NURSES' PERCEPTION OF RESILIENCE: DOES EXPERIENCE MATTER?

A Scholarly Project Submitted in Partial Fulfillment of The Requirements for the Degree of Master of Science in Nursing in The Onanian School of Nursing Rhode Island College May 4, 2022 by Mary Brogno

MSN Scholarly Project Team

MSN Scholarly Project Advisor

MSN Scholarly Project Content Expert

MSN Scholarly Project Organizational Mentor

MSN Program Director

NURSES' PERCEPTION OF RESILIENCE: DOES EXPERIENCE MATTER?

A Scholarly Project Submitted in Partial Fulfillment of

The Requirements for the Degree of

Master of Science in Nursing

in

The Onanian School of Nursing Rhode Island College May 4, 2022 by

Mary Brogno

Acknowledgements

I would like to thank my family for their endless support throughout this process, especially to my fiancé. To my professors, I want to thank you for your encouragement and support over the last few years.

Abstract

Nurses and other healthcare professionals work tirelessly to care for others, often putting others' needs before their own. Over time, this can have a harmful effect on the mental health and wellbeing of nurses who encounter high stress levels on the job. Since the start of the COVID-19 pandemic, there has been even more stress and burnout amongst nurses around the globe. Resilience is a trait that can help nurses cope with stress and burnout. Several studies (Blackburn et al., 2020, Duchemin et al., 2015) have shown resilience training to be beneficial in helping nurses navigate the stressful world of healthcare and improve their coping skills, however, there has been little research identifying a correlation between nurses' perception and willingness to participate in resilience training based on years of experience. The purpose of this paper is to present a Quality Improvement project proposal to determine whether years of nursing experience impacts nurses' perception of resilience training. A suggested method to explore this question includes dissemination of an informational packet about resilience and a survey measuring resilience among critical care staff nurses in a Level 1 Trauma Center. Using the data collected and analyzed in this proposed project may help in addressing the need for resilience training programs and the target populations who would gain the most from such programs.

Key Words: resilience training; critical care nursing; burnout syndrome; mindfulness training; COVID-19

Table of Contents

| Background and Problem Statement |
|---|
| Literature Review |
| Purpose Statement and Specific Aims 12 |
| Conceptual/Theoretical Framework13 |
| Methods15 |
| Purpose1 |
| Setting1 |
| Participants1 |
| Intervention1 |
| Measures10 |
| Analysis Plan1 |
| Ethical Considerations1 |
| Results18 |
| Summary and Conclusions19 |
| Recommendations and Implications for Advanced Nursing Practice 2: |
| References23 |
| Appendices Error! Bookmark not defined |

Nurses' Perception of Resilience: Does Experience Matter?

Background and Problem Statement

Nurses and other healthcare professionals work tirelessly to care for others, often putting others' needs before their own. Over time, this can have a harmful effect on the mental health and wellbeing of nurses who encounter high stress levels on the job. There are several terms used to describe this phenomenon, such as burnout syndrome or compassion fatigue. Burnout syndrome has been described as a negative response to prolonged work-related stressors that correlates with adverse outcomes on patient care, healthcare providers, and the healthcare system as a whole (Swamy et al. 2020). There are many components that contribute to burnout syndrome. High patient acuity, short staffing, long shifts, and moral distress are just a handful of factors that can lead to burnout. While burnout is a problem that nurses and other health professionals have faced for many years, it has only worsened since the COVID-19 pandemic hit last year. Nurses in critical care especially have higher rates of burnout than nurses in other fields due to high patient acuity, a high stress environment, and higher patient mortality rates (Mealer et al., 2014).

Burnout has negative effects not just on the individual who is experiencing it, patients can also encounter adverse outcomes because of healthcare provider burnout. Quality of care, patient satisfaction, and safety are all impacted by burnout (Mahmoudi et al. 2020).

Resilience is a trait that can help nurses cope with stress and burnout. Resilience can be taught and has been identified as one of the most influential components in adapting to traumatic and stressful events (Mealer et al., 2014). Identifying strategies to

cope with stress are crucial to maintaining a healthy mental and physical state. Resilience training has been used in many different professions to help alleviate work-related stress, including the US Army, fire and police forces, and in healthcare facilities (Chitra & Karunanidhi, 2018, Joyce, et al., 2018). The main focus of resilience training is to give the individual the tools to adapt and manage stress in order to continue to do their job effectively with minimum negative impact on their wellbeing. There are many different interventions that can be used in resilience training, including non-reactivity and mindfulness training, journaling, counseling, yoga, meditation, and numerous others. While resilience training does not reduce the amount of stress that an individual can experience in the workplace, it does assist them in processing and handling that stress.

