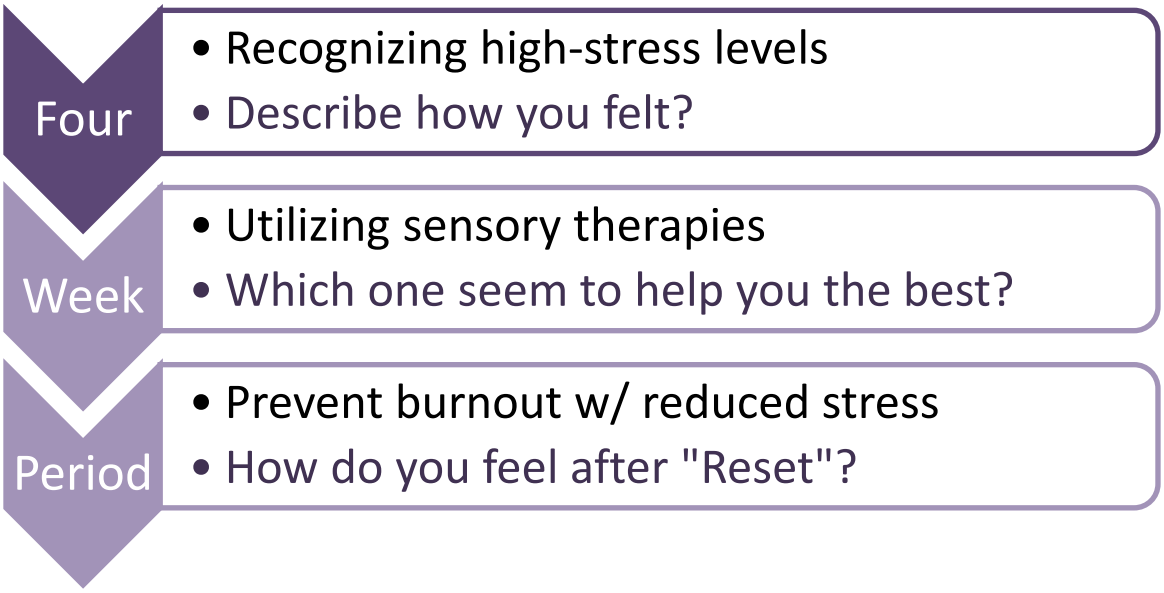
Figure 2

Input-Output-Outcomes

Inputs:	**Outputs:**	**Outcomes:**
Resources	Effective and immediate change in stress level from interventions	Measurable results with data collection

Figure 3

Simple Logic Model



Implementation

On January 12th, 2024, 2 hours were spent preparing the Reset Room ready for its unveiling. The first hour was spent scrupulously deciding how to place the chair, rug, pictures, curtain for the door, and side table. The next 45 minutes were spent setting up the side table with:

- an essential oil diffuser,
- soft lighting,
- sound machine,
- tiny purple fairy lights in the flower vase and basket
- purple faux Calla lilies in a vase with tiny purple fairy lights and 10,000 4.5mm purple acrylic crystals,
- a massage pad attachment in the recliner, and
- placing the purple ombre fleece throw on the chair.

The project leader was the first participant as minutes were spent with all the modalities turned on, reclined while utilizing the massage pad, and enjoying the room's lavender relaxing vibe. An introductory email was drafted to inform potential participants (ED staff) of the first day of project implementation. Reset room pictures were taken with an iPhone 14 Plus with no use of filters, special effects, adjusting or retouching phone apps (Appendix C).

Monitoring Implementation

Monitoring of the project implementation was not difficult but did require constant follow-up during the 4 weeks of implementation. On the 3 days as scheduled staff in the project unit, the project leader stepped into the room to ensure equipment was functioning properly, clean and straighten, refill water in the diffuser, and ensure stock of essential oil. The project leader encouraged the use of and facilitated the use of the Reset room by staff during scheduled shifts on the project unit. Reminders for participants to complete the pre- and post-use surveys either by QR code or to click the pre- and post-survey links in the introductory email were also given live time. After the first week of

implementation, a second email was sent to all potential staff reiterating what the project was, and its purpose, and reminding staff about the surveys and the importance of their data. After the second email, less staff reached out to participants for assistance in participating and use of the Reset room.

