EVALUATING PEER SUPPORT AS AN INTERVENTION TO REDUCE THE ADVERSE SEQUELAE ASSOCIATED WITH ETHICAL DILEMMAS

by © Leslie Laurio

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Abstract

Background: Regular exposure to ethical dilemmas can impact a nurse's well-being and by extension, the healthcare system. Peer support programs are interventions that have been implemented to mitigate these effects. CARED rounds are a local peer support program that has not been evaluated since implementation in 2020 and thus, the efficacy in addressing ethical dilemmas is unknown. **Purpose:** I aimed to evaluate CARED rounds' efficacy in addressing the adverse consequences of ethical dilemmas and determine the potential benefits, challenges and opportunities for improvement. **Methods:** I completed a literature review, consultation with stakeholders, and an evaluation of CARED rounds, including a questionnaire and interviews. The Moral Distress Scale-Revised (MDS-R) captured moral distress levels. **Results:** Peer support programs, including CARED rounds, have promoted resilience and camaraderie among participants by validating their feelings, decreasing feelings of isolation, and improving job satisfaction. Moderate moral distress levels were observed in both participant and non-participant groups, suggesting that while CARED rounds offer some support, broader sources of distress could remain. Key barriers to attendance included scheduling conflicts, staff workloads, and insufficient understanding of CARED rounds' benefits among non-participants. **Conclusion:** Most registered nurses, regardless of participation status report moderate moral distress levels suggesting that CARED rounds offer some support but may not fully address broader sources of moral distress. Addressing logistical challenges and enhancing communication about the program's benefits could improve participation and ensure greater alignment with its intended design.

Keywords: *ethical dilemmas; peer support; nurses; evaluation of peer support*

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An ethical dilemma is a situation where a decision must be made between two or more conflicting principles, where following one may compromise the other (Haahr et al., 2020; Rainer et al., 2018). In the healthcare setting, registered nurses encounter several situations perceived as ethically challenging. Common ethical dilemmas in healthcare include perceived futility in care, workload hindering a healthcare provider's ability to provide holistic care, and conflicting perspectives on a patient's care plan (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018). Although all healthcare providers encounter ethical dilemmas, this practicum project focused on registered nurses. Consistent exposure to ethical dilemmas may result in adverse emotional and physical effects on registered nurses, subsequently influencing organizational dynamics (Haahr et al., 2020; Rainer et al., 2018). For example, registered nurses frequently encountering ethical dilemmas may experience compassion fatigue, which can diminish the quality of care provided and subsequently result in adverse patient outcomes (e.g., hospital-acquired infection) (Berger et al., 2015; Li et al., 2023; Whitehead et al., 2015). The pediatric setting presents additional complexities regarding ethical dilemmas, given the unique needs and considerations associated with this patient population (e.g., patient care plan decisions that occur by proxy) (Berger et al., 2015; Choe et al., 2019; Prentice et al., 2016).

Peer support is an intervention that aims to alleviate the adverse effects associated with ethical dilemmas (Pereira et al., 2021; Simpson et al., 2023). This approach involves individuals with similar experiences offering each other mutual emotional and practical support to navigate the challenges posed by ethical dilemmas (Pereira et al., 2021; Simpson et al., 2023). CARED rounds, a peer support initiative, was implemented in the cardiac critical care unit (CCCU) at Sick Kids Hospital in Toronto in 2020. Since their inception, no formal evaluation has yet to be

completed; therefore, CARED rounds' effectiveness in mitigating the impacts of ethical dilemmas remains unknown. Notably, peer support in the ***pediatric critical care context*** is underrepresented in the literature and thus merits further evaluation (Berger et al., 2015; Choe et al., 2019). Therefore, I have chosen to evaluate CARED rounds as the focus of my practicum project, which is part of the requirements for my Master of Science in Nursing (MScN) degree at Memorial University Faculty of Nursing.

The evaluation of CARED rounds was guided by relational inquiry as a foundational theory (Younas, 2017; Younas, 2020). Relational inquiry enhanced the understanding of the experiences of registered nurses who participated in CARED rounds by obtaining each registered nurse's unique perspective on the potential benefits, challenges and opportunities for improvement through questionnaires and interviews. Furthermore, relational inquiry encourages reflective practice and encourages an individual to maintain compassion for the effects of reliving ethical dilemmas (Younas, 2017; Younas, 2020). Throughout this evaluation, I acknowledged that revisiting ethically challenging circumstances could be distressing for registered nurses. Accordingly, I structured the interviews to permit pauses, allowing participants to process their emotions.