Research studies, such as Raab, et al. (2015) and Mealer et al. (2014), demonstrate that resilience training can have a positive impression on mental health, improve coping skills, and decrease burnout. There have been studies on nurses' perception of resilience training and its effectiveness, but none of these studies specifically looked for any correlation in years of experience and nurses' perception of resilience training. The purpose of this paper is to present a Quality Improvement project proposal to determine whether years of nursing experience impacts nurses' perception of resilience training. Next, a review of the literature will be provided.

Literature Review

The aim for this literature review was to determine whether resilience training has been shown to be effective in reducing symptoms of burnout syndrome in critical care nurses and to identify any gaps in the literature. CINAHL Plus, Google Scholar and PubMed were used to search for research studies pertinent to this research question. Keywords used were "resilience training", "critical care nursing", "burnout syndrome", "mindfulness training", and "COVID-19".

Measuring Burnout

There are many reliable tools available to measure burnout and stress levels. A study was conducted within a surgical intensive care unit (SICU) in Ohio to determine if a mindfulness-based intervention (MBI) would decrease stress in personnel (Duchemin, et al., 2015). An eight-week MBI consisted of yoga and mindfulness practice with music. The MBI took place during work hours and was led by a certified mindfulness and yoga instructor for one hour each week. Activities included in the one-hour session were gentle stretching, progressive relaxation, yoga, and formal meditation, with an emphasis on a different topic every week. Participants were also provided CDs to continue their meditative practice at home (Duchemin et al., 2015).

Several tools were used to collect data, using both biological markers (salivary α amylase levels) and psychological measures. High levels of salivary α -amylase are associated with stress reactivity (Duchemin et al., 2015). This study is noteworthy as it is the only one found in the literature that shows evidence of how a biological marker can be used to analyze the effect of the intervention on stress. The Perceived Stress Scale (PSS), the Depression Anxiety Stress Scale (DASS), the Maslach Burnout Inventory, and lastly the Professional Quality of Life (ProQOL) were used to collect and analyze the psychological measures. Two assessments were completed, before and after the intervention was implemented. Results concluded that using an MBI in the workplace can decrease stress reactivity among workers in the SICU (Duchemin et al., 2015).

Workplace Factors Affecting Burnout

Workplace climate has a significant effect on the overall morale of healthcare professionals. Swamy et al. (2020) sought to determine if there were any environmental factors that were more likely associated with burnout. Using a 2017 all-employee survey (AES) conducted by the Veterans Health Administration of the Department of Veterans Affairs (VA), the researchers carried out an observational study to determine correlations between workplace environment and levels of burnout in ICU nurses. Since the VA has facilities across the nation, this provided an opportunity to get a broader look at the nation as a whole. The VA conducts an AES yearly to collect data on characteristics, demographics, feelings of burnout, workplace climate and characteristics about the organization in general (Swamy, et al., 2020).

After analysis, it was determined that approximately one-third of the nurses surveyed experienced burnout according to the inclusion criteria (Swamy, et al., 2020). In the analysis of the 2016 surveys, workplace climate, VA tenure, star rating of the facility, and urban location were all significantly associated with burnout. Poor perception of leadership was potentially a major contributor to burnout due to poor communication, inequality, or lack of recognition. According to their results, workplace climate was one of the strongest predictors of burnout and this finding can lead to improved efforts to address and decrease burnout in ICU nurses (Swamy, et al., 2020). A study by Mahmoudi, et al. (2020) conducted in Iran compared stress and burnout in nurses working in critical care versus non-critical care to investigate if the workplace environment had an effect on burnout. The researchers also investigated if there were any demographic characteristics that affected burnout. Questionnaires consisting of demographic and occupational questions (age, gender, marital status, level of education, and years of experience) as well as the Persian Copenhagen Burnout Inventory (P-CBI) were distributed to nurses across 15 hospitals. The P-CBI is a reliable tool used to measure burnout by having respondents answer questions about varied dimensions of burnout, including personal burnout, work-related burnout, client-related burnout, and work aversion-related burnout. The higher the score on the P-CBI, the more burnout the respondent is determined to be experiencing.

The results varied considerably from unit to unit and among the different dimensions of burnout, but overall respondents from critical care units had a higher reported average of burnout symptoms compared to medical-surgical nurses. (Mahmoudi et al., 2020).

Factors Affecting Resilience

There are many factors that contribute to the development of resilience. A secondary analysis conducted by Mealer, et al. (2017) investigated factors that affected resilience and whether those factors have a direct or indirect influence on the development of PTSD and resilience in ICU nurses. Thirty-five hundred critical care nurses who are members of the American Association of Critical Care Nurses were randomly selected to participate in the study and were mailed surveys to complete anonymously. The total sample in the study consisted of 744 nurses. The surveys

consisted of questions to measure the prevalence of anxiety, depression, burnout syndrome, PTSD, and resilience. The Connor-Davidson Resilience Scale and the posttraumatic diagnostic scale were used to determine self-reported PTSD and resiliency levels. Personal information regarding respondents' marital status, highest degree obtained, type of ICU they worked in, years of experience, and exercise routine was included in the survey as well as the shift worked, nurse-to-patient ratios, and generational cohort (Mealer, et al., 2017).

