

**Implementation and Evaluation of a Wellness Resource for Resiliency amongst Emergency
Nurses in a Rural Newfoundland Site**

by © Vanessa Griffiths

A report submitted to the School of Graduate Studies in partial fulfillment of
the requirements for the degree of

Master of Science in Nursing

Faculty of Nursing

Memorial University of Newfoundland

May 2023

St. John's Newfoundland and Labrador

Abstract

Background: Emergency department (ED) nurses are at high risk of compassion fatigue (CF) because of repeated exposures to traumatic experiences of others. Due to the fast-paced nature of the ED, brief interventions are needed to help improve nurses' resiliency. A wellness resource (Higdon, 2022), specifically developed for oncology staff at an urban hospital in NL was found to have supportive interventions that were potentially transferable to ED staff.

Purpose: To implement a wellness resource with emergency nurses in a rural NL site and evaluate its impact on their resilience and wellbeing.

Methods: Permission was granted by the original author to use this resource. The following steps were completed: a literature review helped to determine that the same interventions (e.g., self-care and debriefing) were effective for ED nursing staff as those originally provided for oncology staff, and identified appropriate methods of implementation and evaluation; consultations with four key stakeholders (including the clinical educator, unit manager, and two unit nurses), provided insight into staff needs and potential issues with fostering resiliency at this site; an environmental scan found relevant resources within the health authority and other organizations; and a needs assessment that explored participants' years working as an ED nurse, preferred methods of education delivery, and appropriate timing for education sessions. Higdon's (2022) PowerPoint presentation was adapted to include self-care methods, debriefing resources, and additional information pertinent to ED nursing and was delivered to ED nursing staff at the rural site. The Qualtrics software platform was used to distribute the Professional Quality of Life Score (ProQOL) instrument and the Connor Davidson Resiliency Scale (CD-RISC) to determine baseline and follow-up scores for participating nursing staff.

Results: The most commonly used and effective interventions reported by participants included education regarding self-care, mindfulness-based stress reduction strategies, and debriefing opportunities using in-person or virtual formats. The environmental scan indicated staff would like the option to participate in-person, virtually, and as a pre-recorded session to be completed when they had the time. These strategies and methods of delivery aligned with the identified strategies in Higdon's (2022) wellness resource. The initial scores for the ProQOL and CD-RISC scales ranged from mild to moderate levels of compassion fatigue and moderate levels of resiliency, respectively. Nine pre-intervention questionnaires were completed (n=9). Results from post-intervention questionnaires (n=5) indicated a positive improvement in ProQOL and CD-RISC scores. The intervention was well received by nursing staff who expressed a willingness to participate in other wellness activities.

Conclusion: Repeated exposures to traumatic experiences and suffering of others can lead to compassion fatigue, burnout, and secondary traumatic stress. Increasing resiliency in nursing staff is one way to combat symptoms of compassion fatigue. There is an opportunity for nursing staff to improve their resiliency and reduce symptoms of compassion fatigue by implementing various strategies within their workday. This wellness resource is an evidence-based option with brief and potentially effective actions for ED nursing staff to use to improve their wellbeing.

Keywords: *resilience, compassion fatigue, emergency, nurse, wellness*

Acknowledgements

This practicum project and my master's journey would not be possible without the support of a number of people. I would like to extend acknowledgements and immense gratitude to the following individuals who have supported me throughout this project.

To my supervisor, Dr. Nicole Snow, thank you for your guidance and kindness throughout this project. This project presented a number of obstacles and your support did not go unnoticed. Thank you for your patience and making this a memorable experience.

To my partner, Jonathan Edwards, my parents, in-laws, family, and friends for their encouragement and significant support throughout this journey. I will forever be grateful to you all.

To Leslie Higdon for developing the original wellness resource and her permission and guidance to adapt it for emergency nursing staff in this area.

To my colleagues, teammates, and peers. Thank you for your encouragement to continue with the master's program throughout the years and, in particular, for participating in this practicum project. I could not have completed this project without you.

Table of Contents

Abstract	i
Acknowledgements	ii
Introduction	1
Objectives	2
Overview of Methods	3
Summary of the Literature Review	3
Summary of Consultations	6
Survey Summary	6
Interview Summary	7
Summary of Environmental Scan	7
Summary of Participant Evaluations	9
Professional Quality of Life (ProQOL) Scores	9
Connor-Davidson Resiliency (CD-RISC) Scores	10
Likert Scale Evaluation	11
Subjective Evaluation	11
Limitations	12
Discussion of Advanced Nursing Practice (ANP) Competencies	12
Next Steps	15
Conclusion	16
References	18
Appendix A: Literature Review	23
Appendix B: Consultation Report	64
Appendix C: Environmental Scan Report	95
Appendix D: Summary of Evaluations	116

Introduction

Emergency nurses work in a high stress environment with changing demands and are often exposed to traumatic experiences (Muir & Keim-Malpass, 2020). These stressors exacerbated as a result of the COVID-19 pandemic. Subsequent systematic challenges such as increased emergency department (ED) visits, higher patient acuity in the ED, and physical, mental, and emotional stress related to working during a pandemic add to the psychological impact of the workplace (Wong et al., 2022). In addition to the common workplace stressors such as insufficient staffing and managing continually changing work demands, emergency nurses can lack awareness of the potential impact of secondary traumatic stress (STS) on their health (Phillips et al., 2022; Wong et al., 2022). STS is the negative outcome associated with witnessing other people's pain and traumatic experiences (Flarity et al, 2013). Consequently, compassion fatigue (CF) can result from cumulative secondary traumatic stress. CF, as experienced by health care professionals, is identified as a significant form of pressure, concern, and fixation with individual or cumulative traumas of patients where those affected (such as nurses) often experience exhaustion and dysfunction, physiologically and emotionally due to continued exposure of suffering and pain in the workplace (Wentzel & Brysiewicz, 2014).

According to Statistics Canada (2021), one-third of surveyed healthcare workers report fair to poor mental health and almost 70% report a somewhat worse or much worse mental health than before the COVID-19 pandemic occurred. While studies regarding the long-term effects of working through the COVID-19 pandemic are not available at this time, one study did determine that female, novice nurses working rotating shift work with less than five years of experience are the most at risk of CF (Wong et al., 2022). With the Canadian government's efforts to recruit and retain new nurses, it is logical to anticipate the need for a psychological wellness resource for

new hires and existing employees. Therefore, supports must be put into place to help nurses cope with their work experiences, build resilient staff, and develop positive practice environments.

From a local perspective, Higdon (2022) developed a wellness resource for oncology staff at the H. Bliss Murphy Cancer Centre in St. John's, NL, using evidence-based literature to determine the most effective interventions and delivery methods within that specific population. The resource consisted of an education session regarding self-care and a debriefing program for oncology staff. For this practicum project, Higdon's existing resource was adapted for use with emergency nursing staff. It was then implemented and evaluated within a specific cohort of nurses working in a rural ED. Due to time and assessment limitations within the scope of this project, the primary focus of this adapted resource was on the education sessions with ED nursing staff and no formal debriefing interventions were implemented at this time. Throughout this summary, I will identify and discuss briefly the objectives of the project, and provide a synopsis of the literature review, consultations, environmental scan, implementation, and evaluation aspects of this practicum project.

Objectives

The overall goal of the practicum was to adapt, implement, and evaluate the impact of the wellness program to improve compassion fatigue among ER nurses within the Placentia Health Centre (PHC) emergency department (ED). The key practicum objectives were:

1. Explore issues related to compassion fatigue and burnout within emergency nursing;
2. Identify potential solutions to compassion fatigue and burnout within emergency nursing;
3. Adapt, implement, and evaluate an existing wellness program created by Higdon for registered nurses working within the identified clinical area; and
4. Demonstrate advanced nursing practice competencies.

Overview of Methods

For this practicum project, I used a comprehensive approach to adapting, implementing, and evaluating the wellness resource within ED nursing staff at a rural health facility. An integrative literature review was conducted to determine if interventions for ED nursing were similar to those identified in the existing wellness resource used in oncology. Once I confirmed that the literature supported the use of similar interventions in the ED, I conducted consultations with key stakeholders. This included completing a needs assessment with the 12-nursing staff of the ED, as well as interviews with four key stakeholders, including the division manager, the clinical educator for the ED, and two nursing staff on the unit. Subsequently, an environmental scan was completed to determine any relevant resources offered through the regional health authority, provincially, nationally, and internationally. These findings were used to adapt the existing resource for the identified population, to implement it with the appropriate changes, and to evaluate its effectiveness. This section will further discuss these identified methods.

Summary of the Literature Review

The integrative literature review was conducted for a number of reasons: to determine if the same interventions are effective for ED nursing staff as used in the original resource for oncology nurses, to establish the most effective implementation methods, and to assess the evaluation methods for such activities as discussed throughout the literature. Integrative literature review methodology requires review of experimental studies, such as randomized controlled trials, and qualitative literature, such as hermeneutic phenomenology studies (Dhollande et al., 2021; Toronto & Remington, 2020; Whitemore & Knafel, 2005). This current integrative literature review included 13 studies and their quality was assessed using the Public Health

Agency of Canada (PHAC) (2014) Critical Assessment Tool and Joanna Briggs Institute (JBI) (2017) Critical Appraisal Checklist for Qualitative Literature.

Orem's Self-Care Deficit Theory of Nursing (Hartweg, 1991) was used to guide this practicum project. The definition of Orem's Self-Care Deficit Theory focuses on the individual's ability to initiate and perform their own self-care to improve or maintain their health (Gonzalo, 2022). This theory provides a logical sequence to identify how self-care deficit occurs and the need to intervene. Orem identifies five assumptions relevant to discovering and preventing CF: 1. People communicate and connect with others and their environment; 2. Purposeful acts occur to identify needs; 3. Acts of self-care are carried out to ensure well-being achieved and maintained; 4. Human agency allows identification and meeting of needs; and 5. People with structured relationships share responsibilities for providing care to others (Gonzalo, 2022; Hartweg, 1991). It was evident through the literature review that CF can occur as a result of poor coping strategies, busy and demanding work conditions, witnessing significant pain and trauma, and can lead to self-care deficit if resiliency is not built (Phillip et al., 2022). Orem's Theory of Self-Care can be used to guide intervention development, implementation and evaluation planning.

Via the literature review, I identified how effective intervention strategies for ED nurses aligned with those depicted in the original wellness resource. These strategies included educational information sessions on self-care including mindfulness, journaling, use of breathing techniques (Copeland, 2021; Delaney, 2018; Flarity et al., 2013; Muir & Keim-Malpass, 2020; Slatyer et al., 2018), learning autonomic skills tracking one's physical sensations, emotions, resourcing, grounding, and gesturing skills (Grabbe et al., 2021), as well as motivational messages of health promotion and gratitude (Goktas et al., 2022), engaging in psychotherapy

sessions (Janzarik et al., 2022), and using debriefing opportunities (Beres et al., 2022). The implementation strategies identified included a variety of in-person delivery only (Beres et al., 2022; Delaney, 2018; Flarity et al., 2013; Grabbe et al., 2021; Slatyer et al., 2018), virtual delivery only (Goktas et al., 2022), and a combination of in-person and virtual delivery with or without recordings (Janzarik et al., 2022; Muir & Keim-Malpass, 2020) with variable success. The length of implementation strategies varied from single five- to ten-minute education sessions and interventions (Copeland, 2021; Goktas et al., 2022), three- to four-hour long one-time education sessions (Flarity et al., 2013; Grabbe et al., 2021) to longer sessions over eight- and 12-weeks (Beres et al., 2022; Delaney, 2018; Janzarik et al., 2022; Muir & Keim-Malpass, 2022; Slatyer et al., 2018). Brief interventions (Beres et al., 2022; Copeland, 2021; Goktas et al., 2022) and one-time education sessions (Flarity et al., 2013; Grabbe et al., 2021) displayed as much effectiveness as the longer sessions (Delaney, 2018; Janzarik et al., 2022; Muir & Keim-Malpass, 2020; Slatyer et al., 2018). Evaluation methods included the use of established tools, such as the Professional Quality of Life Score [ProQOL] (Stamm, 2009 – 2012) (Beres et al., 2022; Berg et al., 2016; Copeland, 2021; Delaney, 2018; Flarity et al., 2013; Slatyer et al., 2018) and the Connor-Davidson Resiliency Scale [CD-RISC] (Connor & Davidson, 2003) (Delaney, 2018; Grabbe et al., 2021; Janzarik et al., 2022; Slatyer et al., 2018) conducted before and after the intervention implementation. The results were collected using in-person and virtual methods. These evaluation tools measure compassion fatigue and resiliency, respectively, using multiple-item questionnaires on five-item scales and provide a numerical score for both. Examples of these evaluation tools can be found in Appendix A.

Using the Public Health Agency of Canada's [PHAC] (2014) Infection Prevention and Control Guidelines Critical Appraisal Toolkit and the Joanna Briggs Institute [JBI] (2017)

Critical Appraisal Checklist for Qualitative Research, the quality of the studies was medium with a variety of designs ranging from weak to strong. The reviewed literature offered self-care information and interventions through an in-person, virtual, or combined medium with before and after evaluations using validated assessment tools. The full integrative literature review can be reviewed in Appendix A.

Summary of Consultations

The goal of the consultations was to gain insight into the existing knowledge regarding compassion fatigue, to determine attitudes towards interventions, to identify knowledge gaps, and to gather demographic information about this target population. There were two methods of consultations completed for this practicum project: a pre-intervention survey of nursing staff working in this ED and one-on-one interviews with a number of key stakeholder representatives. This collaboration with nursing staff and representatives provided a comprehensive foundation for the implementation and evaluation processes of the project. A needs assessment survey (see Appendix B) was sent to all full-time, part-time and casual ED nursing staff through Qualtrics software. One-on-one meetings were conducted with the clinical educator for the department, the division manager, and two nurses from the floor working opposite sides of the schedule with different levels of experience. An additional consultation was held with the creator of the original wellness resource to gain insight into her goals for the original resource and any thoughts towards the implementation and evaluation of the program.

Survey Summary

Of a possible 12 respondents, eight registered nurses and one licensed practical nurse answered the pre-intervention questionnaire (n=9). Detailed summary graphics as well as the

survey administered can be found within the consultation report in Appendix B. A majority of nursing staff reported working as a nurse for 20+ years with 89% reporting experiencing feelings of burnout. Approximately 66% of respondents reported feelings of burnout multiple days per week or daily. All respondents reported a willingness to participate in an education session about compassion fatigue and resiliency. There was a fairly even request for education sessions to be held in the morning (33%) and in the afternoon (44%) with a majority (66%) of respondents wanting a combination of in-person, recorded, and virtual techniques. The most common barrier identified by ED nursing staff was a lack of time to participate in self-care activities in the workplace, particularly within an increasingly busy and demanding ED.

Interview Summary

Common themes identified in the consultations with stakeholders included the need for organizational support to engage in self-care while at work, the promotion of self-care and support within the team, a lack of time to complete self-care activities in the workplace, and a lack of awareness of the risk for CF. All consultants agreed that there is rarely enough time throughout the workday to participate in educational opportunities. Therefore, having varied implementation strategies and delivery methods would be an important consideration to offering education to staff. There was consensus among the consultants that being aware of the need to engage in self-care and to intervene to prevent burnout is necessary before the symptoms become unmanageable. A collaborative effort on behalf of nursing staff and leadership within the organization is necessary to improve the effects of CF on frontline staff. The full consultation report can be viewed in Appendix B.

Summary of Environmental Scan

In addition to the consultations, an environmental scan was completed as part of the consultation process in this practicum project. As a result, I was able to identify a number of resources for employees to avail of as part of the regional health authority, as well as provincial, national, and international supports. Through the Eastern Regional Health Authority, the Employee Family Assistance Program, the LEARN online education system, and various programs offered through the Peer Support Coordinator (such as the Navigator Line, Peer 2 Peer Program, and the Employee Virtual Assistant) are all available for employees (Eastern Health, 2021a; Eastern Health, 2021b).

Provincially, Bridge the gApp (Government of Newfoundland & Labrador, 2022) is an online, virtual resource that offers access to many resources that aim to improve mental health, and to provide education and interventions to decrease feelings of anxiety and stress. Mindwell and Breathing Space are two of the resources within Bridge the gApp that can be tailored for health care workers and target building resilience. These virtual resources are accessible to people living all over NL. There are in-person and virtual educational opportunities offered by the Canadian Mental Health Association of NL ([CMHA NL], 2022) such as various self-help information and self-directed learning regarding helping coworkers who may be struggling. In addition, Lifewise Warmline, a phone-in service, allows callers to speak with trained peer support staff about mental health concerns from 10am to 12am daily (Lifewise Mental Health Peer Services, n.d). Nationally, the Wellness Together Canada (2022) website offers a number of ways to build resilience virtually with virtual self-assessments that can be initiated and completed at one's convenience. In addition, Anxiety Canada also offers information and stress reducing techniques. The full consultation report can be viewed in Appendix C.

Implementation Summary

The education sessions were carried out on a Thursday afternoon and a Friday morning in an attempt to capture staff on opposing sides of the work schedule and facilitate offerings at different times of the day. Both were offered in person or virtually using Microsoft Teams meeting platform. The in-person session was hosted at the health centre. Emails and information posted on the unit informed nursing staff as to when the sessions were being held and how one could attend. The education session consisted of the adapted wellness resource PowerPoint presentation with interactive questions, opportunities for voluntary discussion and questions at the end. I had two in-person attendees and four virtual attendees for the two presentations. The second presentation was recorded and emailed to all ED nursing staff for their review. At this time, I am unable to determine how many nursing staff viewed the recorded version of the wellness resource PowerPoint presentation.

Summary of Participant Evaluations

There were two sets of evaluations in this practicum project consisting of pre- and post-intervention surveys using the ProQOL and CD-RISC tools. These evaluations were done anonymously with a survey link being sent to the facility's ED nursing staff emails and no identifying information requested or collected within the survey. The ProQOL and CD-RISC tools were used in both evaluations to measure CF and resiliency, respectively. The ProQOL scored three subscales: compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS). A total of five (n=5) post-intervention evaluations were completed by participants. Due to the small sample size of this project, descriptive statistics will be used. This section will discuss these results.

ProQOL

The ProQOL questionnaire (Stamm, 2009-2012), consisting of 30-items on a five-point scale, was used to measure three subscales: compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS). The scales for assessing these subscales include a threshold for which the subscale should be investigated by the participant. For example, if a score for CS is 23 or less, the participant may not find as much satisfaction in their work as other things. The higher this score, the more likely it is that the participant finds professional satisfaction in their work. BO is measured inversely, meaning that the lower this score, the more satisfied they are with their work and effectiveness (e.g., score is less than 23). As such, the higher the BO score, the more likely the participant may be experiencing BO or feeling ineffective at the time of assessment. Higher STS scores may be indicative of a person's struggles in coping with their work experiences and being repeatedly exposed to trauma and suffering (e.g., score is greater than 41).

The post-intervention CS scores had a mean of 38 and a range of 34 to 48, which was improved from the initial results of 33 and a range of 27 to 43. Similarly, BO measured a mean score of 26.2 with a range of 18 to 29. These results were comparable to the pre-intervention scores for BO, where there was a pre-intervention mean of 31.78 with a range of 23 to 40. Post-intervention STS had a mean of 25.6 with a range of 16 to 43, which is less than the pre-intervention score of 29.2 with a range of 18 to 41. The mean of each score did move in a positive direction with reportedly improved levels of CS, BO, and STS. The overall ranges of scores for the three subscales did slightly improve.

CD-RISC

The CD-RISC (Connor & Davidson, 2003) scores measure resiliency which is a mitigating factor to CF; the higher the CD-RISC score, the more resilient the participant. The

post-intervention score of participants in the educational session had a mean of 67.6 with a range of 54 to 80. These scores were an improvement from the pre-intervention score with a mean of 60.2 and a range of 51 to 71. Given the small sample size, statistical significance is not possible to calculate.

Likert Scale Evaluation

To determine how participants felt about the education session, I adapted a Likert Scale post-intervention tool which asked participants to indicate their level of knowledge of CF and STS, and how they plan to use their knowledge in the future. Participants responded very favorably to this, with all indicating they somewhat agreed or strongly agreed with the statements. The complete list of questions and responses can be found in Appendix D.

Subjective Evaluations

In addition to the tools used and the Likert scale evaluation, there were five subjective questions asked, including list ways you plan to use these strategies; are there ways management/leadership can help you; what did you like about this session; what can be improved in this education session for the future; and would you attend another session on wellness? Participants accurately depicted ways to use the identified strategies throughout their shifts and to prioritize self-care to find work life balance. When asked how management or leadership could help, it was commonly noted that ensuring adequate staffing, assigning breaks at work, building supportive team environments, and checking in with nursing staff would be beneficial in supporting ED nursing staff at work. Participants appreciated the accessibility of the education session, and having it recorded to complete at a time that suited their schedules. For future education sessions, participants identified “offering more education session times”,

limiting sessions to a single topic or technique, and focusing on step-by-step processes to participate in stress relieving techniques such as mindfulness or meditation would be helpful. Each respondent identified a willingness to attend another wellness session and proposed topics like “maintain boundaries between work and home life”, “effective journaling techniques and meditation”, and other direct activities that can be performed in the workplace to improve resiliency in the workplace. The pre- and post-intervention results are listed in Appendix D.

Limitations

There were a number of limitations to this project’s evaluations. Using such a small sample, I was unable to use more significant statistical evaluations. This could indicate possible information bias. There was significantly less response from ED nursing staff in the post-intervention evaluation (n=5) compared to the pre-intervention survey (n=9). There was no control cohort included in this project. These results are limited to the circumstances and cohort of this ED nursing staff and not generalizable to other departments or nursing staff. Unfortunately, there is no way to know how many times the recorded version of the education session has been viewed by ED nursing staff.

Discussion of Advanced Nursing Practice (ANP) Competencies

Throughout this practicum project, I utilized many of the ANP competencies outlined in the Advanced Nursing Practice: A Pan-Canadian Framework (Canadian Nursing Association [CNA], 2019). There are six ANP competencies: direct comprehensive care, optimizing health system, education, research, leadership, and consultation and collaboration competencies. I achieved each of these competencies through this practicum project.

Demonstrating the direct comprehensive care competency (CNA, 2019), I was able to use quantitative and qualitative research data from various sources to adapt a wellness resource for a specific cohort of ED nurses. This was done in response to their identified need to learn more about how to develop resiliency in the face of challenging working conditions. In addition to this, I developed my adapted resources, completed my independent research to confirm the suitability of the interventions and determine the most appropriate delivery and evaluation methods, and disseminated the knowledge through educational presentations. To determine the success of the intervention, I completed a baseline assessment of participants' levels of CF and resiliency using the ProQOL and CD-RISC scores, respectively, then compared these with post-intervention evaluation scores.