Concerned about the Reset Room equipment working properly, participants needing help with the modalities, and hoping the oil diffuser did not burn out from lack of water, project unit administrative support was utilized to monitor the room when the project leader was not available. Participants also took it upon themselves to ensure room success in my absence, which can be interpreted to show value and support for the project.

Unexpected Events and Successes

There were three main unexpected events while implementing the project. One, during the first week of implementation participants seemed hesitant to try the modalities. Many potential participants would walk into the room to just look at what was in there without plans to participate. When staff began trying the modalities and talking amongst themselves, others became curious and began participating. The success that came from that event morphed into participants teaching others how to operate the equipment and to assist with questions, becoming more extensively used and encouraged for use. ED staff that felt benefit from the Reset room began to utilize the space and modalities on a more regular basis. A few staff use the room to "step off stage" during their breaks with a frequent question being, "How long is the room going to be here?"

A second unexpected event was of a night shift weekend provider who used the Reset room to sleep. Of note, there was a room down the hall from the ED that was

designated for only ED providers to sleep or stay in during extended working shifts. This particular provider loved the Reset room environment and reported it beneficial to gain restful sleep during the least busy times in the ED. Permission was requested by the provider from the night shift staff to utilize the room for a few hours at a time (making it inaccessible for others during that time). The provider reported turning on the sound, lighting, and oil diffuser to "catch some very restful sleep." Although sleep improvement was not the intention of this project, the addition of the Reset room modalities into the designated sleep space could improve the quality of sleep leading to better preparation for upcoming provider shifts.

Lastly, the project leader was overwhelmed with the amount of support received from participants using Reset. It has been communicated as a wonderful experience for the staff, especially the ones that have never heard of or experienced a "Lavender room" or the concept of medical provider support to decrease fatigue, burnout, and secondary trauma. Qualitative data was not a planned data analysis point, but comments did support quantitative findings, such as "Excellent job!", "Love your room!", "Can this be a permanent thing?", "It smells so amazing!", "This is so wonderful, it's so relaxing.", "The lights are so pretty and so calming.", and the best comment made was "Your room is like a 90s' teen girl's bedroom, I love it!" One comment was made by one of the providers which was really unexpected, "I love the lavender so much that I rubbed a drop of the essential oil on my temples, and I was ready to seize the day!"

Threats and Barriers

The main threat and barrier to success identified during project implementation was the lack of participant time availability. The issue of time was primarily a dayshift

problem, as finding the time to explore the Reset room and being able to step away from patient care long enough to participate was limited within the shift. There were several ED staff members who did not participate in the project and reported inability due to lack of opportunity (often stating they were “so busy I forgot about it”).

Additional threats and barriers included the project leader not being on site 24/7 to maintain equipment, participants’ hesitance to use the equipment, lack of knowledge on how to use the equipment, and participants failing to complete pre- and post-surveys. Participants were emailed the introduction of the Reset room and notified of the instruction manuals that were available next to the modalities. Interestingly there were still participants who stated that did not know how to use the equipment or they were not sure about how to turn it on. Although the project leader was available by phone, email, or in person, very few potential project participants requested a tutorial on the use of equipment in the room.

With project leader not being on site every day for room checks, equipment monitoring, being able to assist first-time room users, and making sure participants filled out the surveys, led to an unexpected and unplanned event. In the absence of the project leader, the ED clerk, who was there during the week, would perform morning checks on the room such as refilling the water for the diffuser, turning on the sound and light projector machines, and making sure the room was clean and free of any clutter. The ED clerk would also remind participants about completing the surveys.

Another unexpected event was that the night shift team supervisor would perform a room check in the morning before leaving, encourage staff participation in the QI

project, and give reminders for participants to fill out the pre- and post-surveys. The supervisor would help advise participants on equipment use.

An additional barrier was that the massage pad for the reclining chair was not "one size fits all" as the massage pad was not adjustable to someone's height and participants experienced different areas that the massager was effective or missed completely. Another barrier with the massage pad was the lack of pressure of the massage. While most participants were happy with the performance, others were smaller in body frame and claimed the "kneading" motion was a little too deep for their back muscles causing an unpleasant experience.