The factors that were most closely correlated with having higher levels of resilience included years of experience in the ICU, having children and level of education earned (Mealer, et al., 2017). The results also indicated that resilience was positively influenced by generational cohort and type of unit where nurses worked, with the millennial group being more significantly associated with resilience than any other generation. After analysis of the results, it was determined that having children and the number of years working in the ICU had an inverse direct effect on the development of PTSD. Nurses who had children were 40% less likely to develop PTSD than those who did not and respondents with increased experience were 3% less likely to develop PTSD. Interestingly, nurses who had a graduate degree were 18% more likely to experience PTSD than those with a bachelor's degree (Mealer, et al., 2017).

Resilience Training Programs

Mindfulness-based stress reduction (MBSR) is a concept that was developed in 1982 by Dr. Jon Kabat-Zinn and has been used for decades to aid in stress management (Raab et al, 2015). A pilot study conducted in a Canadian health center used an MBSR program to determine its effect on perceived stress, burnout, and overall quality of life. The traditional MBSR created by Kabat-Zinn consists of 8 weeks of 2.5 hour-long classes that include elements of meditation techniques, such as yoga and body scanning, group practice, an emphasis on non-conceptual learning and non-goal orientation, and an emphasis on the importance of continued home practice and application of learned skills. MBSR has been modified over the years and has been proven as an effective method of reducing stress and increasing resilience. Various resilience training programs include some elements of the traditional MBSR (Raab et al, 2015).

A hospital in Ohio utilized a resilience program called THRIVE to address the concerns of secondary trauma and burnout in oncology nurses (Blackburn et al, 2020). The program included an 8-hour retreat dedicated to education on strategies to improve self-care, a 6-week private study group and a two-hour wrap up session. THRIVE was developed by two clinical nurse specialists who are certified in psychiatry and mental health. During the retreat, participants partake in mindfulness, journaling, art therapy, acupressure and aromatherapy, and guided imagery. After the retreat, over the next 6 weeks, participants are encouraged to join a private social media group dedicated to the program in which group moderators provide up to three different exercises per week for participants to apply their learned skills from the retreat. The group also allows for participants to interact and encourage one another throughout the duration of the program. The final wrap-up session focuses on reviewing what has been learned throughout the program and on promoting continued use of the learned skills, as well as a journaling session in which the participants answer questions about significant patient experiences in the past. Results from this program have shown an overall increased level in resilience of participants (Blackburn et al, 2020).

The Stress Management and Resiliency Training (SMART) program was utilized in a randomized controlled pilot study to determine the efficacy of stress management interventions for new nurses at The Mayo Clinic in Rochester, MN (Chesak et al. 2015). The program was developed by a physician at The Mayo Clinic and relies on independent practice after the initial intervention session that is held during new nurse orientation. The SMART program is intended to educate participants on the biology of stress and on how to manage stress. The 90-minute SMART program session included the presentation of a stress and resilience model, and based on the model, methods of stress management were discussed. The session was held during the new nurses' orientation. Stress management techniques included practicing compassion, acceptance, gratitude, forgiveness, and higher meaning. Four weeks after the initial session, a 1-hour follow-up session was held to answer any questions the participants had about the program. Handouts were distributed via email to the participants throughout the subsequent weeks to reinforce the initial education. While the before and after stress scores did not vary significantly, overall, the program was found to be feasible to include in new nurse orientation (Chesak et al, 2015).

Effectiveness of Resilience Training

Mealer et al. (2014) conducted a study on stress in ICU nurses and whether a resilience training program would be feasible and accepted among those nurses using a modified Mindfulness-based stress reduction (MBSR) program by conducting a randomized control trial. The sample included 27 nurses. The study consisted of a 12-week intervention that was mostly implemented on personal time. A pre-and post-study questionnaire was filled out by all the participants for comparison that included the

Connor-Davidson Resilience Scale (CD-RISC), the Posttraumatic Diagnostic Scale (PDS), the Hospital Anxiety and Depression Scale (HADS), and the Maslach Burnout Inventory (MBI). For the intervention group, there was a mixture of cognitive behavioral therapy workshops, self-care, mindfulness exercises, journaling, and guided therapy sessions with a licensed clinical social worker. (Mealer et al., 2014).