In achieving the education competency, I completed its “identification of learning needs”, contribution of knowledge and skills, and “sharing evidence” components (CNA, 2019, p.32). I planned, initiated, coordinated, and implemented the wellness resource within this specific group of nurses. I identified the needs of the nursing staff, adapted an existing wellness resource, and implemented it using in-person, virtual live, and recorded options. Decisions I made were based on evidence provided in the literature, guiding me to make the best decisions I could. I provided opportunities for discussion, sharing experiences, and learning from others within the educational session.

Some of the aspects of the research competency (CNA, 2019) I achieved include “identify and implement research-based innovations for improving client care, organizations, or systems” (CNA, 2019, p.32) through the adaptation and application of the wellness resource within the clinical area. I took the step to consult the research literature regarding the use of wellness resources with emergency nursing staff to ensure that I was adapting the resource

appropriately in order to meet “current best practice” (CNA, 2019, p.32). My research skills were developed and used in researching, choosing, and implementing appropriate data collection instruments such as the ProQOL and CD-RISC. I also carefully considered what would determine the “client outcomes” (CNA, 2019, p.32) (in this case with my target cohort being the nurses working in this ED) when developing satisfaction evaluation tools to determine individuals’ perceptions of the success of the intervention.

The consultation and collaboration competency (CNA, 2019) was evident throughout various stages in completing my practicum project. I worked with other healthcare professionals to conduct consultations to determine what would be best to do in meeting the needs of individuals in my target group. Implementation of the resource required me to meet with managers and ethics boards to gain necessary approval, and to determine the needs of and what would work best for the target group. I also had to consult with information technology staff at Memorial University to explore software programs which would meet the evaluation component of this project. Finally, I developed collaborative relationships with representatives in key stakeholder positions as well as my supervisor to achieve the objectives of this project.

Similarly, the leadership competency (CNA, 2019) was obtained by my actions with my course supervisor, my worksite contact person, meeting with consultants, and engaging with nursing staff who participated in the intervention. APNs are leaders within the clinical setting and this project was no different. I demonstrated “self-awareness, professional development, and exhibit[ed] character and behaviour that is aligned with ethical values” (CNA, 2019, p.33) in this practicum project. As an individual who works in the ED, I was aware of the challenges faced by the nursing staff. I was motivated to address this and I initiated changes to address these issues with the ED nursing staff. I applied theories and aspects of change management (CNA, 2019) in

my project planning, implementation, and evaluation, as well as promoted nursing and the APN role throughout my consultations. I achieved aspects of optimizing health system competency (CNA, 2019) by engaging members within the ED nursing cohort at this site, both in-person and virtually, to encourage them to help themselves recover from and prevent compassion fatigue from their workplace exposures. These competencies ensure effective clinical practices for advanced practicing nurses and this practicum project provided the opportunity to establish and cultivate each one.

Next Steps

The wellness resource was adapted, implemented, and evaluated with a small group of ED nursing staff at a rural NL site. An ideal sequential step in this project would include conducting repetitive assessments using the ProQOL and CD-RISC tools to determine the resource's effect over time. Qualitative data can be obtained from participants to determine what strategies worked well and what suggestions they may have to improve the resource for future use. This wellness resource could be provided multiple times throughout the year to re-educate ED nursing staff of the risk of CF and how to participate in protecting their resiliency in the workplace. It could be added to the desktop computer at the ED nursing desk to enhance access to educational information when time permits. The original wellness resource (Higdon, 2022) consisted of a multifaceted approach including an education session and formal team debriefing. I adapted the existing educational session to suit the needs of ED nurses. In the future, implementation of a debriefing team or psychological safety leaders can be incorporated into the program as identified by Higdon (2022). This action requires appropriately trained personnel and their availability within the regional health authority.

Looking forward, the next steps for this resource include the replication of this implementation and evaluation in a similar site to determine its impact on nursing staff resilience. Once significant research is developed, this resource could be used as a quality improvement initiative for nursing staff in other EDs if it is effective. Collaboration with organizational leadership is required to implement this resource as part of a wellness initiative or policy development within EDs. Emergency nurses complete an annual competency checklist as part of the regional health authorities' ED nursing policy. This resource could be included in this competency checklist to ensure annual review. This would require a policy change within the organization to include self-care education in the continuing competency ED checklist. These actions could contribute to improved self-care participation in the workplace leading to supportive practice environments.

Conclusion

There is considerable variance in what ED nurses witness in their daily work lives. These experiences can often include trauma and pain felt by their patients. Compassion fatigue can occur as a result of these workplace exposures and require interventions to prevent and decrease their impact on ED nursing staff. A wellness resource for nursing staff in a rural NL ED site was adapted using relevant literature for this specific population, implemented using in-person, virtual live, and recorded education sessions, and evaluated with pre- and post-intervention electronic surveys using established compassion fatigue and resiliency assessment tools: the ProQOL and CD-RISC scales. While this sample size was small, the results provide knowledge on the existing issue of compassion fatigue experienced by nursing staff in the rural ED used. The traumatic and prolonged effects of the COVID-19 pandemic have not been fully realized at this point in time. The efforts of frontline nursing staff in meeting the general population's health

needs have been stretched to their limits. Emergency nursing requires support to optimize ED nurses' ability to continue caring for others, while mitigating the effects of witnessing trauma and pain in others and not having the opportunity to process these experiences in a healthy, effective way. This project contributes knowledge and experience to ameliorating the effects of negative emergency nursing experiences on the staff who are desperately required to keep the entry point of the healthcare system afloat.

References

- Beres, K. E., Zajac, L. M., Mason, H., Krenke, K. & Costa, D. K. (2022). Addressing compassion fatigue in trauma emergency and intensive care settings: A pilot study. *Journal of Trauma Nursing*, 29(4), 210 – 217.
<https://doi.org/10.1097/JTN.0000000000000663>
- Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R. & Lippoldt, D. (2016). Exposing compassion fatigue and burnout syndrome in a trauma team: A qualitative study. *Journal of Trauma Nursing*, 23(1), 3 – 10. <https://doi.org/10.1097/JTN.0000000000000172>
- Canadian Mental Health Association – Newfoundland & Labrador (2022). *Workplace mental health program*. <https://cmhanl.ca/web/what-we-do/workplace-mental-health-program/>
- Canadian Nursing Association (2019). Advanced practice nursing: A pan-Canadian framework. https://hl-prod-ca-oc-download.s3-ca-central-1.amazonaws.com/CNA/2f975e7e-4a40-45ca-863c-5ebf0a138d5e/UploadedImages/documents/nursing/Advanced_Practice_Nursing_framework_e.pdf
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76 – 82.
<https://doi.org/10.1002/da.10113>
- Copeland, D. (2021). Brief workplace interventions addressing burnout, compassion fatigue, and teamwork: A pilot study. *Western Journal of Nursing Research*, 43(2), 130 – 137.
<https://doi.org/10.1177/0193945920938048>

Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (msc) training program on nurses' compassion fatigue and resilience. *PLOS ONE*, 13(11), e0207261–e0207261.

<https://doi.org/10.1371/journal.pone.0207261>

Dhollande, S., Taylor, A., Meyer, S., & Scott, M. (2021). Conducting integrative reviews: a guide for novice researchers. *Journal of Research in Nursing*, 26(5), 427 – 438.

<https://doi.org/10.1177/1744987121997907>

Eastern Health (2021a, July 2). *Employee and family assistance program*.

<https://www.easternhealth.ca/employees-and-physicians/ohs-efap/efap/>

Eastern Health (2021b, July 4). *LEARN – Learning management system*.

<https://www.easternhealth.ca/employees-and-physicians/career-growth-and-development/learn-learning-management-system/>

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal*, 35(3), 247 – 258.

<https://doi.org/10.1097/TME.0b013e31829b726f>

Goktas, S., Gezinci, E., & Kartal, H. (2022). The effects of motivational messages sent to emergency nurses during the COVID-19 pandemic on job satisfaction, compassion fatigue, and communication skills: A randomized controlled trial. *Journal of Emergency Nursing*, 48(5), 547 – 558. <https://doi.org/10.1016/j.jen.2022.06.001>

Gonzalo, A. (2022). *Dorothea Orem: Self-care deficit theory*. Nurselabs.

https://nurseslabs.com/dorothea-orems-self-care-theory/#theory_of_self-care_deficit

Government of Newfoundland and Labrador (2022). Bridge the gapp.

<https://bridgethegapp.ca/adult-national/>

Grabbe, L., Higgins, M. K., Baird, M., & Pfeiffer, K. M. (2021). Impact of a resiliency training to support the mental well-being of front-line workers. *Medical Care*, 59(7), 616 – 621.

<https://doi.org/10.1097/MLR.0000000000001535>

Hartweg, D. (1991). *Dorothea Orem: Self-Care Deficit Theory (Vol. 4)*. SAGE Publications, Incorporated. <https://doi.org/10.4135/9781483325842>

Higdon, L. (2022). *Development of a wellness resource to strengthen resilience the oncology health care team*. Memorial University of Newfoundland.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/uk1f0m/alma992687355602511

Janzarik, G., Wollschlager, D., Wessa, M. & Lieb, K. (2022). A group intervention to promote resilience in nursing professionals: A randomized controlled trial. *International Journal of Environmental Research and Public Health*, 19, 1 – 18.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_doaj_primary_oai_doaj_org_article_037bf04f04bc40c78db0fa1b8e066d62

Joanna Briggs Institute (2017). *JBI critical appraisal checklist for qualitative research*.

https://jbi.global/sites/default/files/2019-05/JBI_Critical_Appraisal-Checklist_for_Qualitative_Research2017_0.pdf

Lifewise Mental Health Peer Services (n.d.). <https://lifewisenl.ca/>

Muir, K. J. & Keim-Malpass, J. (2020). The emergency resiliency initiative: A pilot mindfulness intervention program. *Journal of Holistic Nursing*, 38(2), 205 – 220.

<https://doi.org/10.1177/0898010119874971>

Phillips, K., Knowlton, M., & Riseden, J. (2022). Emergency department nursing burnout and resilience. *Advanced Emergency Nursing Journal*, 44(1), 54 – 62.

<https://doi.org/10.1097/TME.0000000000000391>

Public Health Agency of Canada (2014). *Infection prevention and control guidelines critical appraisal toolkit*. https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

Slatyer, S., Craigie, M., Heritage, B., Davis, S. & Rees, C. (2018). Evaluating the effectiveness of a brief mindful self-care and resiliency (MSCR) intervention for nurses: A controlled trial. *Mindfulness*, 9, 534 – 546.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_journals_2017642905

Stamm, B.H. (2009-2012) *Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL)*. www.proqol.org

Statistics Canada (2021, February 2). Mental health among health care workers in Canada during the COVID-19 pandemic. <https://www150.statcan.gc.ca/n1/daily-quotidien/210202/dq210202a-eng.htm>

Toronto, C. & Remington, R. (Eds.). (2020). *A step-by-step guide to conducting an integrative review* (1st ed.). Springer International Publishing AG. <https://doi.org/10.1007/978-3-030-37504-1>

Wellness Together Canada (2022). <https://www.wellnesstogether.ca/en-CA>

Wentzel, D & Brysiewicz, P. (2014). The consequence of caring too much: Compassion fatigue and the trauma nurse. *Trauma Notebook*, 40(1), 95 – 97.

<https://doi.org/10.1016/j.jen.2013.10.009>

Whittemore, R. & Knafl, K. (2005). The integrative review: updated methodology. *Journal of Advanced Nursing*, 52(5), 546 – 553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>

Wong, C. L., Young, B., Lui, B. S. C., Leung, A. W. Y., So, J. L. T. (2022). Professional quality of life and resilience in emergency department healthcare professionals during COVID-19 in Hong Kong: A cross-sectional study. *Hong Kong Journal of Emergency Medicine*, 29(3), 168 – 176. <https://doi.org/10.1177/10249079211049128>

**Appendix A: Implementation and Evaluation of a Wellness Resource for Emergency
Nurses in a Rural Newfoundland (NL) Site**
An Integrative Literature Review

Abstract

Background: Emergency nurses are at high risk of compassion fatigue (CF), burnout, and secondary traumatic stress (STS) because of repeated exposures to traumatic experiences of others and patient's suffering. This complex issue requires brief interventions that emergency nurses can incorporate into their daily routine to improve resiliency and well-being. Higdon (2022) developed a wellness program for oncology nurses as part of the requirements for the Master of Nursing Program and will be used as a guide for intervention practices. *Purpose:* To identify relevant interventions to decrease CF and improve resiliency focusing on the implementation and evaluation methods used by other researchers. *Methods:* A literature search for quantitative and qualitative articles was conducted using CINAHL, PubMed, Memorial University OneSearch, and Google Scholar. Thirteen relevant articles were found and critically appraised. The overall quality of the literature was medium with a mixture of study designs used. Strengths and weaknesses of each study were identified. *Findings:* Implementation methods relied heavily on in-person presentations with variable durations. Evaluation methods used questionnaires such as Professional Quality of Life (ProQOL), the Connor-Davidson Resilience Scale (CD-RISC), and the WHO (Five) Well-being Index (WHO-5) to determine compassion fatigue, resilience, and well-being. *Conclusion:* The findings of this literature review align with the intervention and methodology outlined in Higdon (2022). Implementation can take place in-person or virtually. Evaluation methods using self-administered questionnaires can be conducted in person or on-line to determine a wellness program's effectiveness. Qualitative data is relevant in evaluating participants experience with the intervention as well.

Key Words: *compassion fatigue, burnout, secondary traumatic stress, emergency nursing, resiliency*

Implementation and Evaluation of a Wellness Program for Emergency Nurses: An Integrative Literature Review

Emergency nurses experience high stress and traumatic exposures in the workplace, often impacting their work and home life (Muir & Keim-Malpass, 2020). Compassion fatigue (CF) can often result from these situations. CF is defined as “an extreme state of tension and preoccupation with individual or cumulative traumas of clients” where those affected often display a “state of exhaustion and dysfunction, biologically, physiology and emotionally due to prolonged exposure to compassion stress” (Figley, 2003, as cited in Wentzel & Brysiewicz, 2014, p. 95). There has been significant research into the impacts of CF on various nursing populations. It has been identified that effective, practical interventions aimed at improving the impact of CF on emergency nurses are required to improve quality of care and preserve the emergency nursing workforce (Lopez et al., 2022). A review of current literature relating to CF and its impact on the emergency nursing population was conducted. The purpose of this integrative literature review is to identify and critically appraise relevant literature on effective compassion fatigue interventions and the implementation and evaluation methods of such within a specific emergency nursing population.

Background

CF has been well established as an issue within the nursing profession. The psychological impact of traumatic experiences and the recent COVID-19 pandemic have added additional pressures onto emergency room staff (Wong et al., 2022). The Registered Nurses’ Association of Ontario [RNAO] (2022) completed a study and comparative analysis to other international results regarding fatigue in nursing throughout the pandemic. The highest scores for depression, anxiety and stress using the Depression, Anxiety, and Stress Scale [DASS], were reported by

RNs and Nurse Practitioners (NPs) aged 21- to 25-year-old. The overall scores for Canadian nursing respondents regarding depression, anxiety, and stress were slightly higher than the international scores, where a higher score indicates higher depression, anxiety, and stress (RNAO, 2022). There were no statistics provided regarding their place of work and associated DASS scores. In the same report, RNAO (2022) reported exhaustion and disengagement, which are elements of burnout, as measuring higher than the clinical cut off, implying widespread burnout of Canadian nurses. A cross-sectional study on nurse burnout in the United States identified that 31.5% of nurses who recently left a position reported burnout as the reason for their departure (Shah et al., 2021). Another cross-sectional descriptive study reported “high levels of compassion fatigue, medium levels of burnout, and low levels of compassion satisfaction” (Ruiz-Fernandez et al., 2021, p. 3) in emergency nurses. Given the nature of emergency nursing, this population is exposed to various traumas and difficult situations that may require psychological or emotional deliberation to prevent lasting effects (Copeland, 2021; O’Callaghan et al., 2019; Wong et al., 2022). Over time, these repeated exposures to situations, inability to cure or fix patients’ pain, and insufficient coping mechanisms can lead to significant symptoms of burnout, traumatic stress, and CF (Lopez et al., 2022; Wentzel & Brysiewicz, 2014).

While CF among many nursing specialities has been established in previous research, the reality of the COVID-19 pandemic has had a lasting impact on emergency personnel as the first point of contact for sick patients presenting to emergency departments for care (Wong et al., 2022). Previous interventions to decrease CF among nurses have not been effective in their efforts and it has been reported that a moderate amount of burnout and secondary traumatic stress (STS) are still experienced among emergency nurses following the COVID-19 pandemic

(Lopez et al., 2022). Wong et al. (2022) identified female, novice nurses working rotating shift work with less than five years' experience were at the highest risk of burnout and STS. With the anticipated influx of new graduate nursing staff to help address the nursing shortage across Canada, it is important to determine appropriate interventions, implementation methods, and evaluation procedures to prevent burnout among new nursing staff.

Definitions and Key Concepts

Many of the terms relating to CF are used interchangeably when there is an important distinction between them. CF as described above, is composed of two other aspects: Burnout and STS (Copeland, 2021). Compassion satisfaction and resilience are considered mitigating factors to preventing or improving symptoms of CF. This section will clearly define these terms.

Burnout and Secondary Traumatic Stress

Burnout is defined as depletion of motivation to a cause resulting from extended exposure to emotional or psychological workplace stress (Maslach, 2003; Muir & Keim-Malpass, 2020). Some feelings associated with burnout include exhaustion, frustration, indifference, despair, and sadness (Flarity et al., 2013). STS is the negative outcome linked to observing patients' trauma, pain, and suffering (Flarity et al., 2013).

Compassion Satisfaction and Resilience

Compassion satisfaction (CS) is the gratification experienced from providing care for others (Copeland, 2021). This is often inversely related to CF, where compassion satisfaction goes up when CF decreases. Resilience is referred to as a mitigating factor against CF and is defined as one's ability to recover from adversity (Phillips et al., 2022) or a "positive adaptation to stress" (Janzarik et al., 2022, p.2). Resilience is believed to be fostered in healthcare

professionals using internal and external resources such as specific training and coping strategies (Flarity et al., 2013). Some characteristics associated with resiliency include self-discipline, optimism, goal-oriented, and the ability to make decisions (Phillips et al., 2022).

Theoretical Framework

Orem's Self-Care Deficit Theory of Nursing (Hartweg, 1991) was used to guide this literature review and practicum project. Orem's theory comprises three connected theories: 1) The theory of self-care, 2) The self-care deficit theory, and 3) The theory of nursing systems (Gonzalo, 2022; Hartweg, 1991). The definition of Orem's Self-Care Deficit Theory focuses on the individual's ability to initiate and perform their own self-care to improve or maintain their health (Gonzalo, 2022). This theory is relevant to the topic of CF in emergency nurses as it identifies how nurses can experience self-care deficit and assist in developing a plan to address prioritizing self-care for individuals. Orem's theory has five assumptions: 1) to live, people communicate and connect with others and their environment; 2) purposeful acts occur to identify needs; 3) when mature, people carry out acts of self-care to ensure preservation of life and wellbeing; 4) needs are identified and acted on using human agency; and 5) people with structure relationships share responsibilities for providing care to others (Gonzalo, 2022; Hartweg, 1991). Orem's Theory of Self-Care can be used to guide development of interventions, implementation strategies, and evaluation methods to address self-care deficits in emergency nurses.

Orem identified five methods of helping as a nurse, including: acting and doing things for others; guiding others; supporting another person/group; providing a learning environment; and teaching others (Gonzalo, 2022). These five methods are relevant to CF intervention planning, implementation, and evaluation as they help emergency nurses experiencing CF recognize the issue and act accordingly to work to improve their symptoms.

Problem Identification

The purpose of this integrative literature review is to explore and critically appraise existing literature to determine what are the most effective implementation and evaluation methods to include in a wellness program targeting CF for nurses working in an ER department. The evaluation and synthesis of current, available literature will assist in determining appropriate implementation and evaluation measures for CF interventions with emergency nurses. In accomplishing this, I will consider qualitative, quantitative, and mixed methods studies, systematic reviews, and grey literature.

Higdon (2022) developed an intervention for oncology nurses to strengthen resilience and decrease CF and burnout as part of their requirements for the Master of Nursing program at Memorial University of Newfoundland. This resource encompasses many of the interventions also used to prevent or decrease CF in emergency nurses. With approval from the author, I will use this document as a resource for this project and subsequently implement and evaluate its use within a small, specific, ER nursing population in a rural facility.

Rationale

According to Statistics Canada (2020), 14.5% of Canadians over the age of 12 do not have access to a primary health care provider in 2019. This is approximately 4.6 million people likely seeking medical assessment and treatment from emergency departments across Canada. In Newfoundland and Labrador, 12.5% of people over the age of 12 did not have access to a primary healthcare provider for their healthcare concerns. This inaccessibility often leads to congested emergency departments and an increased demand on frontline staff, particularly emergency nurses. Increased work demands, insufficient resources, high acuity patients,

witnessing the pain of others, assessing traumatized patients, and increased time spent at the workplace can increase the amount of stress and anxiety felt by ER nursing staff (Copeland, 2021; Goktas et al., 2022; Wong et al., 2022). This strained cycle can develop into CF and burnout if it is not addressed.

There are many physical and emotional impacts of CF on nurses including headaches, chronic condition development such as hypertension, weight gain, insomnia, and gastrointestinal issues, indifference, disconnection, frustration, and impatience (Wentzel & Brysiewicz, 2014). Clinically, there are notable impacts within the workplace including a decrease in quality patient care, decreased patient and employee safety, absenteeism, high turnover rates, increased job vacancies and nurses leaving the nursing profession altogether (Copeland, 2021; Wentzel & Brysiewicz, 2014). These impacts have a detrimental effect on an already exhausted healthcare system. Interventions to improve nurse wellbeing, employee retention, and patient safety are necessary.

Method

For this literature review, an integrative literature review methodology is appropriate to include experimental studies, such as randomized controlled trials, and qualitative literature, such as hermeneutic phenomenology studies (Dhollande et al., 2021; Toronto & Remington, 2020; Whittemore & Knafl, 2005). This will provide a more comprehensive review of the available and relevant literature. Whittemore and Knafl (2005) provide an appropriate framework for integrative literature reviews and will be used as a guide for this document.

Search Strategy

An integrative literature review of electronic databases was conducted using Cumulative Index to Nursing and Allied Health (CINAHL), PubMed, Memorial University Library OneSearch, and Google Scholar. Databases were searched using key search words including *emergency nursing, burnout, compassion fatigue, secondary traumatic stress, intervention, evaluation, and resilience*. This search produced 337 articles. Inclusion criteria included articles published in the English language (with dates ranging from 2012 to 2022), nursing-focused studies, and those published in peer-reviewed journals. Exclusion criteria included articles that did not include emergency nursing as part of the sample population and literature reviews. There were many cross-sectional, descriptive studies establishing CF in emergency nurses found in this search, but these were not included as they lacked relevancy to the review question regarding implementation and evaluation methods. Articles were screened based on their titles and abstracts. This search yielded thirteen relevant studies. Grey literature is included in various sections throughout this literature review. Relevant interventions and programs will be discussed in an environmental scan document at a later date.