I used process evaluation as the guiding framework to evaluate CARED rounds. Process evaluation aims "to identify the strengths and weakness of an ongoing program with the primary objective being to determine how the programs could be improved" (Stratton et al., 2021, p. 204). By applying a process evaluation approach to assess CARED rounds, I assessed whether these sessions were delivered as intended (implementation fidelity) by applying a process evaluation approach to assess CARED rounds. This included a detailed look at the peer support sessions' frequency, duration, attendance, and content.

In this project, I aimed to assess the effectiveness of CARED rounds in alleviating the impact of ethical dilemmas on registered nurses and determine whether CARED rounds meet the requirements of the local practicum environment. In the subsequent section, I will provide background on CARED rounds and describe the evaluation setting and target population of the evaluation.

CARED Rounds

CARED rounds have been established within the CCCU to mitigate the impacts of ethical dilemmas and offer staff a forum to access peer support. CARED rounds can be held in person or virtually and are facilitated by a bioethics nurse or a bioethicist. The bioethics nurse, a registered nurse in the CCCU with advanced training in bioethics (i.e., Masters of Health Science in Bioethics), provides peer support individually (e.g., assisting a registered nurse in navigating their feelings after making a medication error) and in group settings (e.g., CARED rounds) (Sick Kids Hospital, 2022). The bioethicist, possessing advanced degrees in areas such as bioethics or health policy, provides guidance on ethical issues in healthcare and clinical decision-making. Additionally, they provide objective advice on complex ethical cases throughout the institution (Sick Kids Hospital, 2022). For instance, when the medical team and a family disagree on withholding life-sustaining treatment for a terminally ill, unconscious patient, a bioethicist could facilitate the discussion. The bioethicist considers all perspectives and guides the team toward a resolution that maintains ethical principles (i.e., autonomy, justice, beneficence, and non-maleficence) (Haahr et al., 2020; Shapiro & Layde, 2002; Sick Kids Hospital, 2022).

In-person, the bioethicist or bioethics nurse approaches registered nurses in patient care areas to gauge interest in participating in CARED rounds. If registered nurses are available (e.g., not busy engaging in patient care), the bioethicist or bioethics nurse will convene at the nursing

desk or patient's bedside, maintaining confidentiality by ensuring guardians are not present. For virtual sessions, an email invite with a set date and time is sent to all staff in the critical care unit. Participants and facilitators may discuss a preestablished topic, such as the ethical issues related to end-of-life care, or follow an open format where registered nurses discuss ethically challenging situations of their choosing.

CARED Rounds' Setting

The CCCU located in Sick Kids Hospital provides specialized care to children from newborn to young adulthood presenting with congenital or acquired heart conditions. The patient population originates from different regions across Canada, with a significant number from Eastern Canada. The 25-bed facility offers comprehensive care, including post-operative management, mechanical ventilation, circulatory system support, and end-organ support.

Target Population for Evaluation

Registered nurses can often find themselves amid ethical dilemmas (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). Numerous factors specifically contribute to the ethical challenges faced by pediatric nurses, including internal conflicts arising from disagreeing with the medical team or guardian's preferred plan of care, patient care decisions that occur by proxy, and the discomfort in palliating a young patient (Berger et al., 2015; Lang & Paquette, 2018; Mills & Cortezzo, 2020; Prentice et al., 2016; Walden et al., 2018). Although the value of peer support is recognized in the existing literature, studies specific to pediatric nursing are fewer (Berger et al., 2015; Choe et al., 2019). This underscores the need for a focused evaluation of peer support effectiveness among pediatric nurses.

I conducted a literature review and consulted with stakeholders to inform my evaluation. In the subsequent sections, I will outline the key objectives of this practicum project and provide

a synthesis of the insights gathered from the literature review and consultations. Additionally, I will elaborate on the theoretical frameworks that informed the evaluation process.

Objectives

To accomplish the goals of the evaluation, I set the following objectives:

- Explore and describe how CARED rounds are conducted within the CCCU.
- Explore and assess CARED rounds' perceived impact using the moral distress scale revised (MDS-R), questionnaires, and interviews.
- Explore and identify the benefits, challenges and opportunities for growth for CARED rounds.
- Evaluate the implementation fidelity of CARED rounds, including frequency, duration, attendance, and content.
- Demonstrate advanced nursing practice competencies such as research utilization, consultation and collaboration, and leadership (Canadian Nurses Association, 2019).