Project Closure

This project began on January 12th, 2024, and ended on February 9th, 2024, with its course running over a 4-week period. On February 9th, 2024 ED staff was emailed regarding the end of the project and the last day for surveys. Equipment and materials were left in the Reset room for staff use – free of data collection and surveys. The collection of data results was gathered from Qualtrics and used in presentations with ED supervisors and managers.

After the project ended, the equipment was left in the room. The ED manager had voiced to the project leader that ED staff still used Reset and wanted to keep the room for long-term utilization. This is the best outcome that a project leader could anticipate, as the project ended, but the concept was ongoing. Results of the project were presented to the ED manager and supervisors as well as a plan to keep Reset for long-term.

Interpretation of Data

Data collected from pre- and post-surveys of participants of the Reset Room was gathered by participants scanning the QR codes posted in the room, or by clicking on the survey links in the introductory and reminder email from the project leader. No paper surveys were collected during the course of project implementation. Electronic quantitative survey data was collected, and descriptive analysis was performed through the use of Qualtrics, a secure and encrypted data collection system provided by Gardner-Webb University.

Qualitative Data

The collection of qualitative data was not performed in an organized fashion and the project leader did not seek out participants for this data type. Participants frequently sought out the project leader to personally voice their thoughts and opinions regarding the Reset room, which was reported previously as an unexpected event and success.

Quantitative Data

The research method used to gather the quantitative data was the use of surveys that were automatically uploaded to Qualtrics in order to show results without risks of human error in calculation. As the room may have been used without a pre- or post-survey completed, the exact number of times the Reset room was actually used is unavailable. Of the 33 ED staff (potential subjects), 25 reported first-time use of the Reset room (76% participation rate). A potential threat to the reported data is a falsely inflated participation rate of 76% as the unsecured room was available 24/7 with access by all hospital staff, and it is possible that a staff member from another unit utilized Reset and completed the survey. Five participants who completed the survey report chose to

utilize the room more than once; it is unknown if this was single or multiple individuals who completed the survey.

Survey data collected in Qualtrics yielded results of a 6.30 (mean) stress level pre-Reset room use and a 2.89 (mean) stress level post-use showing a 54% decrease in stress level. 100% of participants surveyed reported a more positive frame of mind after use and 100% of surveyed participants reported that they would use the room regularly if it were permanently available. This data could potentially be skewed by participants who did not complete a post-survey who had a negative experience leading to negative feelings of future use and who chose not to report. The goal of a 50% reduction of stress levels and creating a more positive frame of mind has been successful.

Various modalities were available for complementary use in the Reset room including a massage pad in a reclining chair, lavender essential oil in a diffuser, visual imagery, and sound machine. All respondents agreed that one or more complementary therapies assisted in decreasing stress. Of those utilized, 40% identified the massage pad in the reclining chair as helping to de-stress, which was the highest-rated modality. The lowest-rated modality to assist in de-stressing was the essential oil at 16% (Figure 4 and Table 3) for the question asking, “Which modalities do you feel helped de-stress you”?

Figure 4

Post-Survey Question: Modality Results Chart

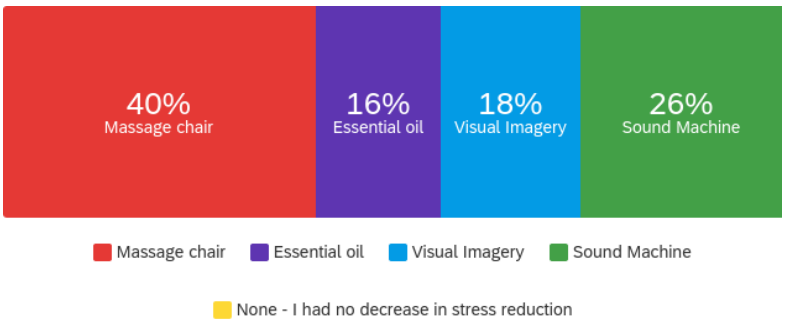


Table 3

Post-Survey Question: Modality Results Table

#	Answer	%	Count
1	Massage chair	40.00%	20
2	Essential oil	16.00%	8
3	Visual Imagery	18.00%	9
4	Sound Machine	26.00%	13
5	None - I had no decrease in stress reduction	0.00%	0
	Total	100%	50

Process Improvement Data

The purpose of the Quality Improvement project was to show how stress was reduced and improve the mental state of emergency department nurses and staff with the use of complementary therapies such as aroma, sensory, and massage therapy with a long-term goal of decreasing burnout. This project helped promote mental health well-being for emergency department staff by offering therapeutic interventions to improve a positive working environment. Emergency department staff, especially nurses, can experience burnout, compassion fatigue, secondary trauma, and often neglect to practice self-care. The intention of this project was to show the importance of recognizing high-stress levels and how the use of complementary therapies can decrease stress levels to promote a more positive state of mind in ED staff.