Data Evaluation

This search yielded thirteen studies for the review. Various study designs were used including: three randomized controlled trials (RCT) (Copeland, 2021; Goktas et al., 2022; Janzarik et al., 2022), one non-randomized controlled trial (NRCT) (Slatyer et al., 2018), one uncontrolled before and after (UCBA) study (Grabbe et al., 2021), two pre-and post-test studies (Beres et al., 2022; Flarity et al., 2013), two mixed-methods studies (Delaney, 2018; Muir & Keim-Malpass, 2020), and four phenomenological qualitative studies (Berg et al., 2016; Clark et al., 2022; Gustafsson & Hemberg, 2022; Perez Garcia et al., 2021). Studies were included in this literature review regardless of their assessment quality.

Data Analysis

Literature relevant to the review question were read and analyzed to determine similarities and differences between study interventions. Studies were then grouped together by similarities of implementation methods and evaluation methods. In-person, formal interventions were the most used implementation method. Evaluation methods relied on self-assessment surveys using valid and reliable tools, such as the Professional Quality of Life (ProQOL) survey and the Connor-Davidson Resilience Scale (CD-RISC). Outcomes from evaluation methods were grouped according to CF, which included burnout and STS, compassion satisfaction, resilience, and wellbeing.

Study Quality Assessment

The Public Health Agency of Canada (PHAC) (2014) Critical Appraisal Tool and the Joanna Briggs Institute (JBI) (2017) Critical Appraisal Checklist for Qualitative Research were used to determine the quality of each applicable study. Overall, the quality of the studies was medium, with one strong design of high quality (Goktas et al., 2022) and three strong designs of medium quality (Copeland, 2021; Janzarik et al., 2022; Slatyer et al., 2018). There were two weak designs of medium quality (Flarity et al., 2013; Grabbe et al., 2021) and one weak design with low quality (Beres et al., 2022). There were two mixed-method studies that used a weak design with medium quality for both quantitative aspects of their study (Delaney, 2018; Muir & Keim-Malpass, 2020). For the four qualitative phenomenological studies, the JBI (2017) Critical Appraisal Checklist was used. Three studies had high credibility and were trustworthy (Clark et al., 2022; Gustafsson & Hemberg, 2022; Perez Garcia et al., 2021) and one study had moderate credibility (Berg et al., 2016).

Strengths and Weaknesses

Some strengths identified in the literature include each article receiving ethical approval of their respective institutions or governing bodies. Another notable strength was the use of valid and reliable evaluation tools, such as the ProQOL or the CD-RISC tool. Trained researchers lead education sessions and interventions in many studies. Emergency nursing staff were the sole recipients of the intervention in some studies and were included in sample populations with other disciplines such as intensive care unit RNs and frontline staff.

One of the largest weaknesses to many of the studies reviewed is the use of a convenience sample or self-referred participants which pose a risk of selection bias. Some study populations included specialties other than emergency nursing. Both quantitative and qualitative literature identified high frequency of female participants, creating a possible risk of homogeneity. However, this is a difficult argument to make considering nursing is traditionally considered a female dominated profession. There was no consistency in the identified CF interventions across the literature. Each study offered a different intervention such as mindfulness, resiliency training, debriefing, positive affirmations, journaling, or a combination of interventions. The duration of interventions varied as well from brief, five-minute tasks up to four-hour education and training sessions. The use of self-administered questionnaires poses a weakness to the studies as it opens the possibility for response bias in evaluation methods.

Future Research Recommendations

Following the identification of strengths and weaknesses of the integrated studies, it is important to note what can be considered for future studies. From an implementation aspect, more research is required to establish a consistent, effective intervention for testing. Time off for

research studies and education may not be possible with the current healthcare shortage, therefore, short, effective interventions and solutions would be an asset. Interventions should be accessible to all healthcare staff and studies offering more virtual-based programs would be beneficial in achieving this goal. Stronger study designs such as RCTs and controlled before and after studies are required.

From an evaluation perspective, the use of valid and reliable assessment tools is well done and should be applied in future studies. It would be beneficial to include these valid tools in repeated measures designs or cohort studies to determine specific interventions' effectiveness over a longer period of time. Qualitative research studies such as narrative and phenomenological designs are required following an intervention to gain a lived-experience report of the impacts.

Results

The reviewed literature used a number of different interventions with the aim of improving CF that align with the planned program identified by Higdon (2022). Higdon identified using a holistic, comprehensive approach to CF interventions, using technology-based interventions, and using bereavement interventions to improve feelings of CF among her target population, oncology staff. In this section, I will focus on the implementation and evaluation method results discussed in the literature.

Identified Interventions

Mindfulness interventions were the most commonly used activity to combat CF (Delaney, 2018; Grabbe et al., 2021; Muir & Keim-Malpass, 2020; Slatyer et al., 2018). Specifically, mindfulness meditation and mindfulness-based stress reduction (MBSR) techniques

were used (Delaney, 2018; Muir & Keim-Malpass, 2020; Slatyer et al., 2018) as well as learning a set of autonomic skills that require tracking their physical sensations and emotions, resourcing, grounding, and gesturing skills (Grabbe et al., 2021). Other studies used group psychotherapy sessions (Janzarik et al., 2022), formal debriefing sessions (Beres et al., 2022), and motivational messages of health promotion and gratitude (Goktas et al., 2022). One study used a formal frontline worker CF prevention intervention with a sample population of emergency nurses (Flarity et al., 2013). This intervention consisted of a four-hour seminar about CF resiliency, adapted from Eric Gentry's *Compassion Fatigue Prevention and Resiliency, Fitness for the Frontline*, using first-hand experience videos, demonstration videos, and a slide show designed to facilitate an interactive lecture, group discussion, and exercises (Flarity et al., 2013). Another study used a multifaceted approach including multiple interventions such as meditation, breaks outdoors, gratitude, and journaling (Copeland, 2021). For this study, participants were randomized into one of the interventions to determine which was more effective in decreasing feelings of CF. The identified interventions among ER staff aligned with the methods and interventions identified in Higdon (2022).

Implementation Methods

Various implementation methods were used in the selected literature. In-person only, virtual, and a combination of delivery methods were employed by researchers. The length of time that the intervention was conducted varied as well from study to study. These delivery methods and the duration of interventions will be discussed in this section.

Delivery Method

A majority of researchers carried out their intervention using only in-person delivery methods (Beres et al., 2022; Delaney, 2018; Flarity et al., 2013; Grabbe et al., 2021; Slatyer et al., 2018), while others used in-person and virtual means of intervention implementation and evaluation (Janzarik et al., 2022; Muir and Keim-Malpass, 2020). Goktas et al. (2022) used only virtual communication for their intervention. The means by which these delivery methods were used also varied. One study incorporated their in-person intervention into daily or weekly work practices such as staff meetings with recordings for others to watch when their schedule allowed (Muir & Keim-Malpass, 2020). However, one study did not specify if initial intervention was conducted in person or virtually (Copeland, 2021).

For the mixed-methods studies, individual, in-person interviews were conducted in one study where five interviews took place (Muir & Keim-Malpass, 2020) while another study used forty-minute in-person focus groups following their intervention asking participants “How did you experience the effects of this pilot training?” (Delaney, 2018, p.8). Two qualitative studies used in-person methods of obtaining data (Berg et al., 2016; Perez Garcia et al., 2020), and two studies used both in-person and virtual meetings to collect qualitative data due to the COVID-19 pandemic safety measures (Clark et al., 2022; Gustafsson & Hemberg, 2022).

Duration

The duration of the interventions varied as well. This included brief, independent 5-minute interventions (Copeland, 2021), scheduled, brief, motivational text messages that nurses were provided with a 5- to 10-minute break to read (Goktas et al., 2022), and a 45-minute monthly presentation and activity within the unit’s staff meeting (Muir & Keim-Malpass, 2021). Other interventions required more time such as twenty formal debriefing sessions with an average length of 14-minutes each over a 12-week period (Beres et al., 2022), a single 3-hour

education class (Grabbe et al., 2021), and a 4-hour interactive group seminar (Flarity et al., 2013). The longest interventions included one with a total of 11.5 hours that included one full day workshop and three weekly sessions at 105 minutes in length (Slatyer et al., 2018), another with eight-weekly group psychotherapy sessions at two hours each, for a total of sixteen hours (Janzarik et al., 2022), and a third with an eight-week mindfulness training intervention with 150-minute sessions per week (Delaney, 2018).

When reviewing the qualitative aspects of the studies, the intervention focused on discussing resilience, compassion fatigue and feelings of burnout following a debriefing intervention (Delaney 2018) and the impact that mindfulness interventions had on their feelings postintervention (Muir & Keim-Malpass, 2020). The qualitative studies did not focus on a specific intervention but did employ discussion regarding burnout symptoms and resilience to determine strengths and weaknesses in coping with CF. Some examples from the qualitative research includes finding positive job aspects (Berg et al., 2016), job satisfaction, workplace engagement (Clark et al., 2022), focusing on self-care (Gustafsson & Hemberg, 2022), and addressing emotional and personal consequences as they occur (Perez-Garcia et al., 2020). This qualitative data was collected using one-on-one interviews and focus groups. Two studies used a similar amount of time with each participant's interview which ranged from 45- to 60-minutes (Clark et al., 2022; Gustafsson & Hemberg, 2022). Two studies used a focus group approach which lasted 90-minutes (Berg et al., 2016; Perez Garcia et al., 2020).

Implementation Issues

A number of challenges were noted in the literature regarding the actual implementation of the wellness interventions. It was difficult for studies with in-person only interventions to accommodate all staff. Nightshift staff were often unable to attend or participate in many of the

interventions as they have to sleep during the day while interventions and presentations were offered, particularly if only offered as in-person interventions. Virtual communication and intervention delivery would promote inclusion of more participants and a more comprehensive response to implementation efforts. Some participants voiced that the online interventions provided a “less intimate” and less connected feeling than performing interventions in person (Muir & Keim-Malpass, 2020). For interventions providing in-person and virtual presentations, there needs to be engagement and participation from all participants and facilitators to improve connectedness within the intervention.

The duration of interventions posed some issues as well. Grabbe et al. (2021) identified difficulty facilitating their three-hour intervention due to participants’ time restraints. This researcher implemented a shorter, condensed version to those expressing limitations in being able to participate due to time. This implementation issue should be considered and restructured to allow all staff to receive the same intervention. Another study reported that implementing their intervention of in-person, structured debriefing, one-year after the pandemic led to low debriefing attendance and low survey completion (Beres et al., 2022). They stated that the pandemic has become a chronic stressor and may have impacted the impression of single debriefing sessions for staff. It is important to clearly state the purpose and procedure of the intervention when recruiting participants for studies. The post-pandemic way of life may impact nursing staff from wanting to participate in in-person interventions as well.

Evaluation Methods

There were many ways to evaluate interventions ranging from pre- and post-intervention surveys, multiple assessments over time, and subjective experiences from participants. The most common evaluation methods used within the selected literature will be discussed in this section.

These include the Professional Quality of Life Scale [ProQOL] (The Centre for Victims of Torture, 2021), the Connor-Davidson Resiliency Scale [CD-RISC] (Connor & Davidson, 2003), and the World Health Organization's [WHO] Well Being Index (1998).

Quantitative

There were a number of evaluation tools available for researchers to use. The most commonly used intervention assessment was the ProQOL questionnaire (Beres et al., 2016; Berg et al., 2016; Copeland, 2021; Delaney, 2018; Flarity et al., 2013; Slatyer et al., 2018). The ProQOL assessment is a 30-item questionnaire addressing CF, burnout, secondary traumatic stress and compassion satisfaction (CS) that uses Likert-style questions with responses ranging from 1 (never) to 5 (very often) (Beres et al., 2016). Burnout and secondary traumatic stress scores comprised a total score for CF and were categorized as low if score less than 22, moderate if between 23 and 41, and high if greater than 42. The ProQOL tool was used as a pre- and post-intervention assessment completed by each participant to determine initial scores and the impact of interventions on CF and CS (Beres et al., 2022; Copeland, 2021; Delaney, 2018; Flarity et al., 2013; Slatyer et al., 2018). These evaluations were administered in-person or completed virtually where applicable. It was also established that the ProQOL is a valid and reliable tool to measure CF and Cronbach alpha scores were provided in each study. For example, Beres et al. (2016) reported a score of 0.78. Copeland (2021) reported three subscale scores for CS (0.89), burnout (0.88), and STS (0.84). Delaney (2018) reported Cronbach alpha scores for each subscale of CS (0.87), burnout (0.72), and secondary traumatic stress (0.80). Flarity et al. (2013) reported a Cronbach alpha score ranging from 0.84 to 0.90 for the three subscales and Slatyer et al. (2018) reported scores of greater than 0.70 for the subscales.

The next most common evaluation tool was the CD-RISC, which is a 25-item questionnaire to evaluate stress, coping skills, and resilience (Delaney, 2018; Grabbe et al., 2021; Janzarik et al., 2022; Slatyer et al., 2018). Using a 5-point scale, each question asks the participants how much they relate or feel towards a statement, with higher scores indicating higher resiliency. In these studies, Cronbach's alpha was greater than 0.70 (Slatyer et al., 2018) and 0.89 (Delaney, 2018). There was no Cronbach's alpha reported for Grabbe et al. (2021) and Janzarik et al. (2022). These questionnaires were completed in person at pre- and post-intervention assessments (Delaney, 2018; Grabbe et al., 2022; Janzarik et al., 2022; Slatyer et al., 2018), at 6-month follow-up (Slatyer et al., 2018) and additionally at 1 week, 3-month, and 1-year post-intervention (Grabbe et al., 2021).

The WHO-5 Well-being Index, a 5-item questionnaire using 6-point Likert scale questions, was used by three studies (Grabbe et al., 2021; Janzarik et al., 2022; Slatyer et al., 2018) to evaluate quality of life based on mood, energy, and interest. This is another well validated and reliable tool with higher scores indicating a greater well-being (Grabbe et al., 2021). Reporting of Cronbach's alpha was varied in this group. Slatyer et al. (2018) identified a Cronbach's alpha greater than 0.70 while Janzarik et al. (2022) and Grabbe et al. (2021) did not report on this calculation.

Other evaluation methods included various valid and reliable tools such as the Compassion Fatigue Scale [Adams et al., 2006] (Goktas et al., 2022), the Neff 26-item Self-compassion Scale [Neff, 2003] (Delaney, 2018), general self-efficacy (SWE), perceived stress (PSS) (Janzarik et al., 2022), and the Secondary Traumatic Stress Scale (STSS) (Grabbe et al., 2021) were used yielding various results. For this literature review, only the most commonly used evaluation methods were analysed.

Qualitative

Qualitative data from each study were recorded during their respective sessions with participants and transcribed verbatim (Berg et al., 2016; Clark et al., 2022; Gustafsson et al., 2022; Perez-Garcia et al., 2020). Perez-Garcia et al. (2020) and Gustafsson and Hemberg (2022) provided detailed accounts of their data analysis process. One study used a three-phase data analysis method, previously designed by Giorgi (1997), used by two researchers ensuring appropriate transcription, coding, grouping of themes (Perez-Garcia et al., 2020) and two studies identified content analysis done by a single researcher with reading content repeatedly to discover meaning units (Clark et al., 2022; Gustafsson & Hemberg, 2022). This detailed analysis process added to the credibility of the study's findings. Berg et al. (2016) had two researchers make notes during their focus group sessions, which were also recorded and transcribed verbatim. The identified themes were clearly written and discussed in each article. The qualitative findings compliment the quantitative findings, with firsthand reports of what fosters resiliency, what causes stress in the workplace, and what interventions help participants cope.

Outcomes Measured

Although the reviewed studies may have used different implementation interventions, methods, and evaluations, there were common outcomes measured. These outcomes included CF, which was made up of compassion satisfaction (CS), burnout, and secondary traumatic stress (STS). Resiliency and well-being were also outcomes measured within these reports. This section will discuss the outcomes of the identified interventions.

Compassion Fatigue

CF encompasses a number of outcomes assessed throughout the literature, namely CS, burnout and STS. Seven studies used CF or an element of CF as a measured outcome.

Compassion Satisfaction

In conducting their four-hour interactive CF resiliency seminar with discussions, videos and exercises, Flarity et al. (2013) reported statistically significant CS improvements in their pre- and post-test analysis ($p = 0.004$). Similarly, Slatyer et al. (2018) conducted a mindful self-care and resiliency full-day workshop with education regarding CF and resilience. Their research did not report statistically significant findings in their CS subscale assessment ($p = 0.060$). Over a longer period of time, Delaney (2018) reported an improvement in CS scores with a pre-intervention score mean of 37.92 and post-intervention mean of 41.00 following their eight-week mindful self-compassion training program. However, Copeland (2021) reported no statistically significant findings in CS following their six-week multi-faceted intervention using four independent intervention groups of meditation, going outside, expressing gratitude, journaling, and a control group.

Burnout and Secondary Traumatic Stress

In addition to CS, burnout and STS are another set of outcomes measured as part of CF. Following their three-hour interactive, in-person Community Resiliency Model session, Grabbe et al. (2021) reported a significant decrease in STS from baseline to one-year ($p = 0.011$) with up to 65% of participants having a decreased score at each post-test assessment with a moderate effect size (Cohen $d = 0.49$). Similarly, Flarity et al. (2013) had a decrease in burnout and STS ($p = 0.001$) for both outcomes after their interactive CF resiliency intervention. Copeland (2021) had a significant improvement in STS in their RCT meditation intervention group ($p = 0.05$) and

an improvement in burnout scores ($p = 0.035$) in their journaling intervention group at post-intervention assessment. Some researchers completed second and third assessments post-intervention. Measuring post-intervention scores six months after program completion, Slatyer et al. (2018) reported a significant improvement in burnout symptoms with their intervention group over time ($p = 0.003$, partial $\eta^2 = 0.04$, small-to-moderate effect size) as well as a significant difference in the pre-and post-intervention scores for burnout in their intervention group ($p < 0.001$, $d = 0.38$, small-to-moderate effect size). Conversely, Beres et al. (2016) reported no significant CF findings in their pre- and post-test design.

Some researchers measured CF using different assessment methods and yielded similar results as those who used the more common assessment scales mentioned previously. Goktas et al. (2022) used CF as an outcome using the Compassion Fatigue Scale (Adams et al., 2006), with higher scores measuring a higher level of CF. Goktas et al. (2022) also reported a significant decrease in their post-intervention CF scores ($p < 0.05$) and significant findings for score measurement and group interactions ($p < 0.05$). There was a significant difference in the pre- and post-test scores for the intervention group versus the control group who had an increase in their CF and burnout scores ($p < 0.001$) leading us to believe that these measures can help participants decrease aspects of burnout and CF if implemented over time.

In the mixed-method studies, Muir and Keim-Malpass (2020) measured burnout symptoms using the Maslach Burnout Inventory (Maslach et al., 1996) and reported a decrease in emotional exhaustion ($p = 0.01$) and an increase in personal accomplishment ($p = 0.01$) among RNs that participated in their monthly formal mindfulness training sessions. Participants included RNs and had a significant increase in personal accomplishment ($p = 0.01$) and a significant decrease in emotional exhaustion ($p = 0.03$). The other mixed method study review

was by Delaney (2018). Following their eight-week self-compassion and mindfulness sessions, they reported a negative correlation between self-compassion and burnout ($r = -.55$, $p = 0.05$), and STS ($r = -.62$, $p = 0.02$) respectively. In relation to mindfulness and burnout ($r = -.60$, $p = 0.03$) and STS ($r = -.54$, $p = 0.05$).

Resiliency

One of the mitigating factors for CF is resiliency. In this literature review, four studies used resiliency as a measured outcome. Delaney (2018) reported a significant positive correlation of resiliency with mindfulness ($r = +0.66$, $p = 0.01$) following their mindful self-compassion training sessions held over eight weeks. However, while no statistically significant differences were found in pre- and post-test scores in the RCT by Janzarik et al. (2022), the authors did report significant group effects in resiliency in the follow-up period at three-, six-, and nine-month assessments ($p = 0.04$). Unfortunately, Grabbe et al. (2021) reported no statistically significant change in resiliency scores over one-year from baseline ($p = 0.222$) following their three-hour in-person, interactive community resilience model training session and Slatyer et al. (2018) had no significant changes reported in resiliency or resiliency over time with their intervention.

Well-Being

Another outcome measurement included in a number of studies was the overall well-being assessment. Three studies in this literature review used wellbeing as an outcome measurement (Grabbe et al., 2021; Janzarik et al., 2022; Slatyer et al., 2018). Grabbe et al. (2021) reported an increase in well-being at 1-year follow up ($p = 0.056$) with each post-test reporting small to moderate improvements (Cohen $d = 0.22 - 0.32$) following their three-hour

resiliency training session. Janzarik et al. (2022), who conducted eight weekly, two-hour cognitive behavioural education sessions, had a significant difference in well-being in their follow-up assessments at three-, six-, and nine-months ($p = 0.004$), but not at their pre-and post-test assessment. Slatyer et al. (2018) reported comparison differences in the intervention group with pre-and post-test results ($p < 0.001$, $d = 0.54$, moderate effect size) and at follow-up ($p < 0.033$, $d = 0.39$, small-to-moderate effect size). These findings indicate a statistically significant difference in the intervention's effect on the participants from pre- to post-intervention and on their follow up assessment.

Qualitative Themes

In the mixed-method studies, the themes identified included prioritization distress, change fatigue, self-protection through superficiality, intentional response, community, chaos (Muir & Keim-Malpass, 2020) and positive mental states (Delaney, 2018). Muir and Keim-Malpass (2020) focused their qualitative research on describing burnout as it is experienced by emergency department staff, including RNs. Delaney (2018) posits that the lived experience of participants in the study found improved positive mental states from the interventions employed within the research, namely a mindful self-compassion training program.

In the qualitative study designs, similar themes were echoed including trauma experienced results in stress triggers (Berg et al., 2016), frustration occurring as a result of not being able to alleviate patient suffering (Perez-Garcia et al., 2020), CF is being experienced as exhausting from a professional RN and personal perspective (Gustafsson & Hemberg, 2022), and moral distress is leading to workplace disengagement (Clark et al., 2022). Themes that contributed to positive outcomes include identifying the personal consequences one feels when CF is experienced (Perez-Garcia et al., 2020), CF experiences are providing the nurse with an

opportunity for growth and learning as a human being (Gustafsson & Hemberg, 2022), the experience of one's resilience building the longer one practices (hopefully decreasing the impact that CF has on nurses) (Clark et al., 2022), and group and independent coping mechanisms being available to improve feelings of CF (Berg et al., 2016). These themes provide reassurance to nursing staff experiencing CF, direction for individual nurses seeking ways to help themselves, and implications for future research to dive deeper into the lived experiences of nurses with CF.

Conclusion

CF is a potential and actual issue for emergency nurses. Brief, effective strategies are required to impact feelings of burnout and STS. While the overall quality of the literature was medium, there is ample information to aid in identifying possible implementation and evaluation methods that can be employed to determine the effectiveness of a wellness program, such as the one developed by Higdon (2022). Interventions identified that could provide the best results include mindfulness and self-care presentations, resiliency programs, virtual messages and debriefing opportunities (Beres et al., 2022; Copeland, 2021; Delaney, 2018; Flarity et al., 2013; Goktas et al., 2022; Grabbe et al., 2021; Janzarik et al., 2022; Slatyer et al., 2018).