Analysis of the pre-study questionnaires identified all the participants had symptoms of anxiety, and 77% had symptoms of depression (Mealer et al., 2014). After the intervention, the post-study questionnaire results showed an improvement in all scores except anxiety. The scoring for anxiety had no significant change. The results of the study showed that after implementation of the intervention, there was a significant reduction in depression symptoms in the intervention group as well as lower levels of PTSD in both groups. While the intervention was quite extensive, the results indicated that the implementation of a resilience training program can be effective in reducing stress and burnout symptoms (Mealer et al., 2014).

Effects of COVID-19 on Burnout

The COVID-19 pandemic has further intensified the level of already existing burnout experienced by nurses (Hoang, 2021). In previously mentioned studies, resiliency can lead to improved burnout levels, and in the onslaught of COVID-19, resiliency could have a positive influence on how nurses handle the stress of the pandemic. A study in North India (Jose, et al., 2020), examined burnout and resilience among frontline emergency department and tertiary care center nurses. A sample of 120 frontline nurses was surveyed using a descriptive cross-sectional research design to assess the level of burnout and resilience using the MBI and the CD-RISC tools.

Surveys included questions regarding demographic characteristics, resilience, and burnout levels of the respondents (Jose, et al., 2020). A majority of the participants were younger than 30 and only 11 participants had more than 10 years of experience. In a startling statistic, 72% of respondents said they had been unknowingly exposed to COVID cases without personal protective equipment (PPE) and 86% feared the possibility of infecting family members. More than half the nurses surveyed had selfreported high levels of burnout and 37% reported moderate levels of emotional exhaustion. Scores from the CD-RISC demonstrated that the respondents had moderate to high levels of resilience, which may be beneficial in how they cope with working in a pandemic. In general, the results showed that reduced personal accomplishments and emotional exhaustion had a significant negative correlation with resilience. Not surprisingly, levels of emotional exhaustion were significantly higher in the nurses who reported fear of infecting family members and who felt unsafe in the workplace. In the analysis of the findings, there appeared to be an increase in anxiety and stress due to the fear of transmitting COVID-19 to family members due to exposure at work, however increased levels of resilience were able to combat those concerns. The study is especially relevant since the pandemic is still ongoing, and there are many unknowns in the upcoming months and years as the after-effects of the virus are discovered (Jose, et al., 2020).

The literature shed light on the many aspects of resilience, burnout, and the relationship that exists between the two. Burnout has numerous negative effects on patients and healthcare providers and resilience has been shown to be an effective acquired trait to combat burnout. Countless programs exist and have been studied at large

to promote and teach resilience. Considering the pandemic, and the increase in stress, anxiety, and burnout, resiliency is more important than ever to help nurses and other healthcare providers maintain mental and physical health. Different factors, such as workplace environment, adequate staffing, and demographics all have an effect on resiliency and burnout in the individual. The literature review answered several questions about the efficacy of resilience training and factors affecting burnout and resiliency. There is still more to be learned about resilience training and how years of experience impacts its efficacy.

Purpose Statement and Specific Aims

The purpose of this paper is to present a Quality Improvement project proposal to determine whether years of nursing experience impacts nurses' perception of resilience training. Specific aims for this proposal include raising awareness of resilience training among critical care staff nurses and exploring the potential for implementation of a future resilience training program.

Conceptual/Theoretical Framework

Knowles' Theory of Adult Learning (Knowles, 1978) will be used as a framework for this Quality Improvement proposal. The theory is also referred to as the Theory of Andragogy. Knowles' Theory is used to show the differences in how children and adults learn, focusing on adult learning (Norrie & Dalby, 2007). According to Knowles, "the single most important thing in helping adults to learn is to create a climate of physical comfort, mutual trust and respect, openness, and acceptance of differences" (McEwen & Wills, 2014, p. 402).

Knowles' theory involves six assumptions - need to know, self-concept, experience, readiness to learn, orientation and motivation (McEwen & Wills, 2014). Each of these assumptions lays the groundwork for effectively teaching adults. The first assumption revolves around the concept that adult learners need to know why they need to learn something. In doing this, the learner will be more motivated to learn, knowing why it's important (Norrie & Dalby, 2007). Self-concept, relates to the idea that adult learners want to be viewed as capable and independent, not having someone else's wishes forced on them (McEwen & Wills, 2014). Experience, the third assumption, relates to the concept that as adults age, they gain experience that can aid in future learning situations. Readiness to learn means that adults will be ready to learn about topics that will be useful to them (Norrie & Dalby, 2007). For instance, nurses will be more ready to learn about stress reducing techniques if they have been previously exposed to stress. Orientation to learning, which is similar to the assumption of readiness, orientation towards learning "shifts from one of subject centeredness to one of problem centeredness" (McEwen & Wills, 2014, p. 403). Orientation to learning means that adult learning is more effective

when the teaching is directed towards a real-life situation the adult has experienced. Lastly, the sixth and final assumption is motivation. Motivation for the adult learner is centered around the idea that adults are more motivated to learn about things that will help them with practical problems in the immediate future (McEwen & Wills, 2014).