Even with unexpected or unintended events, it appeared that Reset was a wonderful success. Some of the staff seemed to really enjoy it and even seemed to be in

better spirits after their session. Some have commented that just walking in there made them feel a little better just by the visuals and smelling the lavender oil.

General outcomes include awareness of the project site's ED nursing and provider staff of the necessity for a Reset or Lavender room as a "safe place" to unwind, destress, step off stage, take a breath, or reset the mind. As ED staff became more aware of their stress levels and the importance of taking time to relax and destress through the personal benefits of the Reset room, ED staff reported interest in the continued availability of the Reset room.

Should the Reset room be a long-term placement in the ED, the maintenance, upkeep, equipment repairs/replacement(s) and restocking would fall on the ED's responsibility. Clearly, identified people with a schedule for room and equipment monitoring would be necessary, and ongoing funding would be required. As all of the equipment for the QI project implementation was funded by the project leader, Initial Reset room funding would require more budget funds than successive implementation.

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Appendix A

Pre- and Post-Surveys

Pre-Survey:

1. On a scale of 0 – 10; with 10 being overwhelmingly stressed and 1 being mildly stressed (Zero being no stress) – Where do you rank your stress level right now (prior to Reset room use)?

   Answer: Likert scale

2. Is this the first time using the Reset room?

   Answer: Yes/No

Post-Survey:

1. On a scale of 0 – 10; with 10 being overwhelmingly stressed and 1 being mildly stressed (Zero being no stress) – Where do you rank your stress level right now (after use of the Reset room)?

   Answer: Likert scale

2. A positive frame of mind allows you to see the best in others and in yourself while expecting positive results. Do you feel that you have a more positive frame of mind after use of the Reset room?

   Answer: Yes/No

3. Which modality(ies) do you feel helped to de-stress you?

   Answer:(multi choice) Massage chair, Essential oil, Visual imagery, Sound machine, None- I had no decrease in stress reduction

4. Would you use the Reset Room regularly if it was available as a permanent place in this facility?

   Answer: Yes/No

Pre-Survey link:
https://gardnerwebb.az1.qualtrics.com/jfe/form/SV_1AKRHoQhqYcPNVs

Post-Survey link:
https://gardnerwebb.az1.qualtrics.com/jfe/form/SV_bIbbAeC868iSI2W

Appendix B

Electronic Consent

Gardner-Webb University, Hunt School of Nursing, QI Committee

Informed Consent Form for Online Survey

Emergency Room Staff & Burnout: Interventions for Stress Management

The intention of this Quality Improvement (QI) project is to show the importance of recognizing high stress levels, how the use of complementary therapies can decrease stress levels to promote a more positive state of mind, and evaluate the effectiveness of the modalities being used.

As a participant in the project, you will be asked to scan a pre-survey QR code to answer simple questions immediately prior to utilizing the Reset room (at a time that is appropriate and convenient for you). After your 15-minute Reset room session, you will scan the post-survey QR code to answer simple questions regarding your experience. You may opt not to answer survey questions before or after utilizing the Reset room, but it is requested for the purpose of the project. You may use the room as many times during the 4-week duration. There is no limit to use. Space will only accommodate one participant at a time.