Implementation strategies should aim to include nurses on both day and night shift with virtual presentations and assessments being used while still offering in-person sessions. This serves a dual purpose to facilitate learning in all delivery methods, thus reaching a larger audience, and to not exclude staff who may not want to experience in-person education sessions in a post-pandemic world. The identified implementation strategies align with Higdon's (2022) wellness resource. In order to determine effectiveness, evaluation methods should include valid and reliable self-administered questionnaires such as ProQOL, CD-RISC, or WHO-5 to assess outcomes of CF, resilience, and well-being. Using these interventions, implementation and

evaluation methods will allow the opportunity to address the levels of CF experienced by emergency nurses.

References

- Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry*, 76 (1), 103 – 108. <https://doi.org/10.1037/0002-9432.76.1.103>
- Beres, K. E., Zajac, L. M., Mason, H., Krenke, K. & Costa, D. K. (2022). Addressing compassion fatigue in trauma emergency and intensive care settings: A pilot study. *Journal of Trauma Nursing*, 29(4), 210 – 217. <https://doi.org/10.1097/JTN.0000000000000663>
- Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R. & Lippoldt, D. (2016). Exposing compassion fatigue and burnout syndrome in a trauma team: A qualitative study. *Journal of Trauma Nursing*, 23(1), 3 – 10. <https://doi.org/10.1097/JTN.0000000000000172>
- The Centre for Victims of Torture (2021). *ProQOL*. <https://www.proqol.org/>
- Clark, P., Hulse, B., & Polivka, B. J. (2022). Resilience, moral distress, and job satisfaction driving engagement in emergency department nurses. *The Journal of Nursing Administration*, 52(2), 112 – 117. <https://doi.org/10.1097/NNA.0000000000001111>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76 – 82. <https://doi.org/10.1002/da.10113>
- Copeland, D. (2021). Brief workplace interventions addressing burnout, compassion fatigue, and teamwork: A pilot study. *Western Journal of Nursing Research*, 43(2), 130 – 137. <https://doi.org/10.1177/0193945920938048>

Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (msc) training program on nurses' compassion fatigue and resilience. *PLOS ONE*, *13*(11), e0207261–e0207261.

<https://doi.org/10.1371/journal.pone.0207261>

Dhollande, S., Taylor, A., Meyer, S., & Scott, M. (2021). Conducting integrative reviews: a guide for novice researchers. *Journal of Research in Nursing*, *26*(5), 427 – 438.

<https://doi.org/10.1177/1744987121997907>

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal*, *35*(3), 247 – 258.

<https://doi.org/10.1097/TME.0b013e31829b726f>

Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, *28*(2), 235 – 260. <https://doi.org/10.1163/156916297X00103>

Goktas, S., Gezginici, E., & Kartal, H. (2022). The effects of motivational messages sent to emergency nurses during the COVID-19 pandemic on job satisfaction, compassion fatigue, and communication skills: A randomized controlled trial. *Journal of Emergency Nursing*, *48*(5), 547 – 558. <https://doi.org/10.1016/j.jen.2022.06.001>

Gonzalo, A. (2022). *Dorothea Orem: Self-care deficit theory*. Nurselabs.

https://nurseslabs.com/dorothea-orems-self-care-theory/#theory_of_self-care_deficit

Grabbe, L., Higgins, M. K., Baird, M., & Pfeiffer, K. M. (2021). Impact of a resiliency training to support the mental well-being of front-line workers. *Medical Care*, 59(7), 616 – 621.

<https://doi.org/10.1097/MLR.0000000000001535>

Gustafsson, T. & Hemberg, J. (2022). Compassion fatigue as bruises in the soul: A qualitative study on nurses. *Nursing Ethics*, 29(1), 157 – 170.

<https://doi.org/10.1177/09697330211003215>

Hartweg, D. (1991). *Dorothea Orem: Self-Care Deficit Theory (Vol. 4)*. SAGE Publications, Incorporated. <https://doi.org/10.4135/9781483325842>

Higdon, L. (2022). *Development of a wellness resource to strengthen resilience the oncology health care team*. Memorial University of Newfoundland.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/uk1f0m/alma992687355602511

Janzarik, G., Wollschlager, D., Wessa, M. & Lieb, K. (2022). A group intervention to promote resilience in nursing professionals: A randomized controlled trial. *International Journal of Environmental Research and Public Health*, 19, 1 – 18.

<https://doi.org/10.3390/ijerph19020649>

Joanna Briggs Institute (2017). *JBI critical appraisal checklist for qualitative research*.

https://jbi.global/sites/default/files/2019-05/JBI_Critical_Appraisal-Checklist_for_Qualitative_Research2017_0.pdf

Lopez, J., Bindler, R. J., & Lee, J. (2022). Cross-sectional analysis of burnout, secondary traumatic stress, and compassion satisfaction among emergency nurses in southern

- California working through the COVID-19 pandemic. *Journal of Emergency Nursing*, 48(4), 366-375. <https://doi.org/10.1016/j.jen.2022.03.008>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory: Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- https://www.researchgate.net/profile/Christina-Maslach/publication/277816643_The_Maslach_Burnout_Inventory_Manual/links/5574dbd708aeb6d8c01946d7/The-Maslach-Burnout-Inventory-Manual.pdf
- Muir, K. J. & Keim-Malpass, J. (2020). The emergency resiliency initiative: A pilot mindfulness intervention program. *Journal of Holistic Nursing*, 38(2), 205 – 220.
- <https://doi.org/10.1177/0898010119874971>
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223 – 250. <https://doi.org/10.1080/15298860309027>
- O’Callaghan, E. L., Lam, L., Cant, R., & Moss, C. (2020). Compassion satisfaction and compassion fatigue in Australian emergency nurses: A descriptive cross-sectional study. *International Emergency Nursing*, 48, 100785–.
- <https://doi.org/10.1016/j.ienj.2019.06.008>
- Pérez-García, E., Ortega-Galán, Á. M., Ibáñez-Masero, O., Ramos-Pichardo, J. D., Fernández-Leyva, A., & Ruiz-Fernández, M. D. (2021). Qualitative study on the causes and consequences of compassion fatigue from the perspective of nurses. *International Journal of Mental Health Nursing*, 30, 469 – 478. <https://doi.org/10.1111/inm.12807>

Phillips, K., Knowlton, M., & Riseden, J. (2022). Emergency department nursing burnout and resilience. *Advanced Emergency Nursing Journal*, 44(1), 54 – 62.

<https://doi.org/10.1097/TME.0000000000000391>

Public Health Agency of Canada (2014). *Infection prevention and control guidelines critical appraisal toolkit*. https://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-119-2014-eng.pdf

Registered Nurses' Association of Ontario (2022). *Nursing Through Crisis: A Comparative Perspective*. May 12. <https://rnao.ca/sites/default/files/2022-05/Nursing%20Through%20Crisis%20-%20A%20Comparative%20Analysis%202022.pdf>

Ruiz-Fernández, M. D., Ramos-Pichardo, J. D., Ibañez-Masero, O., Sánchez-Ruiz, M. J., Fernández-Leyva, A., & Ortega-Galán, Á. M. (2021). Perceived health, perceived social support and professional quality of life in hospital emergency nurses. *International Emergency Nursing*, 59, 101079–. <https://doi.org/10.1016/j.ienj.2021.101079>

Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the US. *JAMA Network Open*, 4(2), e2036469–. <https://doi.org/10.1001/jamanetworkopen.2020.36469>

Slatyer, S., Craigie, M., Heritage, B., Davis, S. & Rees, C. (2018). Evaluating the effectiveness of a brief mindful self-care and resiliency (mscr) intervention for nurses: A controlled trial. *Mindfulness*, 9, 534 – 546. <https://doi.org/10.1007/s12671-017-0795-x>

Statistics Canada (2020, October 22). Primary healthcare providers, 2019.

<https://www150.statcan.gc.ca/n1/pub/82-625-x/2020001/article/00004-eng.htm>

- Toronto, C. & Remington, R. (Eds.). (2020). *A step-by-step guide to conducting an integrative review* (1st ed.). Springer International Publishing AG. <https://doi.org/10.1007/978-3-030-37504-1>
- Wentzel, D & Brysiewicz, P. (2014). The consequence of caring too much: Compassion fatigue and the trauma nurse. *Trauma Notebook*, 40(1), 95 – 97. <https://doi.org/10.1016/j.jen.2013.10.009>
- Whittemore, R. & Knafl, K. (2005). The integrative review: updated methodology. *Journal of Advanced Nursing*, 52(5), 546 – 553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>
- Wong, C. L., Young, B., Lui, B. S. C., Leung, A. W. Y., So, J. L. T. (2022). Professional quality of life and resilience in emergency department healthcare professionals during COVID-19 in Hong Kong: A cross-sectional study. *Hong Kong Journal of Emergency Medicine*, 29(3), 168 – 176. <https://doi.org/10.1177/10249079211049128>
- World Health Organization (1998, February 12 -13). Wellbeing measures in primary health care/the depcare project. https://www.euro.who.int/__data/assets/pdf_file/0016/130750/E60246.pdf

Appendix A: Literature Summary Table

Key Question: What implementation and evaluation methods are most appropriate in determining compassion fatigue intervention effectiveness?

Legend: V&R – validity and reliability; ProQOL – professional quality of life; AHRQ – agency for healthcare research and quality; CS – compassion satisfaction; STS – secondary traumatic stress; BO – burnout; GHQ – general health questionnaire; MIMI – Mainz Inventory of Microstressors; CF – compassion fatigue; MBI – Maslach’s Burnout Inventory; BRS – Brief Resilience Scale; CD-RISC – Connor Davidson Resilience Scale; WHO-5 – subjective wellbeing; SWE – general self-efficacy; RSES – self-esteem; SWLS – satisfaction with life scale; ERSQ-27 – emotional regulation skills; PSS – perceived stress; UCBA – uncontrolled before and after; STSS – Secondary Traumatic Stress Scale; SSS – Somatic Symptom Scale; DAS-21 – Depression, Anxiety, and Stress Scale; SCS-SF – Self-Compassion Scale Short Form

Study/Design	Methods	Key Results	Comments
<p><u>Authors:</u> Copeland (2021)</p> <p><u>Design:</u> RCT</p> <p><u>Purpose:</u> To determine the feasibility and effectiveness of five short daily interventions on burnout, compassion fatigue, and teamwork perceptions</p>	<p>N: 20 nurses working at a suburban, level 1 trauma center</p> <p><u>Country/setting:</u> Colorado, USA in a suburban trauma hospital</p> <p>Complete one brief five-minute intervention daily for six weeks following randomization into groups; Meditation (4 participants), outside (5 participants), gratitude (5 participants), journaling (4 participants), or control group (2 participants).</p> <p><u>Data collection:</u> Pre- and post-intervention at six weeks</p> <ul style="list-style-type: none"> • ProQOL (established V&R; 30-item questionnaire using 5-point Likert questions) • AHRQ Teamwork Perceptions Questionnaire (good V&R; questionnaire using five-point Likert scales, reversely scored where lower scores indicated higher acceptance of the situation) <p>Outcomes:</p> <ol style="list-style-type: none"> 1. Compassion satisfaction 2. Secondary Traumatic Stress 3. Burnout 4. Situation monitoring 5. Mutual support 6. Communication 	<p>p value = 0.05 is significant Mean (SD)</p> <ol style="list-style-type: none"> 2. Secondary traumatic stress <ul style="list-style-type: none"> • Meditation group pre 26.3 (7.3), post 21 (6.7) $p = 0.05$ 3. Burnout <ul style="list-style-type: none"> • Journal group pre 25.25 (4.6), post 22.25 (3.2), $p = 0.035$ 4. Situation monitoring <ul style="list-style-type: none"> • Outside group pre 14.8 (3), post 13 (2.3), $p = 0.053$ 6. Communication <ul style="list-style-type: none"> • Journal group pre 8.5 (0.58), post 6.25 (1.7), $p = 0.037$ <p>ProQOL items (CS, STS, BO) significantly correlated with each other. AHRQ items (situation monitoring, mutual support, and communication) significantly correlated with each other. BO and CS were significantly correlated with mutual support.</p>	<p><u>Strength of Design:</u> Strong</p> <p><u>Quality:</u> Medium</p> <p>Strengths: Positive subjective feedback from participants</p> <p>Issues: Small sample size Possible selection bias as participants self-referred and may be more acceptable to change Sample homogeneity as all participants female and from a single hospital Possible response bias as self-reporting of intervention completion used</p>

<p><u>Authors:</u> Muir & Keim-Malpass (2020)</p> <p><u>Design:</u> Mixed methods; UCBA and individual interviews</p> <p><u>Purpose:</u> To determine feasibility and effectiveness of resiliency training on ED nurses</p>	<p><u>N:</u> 26 RNs, 9 patient care technicians (PCTs)</p> <p><u>Country/setting:</u> One ED at an urban level 1 trauma centre in Virginia</p> <p>Emergency Resiliency Initiative (ERI) consists of 5-minute grounding practice on breathing, a forty-minute session on the topic of the month, formal mindfulness meditation, and compassion practice.</p> <p><u>Data collection:</u> Measurements pre, post, and follow up 1 to 3 months after intervention (used with qualitative participants only)</p> <p>MBI Human Services Survey for Medical Personnel (established V&R; 22-item survey reporting frequency of BO symptoms)</p> <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1. Emotional exhaustion (EE) 2. Depersonalization (DP) 3. Personal accomplishment (PA) <p>Qualitative in-person interviews</p>	<p>Means; P <0.05</p> <p>Pre-test means for RNs & PCTs</p> <ol style="list-style-type: none"> 1. EE RNs 2.81, PCTs 1.91; P = 0.03 2. DP RNs 2.73, PCTs 1.33; P < 0.01 3. PA RNs 4.61, PCTs 5.01; P = 0.17 <p>Posttest means for RNs & PCTs had nonsignificant results for all 3 outcomes</p> <p>Mean difference (MD) from pre- and posttest for RNs and PCTs (standard deviation); p value</p> <ol style="list-style-type: none"> 1. EE RNs: MD 0.49 (0.81), p = 0.01(significant decrease) 2. DP RNs nonsignificant difference 3. PA RNs: MD 0.33 (0.48), p = 0.01 <p>*PCTs had nonsignificant differences in all outcomes</p> <p>Combined Post Intervention</p> <ol style="list-style-type: none"> 1. EE 0.36 (0.76), p = 0.03 2. DP nonsignificant difference 3. PA 0.26 (0.44), p = 0.01 <p>Qualitative results</p> <p>Five themes: prioritization distress, change fatigue, self-protection through superficiality, intentional response, and community amid chaos</p>	<p><u>Strength of Design:</u> Weak</p> <p><u>Quality:</u> Medium</p> <p>Issues:</p> <ul style="list-style-type: none"> • 26 out of 35 participants attended minimum of two of three sessions and pre- and posttest surveys • Self-referred into study poses risk of selection bias • Different delivery modes used, unable to confirm participation throughout intervention • Sample from a single ED. Unable to generalize findings
---	--	---	--

Study/Design	Methods	Key Results	Comments
<p><u>Authors:</u> Janzarik et al. (2022)</p> <p><u>Design:</u> RCT</p> <p><u>Purpose:</u> To determine if participation in an eight-week psychotherapy intervention program will improve RN mental health outcomes</p>	<p>N: 72 RNs in a medical centre</p> <p>Country/setting: Urban Medical Centre in Germany</p> <p><u>Intervention Group:</u> 38 RNs participated in the eight-week psychotherapy intervention, lasting two hours every week</p> <p><u>Control Group:</u> 34 RNs on a waitlist group</p> <p><u>Data collection:</u> Pretest one week before intervention, posttest one week after, follow up at three, six, and nine months.</p> <p>GHQ-28 (4-point Likert-style questions; good V&R), MIMI (58 items about microstressors x one week, V&R not discussed), BRS, CC-RISC, WHO-5, SWE, RSES, SWLS, ERSQ-27, PSS, Brief-COPE</p> <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1. Mental Health 2. Wellbeing 3. Resilience 4. Satisfaction with Life 5. Perceived Stress 6. Self-Esteem 7. Self-Efficacy 8. Emotional regulation 9. Active Coping 10. Positive Reframing 11. Stressor Load 	<p>Pre-Test Mean (SD), Posttest Mean (SD) & ANCOVA</p> <ol style="list-style-type: none"> 1. Mental Health IG: 20.79 (9.85), 15.81 (7.13) CG: 20.68 (8.48), 20.03 (10.69) t = -2.25 p = 0.03 n2 = 0.08 4. Satisfaction with Life IG:24.21 (5.28), 26.71 (4.49) CG: 24.94 (5.06), 25.15 (4.90) t = 2.05, p = 0.05, n2 = 0.07 8. Emotion regulation IG: 78.16 (12.22), 83.55 (13.42) CG: 74.86 (12.83), 72.70 (14.80) t = 3.13, p = 0.003, n2 = 0.14 9. Resilience IG:70.40 (11.84), 73.36 (12.38) CG: 69.88 (11.85), 69.33 (12.35) t = 2.36, p = 0.02, n2 = 0.08 10. Active coping IG: 5.18 (1.47), 5.84 (1.46) CG: 5.35 (1.37), 4.94 (1.46) t = 2.94, p = 0.01, n2 = 0.12 <p>Group differences of follow up period from t0 to t4 (p-value):</p> <ol style="list-style-type: none"> 1. Mental health (0.01) 2. Wellbeing (0.004) 4. Satisfaction with life (0.07) 8. Emotional regulation (0.02) 9. Resilience (0.04) 10.Active Coping (0.01) 11. Positive reframing (0.01) 	<p><u>Strength of Design:</u> Strong</p> <p><u>Quality:</u> Medium</p> <p>Issues:</p> <ul style="list-style-type: none"> • Sample recruited from one medical centre • T4 unable to be completed in control group due to COVID-19 pandemic and safety • Use of self-assessment questionnaires may lend to response bias

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Grabbe et al. (2021)</p> <p><u>Design:</u> UCBA</p> <p><u>Purpose:</u> To determine what effect the Community Resiliency Model (CRM) have on frontline workers' wellbeing</p>	<p>N: 104 front-line workers (including nurses) at an urban facility</p> <p>Country/setting: Healthcare facility in Southeastern USA</p> <p>A majority of participants received a 3-hour in-person, interactive session on CRM including psycho education on physical responses to trauma and stress. A small number of participants completed a condensed version due to time-constraints</p> <p><u>Data collection:</u> Prior to intervention, 1-week post intervention, 3 months after and 1 year after intervention. WHO-5 (wellbeing), CD-RISC (resiliency), STSS (secondary trauma), SSS-8 (somatic symptoms); well-known V&R for all tools</p> <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1. Well-being 2. Resiliency 3. Secondary traumatic stress 4. Somatic symptoms 	<p>Baseline & 1-year assessments mean (SD), p value</p> <p>1. Well-being 47.0 (17.7) & 57.2 (18.3), p = 0.056</p> <ul style="list-style-type: none"> • More than 50% of participants report higher scores at each posttest • Small to moderate effect size (Cohen d 0.22 – 0.32) for 1-week and 3-month assessments <p>2. Resiliency Not statistically significant</p> <p>3. Secondary Traumatic Stress 39.1 (11.3) & 34.6 (10.1), p = 0.011</p> <ul style="list-style-type: none"> • 52.7% - 65% reported lower scores at each posttest • moderate effect size (Cohen d = 0.49) seen at 1 week post intervention <p>4. Somatic symptoms 8.4 (6.1) & 6.3 (5.0), p = 0.048</p> <ul style="list-style-type: none"> • 37% - 61.7% reported improvement at each posttest • Largest improvement from baseline to 1-week (Cohen d = 0.39) 	<p><u>Strength of Design:</u> Weak</p> <p><u>Quality:</u> Medium</p> <p><u>Strengths:</u></p> <ul style="list-style-type: none"> • Sessions led by certified trainers <p><u>Issues:</u></p> <ul style="list-style-type: none"> • Intervention comprised of 3-hour session on CRM and condensed version due to time constraints • Possible that intervention integrity compromised due to condensed version • Simple statistics used

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Flarity et al. (2013)</p> <p><u>Design:</u> Pre- and posttest</p> <p><u>Purpose:</u> To determine the effectiveness of “Compassion Fatigue Resiliency” seminar on emergency nurses</p>	<p>N: 73 ED RNs</p> <p>Country/setting: 2 EDs in Colorado Springs, Colorado, USA</p> <p>4-hour interactive seminar with other ED RNs, “Compassion Fatigue Resiliency”, including videos and interactive lectures, group discussion, exercises, and multimedia resources.</p> <p><u>Data collection:</u> ProQOL (Version 5)</p> <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1. Compassion satisfaction 2. Burnout 3. Secondary traumatic stress 	<p>Pre-test/Posttest Mean (SD), p-value (Wilcoxon signed-rank)</p> <p>1. Compassion satisfaction Pre-test 40.3 (5.6) Posttest 42.2 (4.6)</p> <ul style="list-style-type: none"> • p-value = 0.004 <p>Improved compassion satisfaction</p> <p>2. Burnout Pre-test 23.9 (5.1) Posttest 20 (3.3)</p> <ul style="list-style-type: none"> • p-value < 0.001 <p>Decreased feelings of burnout</p> <p>3. Secondary traumatic stress Pre-test 23.5 (5.3) Posttest 21.4 (4.6)</p> <ul style="list-style-type: none"> • p-value = 0.001 <p>Decrease in secondary traumatic stress symptoms</p>	<p><u>Strength of Design:</u> Weak</p> <p><u>Quality:</u> Medium</p> <p>Strengths:</p> <ul style="list-style-type: none"> • Good response rate of approximately 80% <p>Issues:</p> <ul style="list-style-type: none"> • Convenience sampling used • Self-selection may pose risk of selection or response bias • Simple statistical analysis used • Length of time between intervention and follow up assessment

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Berg et al (2016)</p> <p><u>Design:</u> Phenomenological qualitative methodology</p> <p><u>Purpose:</u> To learn about experience of the trauma team regarding compassion fatigue and burnout</p>	<p>N: 12 members of a trauma team (6 RNs)</p> <p>Country/setting: Midwestern Level 1 trauma centre in USA</p> <p><u>Data Collection:</u></p> <ul style="list-style-type: none"> • Focus groups used • 1.5 hours in length • Facilitated by a trained lead • Used scripted questions about compassion satisfaction, compassion fatigue, STS, and self-care. • Sessions were audio recorded transcribed to derive themes. <p><u>Data Analysis:</u></p> <ul style="list-style-type: none"> • 2 researchers took notes during the session • Audio taped and transcribed • Notes and transcripts were independently reviewed by 2 researcher team members and themes identified • Any disparities were addressed using a mutual consensus 	<p>Qualitative findings:</p> <ol style="list-style-type: none"> 1. Positive aspects of job <ul style="list-style-type: none"> • “Saving lives” and “making a difference” • Pride in their team, excitement from their job 2. Stress triggers <ul style="list-style-type: none"> • Witnessing abuse of old and young people, traumatic events considered triggers 3. Stress symptoms <ul style="list-style-type: none"> • Nightmares, flashbulb memories of disturbing situations and second-guessing clinical decisions 4. Coping with stress <ul style="list-style-type: none"> • Group or independent coping strategies 	<p><u>Appraisal:</u> Include study</p> <p><u>Credibility:</u> Moderate</p> <p>Trustworthiness: Dependability, Transferability, Authenticity met</p> <ul style="list-style-type: none"> • Trained facilitators lead focus groups • Audit trail, audio recordings and transcription completed with triangulation • Coding process briefly discussed <p>Issues:</p> <ul style="list-style-type: none"> • No locating of researchers culturally • No confirming evidence noted