Knowles' theory works well as a framework for this Quality Improvement proposal. Adult learners learn best when they are being taught about something that is going to have a positive impact on them. If nurses can become more resilient and experience less work-related stress, they will likely be interested in learning how to achieve that goal. Building on previous knowledge and experience with a problem is another one of the assumptions in Knowles' theory. Adults are more apt to learn and want to learn more when they already have some understanding of a particular topic.

Methods

Purpose

The purpose of this Quality Improvement (QI) project proposal is to determine whether years of nursing experience impacts nurses' perception of resilience training. The specific research question is: Do years of experience have an impact on nurses' perception of resilience training?

Setting

The QI project would be ideally conducted on five critical care units within a Level 1 Trauma Hospital in Rhode Island. The selected units would be three ICUs (surgical, trauma, and medical intensive care units) and two stepdown units (surgical and respiratory intermediate care units).

Participants

A convenience sample would be utilized for this project - 115 critical care nurses from the pre-selected units. A 1/3 response, around 38 participants, would be considered adequate for analysis.

Intervention

Permission to carry out the project would be obtained from the managers of the participating units. (Appendix A). Institutional Review Board (IRB) approval would be obtained. Informational flyers would be posted on the participating units to encourage nurses to take part in the project and to draw attention to the handouts and surveys that would be left in a designated area of the staff break rooms. The posted flyers (Appendix B) would include a general overview of the project itself as well as contact information if

participants have any questions. At the time of posting flyers, a recruitment email about the research project would be sent out to staff on the participating units (Appendix C). Participation would be voluntary, and collection, analyzing, and reporting data results would be confidential. One week after distribution of the surveys, a repeat email would be sent to check on the status of the project and to answer any potential questions regarding the project or the surveys (Appendix D). The survey would be pilot tested with a group of 5-10 nurses to test for ease of use and feasibility. There would be a marked, sealed container on each unit to collect the surveys and maintain confidentiality. The only demographic data that would be collected would be the respondent's range of years of experience. The survey would be open for two weeks.

Measures

A packet containing a self-administered survey (Connor-Davidson Resilience Scale (CD-RISC)10 item) asking respondents to report their own resilience, information about resilience, and resilience training would be distributed to participating units (see Appendix E). There would also be an informational letter regarding informed consent attached to each packet for the participants to read prior to taking the survey. Permission to use the CD-RISC-10 would be obtained from the author (Dr. Jonathan Davidson). Once the participants have reviewed the handout, they would complete the attached survey to assess their perception of their own resilience and whether or not they believe they would benefit from resilience training. Within the survey, the participants would be asked yes or no questions about their own resiliency based on the results of the CD-RISC-10 they took previously, whether they have any interest in participating in a resiliency training program if it were offered, and if they thought a program like that would have an impact on their resiliency. Lastly, participants would identify their years of experience (less than 5 years, 5-10 years, 10-15 years or greater than 15 years).

Analysis Plan

Descriptive statistical analysis would be utilized to analyze the survey results to determine if any relationship exists between years of experience and perception of resilience training. An overall analysis would be completed to assess the resiliency of the participants and to see if there is a correlation between years of experience and resiliency scores. Data would also be analyzed to determine if there is a correlation between years of experience and nurses' willingness to participate in resiliency training.

Ethical Considerations

No personal data would be collected with the exception of the respondent's range of years of experience, with the range being broad enough to not identify any participants. Inclusion criteria would be working as a staff nurse on any of the participating critical care units. Completed surveys would be placed in a sealed box on the participating units until the end of the two-week period of data collection. The boxes would have a small opening at the top for the surveys to be inserted. Once the survey has closed, the boxes would be collected and locked in a locker with only the primary researcher having access to the surveys. After completion of the project, the surveys would be disposed of in HIPAA bins located within the hospital to be shredded.

Results

Given the small sample size of this proposed project, generalization would not be possible, however, if results demonstrate a link between years of experience and nurses' perception of resiliency training, a resiliency training program could be utilized to assist critical care nurses in managing existing burnout and increasing resiliency levels. High level scores of the CD-RISC-10 would indicate that the nurses surveyed already had existing resilience and may not require resilience training. In that instance, there may be a lack of interest in a resilience training program within this institution. However, if nurses scored lower on the CD-RISC-10, it would be an indication that there is room for improvement in resiliency.