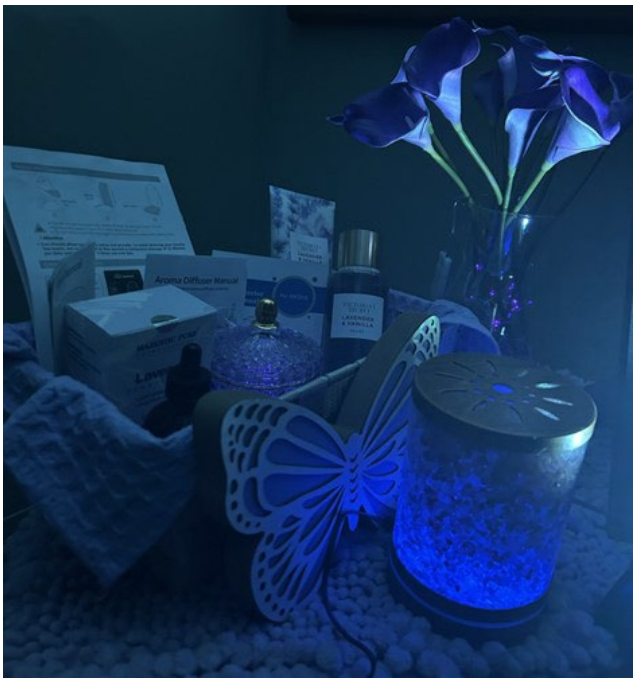
It is anticipated that the project will require about 15 minutes of your time with each use of the Reset room. The number of times a participant can utilize the Reset room is unlimited. Each session should be 15-minute intervals.

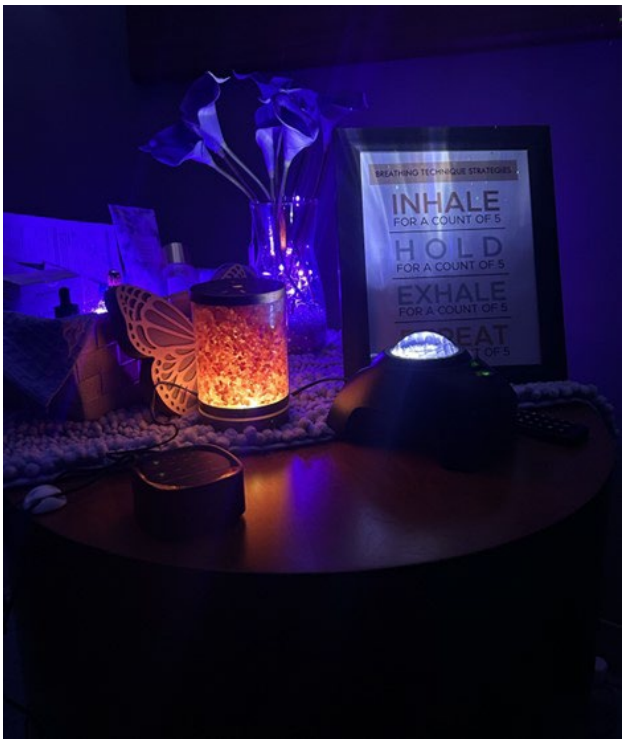
Participation in this project is voluntary. You have the right to withdraw from the QI project at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. The information that you give in the project will be handled confidentially. Your data will be anonymous which means that your name will not be collected or linked to the data. There are no more than minimal anticipated risks in this project. The foreseeable risks that may occur are anyone who is participating could be allergic to the scent(s) used in the essential oil diffuser and may experience symptoms of an allergic reaction. If anyone suffers from light sensitivity, take caution due to the light projecting machine as it may impair vision. These two potential risks are outlined in the introduction email for the project and reflected in the consent. If anyone experiences physical harm, they are encouraged to follow up with the ER for urgent or emergent conditions and/or their PCP for non-urgent conditions. In the event of emotional harm, participants have the facility Crisis Response Team available. The Crisis Response Team supervisor is also the identified DNP Practice Partner.