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Slayter et al. (2018)</p> <p><u>Design:</u> NRCT</p> <p><u>Purpose:</u> To determine the effectiveness of a brief mindful self-care and resiliency intervention on nurses</p>	<p>N: 91 RNs working in a tertiary care hospital</p> <p><u>Country/setting:</u> Busy teaching hospital in Australia</p> <p><u>Intervention Group 1:</u> 19 RNs received a full day in service of 4 sessions at 1.5 hours each (2 on CF and resiliency and 2 on mindfulness concepts and practice). 3 follow up sessions (1.75 hours each) weekly.</p> <p><u>Intervention Group 2/ Control Group 1:</u> 15 RNs placed in a waitlist control group with 8 new participants (23 total)</p> <p><u>Intervention 3/Control Group 2:</u> 10 RNs on waitlist control group with 13 new participants (23 total)</p> <p>Note: Waitlist control group carried out within same study</p> <p><u>Data collection:</u> pre-intervention, post-intervention, and 6 months post follow up</p> <p>ProQOL5, Depression, Anxiety and Stress Scale (DAS21), General Self-Efficacy Scale (GSES), Self-Compassion Scale-short form (SCS-SF), WHO Well-being Index (WHO Five)</p> <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1. Burnout 2. Compassion satisfaction 3. Secondary Traumatic Stress 4. Self-Compassion 5. Well-being 6. Resiliency 7. Self-efficacy 8. Stress 9. Anxiety 10. Depression 	<p>Generalize linear mixed model used for intervention, time and interaction, p-value and partial n2.</p> <ol style="list-style-type: none"> 1. Burnout <ul style="list-style-type: none"> • Intervention x time F (1, 205) = 9.14, p = 0.003 <p>Partial n2 = 0.04 (small-to-moderate effect size)</p> <p>Improved BO scores</p> <ol style="list-style-type: none"> 3. STS <ul style="list-style-type: none"> • Time F (2, 205) = 8.06, p < 0.001 <p>Partial n2 = 0.04 (small-to-moderate effect size)</p> <p>Lower STS scores at follow up</p> <ol style="list-style-type: none"> 4. Self-Compassion <ul style="list-style-type: none"> • Time F (2, 205) = 3.70, p = 0.026 <p>Partial n2 = 0.02 (small effect size)</p> <p>Increased SC scores at follow up</p> <ol style="list-style-type: none"> 10. Depression <ul style="list-style-type: none"> • Intervention x time F (1, 205) = 7.74, p = 0.007 <p>Partial n2 = 0.04 (small-to-moderate effect size) Improved depression scores at follow up</p>	<p><u>Strength of Design:</u> Strong <u>Quality:</u> Medium</p> <p>Strengths:</p> <ul style="list-style-type: none"> • 2 waitlist control groups received the intervention by the end of the study • Risk of type II errors addressed <p>Issues:</p> <ul style="list-style-type: none"> • Convenience sampling used • Does not specify randomization within the study

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Perez-Garcia et al. (2021)</p> <p><u>Design:</u> Hermeneutic phenomenological qualitative design</p> <p><u>Purpose:</u> To understand nurses' experience of patient suffering</p>	<p>N: 43 informants</p> <p>Country/setting: Andalusia, Spain</p> <p>43 informants participated in 5 focus group sessions with 2 researchers, 1 leading the group and 1 recording observations.</p> <p><u>Data collection:</u> Sessions recorded and transcribed verbatim from each focus group session by two researchers. Transcription reading occurred to extract units of meaning from the information. Group meetings were conducted where meaning and transcripts were reviewed to determine themes in the material.</p>	<p>Causes of CF:</p> <ul style="list-style-type: none"> • Frustration over not being able to alleviate the suffering of patients - "I am frustrated that I cannot ease all the suffering that [patients] have because it's not only physical suffering, but also emotional, spiritual suffering" (p. 473) • Differences between professionals • Daily contact with seriously ill patients, dying patients, and death <p>Consequences of CF:</p> <ul style="list-style-type: none"> • Difficulties in job performance - "I have experienced that [type of] exhaustion when the patient leaves and you say 'My God, I can't take it anymore' and then another one comes through the door and you are crushed due to everything you've [just] given" • Emotional and personal consequences - There are cases and situations that you take [home] with you, and that makes you feel sad" (p.474) • The need for a transfer or the desire to quit the profession - "you keep building it up and there came a time when, without knowing why, I was going to work in primary care, but I [knew] I needed to leave" (p.474) 	<p><u>Appraisal:</u> Include</p> <p><u>Credibility:</u> High</p> <p>Trustworthiness: Dependability, Transferability, Authenticity met</p> <p>Strengths:</p> <ul style="list-style-type: none"> • Transcribed data analyzed appropriately • Methodology and design aligned with goal and interpretation of results <p>Issues:</p> <ul style="list-style-type: none"> • No declaration by the researcher on their influence of the research

Study/Design	Method	Key Results	Comments
<p><u>Authors:</u> Gustafsson & Hemberg (2022)</p> <p><u>Design:</u> Phenomenological qualitative</p> <p><u>Purpose:</u> Investigate compassion fatigue as experience by nurses and its effect on them personally and professionally</p>	<p>N: 7 nurses working in different contexts (emergency, pediatrics, medicine, surgery, occupational health, and psychiatry)</p> <p>Country/setting: Southern Finland</p> <p>Semi structured interviews conducted both in-person and by videoconference (due to the start of the COVID-19 pandemic)</p> <p><u>Data collection:</u> All interviews were recorded and transcribed verbatim. Content analysis used, repeat readings of the data conducted until meaning units were retrieved. Information then condensed, coded, and placed in categories for themes from the data.</p>	<ol style="list-style-type: none"> 1. Compassion as an empathetic gift and compassion fatigue as a result of compassion overload 2. Compassion fatigue as exhausting the nurse as a professional and private person 3. Compassion fatigue as a crisis with potentially valuable insights 4. Compassion fatigue can be handled by selfcare and focus on self 5. Compassion fatigue is affected by life itself and multifaceted factors 	<p><u>Appraisal:</u> Include</p> <p><u>Credibility:</u> High</p> <p>Trustworthiness: Dependability, Transferability, Authenticity met</p> <p>Strengths:</p> <ul style="list-style-type: none"> • Ethical approval granted • Appropriate interpretation of the results <p>Issues:</p> <ul style="list-style-type: none"> • Researchers do not comment on their influence on the research • Only female participants

Appendix B

Implementation and Evaluation of a Wellness Resource on Resiliency for Emergency

Nurses in a Rural Newfoundland Site: Consultation Report

Emergency nursing is a specialty that often sees a high turnover of unpredictable patient presentations, lacks control of their work environment, and frequently bears witness to the pain and trauma that others must endure. Higdon (2022) developed a wellness program for oncology nurses to improve resiliency among staff as there are high instances of compassion fatigue and burnout in this population. Emergency nurses are also experiencing moderate to high levels of burnout and require interventions to decrease the effects of compassion fatigue (Lopez et al., 2022; Muir & Keim-Malpass, 2020; Ruiz-Fernandez et al., 2021). Many interventions identified in the literature include holistic approaches (Copeland, 2021; Delaney, 2018; Grabbe et al., 2021; Gustafsson & Hemberg, 2022; Muir & Keim-Malpass, 2020; Perez-Garcia et al., 2021; Slatyer et al., 2018), technology-based interventions (Flarity et al., 2013; Goktas et al., 2022; Janzanik et al., 2022), and bereavement interventions such as debriefing (Beres et al., 2022; Berg et al., 2016; Clark et al., 2022). I plan to modify (as needed), implement and evaluate Higdon's (2022) program to determine its effectiveness among emergency nurses in a rural emergency department (ED) with the aim of reducing nurses' experiences of compassion fatigue and burnout.

Purpose of Consultations

The overall goal of the consultations was to gain insight into the existing knowledge regarding compassion fatigue, determine attitudes towards interventions, identify knowledge gaps, and gather demographic information about the target population. By identifying key stakeholders and consulting with them, I am able to provide a collaboratively based, comprehensive wellness project for the nursing staff at Placentia Health Centre (PHC) ED. A short survey was administered to staff in PHC ED while concurrently conducting one-on-one interviews with the division manager for the ED, clinical educator for the ED, and two nursing staff members. An additional consultation was held with Leslie Higdon, the creator of the

wellness resource.

Objectives for the consultations include:

1. Determine relevant and appropriate key stakeholders from nursing and management with whom I will discuss project implementation and evaluation planning.
2. Incorporate key stakeholders in the consultation process to determine their understanding of compassion fatigue and burnout.
3. Complete brief questionnaires by nursing staff within the PHC ED asking about their current knowledge regarding compassion fatigue, to determine if they believe it is a problem at PHC, and to gain insight into potential implementation problems and solutions.
4. Conduct short, formal interviews with representatives from the identified key stakeholders to gather information to be used in project implementation and evaluation planning.

Setting and Sample

Setting

The setting for this program is the PHC ED, a rural facility with unique aspects to their composition. In addition to the six-bed emergency room, there is an attached medicine unit, outpatient department, and a 75-bed long term care facility. There is an RN assigned to ER, an RN assigned to medicine and an LPN assigned for part of the day shift. The LPN is often assigned within the medicine department but assists in the ED when critical incidents occur or extra help is needed. This unique staffing compliment requires the two RNs to relieve each other

for breaks and assist with various nursing care when needed. Due to ongoing resource shortages, a neighbouring ED has been temporarily closed and nursing staff have been displaced to PHC ED at this time. These individuals are working a similar schedule in PHC ED as they did at their previous site with rotating days and nights as well as alternating weekends.

Sample

At PHC ED, there are 10 full-time RNs, 1 part-time RN, 1 casual RN, who returned from retirement, and 2 part-time LPNs who are employed for the medicine unit but frequently assist with responsibilities in the ED. Each member of our nursing staff leads a busy life, many with numerous responsibilities at home. Many also live in the surrounding communities they serve.

Data Collection

Two forms of data collection were used for the purpose of these consultations: surveys and one-on-one interviews.

Surveys

I developed surveys to be distributed to nursing staff at PHC ED. The Chair of the Non-Clinical Trials Committee of the Human Research Ethics Authority (HREA) for Newfoundland and Labrador was contacted for guidance with respect to ethics submission. It was determined that, with the nature of the project and the screening that took place, there was no need for ethics approval at this time. No identifying information will be included or requested in the surveys. Staff members will be given two weeks to complete the surveys via the Qualtrics software and results were automatically accessible by me. The needs assessment survey is included in Appendix A.

Interviews

Four one-on-one interviews were completed. This consisted of a meeting with the division manager, clinical educator, and two members of the nursing staff working on opposing sides of the schedule. Interview questions used to guide discussion are included in Appendix B. An additional meeting was conducted with the author of the wellness resource to gain insight into her experience and aims for the wellness resource. Interview questions that were used for the interview with Ms. Higdon are included in Appendix C. Once permission was provided by the consultant, each interview was either audio or video recorded, and notes were taken throughout.

Data Analysis

Surveys

Data collected from surveys will be analyzed using the Qualtrics program. Any qualitative data will be reviewed by me for context. This data will be developed into a narrative summary.

Interviews

Each semi-structured interview was either video or voice-recorded with the participants permission and notes were taken for the purposes of synthesizing data from consultants, identifying important ideas, and to return to an idea as the interview progressed. During each interview, I would repeat back direct quotes to the participant and summarize points they had made before moving onto the next question to ensure their thoughts and opinions were appropriately captured. Content analysis was performed on the consultant's answers. I used an article by Doody and Noonan (2013) to guide my semi-structured interviews to ensure appropriate completion of these consultant interviews. My consultant interview questions had to

be approved by my supervisor prior to using them, but if clarification or further information was required, I was able to inquire at the appropriate time throughout the interview. This flexibility allowed me to explore important topics or points as they presented throughout the interviews (Doody & Noonan, 2013).

Results

The results of consultation interviews will be discussed in this section. A needs assessment survey will be administered in January 2023.

Survey

The consultation questionnaire was sent to all emergency nursing staff in the ED. A complete list of findings can be found in Appendix B Consultation Questionnaire Results. Out of a possible 12 responses, nine surveys were completed, providing a 75% response rate. There were a total of eight registered nurses and one licenced practical nurse. A majority of the respondents were full time employees, approximately 78%, with almost 56% reporting 20+ years working as a nurse in any area and 67% reporting 11 to 20 years emergency nursing experience. 89% of respondents reported experiencing feelings of burnout with 33% reporting these symptoms multiple days per week and another 33% reporting feeling symptoms daily. 100% of the respondents were agreeable to participate in a short education session regarding compassion fatigue, resiliency, and ways to improve these factors. When asked what time of day would an education session be most beneficial to suit your schedule, respondents mostly said either morning (25%) or afternoon (33%) and a majority identified a combination of techniques were a preferred method of education session delivery, including virtual, in-person, and scheduled sessions. Every respondent cited no time and an increasingly busy workplace as barriers to self-

care while at work. When asked what solutions could be in place to help ED nurses initiate self-care at work, the responses varied and often included adequate managing of the work load, ensuring adequate staff, and a supportive work environment.

Interviews

Four semi-structured interviews were conducted with key stakeholders, a division manager, a clinical nurse educator, and two registered nurses, one from each side of the schedule. Questions were provided to each stakeholder prior to the interviews to offer context for the interview. These questions are included in Appendix B. The questions focused on exploring how compassion fatigue is experienced within the ED nurses. In asking these, I wanted to determine if the consultants viewed the identified interventions in the project as being potentially helpful, what barriers they felt prevented nurses from participating in self-care at work, how frequent wellness activities should be held at PHC ED, and suggestions to improve self-care participation in the workplace.

Compassion Fatigue at PHC ED

It was made clear in the interviews that compassion fatigue is a prevalent issue within the nursing staff at PHC ED. Every consultant agreed that feelings of burnout and compassion fatigue are being experienced and it varies from individual to individual. Workplace concerns such as increased workplace demands, not receiving rest or nutrition breaks during their shift, increased frustration, and not having enough resources available to do the job the way each consultant would like were clearly noted. One consultant stated, “it’s like I’m in a brain fog”, while another reported having a sense of failure related to feeling compassion fatigue. Consultants stated that there is an increase in the use of sick time at work and in occurrence

reports relating to poor judgement, where a nurse's actions or reactions resulted in near misses or incidents in which patient care has been impacted. One consultant stated, "working in the emergency department, you have no control over the situations that present to you." This increases the nurse's anxiety when they are already feeling stressed or overwhelmed. Another comment that there was "an alarming rate at which staff are using sick leave, using EFAP, and leaving the nursing profession altogether". The data from consultants confirms that compassion fatigue is felt by nursing staff within the PHC ED.

Appropriate Interventions for ED Nurses

All consultants agreed that the identified interventions of a self-care education session, mindfulness training, and debriefing opportunities were applicable and appropriate interventions for PHC ED nurses. The following provides their opinions regarding these activities.

Self-Care Education Sessions. One consultant reported trying different activities in the past, but they (the activities) ended up being another required task in a long list of work responsibilities. They suggested having quick, accessible interventions for workers as a solution. It was a common theme that self-care activities need to be accepted, supported, and promoted by management as well. The workplace culture and health authority need to support employees in attending self-care education sessions, provide coverage during shifts to participate in education, and offer education sessions more frequently to promote self-care in the workplace.

Mindfulness Training. One consultant noted how "mindfulness training would be beneficial for ED nurses as it keeps you in the moment, which is necessary for the work done in the ED." Another agreed that mindfulness training is an appropriate tool and a way for nurses to

learn how to help themselves when they feel overwhelmed. Overall, the response from the consultants was positive towards the use of mindfulness training.

Debriefing Opportunities. Working in a rural emergency room, nurses develop relationships with the patients presenting more frequently that they know within the community and often experience grief when they decline or pass on. This experience was echoed in the responses of consultants, stating “you look after the same patient for months, maybe years, and when they pass, especially if it’s in our ED, it’s like you don’t get the opportunity to grieve. It’s onto the next patient”. This is an important aspect to consider when evaluating the need for debriefing within the department. Consultants reported that debriefing opportunities are not offered enough to ED staff at present and it would be “beneficial for everyone to feel heard” following critical incidents or traumatic ED presentations.

Important Aspects of a Wellness Resource

The most common theme from the four interviews was that the most important aspects of education should include self-awareness of burnout and compassion fatigue and recognizing these issues within oneself. Important comments included “if you don’t know you’re burnt out, how do you know to help yourself?”, “knowing it’s okay to provide self-care is important” and “it’s not a bad thing to look after yourself.” Nursing staff need to know where to reach out for help and administration has to ensure that resources are readily available, easily accessible, and available in various formats to accommodate different learning styles and to provide people with the opportunity to learn.

Barriers to Self-Care

The most common barrier identified throughout the interviews was “there is just not enough *time*.” One individual stated, “There is not enough time to eat during our shift, so I don’t have time for self-care.” Consultants noted that while lunch and learn education sessions used to be an effective method to reaching staff for learning opportunities, with the present issue of not having a guaranteed lunch break anymore, it is very difficult to incorporate learning into the shift. Another comment was that there was no *motivation* for self-care at work. There is a lack of motivation among nurses to improve themselves at work as it was reported to be a “constant struggle just to get through your shift”. The organizational culture surrounding compassion fatigue and self-care activities needs to improve and be promoted in each workspace. In addition, there is a lack of awareness of symptoms of compassion fatigue and what resources are available to help. This must be addressed first.

Frequency of Wellness Activities

When asked how frequent wellness activities should be offered or completed, the answers varied. Education sessions could be completed formally during staff orientations, and it was suggested that sessions could be offered anywhere between once per month to annually as part of the emergency program education policy. It was also suggested that mindfulness training could be provided once every couple of months. This could be coupled with frequent reminders in the workplace to encourage staff to use their mindfulness techniques throughout their shifts. All consultants noted that debriefing should be completed on an as needed basis.

Engaging Staff to Improve Self-Care Participation

All consultants interviewed were asked as to what are some opportunities they would like to see made available in the workplace to improve self-care participation. The responses were

similar and motivated by a performance and reward system. One consultant stated “it is nice to receive a reward for things” and suggested even a free coffee or a draw for a small monetary Tim Horton’s card would improve participation. It was believed that small attainable tasks with a possible reward would help participation rates. Another consultant suggested booking an extra staff member on an education day to ensure appropriate relief could be provided to units to allow as many staff as possible the opportunity to take in some of the education sessions offered. Making sessions available from home is helpful in promoting participation. Efforts to increase participation in self-care and education sessions would require support from the organization and upper management, particularly if overtime was required to provide relief coverage for staff to attend sessions. Another suggestion included incorporating education sessions, mindfulness training, and debriefing opportunities into a mandatory requirement once or twice a year.

Notes from the Creator of the Wellness Resource

The creator of the wellness resource agreed to an interview to gain insight into her experience developing the wellness resource. She stated the resource is being used in “bits and pieces” in her place of work. She offered the education session and mindfulness training to a couple related areas in the hospital and formal debriefing is managed by the Peer Support Coordinator. While she did not pursue any formal feedback at this time, informal feedback from staff seemed positive with statements like “it is a great start.” She was clear that her resource was meant for everyone in her workplace, but it was difficult to reach all staff members due some working nights and others having to continue working while education sessions were offered due to patient acuity or needs within each unit. She noted that there is a responsibility on both the staff and the organization to provide and use the resources to reduce compassion fatigue

symptoms. Clear and timely communication is key to supporting staff to participate in education sessions.

When asked, the creator stated it is hard to know how often the resource should be offered or completed; she stated, “definitely on an as needed basis” and “an annual education session wouldn’t hurt.” An education session and information pamphlet could be used as part of an orientation package for new graduates or those new to the workplace. For implementation, the use of quick, easy, simple, and approachable interventions is necessary. The PowerPoint the creator developed for the education session can be included in presentations to different departments to tie in with planned education days or, for example, “Bell Let’s Talk” day (a national media campaign to raise awareness of mental health and illness and to collect donations to fund mental health initiatives). The PowerPoint created was meant to be light and comedic, helping staff feel more comfortable talking about the subject in a group setting. Opening up the dialogue around compassion fatigue and self-care is key to improving the organizational culture. Mindfulness training can be done at any time or place and can be incorporated into staff meetings.

Conclusion

The consultants interviewed for this project highlights some important aspects of implementation within the PHC ED. Overall, implementation strategies should be quick, simple, and easy to include during busy shifts. The greatest barrier to participating in self-care and education sessions for nurses in the clinical area is a lack of time while at work. The suggestions made by these consultants, including a division manager, clinical educator, and staff nurses, will be incorporated into the implementation and evaluation plan for this practicum project.

References:

- Beres, K. E., Zajac, L. M., Mason, H., Krenke, K. & Costa, D. K. (2022). Addressing compassion fatigue in trauma emergency and intensive care settings: A pilot study. *Journal of Trauma Nursing*, 29(4), 210 – 217.
<https://doi.org/10.1097/JTN.0000000000000663>
- Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R. & Lippoldt, D. (2016). Exposing compassion fatigue and burnout syndrome in a trauma team: A qualitative study. *Journal of Trauma Nursing*, 23(1), 3 – 10. <https://doi.org/10.1097/JTN.0000000000000172>
- Clark, P., Hulse, B., & Polivka, B. J. (2022). Resilience, moral distress, and job satisfaction driving engagement in emergency department nurses. *The Journal of Nursing Administration*, 52(2), 112 – 117. <https://doi.org/10.1097/NNA.0000000000001111>
- Copeland, D. (2021). Brief workplace interventions addressing burnout, compassion fatigue, and teamwork: A pilot study. *Western Journal of Nursing Research*, 43(2), 130 – 137.
<https://doi.org/10.1177/0193945920938048>
- Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (msc) training program on nurses' compassion fatigue and resilience. *PLOS ONE*, 13(11), e0207261-e0207261.
<https://doi.org/10.1371/journal.pone.0207261>
- Doody, O. & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5), 28-32. <https://doi.org/10.7748/nr2013.05.20.5.28.e327>
- Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced*

Emergency Nursing Journal, 35(3), 247 – 258.