Summary and Conclusions

The importance of resiliency in nursing cannot be underestimated. Numerous studies, as stated previously, have shown that resiliency training is effective in reducing the effects of burnout. The utilization of the CD-RISC-10 can assist nurses to gain a better understanding of their own resilience and may help them to cope more effectively with stress. Since the beginning of the COVID-19 pandemic, healthcare workers have had to withstand unprecedented levels of work-related stress. There has been more attention paid to resiliency and the importance of self-care in the last two years, and this project could shed more light on populations that can benefit from resilience training. More people are looking to improve their overall mental health and many of the techniques involved in resilience training (exercise, yoga, meditation, etc.) are excellent tools to positively affect mental well-being. As we continue to deal with the effects of the COVID-19 pandemic, it is essential that the progress made at recognizing the importance of mental health does not falter. Having nurses complete self-evaluations of their own resilience would be an effective way to allow them to reflect on their own personal mental well-being and could help them discover if they are at higher risk of burnout.

Potential limitations to this project would be a small convenience sample and results may not be an accurate representation of the general population of nurses. Lack of statistical significance would also limit the implications of the project. A lack of participation would even further decrease the generalizability of the results. Without a wide range of participants' years of experience, it may be difficult to determine the presence of a correlation between years of experience and perception of resiliency. With previous studies having analyzed the effectiveness of resilience training, and the lack of investigation into possible correlations nurses' perception of resilience training and years of experience, this quality improvement project could help assess gaps in the literature and assist in the implementation of resiliency training programs. There are many ways resiliency training programs can be integrated into hospitals. As mentioned in the article by Chesak, et al. (2015), the SMART program was used during new-nurse orientation. If the results of the survey identify a correlation between novice nurses and interest in resiliency training, tools to improve resilience can be taught during hospital orientation.

Recommendations and Implications for Advanced Nursing Practice

Advanced practice registered nurses (APRNs) have the ability to make positive changes within the healthcare system. Since the majority of APRNs have worked in the inpatient setting prior to obtaining their advanced degree, they are in a unique position to understand what nurses go through on a daily basis and can assist in raising awareness about the mental health needs of nurses within hospitals. Having prior experience working at the bedside, APRNs can help develop feasible resilience training programs that will fit the past-paced schedule that nurses work. Advanced practice registered nurses are leaders in education, especially those in the Clinical Nurse Specialist (CNS) role. Utilizing this project in unit-based resilience programs may be a more feasible undertaking to trial if it would benefit nurses hospital-wide. The CNS can help implement resilience training programs within the units they work with and continue to adapt and change them based on feedback from staff. Resilience training is an ongoing process and having a CNS or other APRNs assisting in the continued efforts to decrease burnout is a great way to apply their skillset.

Expanding this survey to other areas of the hospital, including the remaining intensive care and stepdown units, as well as medical-surgical floors could aid in validating results. A hospital-wide implementation of this survey would have potential to further highlight the importance and nurses' perception of resiliency training programs. With assistance from CNSs, results can be disseminated to administration and progress can be made in reducing burnout in nurses. Nurses are leaving the bedside in droves all across the country, many of whom claim work-related stress has become too much to handle. If APRNs can educate nurses and managers about tools to aid in improving resilience, nurse retention could possibly be improved.

References

- Blackburn, L., Thompson, K., Frankenfield, R., Harding, A., & Lindsey, A. (2020). The THRIVE program: Building oncology nurse resilience through self-care strategies. *Oncology Nursing Forum*, 47(1), 25E34. https://doi.org/10.1188/20.onf.e25-e34
- Chesak, S. S., Bhagra, A., Schroeder, D. R., Foy, D. A., Cutshall, S. M., & Sood, A. (2015). Enhancing Resilience Among New Nurses: Feasibility and Efficacy of a Pilot Intervention. *The Ochsner Journal*, 15(1), 38-44. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4365845/
- Chitra, T., & Karunanidhi, S. (2018). The impact of resilience training on occupational stress, resilience, job satisfaction, and psychological well-being of female police officers. *Journal of Police and Criminal Psychology*, *36*(1), 8-23. https://doi.org/10.1007/s11896-018-9294-9

Duchemin, A., Steinberg, B. A., Marks, D. R., Vanover, K., & Klatt, M. (2015). A small randomized pilot study of a workplace mindfulness-based intervention for surgical intensive care unit personnel. *Journal of Occupational and Environmental Medicine*, 57(4), 393-

399. https://doi.org/10.1097/jom.00000000000371

Hoang, S. (2021, February). 3 strategies for combating nurse burnout during and after the pandemic. The Oncology Nurse. https://www.theoncologynurse.com/issuearchive/2021/february-2021-vol-14-no-1/18820-3-strategies-for-combatingnurse-burnout-during-and-after-the-pandemic