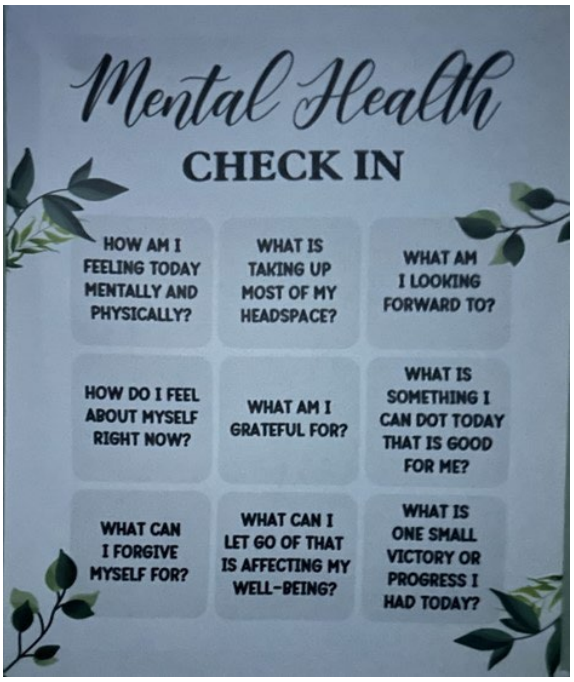
You will receive no payment for participating in the project. You may benefit from decreased stress levels. You have the right to withdraw from the project at any time without penalty by exiting the survey, simply by closing the browser window. Data submitted is unable to be pulled due to its de-identified state. Data from this project will not be used or distributed for future research studies.

Appendix C

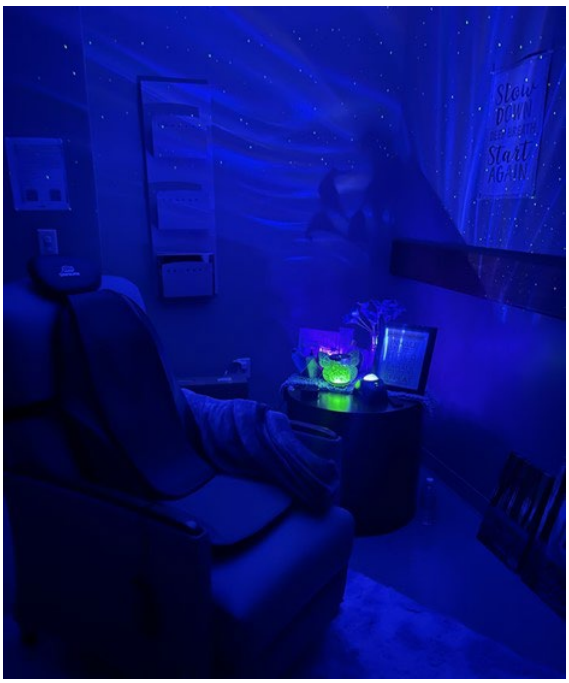
Reset Room Pictures






Mental Health
CHECK IN
HOW AM I FEELING TODAY MENTALLY AND PHYSICALLY?
WHAT IS TAKING UP MOST OF MY HEADSPACE?
WHAT AM I LOOKING FORWARD TO?
HOW DO I FEEL ABOUT MYSELF RIGHT NOW?
WHAT AM I GRATEFUL FOR?
WHAT IS SOMETHING I CAN DOT TODAY THAT IS GOOD FOR ME?
WHAT CAN I FORGIVE MYSELF FOR?
WHAT CAN I LET GO OF THAT IS AFFECTING MY WELL-BEING?
WHAT IS ONE SMALL VICTORY OR PROGRESS I HAD TODAY?

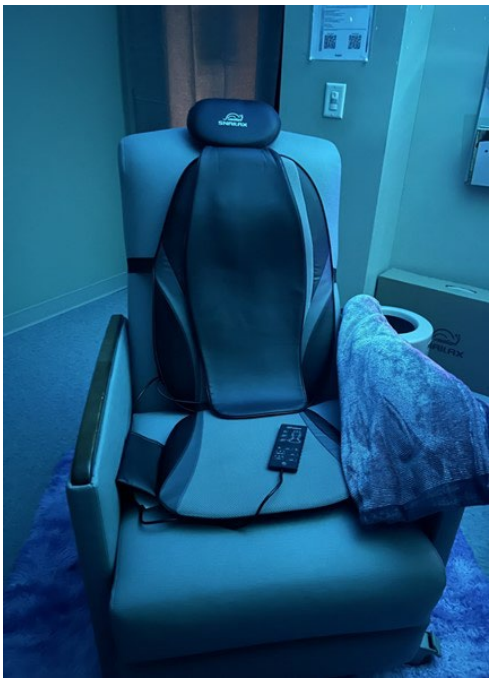

Good
Vibes
Only




Relax
Breathe
Unwind


Mental Health
CHECK IN
LAVENDER
Welcome


Slow
DOWN
DEEP BREATH
Start
AGAIN




Good
Vibes
Only
Welcome