<https://doi.org/10.1097/TME.0b013e31829b726f>

Goktas, S., Gezginci, E., & Kartal, H. (2022). The effects of motivational messages sent to emergency nurses during the COVID-19 pandemic on job satisfaction, compassion fatigue, and communication skills: A randomized controlled trial. *Journal of Emergency Nursing*, 48(5), 547 – 558. <https://doi.org/10.1016/j.jen.2022.06.001>

Grabbe, L., Higgins, M. K., Baird, M., & Pfeiffer, K. M. (2021). Impact of a resiliency training to support the mental well-being of front-line workers. *Medical Care*, 59(7), 616 – 621. <https://doi.org/10.1097/MLR.0000000000001535>

Gustafsson, T. & Hemberg, J. (2022). Compassion fatigue as bruises in the soul: A qualitative study on nurses. *Nursing Ethics*, 29(1), 157 – 170. <https://doi.org/10.1177/09697330211003215>

Higdon, L. (2022). *Development of a wellness resource to strengthen resilience the oncology health care team*. Memorial University of Newfoundland. https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/uk1f0m/alma992687355602511

Janzarik, G., Wollschlager, D., Wessa, M. & Lieb, K. (2022). A group intervention to promote resilience in nursing professionals: A randomized controlled trial. *International Journal of Environmental Research and Public Health*, 19, 1 – 18. <https://doi.org/10.3390/ijerph19020649>

Lopez, J., Bindler, R. J., & Lee, J. (2022). Cross-sectional analysis of burnout, secondary traumatic stress, and compassion satisfaction among emergency nurses in southern

- California working through the COVID-19 pandemic. *Journal of Emergency Nursing*, 48(4), 366-375. <https://doi.org/10.1016/j.jen.2022.03.008>
- Muir, K. J. & Keim-Malpass, J. (2020). The emergency resiliency initiative: A pilot mindfulness intervention program. *Journal of Holistic Nursing*, 38(2), 20 – 220. <https://doi.org/10.1177/0898010119874971>
- Pérez-García, E., Ortega-Galán, Á. M., Ibáñez-Masero, O., Ramos-Pichardo, J. D., Fernández-Leyva, A., & Ruiz-Fernández, M. D. (2021). Qualitative study on the causes and consequences of compassion fatigue from the perspective of nurses. *International Journal of Mental Health Nursing*, 30, 469 – 478. <https://doi.org/10.1111/inm.12807>
- Ruiz-Fernández, M. D., Ramos-Pichardo, J. D., Ibáñez-Masero, O., Sánchez-Ruiz, M. J., Fernández-Leyva, A., & Ortega-Galán, Á. M. (2021). Perceived health, perceived social support and professional quality of life in hospital emergency nurses. *International Emergency Nursing*, 59, 101079-. <https://doi.org/10.1016/j.ienj.2021.101079>
- Slatyer, S., Craigie, M., Heritage, B., Davis, S. & Rees, C. (2018). Evaluating the effectiveness of a brief mindful self-care and resiliency (mscr) intervention for nurses: a controlled trial. *Mindfulness*, 9, 534 – 546. <https://doi.org/10.1007/s12671-017-0795-x>

Appendix A: Needs Assessment Survey for Nursing Staff at PHC ED

Dear nursing staff member of PHC Emergency Department,

My name is Vanessa Griffiths and I am completing a practicum project as a requirement of my master's degree in the science of nursing (MScN) at Memorial University of Newfoundland. I am interested in implementing and evaluating a wellness resource to improve resiliency among PHC emergency nurses. The goal of this questionnaire to gather demographic information and to gain insight into the feelings and experiences of the PHC Emergency Department staff regarding compassion fatigue, burnout, and resiliency.

This questionnaire will take approximately 5 to 10 minutes to complete. It consists of objective and subjective questions. You can decline to answer certain questions or withdraw participation at any time. All answers will remain confidential. Information collected through this endeavor will be locked in a secure location with no identifiers associated with responses (i.e., your name will not be used or associated with any of the information you provide). This questionnaire can be completed electronically and submitted via email to f76vag@mun.ca or it can be printed, completed, and put in a sealed envelop addressed to Vanessa Griffiths in the RN mailbox in the ED.

Thank you for your cooperation in this project.

Vanessa Griffiths

Registered Nurse, Placentia Health Centre

PHC Emergency Nursing Staff Questionnaire

1. What is your discipline?

RN _____ LPN _____ Other (Please specify: _____)

2. How many years have you been practicing nursing?

_____ 1 - 5

_____ 6 - 10

_____ 11-15

_____ 16 – 20

_____ 20 +

3. How many years have you practiced emergency nursing?

_____ 1 – 5

_____ 6 – 10

_____ 11 – 15

_____ 16 – 20

_____ 20 +

4. Do you currently experience feelings of burnout (symptoms include hopelessness, agitation, anxiety, reduced empathy, overwhelmed, difficulty sleeping, and/or other physical symptoms such as headaches, nausea, or dizziness)?

Yes _____ No _____

Comments:

5. How frequently do you experience the symptoms listed above?

- Less than monthly
- Monthly
- Weekly
- Multiple days per week
- Daily
- Multiple times per day

Comments:

6. Are you aware of any wellness resources in

- a. Your workplace? Yes No
- b. Your community? Yes No
- c. Other Yes No

7. Have you used any wellness resources in the past?

Yes No

Comments:

8. Would you be willing to participate in a 30-to-60-minute education session regarding compassion fatigue and methods to prevent or alleviate symptoms associated with compassion fatigue?

Yes No

9. What time of education session would work best for your work schedule?

- Morning
- Lunch
- Afternoon
- Evening
- Other (Please specify: _____)

10. What is the best way for you to receive this information?

- Virtual
- In-person
- Scheduled live sessions
- Independent learning opportunities
- Combination of techniques (Please specify: _____)

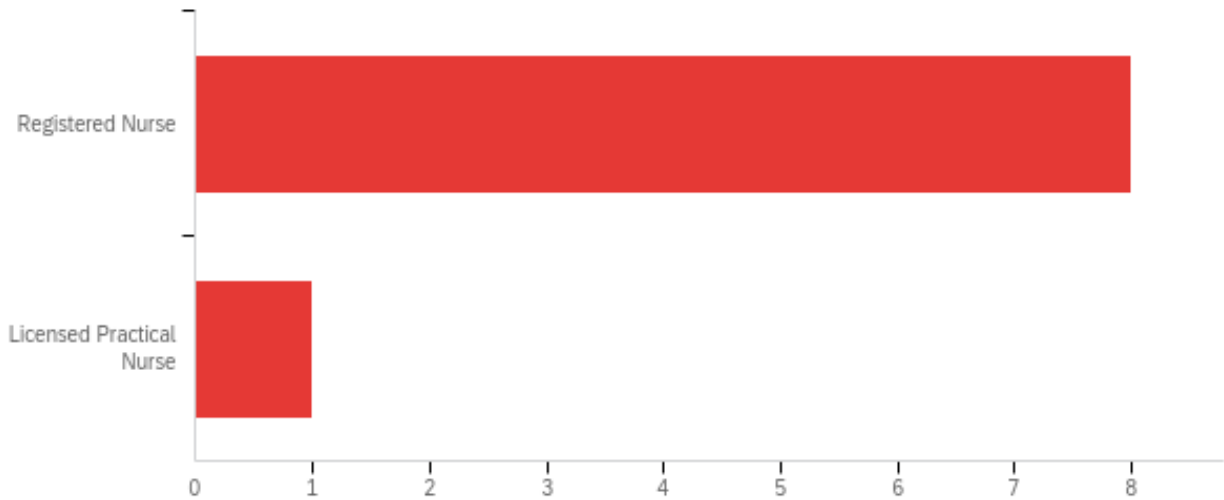
11. What are some barriers you feel prevent nursing staff from effectively protecting their mental and physical well-being while at work?

12. What are some ways to overcome barriers to nursing staff protecting their mental and physical well-being while at work?

Thank you for taking time to complete this questionnaire.

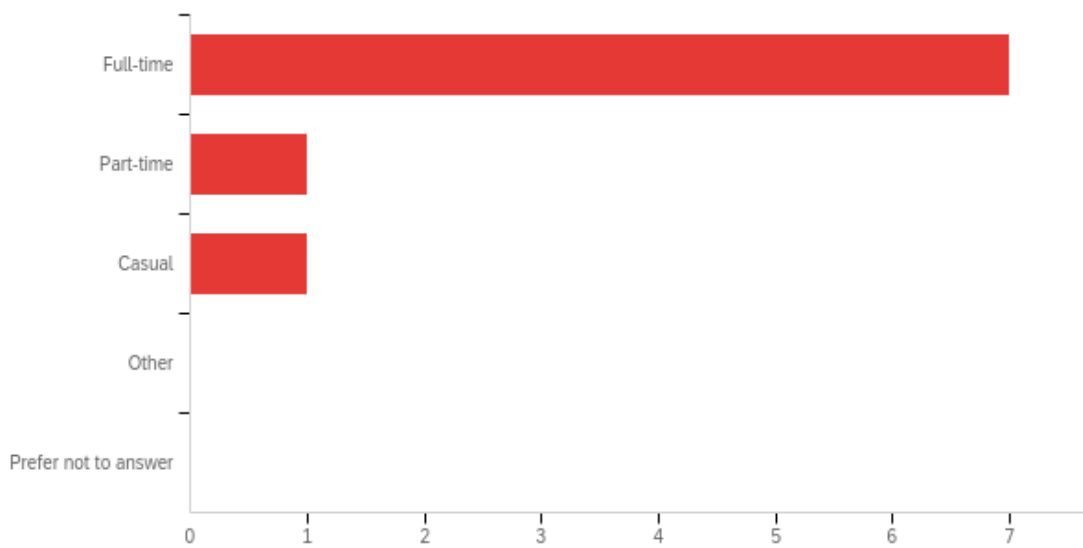
Appendix B: Consultation Questionnaire Results (Jan 11 – Jan 25, 2023)
Compassion Fatigue & Resilience Assessment
 March 21st 2023, 6:21 pm MDT

Q8 - What is your discipline?



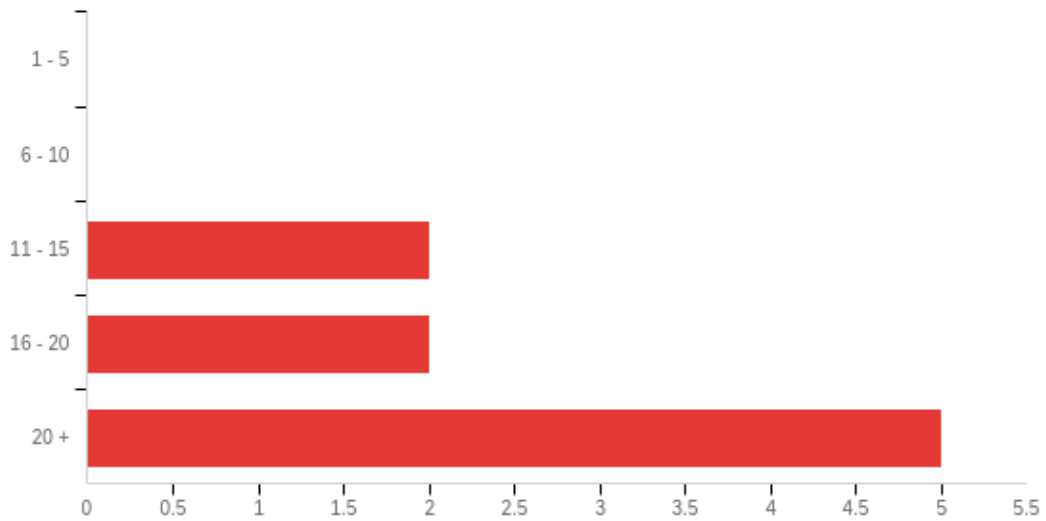
#	Answer	%	Count
1	Registered Nurse	88.89%	8
2	Licensed Practical Nurse	11.11%	1
	Total	100%	9

Q9 - What is your current employment status?



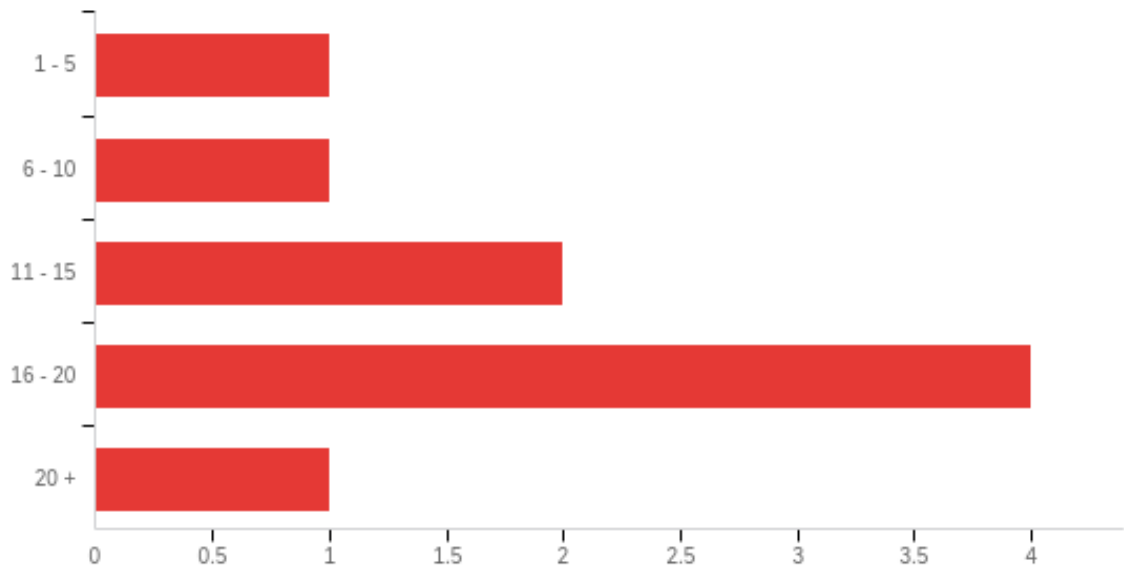
#	Answer	%	Count
1	Full-time	77.78%	7
2	Part-time	11.11%	1
3	Casual	11.11%	1
4	Other	0.00%	0
5	Prefer not to answer	0.00%	0
	Total	100%	9

Q10 - How many years have you been practicing nursing?



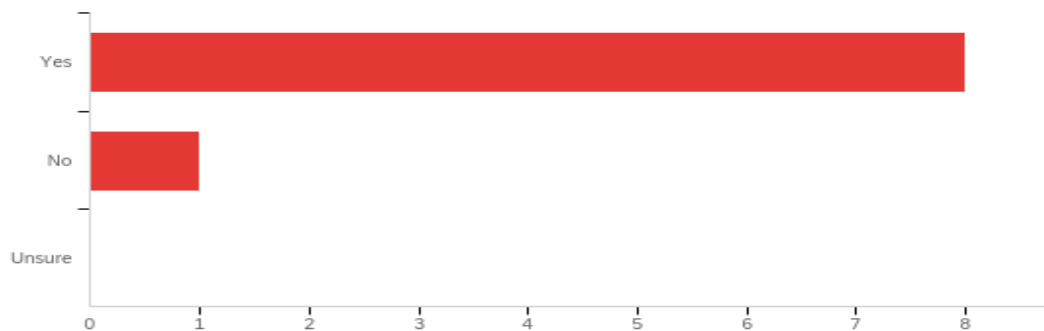
	Answer	%	Count
1	1 - 5	0.00%	0
2	6 - 10	0.00%	0
3	11 - 15	22.22%	2
4	16 - 20	22.22%	2
5	20 +	55.56%	5
	Total	100%	9

Q11 - How many years have you been practicing emergency nursing?



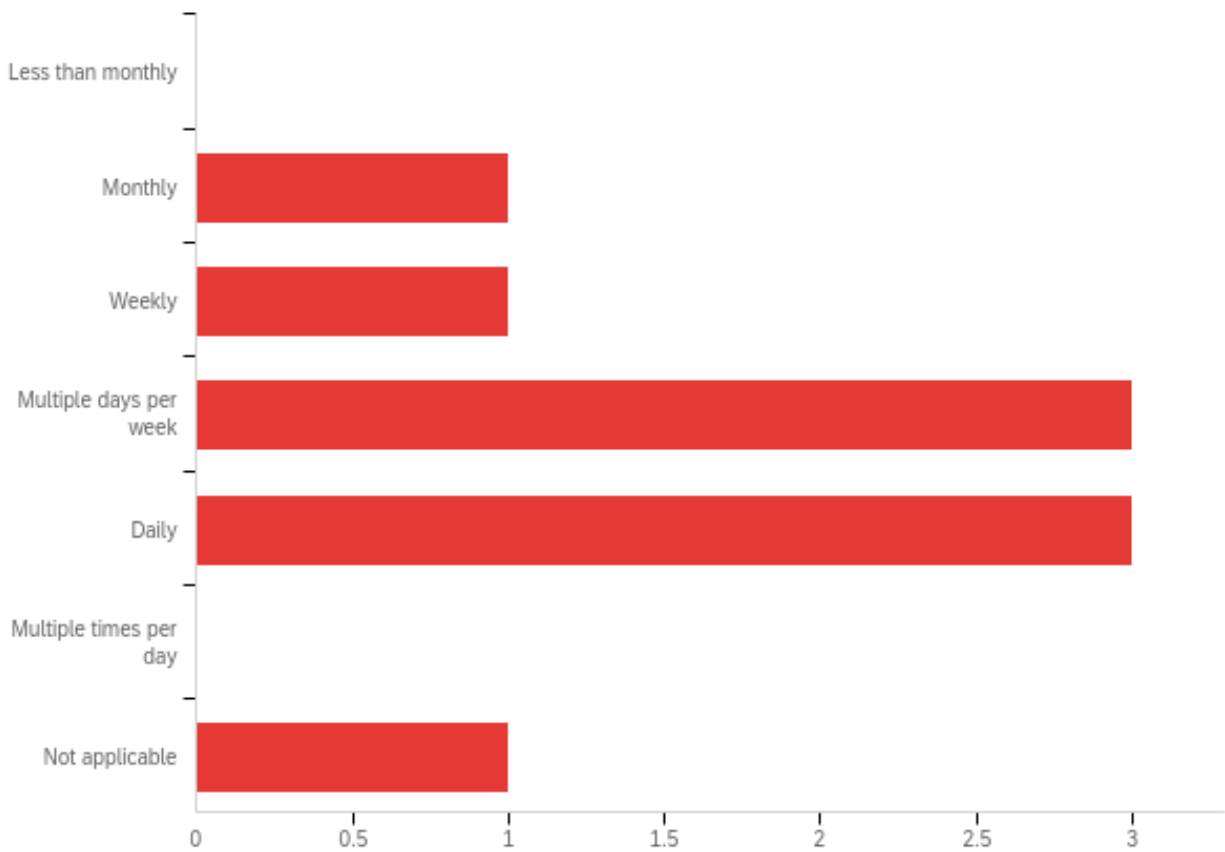
#	Answer	%	Count
1	1 - 5	11.11%	1
2	6 - 10	11.11%	1
3	11 - 15	22.22%	2
4	16 - 20	44.44%	4
5	20 +	11.11%	1
	Total	100%	9

Q12 - Do you currently experience feelings of burnout (symptoms include hopelessness, agitation, anxiety, reduced empathy, overwhelmed, difficulty sleeping, and/or other physical symptoms such as headaches, nausea, or dizziness)?



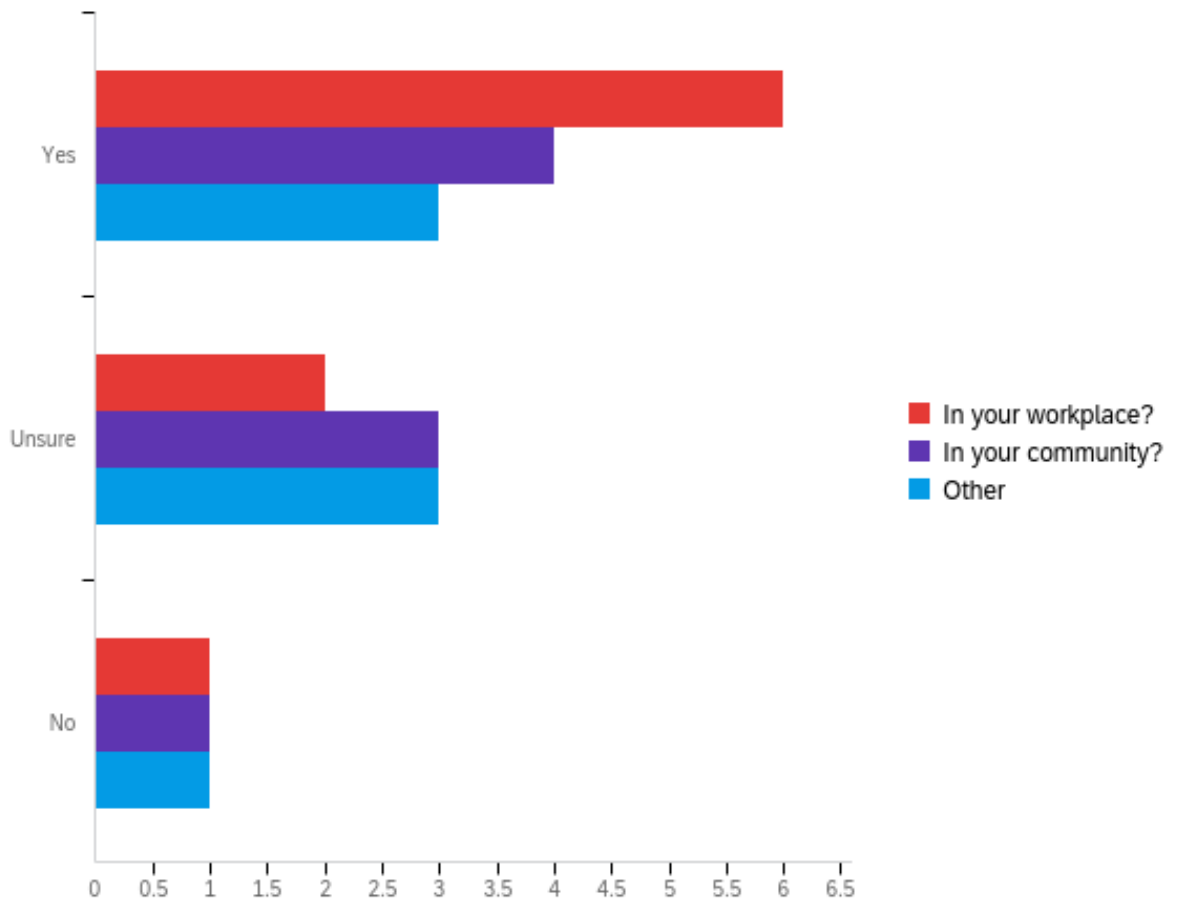
#	Answer	%	Count
1	Yes	88.89%	8
2	No	11.11%	1
3	Unsure	0.00%	0
	Total	100%	9

Q13 - How frequently do you experience the symptoms listed above?