- Jose, S., Dhandapani, M., & Cyriac, M. C. (2020). Burnout and resilience among frontline nurses during COVID-19 pandemic: A Cross-sectional study in the emergency department of a tertiary care center, north india. *Indian journal of critical care medicine : peer-reviewed, official publication of Indian Society of Critical Care Medicine*, 24(11), 1081–1088. https://doi.org/10.5005/jp-journals-10071-23667
- Joyce, S., Shand, F., Bryant, R. A., Lal, T. J., & Harvey, S. B. (2018). Mindfulnessbased resilience training in the workplace: Pilot study of the internet-based Resilience@Work (RAW) mindfulness program. *Journal of Medical Internet Research*, 20(9), e10326. https://doi.org/10.2196/10326
- Knowles, M. S. (1978). The adult learner: A neglected species. Gulf Publishing Company, Book Division.
- Mahmoudi, S., Barkhordari-Sharifabad, M., Pishgooie, A., Atashzadeh-Shoorideh, F., & Lotfi, Z. (2020). Burnout among Iranian nurses: A national survey. *BMC Nursing*, 19(1). https://doi.org/10.1186/s12912-020-00461-7
- Mayo Clinic. (2020, May 22). *Resilience training*. Mayo Clinic Mayo Clinic. https://www.mayoclinic.org/tests-procedures/resiliencetraining/about/pac-20394943

Mealer, M., Conrad, D., Evans, J., Jooste, K., Solyntjes, J., Rothbaum, B., & Moss, M. (2014). Feasibility and acceptability of a resilience training program for intensive care unit nurses. *American Journal of Critical Care*, *23*(6), e97-e105. https://doi.org/10.4037/ajcc2014747

- Mealer, M., Jones, J., & Meek, P. (2017). Factors affecting resilience and development of posttraumatic stress disorder in critical care nurses. *American Journal of Critical Care*, 26(3), 184-192. https://doi.org/10.4037/ajcc2017798
- McEwen, M., & Wills, E. M. (2014). Learning theories. In *Theoretical Basis for Nursing* (4th ed., pp. 402-404). Philadelphia, PA: Lippincott Williams & Wilkins.

Norrie, P., & Dalby, D. (2007). How adult are our learners: a cross-sectional exploration of the learning characteristics of nursing students in a United Kingdom university. *Journal of Research in Nursing*, *12*(4), 319-329. doi:10.1177/1744987107075254

- Raab, K., Sogge, K., Parker, N., & Flament, M. F. (2015). Mindfulness-based stress reduction and self-compassion among mental healthcare professionals: A pilot study. *Mental Health, Religion & Culture, 18*(6), 503-512. https://doi.org/10.1080/13674676.2015.1081588
- Swamy, L., Mohr, D., Blok, A., Anderson, E., Charns, M., Wiener, R. S., & Rinne, S. (2020). Impact of workplace climate on burnout among critical care nurses in the veterans health administration. *American Journal of Critical Care*, 29(5), 380-389. https://doi.org/10.4037/ajcc202083

Appendix A

All facility letters of approval would appear here.

Appendix **B**

RESILIENCY SURVEY RIC MSN STUDENT RESEARCH PROJECT



The aim for my research project is to determine if there is a correlation between years of nursing experience and how nurses feel about resiliency training

Please take a few minutes to read the handout about resiliency and burnout. There is a short survey that follows. Participation is voluntary and greatly appreciated!

QUESTIONS? CALL/TEXT MARY at XXX-XXX-XXXX

Appendix C

Attention all staff RNs,

My name is Mary Brogno, and I am a graduate student at Rhode Island College. I will be conducting a Master's Quality Improvement (QI) project along with the principal investigator titled *Resiliency in Nursing*.

I am writing to invite you to participate. The purpose of this QI project is to determine if years of experience in nursing has an effect on nurses' perception of resilience training. The goal of this QI project is to help identify target populations for possible implementation of a resiliency training program. This QI project is part of a Master's in Nursing program requirement and aggregate results will be shared at an MSN graduation presentation. Upon completion of the project, the results will also be disseminated among the participating units.

You will be asked to complete a one-time questionnaire. Your completion of this questionnaire will take approximately five to ten minutes. The self-completed questionnaire contains yes and no questions along with a a numeric rating scale of resiliency. Completion of this questionnaire is the only thing you will be asked to do. There are no questions that should cause you any discomfort. The completion of this questionnaire may not benefit you personally. Taking part in this questionnaire is completely voluntary. If you choose to participate, questionnaires are located in your staff break room.

The data from this project will be kept confidential. None of the information you provide will have your name or any number on it that will identify you personally. If you have any questions about the questionnaire or the research project itself, please feel free to contact me at mbrogno_xxxx@email.ric.edu or the principal investigator of this project -Name. If you have any questions about your rights, please feel free to call the office of Research Administration manager, Name, at xxx-xxxx.