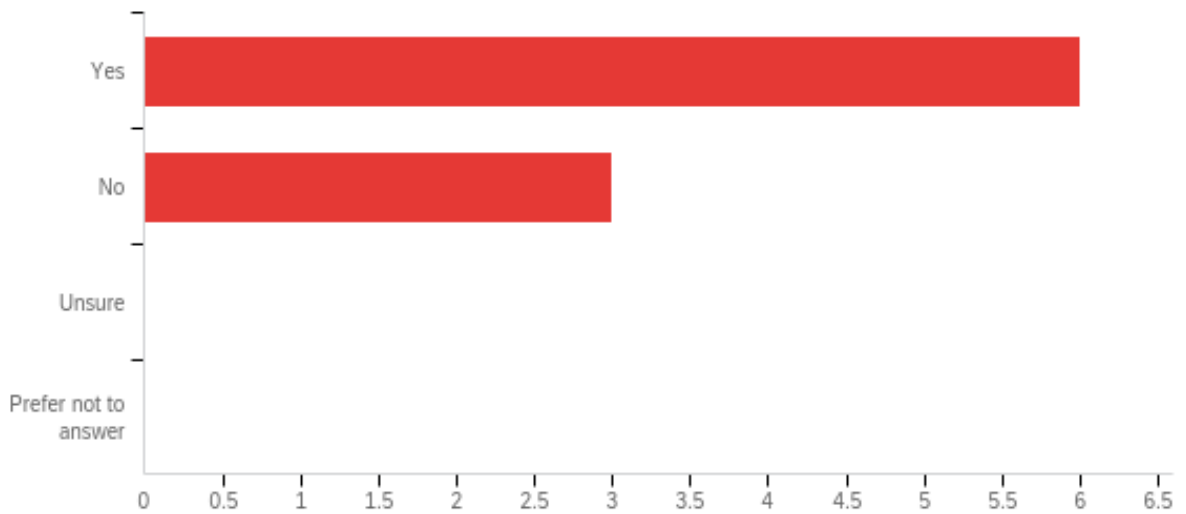
#	Answer	%	Count
1	Less than monthly	0.00%	0
2	Monthly	11.11%	1
3	Weekly	11.11%	1
4	Multiple days per week	33.33%	3
5	Daily	33.33%	3
6	Multiple times per day	0.00%	0
7	Not applicable	11.11%	1
	Total	100%	9

Q14 - Are you aware of any wellness resources in the following areas?



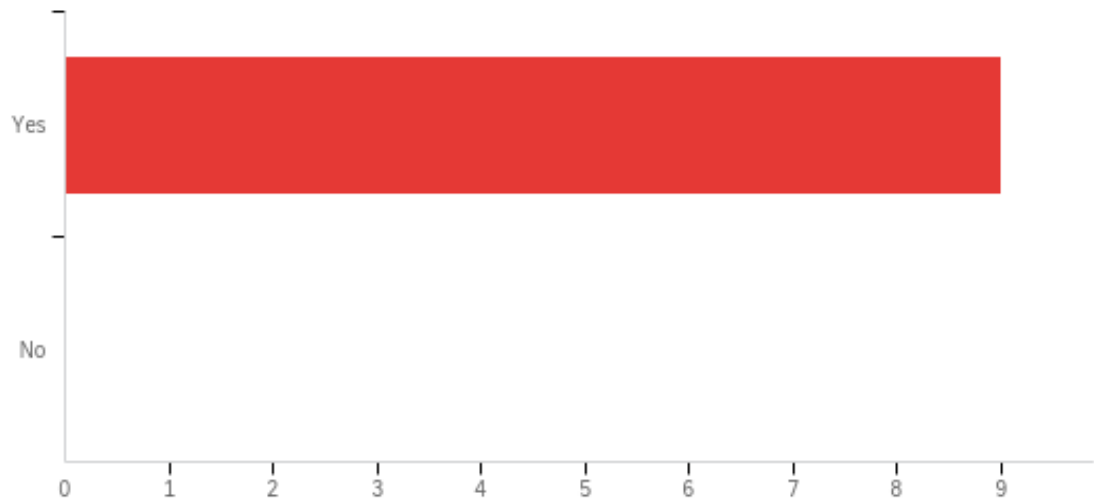
#	Question	Yes	Unsure	No	Total
1	In your workplace?	66.67% 6	22.22% 2	11.11% 1	9
2	In your community?	50.00% 4	37.50% 3	12.50% 1	8
3	Other	42.86% 3	42.86% 3	14.29% 1	7

Q15 - Have you used any wellness resources in the past?



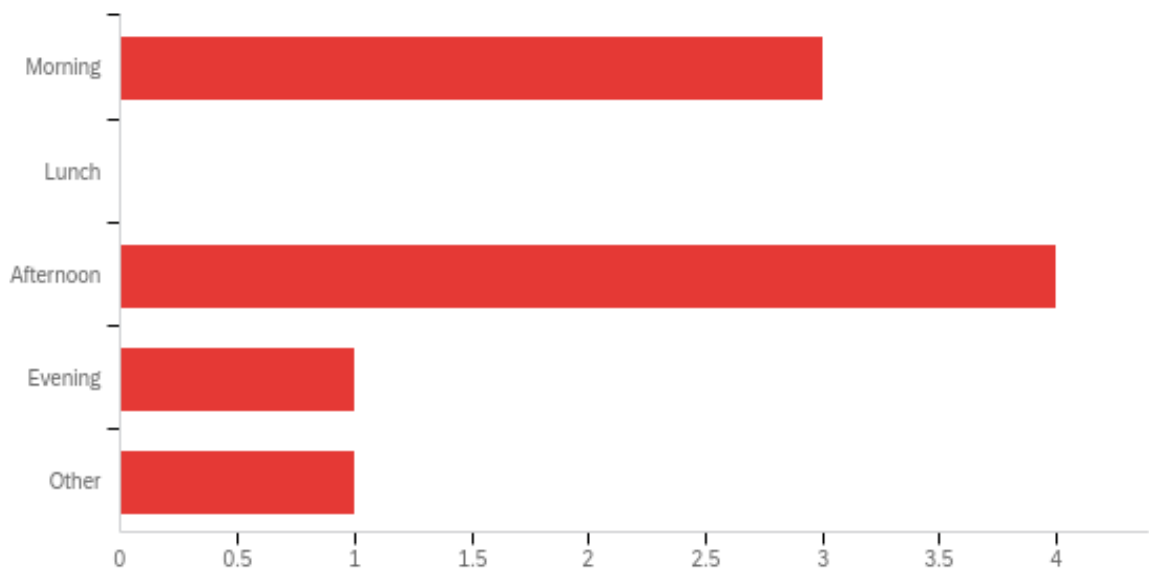
#	Answer	%	Count
1	Yes	66.67%	6
2	No	33.33%	3
3	Unsure	0.00%	0
4	Prefer not to answer	0.00%	0
	Total	100%	9

Q16 - Would you be willing to participate in a 30-to 60-minute education session regarding compassion fatigue and methods to prevent or alleviate symptoms associated with compassion fatigue?



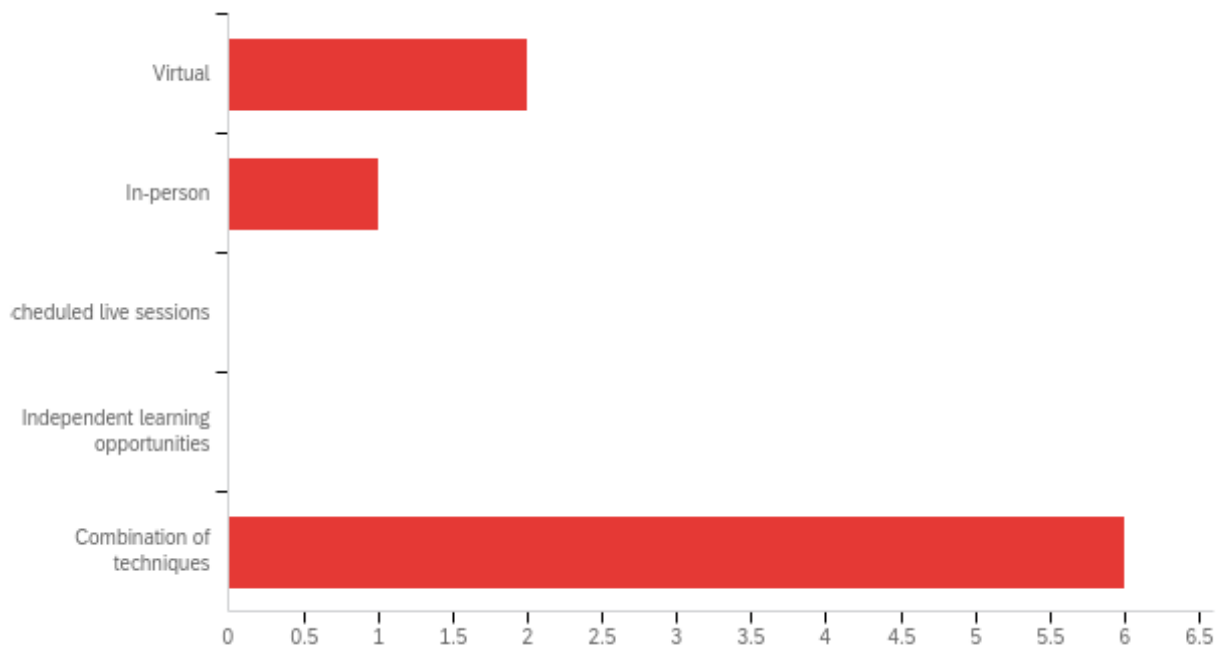
#	Answer	%	Count
1	Yes	100.00%	9
2	No	0.00%	0
	Total	100%	9

Q17 - 9. To participate in an education session, what time would work best for your schedule?



#	Answer	%	Count
4	Morning	33.33%	3
5	Lunch	0.00%	0
6	Afternoon	44.44%	4
7	Evening	11.11%	1
8	Other	11.11%	1
	Total	100%	9

Q18 - What is the best method for you to receive this information?



#	Answer	%	Count
1	Virtual	22.22%	2
4	In-person	11.11%	1
5	Scheduled live sessions	0.00%	0
6	Independent learning opportunities	0.00%	0
7	Combination of techniques	66.67%	6
	Total	100%	9

Q18 Combination of techniques - Text

In person, scheduled live sessions

Q19 - What are some barriers you feel prevent nursing staff from effectively protecting their mental and physical well-being while at work?

What are some barriers you feel prevent nursing staff from effectively protecting their mental and physical well-being while at work?

Increasingly busy workplace, trying to provide the best and proper care to patients with increase in numbers/acuity. Wanting a better work-life balance. No breaks throughout shifts being able to use our leave, to rest and recover from the physical and mental challenges, would help me protect my mental health.

increased workload, numbers and acuity with same core staffing levels. often short staffed. mandated OT

Time and the feeling of being pulled in 100 directions at once.

Lack of time

Unable to take breaks and lack of supplies, staff and physical space and lay out of ER

Pace of work

Inability to have leave to rejuvenate

The inherent desire to make sure everyone/everything is done without self consideration

Q20 - What are some ways to overcome barriers to nursing staff protecting their mental and physical well-being while at work?

What are some ways to overcome barriers to nursing staff protecting their mental and physical well-being while at work?

Have adequate staffing ratios. Staff to be provided with coping mechanisms to help with stressful/busy situations. Getting breaks throughout shifts.

Ensure adequate staff, (including auxiliary staff), so the pace at work is manageable. If enough staff cannot be obtained, then services need to be redesigned to allow a manageable, safe pace at work.

appropriate staffing levels to allow proper breaks, assistance, and VL

More staff.

Enforcing breaks

Ensuring adequate rest periods, increasing staffing levels and ensuring adequate supplies and resources available

Workload decreases

More flex time. ? Self scheduling

Support each other and take breaks

Q21 - Additional comments?

Appendix C: Interview Questions for Consultants

1. Compassion fatigue is defined as “an extreme state of tension and preoccupation with individual or cumulative traumas of clients” where those affected often display a “state of exhaustion and dysfunction, biologically, physiology and emotionally due to prolonged exposure to compassion stress” (Figley, 2003, as cited in Wentzel & Brysiewicz, 2014, p. 95). This is also known as secondary traumatic stress. Burnout is defined as “emotional exhaustion, depersonalization, and lack of personal fulfilment at work as a result of continuous exposure to occupational stressors” (Ruiz-Fernandez et al., 2020). Do you feel this is an issue for you and/or your colleagues or staff within the emergency department? How do you feel it is being experienced?
2. Higdon (2022) developed a wellness resource for oncology nurses at the Health Sciences Centre to improve resiliency among staff. The identified interventions include an education session regarding self-care, completing mindfulness training, and offering debriefing opportunities. Do you feel these interventions are appropriate for emergency nurses? Why or why not?
3. What do you feel is important to include in a wellness resource for nurses experiencing burnout and/or compassion fatigue?
4. What barriers do you feel prevent nurses from participating in self-care opportunities at work?
5. How frequent would you like to see these wellness activities held within the PHC ED (education sessions, mindfulness training and/or debriefing sessions)?
6. What opportunities would you like to see made available in the workplace to improve self-care participation?

Appendix D: Interview Questions for Higdon

1. Your wellness resource was developed for the oncology unit to assist team members in protecting their mental health while at work.
 - a. To your knowledge, has the resource been used in your workplace since its development in May 2022?
 - b. If so, have you received any formal or informal feedback from staff?
2. We are currently experiencing a significant shortage of nursing staff throughout Eastern Health, our province and nationally.
 - a. What challenges do you see in offering a wellness program in this type of climate?
 - b. Do you feel wellness resources, such as the one you have developed, have the potential to encourage new and existing nurses to build their self-efficacy and foster resilience?
3. How often do you feel this wellness training should be completed? E.g., education sessions with new graduate orientation? Quarterly? Yearly?
4. Based on your experience, what insights or recommendations do you have on implementing this resource in another department?

Thank you in advance for your cooperation!

Appendix C

Implementation and Evaluation of a Wellness Resource for Emergency Nurses in a Rural

Newfoundland (NL) Site

An Environmental Scan Report

Higdon (2022) developed a wellness program for oncology nurses to improve resiliency among staff as there are high instances of compassion fatigue and burnout in this population. Emergency nurses are also experiencing moderate to high levels of burnout and require interventions to decrease the effects of compassion fatigue (Lopez et al., 2022; Muir & Keim-Malpass, 2020; Ruiz-Fernandez et al., 2021). Many interventions identified in the literature include holistic approaches (Copeland, 2021; Delaney, 2018; Grabbe et al., 2021; Gustafsson & Hemberg, 2022; Muir & Keim-Malpass, 2020; Perez-Garcia et al., 2021; Slatyer et al., 2018), technology-based interventions (Flarity et al., 2013; Goktas et al., 2022; Janzanik et al., 2022), and bereavement interventions such as debriefing (Beres et al., 2022; Berg et al., 2016; Clark et al., 2022). I plan to adapt, implement, and evaluate Higdon's (2022) program to determine its effectiveness among emergency nurses in a rural emergency department with the aim of improving feelings of compassion fatigue and burnout.

An environmental scan is necessary for this project to determine if there are any changes to the existing resources identified by Higdon (2022), if there are different resources available to emergency department staff as opposed to those available to oncology staff, and to determine if any similar offerings exist similar to this practicum project in improving compassion fatigue in ED nursing staff.

Objectives:

- 1.) Identify resources available through Eastern Regional Health Authority to assist emergency nurses in decreasing feelings of compassion fatigue and burnout.
- 2.) Identify external resources on provincial, national, and international levels that can assist nurses in decreasing feelings of compassion fatigue.

Resources identified by Higdon (2022)

In the practicum project completed by Higdon (2022), relevant resources within Eastern Health were identified, such as EFAP, the Peer-Support Coordinator with Eastern Health, Eastern Health's online education site called LEARN, provincial resources like the Canadian Mental Health Association Newfoundland and Labrador (CMHA-NL), and a number of oncology specific resources. For the purpose of this environmental scan, I will briefly describe relevant resources identified within Higdon (2022) and provide elaboration to any changes noted in each resource.

Data Collection**Sources of Information**

Many resources identified through this environmental scan include online and virtual resources. Higdon (2022) was used as a guide to this environmental scan, providing many of the resources available within Eastern Health as of May 2022 and provincial and program-specific organizations with resources available. Additional information was provided from the creator of the wellness resource. At this time, the Peer Support Coordinator has been emailed regarding the resources within Eastern Health and I am waiting a response.

Data Collection

Data was collected through examination of each organizational website and associated resources for Eastern Health, provincial, national, and international groups. Inclusion criteria consisted of accessible resources for emergency nurses experiencing workplace or mental stress, symptoms of compassion fatigue, burnout and secondary traumatic stress or resources to

improve resiliency or self-care. Both virtual and in-person resources were reviewed with a large number of resources being accessible through virtual means.

Organizational Websites

Organizational websites were visited, and data retrieved from these sources. If additional information was required, an email was used to communicate with the organization to determine pertinent information relating to this project. Some websites offered a primary resource for compassion fatigue or resiliency training, while others included hyperlinks to appropriate resources. Known nursing organizations were searched for relative programs and links to associated topics. A secondary google search was completed with the three topics of interest, “holistic”, “comprehensive”, “resiliency training”, “mindfulness training”, “self-care”, “debriefing strategies”, and “nursing”.

Eastern Health Resources

The online learning program LEARN was accessed to retrieve relevant programs and courses concerning compassion fatigue, self-care, mindfulness, debriefing, and resiliency. A second search of Eastern Health’s intranet was completed using the same key words previously noted. As noted in Higdon (2022), the Peer Support Coordinator and Employee and Family Assistance Program were identified as applicable resources within Eastern Health.

Data Analysis

Each resource was examined and put into a table adapted from Higdon (2022) to determine its applicability and feasibility to the wellness resource. The strengths and limitations of each resource is identified. See Appendix A.

Ethical Considerations

The HREA Screening Tool was used for this project and was originally identified as not requiring ethical approval. See Appendix B.

Results

The results of the environmental scan will be discussed in two sections, online resources broken down by provincial, national, and international resources, and Eastern Health resources. Please see Appendix B for adapted table from Higdon (2022).

Online Resources

Virtual mental health tools have become more common and more accessible since the COVID-19 pandemic. These resources increase the accessibility of wellness resources by the general public and can anonymously accessed by healthcare providers fearful of stigma relating to mental health concerns. For online resources, various provincial, national, and international websites were searched to determine appropriate programs and linked resources from secondary sites.

Provincial

Bridge the Gapp (Government of Newfoundland & Labrador, 2022) is an online portal linking many e-health resources available to people experiencing various physical or mental health issues. While many of these links are not always specific to healthcare workers, they are available to everyone and capable of intervening to provide self-care, capacity, and access to relevant resources when needed. Within Bridge the Gapp, Mindwell (Government of Newfoundland & Labrador, 2022) is a link that has been suggested by e-mental health managers

for healthcare workers as it focuses on interventions to improve feelings of burnout and stress in frontline staff. This link is available to staff and contains links to recorded webinars and other useful links that can be accessed from any device and at any time.

The CMHA-NL is another provincial resource and is a branch of the national Canadian Mental Health Association (CMHA-NL, 2022). The CMHA-NL website offers significant interventions for people experiencing workplace stress. These include information regarding in-person training, online education sessions, contacts for more information beyond the scope of the website, and options to engage CHMA-NL in workplace bookings as part of healthy workplace promotions (CMHA-NL, 2022). Some of the online courses offered include “Psychological First Aid – Caring for Self and Caring for Others” and “Mental Health First Aid (MHFA) Virtual”. Lifewise, a mental health warmline, offers a peer support program to the public that is accessible using a toll-free number from 10am to 12am. They also offer wellness workshops, peer support groups and family group support (Lifewise Mental Health Peer Services, n.d.). The mental health crisis line is now accessible for those in NL by dialing 811 (Government of Newfoundland & Labrador, 2023).

National

On the Canadian Nurses Association ([CNA] 2022) website, there are links to national resources for frontline nursing staff to avail of if experiencing stress. One resource linked through the CNA website is the Wellness Together Canada (2022) page. Wellness Together Canada is a website designed to provide access to virtual resources, courses, and interventions to improve feelings of burnout, stress, and fatigue with a specific section dedicated to the wellness of healthcare workers. You can create an account to complete regular self-assessments using Likert-style questionnaires provided by the website, determine areas that require attention, such

as mood, well-being, and functioning and the appropriate methods that may help improve these areas. This collaborative resource cites many stakeholders in their mission including the Government of Canada, Mental Health Commission of Canada, Canada Health Infoway, Canadian Psychological Association, Bell Let's Talk, Kids Help Phone, and Medavie. This resource could be used by any healthcare provider who recognizes a need for help or change and can be accessed using a private account to track progress, register for courses, and complete interventions at different times with the capability to pick up where they left off.

The National Emergency Nurses Association ([NENA] n.d.) website was searched for resources pertaining to compassion fatigue, burnout, or resiliency with no results. Anxiety Canada (2022) is a national organization that aims to help those experiencing anxiety reduce their symptoms to live the life they want. There is a page dedicated to the wellbeing of healthcare providers providing possible solutions to cope with the trauma witnessed throughout the COVID-19 pandemic. Emergency nurses are not directly named within the website's description, but it provides accurate, relevant definitions relating to compassion fatigue and burnout, and offers possible solutions for healthcare workers to deal with traumatic experiences.

International

The World Health Organization ([WHO] 2022) is an international group recognizes the impact of burnout as a large issue. They list information pertaining to performing self-care and protecting your mental health. They do not offer courses specific to emergency nurses. Many of the strategies listed within the WHO (2022) website are similar to those listed in provincial and regional health authority resources.

Eastern Health Resources

The Employee and Family Assistance (EFAP) program is offered through Eastern Health to assist employees and their families experiencing mental health issues (Eastern Health, 2022a). EFAP is accessible through a regional coordinator, with its initiation required by the employee. Employees can avail of up to six one-hour counselling sessions per year. This program offers confidential services and counseling sessions are extended to applicable family members if required (Eastern Health, 2021a). This resource was discussed in Higdon (2022) and there have not been many notable changes to this program since its publication.

There is a provincial online education portal linked to each regional health authority, known as LEARN (Eastern Health, 2022b), that offers educational sessions online. These education sessions are developed by Eastern Health staff members in collaboration with relevant stakeholders and associations such as the CMHA-NL and Occupational Health and Safety. Some of the online courses include “Compassion Fatigue: The Cost of Caring”, “Conflict Management and Healthy Workplace”, “Mental Health for Employees”, “Trauma, Post-Traumatic Stress Disorder and the Healthcare Workplace” and “Managing Stress in the Workplace” (Eastern Health, 2022b). The sessions require anywhere from 30- to 90-minutes of time to complete and are applicable to continuing education requirements.

The Peer Support Coordinator plays a significant role in managing workplace stress, encouraging self-care, and coordinating debriefing opportunities and training. Email correspondence confirmed information provided in Higdon (2022) regarding the Peer 2 Peer program, the Employee Virtual Assistant (EVA), the Navigator Line, the EFAP, and the Rapid Response Team.

Strengths and Barriers

Some strengths of the identified resources include the accessibility of the interventions, the opportunity to work towards self-improvement independently, and being able to educate at one's own pace (Eastern Health, 2021b, Government of Canada, 2022; Government of Newfoundland & Labrador, 2022). The LEARN application, the Bridge the Gapp website, and the Wellness Together Canada website provide emergency nursing staff with the opportunity to complete education sessions, mindfulness activities, and access resources when they have the time available to do so as well as provide anonymity. Confidentiality is offered through the use of EFAP and is a strength in encouraging emergency nurses to avail of their services (Eastern Health, 2021a).

Some barriers noted to these interventions include the time required to access certain services. There is little down time in the ED and education and self-improvement efforts are unable to be engaged until their shift is over or nurses are on their day off. Scheduling counselling sessions, particularly if they are conducted in-person, would likely interfere with nurses shift work or would have to happen on their day off. While there are many generalized interventions for coping with workplace stress, improving resiliency, and decreasing symptoms of burnout, some are not specialized for emergency nurses or shift workers. This is a barrier to engaging nursing staff.

Conclusion

There are many mental health resources available within Eastern Health as well as provincially, nationally, and internationally. Resources and interventions need to be targeted towards healthcare providers, specifically those experiencing traumatic events, frequently exposed to the pain of others, and those experiencing a lack of resiliency. Emergency nurses require quick, effective interventions that provide a break from their surroundings while at work

and a reprieve when they are off duty. Adapting Higdon's (2022) wellness resource for emergency nurses may provide the opportunity for improvement in feelings of burnout and compassion fatigue.

References

Anxiety Canada (2022). Helping health care workers cope with COVID-19-related trauma.

https://www.anxietycanada.com/articles/helping-health-care-workers-cope-with-covid-19-related-trauma/?gclid=Cj0KCQjwqc6aBhC4ARIsAN06NmP-h5m_eqjpQ6tJWmGII06JpAX1EE7zbR0XdHdyqVgtSjTsumLu3jwaAm31EALw_wcB

Beres, K. E., Zajac, L. M., Mason, H., Krenke, K. & Costa, D. K. (2022). Addressing compassion fatigue in trauma emergency and intensive care settings: A pilot study.

Journal of Trauma Nursing, 29(4), 210 – 217.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2687716304

Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R. & Lippoldt, D. (2016). Exposing compassion fatigue and burnout syndrome in a trauma team: A qualitative study. *Journal of Trauma Nursing*, 23(1), 3 – 10.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_1779876580

Canadian Mental Health Association – Newfoundland & Labrador (2022). *Workplace mental health program*. <https://cmhanl.ca/web/what-we-do/workplace-mental-health-program/>

Canadian Nurses Association (2022). *Resources and FAQs*. <https://www.cna-aiic.ca/en/policy-advocacy/advocacy-priorities/covid-19/covid-19-resources>

Clark, P., Hulse, B., & Polivka, B. J. (2022). Resilience, moral distress, and job satisfaction driving engagement in emergency department nurses. *The Journal of Nursing Administration*, 52(2), 112 – 117.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2622275141

Copeland, D. (2021). Brief workplace interventions addressing burnout, compassion fatigue, and teamwork: A pilot study. *Western Journal of Nursing Research*, 43(2), 130 – 137.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2423059632

Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (msc) training program on nurses' compassion fatigue and resilience. *PLOS ONE*, 13(11), 1 – 20.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_plos_journals_2136546876

Eastern Health (2021a, July 2). *Employee and family assistance program*.

<https://www.easternhealth.ca/employees-and-physicians/ohs-efap/efap/>

Eastern Health (2021b, July 4). *LEARN – Learning management system*.

<https://www.easternhealth.ca/employees-and-physicians/career-growth-and-development/learn-learning-management-system/>

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal*, 35(3), 247 – 258.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_1523398593

Goktas, S., Gezginci, E., & Kartal, H. (2022). The effects of motivational messages sent to emergency nurses during the COVID-19 pandemic on job satisfaction, compassion fatigue, and communication skills: A randomized controlled trial. *Journal of Emergency Nursing*, 48(5), 547 – 558.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2693777790

Government of Newfoundland and Labrador (2022). Bridge the gapp.

<https://bridgethegapp.ca/adult-national/>

Government of Newfoundland and Labrador (2023). Mental health.

<https://www.811healthline.ca/mental-health/>

Grabbe, L., Higgins, M. K., Baird, M., & Pfeiffer, K. M. (2021). Impact of a resiliency training to support the mental well-being of front-line workers. *Medical Care*, 59(7), 616 – 621.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_pubmedcentral_primary_oai_pubmedcentral_nih_gov_8191373

Gustafsson, T. & Hemberg, J. (2022). Compassion fatigue as bruises in the soul: A qualitative study on nurses. *Nursing Ethics*, 29(1), 157 – 170.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2553524738

Higdon, L. (2022). Development of a wellness resource to strengthen resilience the oncology health care team. Memorial University of Newfoundland.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/uk1f0m/alma992687355602511

- Janzarik, G., Wollschlager, D., Wessa, M. & Lieb, K. (2022). A group intervention to promote resilience in nursing professionals: A randomized controlled trial. *International Journal of Environmental Research and Public Health*, 19, 1 – 18.
https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_doaj_primary_oai_doaj_org_article_037bf04f04bc40c78db0fa1b8e066d62
- Lifewise Mental Health Peer Services (n.d.). <https://lifewisenl.ca/>
- Muir, K. J. & Keim-Malpass, J. (2020). The emergency resiliency initiative: A pilot mindfulness intervention program. *Journal of Holistic Nursing*, 38(2), 20 – 220.
https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_journals_2407985597
- National Emergency Nurses Association (n.d.). <https://nena.ca/>
- Pérez-García, E., Ortega-Galán, Á. M., Ibáñez-Masero, O., Ramos-Pichardo, J. D., Fernández-Leyva, A., & Ruiz-Fernández, M. D. (2021). Qualitative study on the causes and consequences of compassion fatigue from the perspective of nurses. *International Journal of Mental Health Nursing*, 30, 469 – 478.
https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2456410572
- Phillips, K., Knowlton, M., & Riseden, J. (2022). Emergency department nursing burnout and resilience. *Advanced Emergency Nursing Journal*, 44(1), 54 – 62.
https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_miscellaneous_2623891712

Slatyer, S., Craigie, M., Heritage, B., Davis, S. & Rees, C. (2018). Evaluating the effectiveness of a brief mindful self-care and resiliency (MSCR) intervention for nurses: A controlled trial. *Mindfulness*, 9, 534 – 546.

https://mun.primo.exlibrisgroup.com/permalink/01MUN_INST/12c0frt/cdi_proquest_journals_2017642905

Wellness Together Canada (2022). <https://www.wellnesstogether.ca/en-CA>

World Health Organization (2022, June 30). *Self care interventions for health*.

<https://www.who.int/news-room/fact-sheets/detail/self-care-health-interventions>

Appendix A: Resources Available to Decrease Compassion Fatigue**Adapted from Higdon (2022) by Vanessa Griffiths**

Source of Information (Strategies/Resources Available)		Focus of Strategy/Resource	Implement (Yes/No)	Strengths	Barriers	Comments
Employee and Family Assistance Program (EFAP) Eastern Health	Coverage provided for employee and family member(s) to receive appropriate counselling (in-person or virtual) Employee contacts EFAP coordinator to initiate the service	Individual counselling sessions	Yes - Included in information pamphlet - Encourage use of same through education session and as colleagues	- Confidential - Easily accessible - Can be provided virtually if unable to travel - inclusive of family members if necessary	- Limited to six sessions - May interfere with work schedule/require time off	Noted by Higdon (2022)
Peer Support Coordinator (Eastern Health)	a) Navigator Line	Call-in service available from 0800 – 2200 every day to assist staff.	Yes Include in information pamphlet	Easily accessible by staff Can initiate Rapid Response Team if necessary	Limited in what interventions can be provided over the phone	Noted by Higdon (2022)
	b) Rapid Response Team	Provides urgent psychological support following a critical event	Yes Include in education pamphlet	Easily accessible through Navigator Line	- Not physically accessible in rural areas of NL - Will not be required often	Noted by Higdon (2022)

	c) Team Check-Ins and Psychological Safety Leaders	A form of debriefing to provide self-reflection, opportunity for discussion, and support.	Yes Part of debriefing program Need to identify psychological safety leaders within the department and program	Accessible Promotes debriefing In-person support Sustainable Promotes teamwork	Not suitable for everyone Psychological Safety Leaders require additional training (may interfere with work schedule)	Noted by Higdon (2022)
	d) Employee Virtual Assistant (EVA)	An automated system online with computer generated responses for mental health concerns	Yes Include in information pamphlet -	Available anytime	May not be suitable for all concerns	Noted by Higdon (2022)
	e) Peer 2 Peer (P2P)	Virtual connection to a trained employee volunteer for support	Yes Include in education pamphlet	Easily accessible Exclusively virtual	Exclusively virtual (may prefer personal, in-person connection)	Noted by Higdon (2022)
LEARN (Eastern Health)	Online learning management system with various modules	Mental Health for Employees (45 min) Managing Stress in the Workplace (45 mins)	Yes Include in information pamphlet Encourage time during shifts to	Easily accessible learning opportunities Can complete in one sitting or save progress	May not be able to complete at work May interfere with home life having to complete same at home	Noted by Higdon (2022) Compassion fatigue and conflict management included in

		<p>Trauma, Post-Traumatic Stress Disorder and the Healthcare Workplace (90 mins)</p> <p>Compassion Fatigue: The Cost of Caring (30 mins)</p> <p>Conflict Management and Respectful Workplace (90 mins)</p>	complete education on site	and continue at another time	Self-directed and must be initiated by the employee	environmental scan as they contribute to navigating healthier workplaces.
<p>Canadian Mental Health Association – Newfoundland & Labrador (CMHA-NL)</p> <p>(Provincial resource)</p>	a) Mental Health Crisis Line	Provincial phone line resource that has staff available to answer and navigate mental health concerns	<p>Yes</p> <p>Include in information pamphlet</p>	Easily accessible at home or at work	For employees, similar contacts can be made using resources through the Peer Support Coordinator.	Noted by Higdon (2022)
	b) Mental Health in the Workplace Tools for Self-Care	Resources and strategies for mental health care and self-care	<p>Yes</p> <p>Include in information pamphlet</p>	Easily accessible virtually	May be repetitive if employee has already navigated through other	Noted by Higdon (2022)

					resources form Eastern Health	
	c) Mental Health Phone Apps	Phone app focused on mental health	Yes Include in education pamphlets	Easily accessible Readily available on cell phone at anytime	May feel impersonal due to virtual, one size fits all approach to app	Noted by Higdon (2022)
Government of Newfoundland & Labrador (Provincial Resource)	Bridge the Gapp	Comprehensive website for numerous provincial mental health resources, links for external resources included	Yes Include in education session	Easily accessible Anonymous use Provides external links for those requiring additional support or are in crisis	Intended audience is general public, not exclusively for emergency nurses or healthcare workers	
Wellness Together Canada (National Resource)	Wellness Together Canada	An interactive, comprehensive national resource where private accounts can be created to access educational programs and resources to improve individuals' mental health.	Yes Include in education session	Easily accessible Private accounts allow for education sessions to be started and finished in separate sittings	Broader scope, using national resources	

				Some topics/resources within the website are specifically designed for healthcare workers		
Anxiety Canada (National Resource)	Helping Healthcare Workers Cope with COVID-19 Related Trauma	Resources and tips to aid healthcare workers in managing workplace related stress	Yes Offer information in education session	Target audience of healthcare workers, specific tips and interventions that can be incorporated into shift work	May be seen as impersonal or generic interventions	
World Health Organization (International Resource)	Self-Care Interventions for Health	Informative webpage regarding self-care definition and the importance of implementing effective self-care interventions	No Information non-specific to healthcare workers Many self-care interventions already listed within other applications and organizational programs	Burnout and selfcare is recognized by this international organization	Vague target audience and non-specific interventions for healthcare workers	

Appendix B: Health Research Ethics Authority (HREA) Screening Tool**Student Name: Vanessa Griffiths****Title of Practicum Project: Implementation and Evaluation of a Wellness Resource for Resiliency among Emergency Nurses in Rural Newfoundland****Date Checklist Completed: October 23, 2022**

This project is exempt from Health Research Ethics Board approval because it matches item number 3 from the list below.

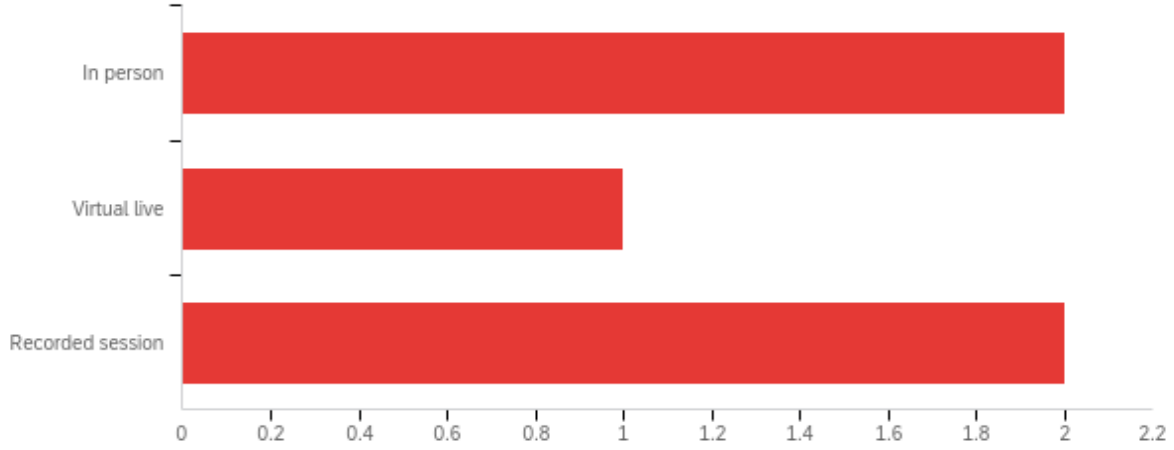
1. Research that relies exclusively on publicly available information when the information is legally accessible to the public and appropriately protected by law; or the information is publicly accessible and there is no reasonable expectation of privacy.
2. Research involving naturalistic observation in public places (where it does not involve any intervention staged by the researcher, or direct interaction with the individual or groups; individuals or groups targeted for observation have no reasonable expectation of privacy; and any dissemination of research results does not allow identification of specific individuals).
3. Quality assurance and quality improvement studies, program evaluation activities, performance reviews, and testing within normal educational requirements if there is no research question involved (used exclusively for assessment, management or improvement purposes).
4. Research based on review of published/publicly reported literature.
5. Research exclusively involving secondary use of anonymous information or anonymous human biological materials, so long as the process of data linkage or recording or dissemination of results does not generate identifiable information.
6. Research based solely on the researcher's personal reflections and self-observation (e.g. auto-ethnography).
7. Case reports.
8. Creative practice activities (where an artist makes or interprets a work or works of art).

For more information please visit the Health Research Ethics Authority (HREA) at <https://rpresources.mun.ca/triage/is-your-project-exempt-from-review/>

**Appendix D: Implementation and Evaluation of a Wellness Resource on Resiliency in
Emergency Nurses in a Rural Newfoundland (NL) Site
Summary of Evaluations**

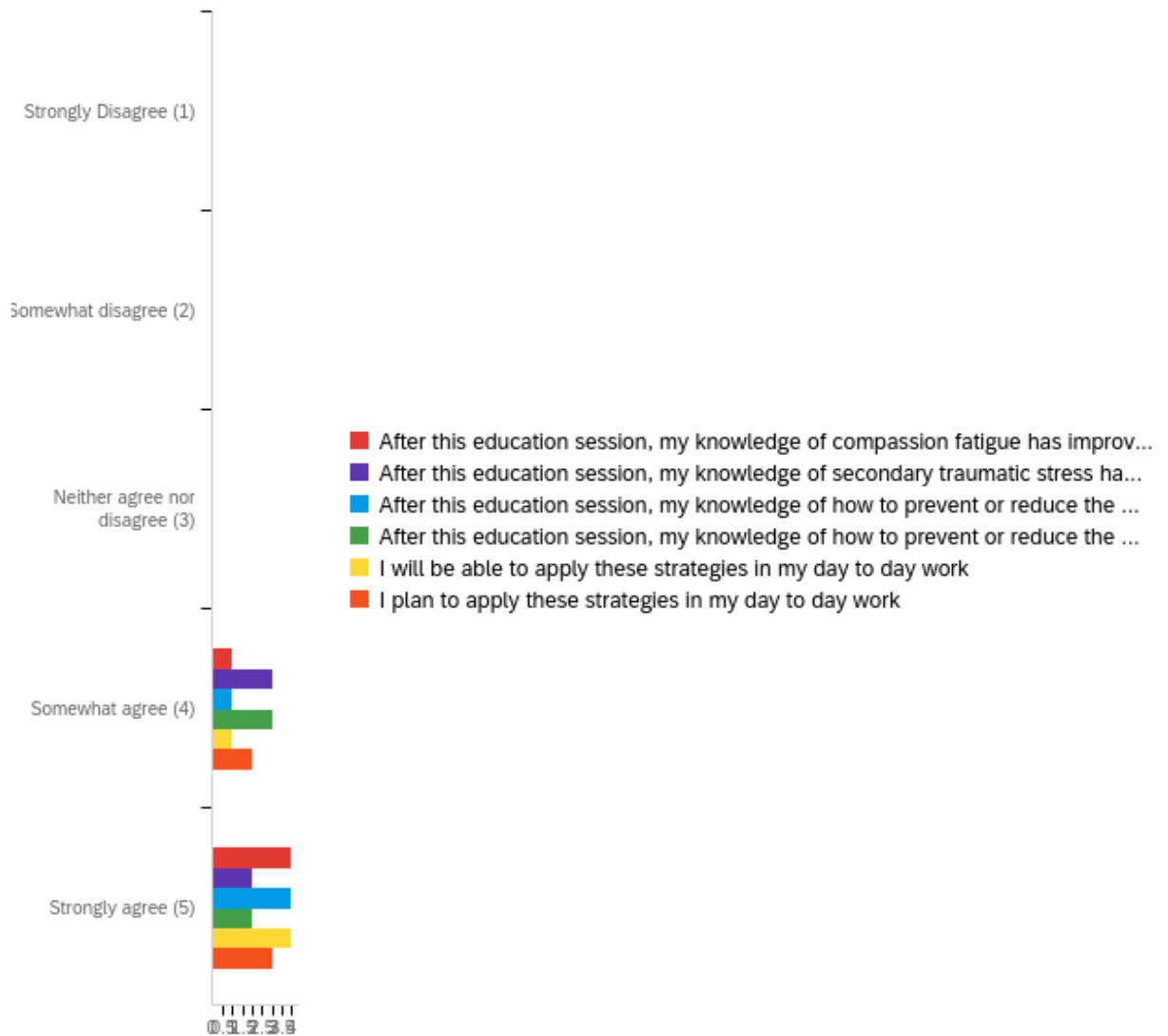
Appendix D: Summary of Evaluations

1. Please indicate which method of the wellness resource you accessed:



#	Answer	%	Count
1	In person	40.00%	2
2	Virtual live	20.00%	1
3	Recorded session	40.00%	2
	Total	100%	5

2. Please indicate your level of agreement with the following statements from one (strongly disagree) to five (strongly agree)



#	Question	Strongly Disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)	Total
1	After this education session, my knowledge of compassion fatigue has improved	0.00% 0	0.00% 0	0.00% 0	20.00% 1	80.00% 4	5

2	After this education session, my knowledge of secondary traumatic stress has improved	0.00%	0	0.00%	0	0.00%	0	60.00%	3	40.00%	2	5
3	After this education session, my knowledge of how to prevent or reduce the risk of compassion fatigue has improved	0.00%	0	0.00%	0	0.00%	0	20.00%	1	80.00%	4	5
4	After this education session, my knowledge of how to prevent or reduce the risk of secondary traumatic stress has improved	0.00%	0	0.00%	0	0.00%	0	60.00%	3	40.00%	2	5
5	I will be able to apply these strategies in my day to day work	0.00%	0	0.00%	0	0.00%	0	20.00%	1	80.00%	4	5
6	I plan to apply these strategies in my day to day work	0.00%	0	0.00%	0	0.00%	0	40.00%	2	60.00%	3	5

3. Please list ways you plan to use these strategies?

- Be a supportive team member and cover each other for breaks as needed Exercise more outside of work hours
- Prioritize my break time at work on busy days
- Add them into busy workday schedules, bathroom breaks, and leave my issues in a virtual "backpack" at the exit door so as to not bring my work problems home with me.
- Mindful moments when washing my hands and doing mundane tasks Deep breathing techniques when I have a moment Disconnecting from my work email when at home
- When faced with stressful situations, step back, take a deep breath, and refocus before continuing on. Bring water bottle to ensure stay hydrated so that my body can be more functional. Recognize when a coworker may be struggling and reach out. Recognize when I am struggling and access supports as necessary

4. Are there ways management/leadership can help you? If so, please comment.

- Encourage and help develop a supportive team environment
- Ensure appropriate staffing levels are fulfilled and not working short staffed
- Encourage assigned breaks at work Check in's with staff throughout shifts to ensure some breaks being taken
- Promote the use of allotted break times at work, ensure assigned break times are use daily Encourage supportive team environments to allow for adequate rest periods during shifts Participate in organizational policy development around psychological safety in the workplace/ED.
- Continue to check in with staff and debriefing as needed

5. What did you like about this session?

- Short, clear and concise information
- Easy to access, straight forward recorded session to watch
- Virtual live session allowed me to attend from home before night shift.
- I am able to access it from anywhere
- Informative and helpful information

6. What can be improved in this education session for the future?

- Focus on one specific topic, we learn and then apply the new techniques in our workplace.
- Offer more education session times
- More detail regarding mindfulness techniques and how to's
- Information session could be broken up into different sessions and promote the learning and practice of self-care skills (i.e.: journaling in one session, deep breathing techniques in another session).

7. Would you attend another session on wellness? What would you like to learn about?

- Yes. Effective journaling techniques and meditation
- Yes. Anything that would help improve my resilience in the workplace
- Yes. How to maintain boundaries between work and home life.
- Yes. More mindfulness moment opportunities would be helpful.
- Meditation techniques

8. Professional Quality of Life Assessments

ProQOL Scores						
	<i>Compassion Satisfaction</i>		<i>Burnout</i>		<i>Secondary Traumatic Stress</i>	
	Mean	Range	Mean	Range	Mean	Range
Pre-Intervention	32.5	27-43	31.7	23-40	29.2	18-41
Post Intervention	38	34-48	26.2	18-29	25.6	16-43

9. Connor Davidson Resiliency Scale Assessments

CD-RISC Scores		
	Mean	Range
Pre-Intervention	60.2	51-71
Post-Intervention	67.6	54-80