Thank you very much for your time,

Mary Brogno, BSN, RN Rhode Island College AG-ACNP Student

Appendix D

Good afternoon,

This is a follow-up to the email you received last week regarding the nursing resiliency research project being conducted within your unit. If you have already completed the survey, thank you, and disregard this email. If you have not, I invite you to participate in this QI project. The surveys are located in your break room. Please see the informational letter attached to this email detailing the project.

Once again, I thank you for your participation in this research project and do not hesitate to contact me with any questions or concerns.

Mary Brogno, BSN, RN Rhode Island College AG-ACNP Student Mbrogno_xxxx@email.ric.edu xxx-xxx-xxxx

Appendix E

What is burnout?

Nurses and other healthcare professionals work tirelessly to care for others, often putting others' needs before their own. Over time, this can have a harmful effect on the mental health and wellbeing of caregivers who encounter high stress levels on the job. There are several terms used to describe this phenomenon, such as burnout syndrome or compassion fatigue. Nurses who work in critical care are often at greater risk of developing burnout due to the high stress of caring for critically ill patients. One way to combat the effects of burnout is resilience.

What is resilience?

Resilience is defined as the ability to adapt and recover quickly after stress, trauma, adversity, or tragedy (Mayo Clinic, 2020). Increased resilience is associated with maintaining a healthier level of physical and mental health wellness while handling the stressors in your life. Lower levels of resilience are associated with feeling overwhelmed, stressed, anxious, depressed, and development of unhealthy coping habits. While it may be difficult or impossible to eliminate stress from our lives, the good news is that resilience is something that can be learned!

What is resilience training?

Resilience training relies on the idea that resilience can be taught and adapted into our everyday lives. If you're familiar with the term "cognitive behavioral therapy", that is one of the principles on which resilience training is based. Resilience training focuses on four areas, physical, emotional, cognitive and mental health, and spiritual resilience (Mayo Clinic, 2020). Modifying and improving these areas can result in a better quality of life, decreased stress, anxiety, and depression, and lead to better adaptation to life's stressors.

What does resilience training consist of?

There are many different ways to promote and learn resilience. Most resilience training programs consist of a combination of learning and practicing meditation and mindfulness, yoga or light stretching/exercise, expressive writing, and guided therapy. The length of the programs varies depending on the content, but most take place over the course of 8-12 weeks. The participant has to put the effort in, but the results have shown that resilience training can help prevent burnout and reduce stress.

You are invited to participate in a survey about resiliency. Your participation in this project will require completion of a questionnaire. This should take approximately five minutes. Your participation will be voluntary, and you will not be contacted again in the future. You will not be paid for participation in this project. This survey does not involve any foreseeable risk to you and there are no direct benefits. However, the benefits of your participation may impact future nurses and prevention of burnout. I will be happy to answer any questions you have about this project. You may contact me, Mary Brogno, by call or text at **xxx-xxx** or by email at **mbrogno xxxx@email.ric.edu**. If you have any questions about your rights as a

participant, you may contact the facility's Institutional Review Board (IRB) at xxx-xxxxxxx. An IRB is a group of people who review research projects to make sure participants' rights and safety are protected. Your consent is implied by participating in this survey without any foreseeable risk.

On the next page you will find a short questionnaire that consists of the Connor-Davidson Resilience Scale – 10 Item (CD-RISC-10) as well as a few follow-up questions. The CD-RISC-10 is a modified scale to help self-measure resiliency. Please fill out the scale and calculate your score (the maximum score is 40 points) - then answer the remaining six questions. Once you've completed the questionnaire completely, remove it from the packet and place it into the labeled sealed box.

Thank you in advance for you participation in this project.

| | Not true | Rarely | Sometimes | Often | True nearly all |
|----------------------------|------------|----------|-----------|----------|-----------------|
| | at all (0) | true (1) | true (2) | true (3) | the time (4) |
| 1. Able to adapt to | | | | | |
| change | | | | | |
| 2. Can deal with | | | | | |
| whatever comes | | | | | |
| 3. Try to see the | | | | | |
| humorous side of things | | | | | |
| 4. Coping with stress | | | | | |
| can strengthen me | | | | | |
| 5. Tend to bounce back | | | | | |
| after illness or hardship | | | | | |
| 6. Can achieve goals | | | | | |
| despite obstacles | | | | | |
| 7. Can focus and think | | | | | |
| clearly under pressure | | | | | |
| 8. Not easily | | | | | |
| discouraged by failure | | | | | |
| 9. Think of self as strong | | | | | |
| person | | | | | |
| 10. Can handle | | | | | |
| unpleasant feelings | | | | | |

Connor-Davidson Resilience Scale – 10 Item

Add up your score to determine your resiliency score (maximum score is 40, the higher your score, the more resilience you have).