Overview of Methods

To inform the evaluation process, I completed a literature review and consulted key stakeholders within the CCCU. These methods assisted in developing a thorough analysis of the efficacy of CARED rounds.

Summary of the Literature Review

I initiated the practicum project by conducting a comprehensive literature review spanning May to June 2024. I conducted searches on PubMed and CINAHL using the following search terms: *ethical dilemma; peer support; debriefing; moral distress; resilience; compassion fatigue; healthcare providers and ethical dilemma; peer support and healthcare provider; ethical distress; compassion fatigue; pediatrics and ethical dilemma; pediatrics and moral*

distress; pediatrics and peer support; pediatrics and debriefing. I examined the literature concerning the prevalence of ethical dilemmas, the contributing factors, and their impact on both individuals and the healthcare system (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). The literature review required four iterative drafts.

Prevalence of Ethical Dilemmas

Ethical dilemmas are prevalent in diverse healthcare environments. The literature review highlighted common ethical challenges experienced including end-of-life care, perceived futility in care, and clashing perspectives between the registered nurse and the medical team or patient and their family (Dos Santos et al., 2023; Haahr et al., 2020; Schulz et al., 2023). Furthermore, the literature underscores the critical role of registered nurses in navigating these ethically challenging circumstances (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). For instance, registered nurses may experience moral distress when required to implement care plans they perceive as clinically unwarranted, causing conflict with their ethical beliefs (Haahr et al., 2020; Rainer et al., 2018; Schulz et al., 2023).

Registered nurses in pediatric critical care units can be particularly vulnerable to ethical dilemmas due to high patient acuity, care plan decision-making by proxy, advanced medical technologies, and the challenges of providing palliative care for a young patient (Mills & Cortezzo, 2020; Prentice et al., 2016; Schulz et al., 2023). Additionally, the acute environment requires time-sensitive, high-risk interventions, further intensifying the impact of ethical dilemmas on registered nurses. These patient circumstances emotionally burden families and registered nurses, often leading to ethical dilemmas (Lang & Paquette, 2018; Mills & Cortezzo, 2020; Prentice et al., 2016).

Contributing Factors to Ethical Dilemmas

Several factors can lead to ethical dilemmas for registered nurses, such as organizational constraints, clashing viewpoints between the registered nurse and family or medical team, palliative care, and perceived futility in care (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). Organizational constraints such as inadequate staffing and negative workplace, hinder registered nurse's ability to provide optimal care, creating potential ethical conflicts (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). Registered nurses can confront ethical dilemmas when there is a discrepancy between the prescribed care plan and their professional assessment of suitable actions (Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). In palliative and futile care situations, registered nurses might struggle with the ethical implications of prolonging life, often being the first in the healthcare team who is accepting of the dying process (Choe et al., 2019 & Rainer et al., 2018; Whitehead et al., 2015).

In the pediatric setting, unique challenges increase the probability of registered nurses experiencing ethical dilemmas (Berger et al., 2015; Walden et al., 2018). These include caring for young patients unable to express their needs because they are pre-verbal or non-verbal, or decision-making that occurs by proxy, where guardians may choose treatments that registered nurses deem aggressive or unsuitable. Furthermore, pediatric nurses may experience distress managing cases involving abused children, adding to the ethical complexities they face (Berger et al., 2015; Walden et al., 2018). Ethical dilemmas could have a significant impact on the well-being of registered nurses and in turn, the healthcare system (Berger et al., 2015; Choe et al., 2019; Li et al., 2023; Sullivan et al., 2019; Walden et al., 2018; Whitehead et al., 2015).

The Impact of Ethical Dilemmas

At the individual level, ethical dilemmas can lead to moral distress and compassion fatigue, manifesting in emotional and physiological responses (e.g., depression, anxiety, cardiovascular diseases, and disengagement from patient care). (Berger et al., 2015; Sullivan et al., 2019; Walden et al., 2018). These effects extend to the healthcare system with increased staff turnover, including among experienced registered nurses, which creates economic strain on institutions. Furthermore, diminished quality of care may result in extended hospitalizations escalating the financial burden on institutions and exposing patients to additional risks, such as hospital-acquired infections (Berger et al., 2015; Li et al., 2023; Whitehead et al., 2015).

Peer Support as an Intervention

Peer support programs are an intervention that can alleviate the adverse effects of ethical dilemmas on the individual and the organization (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). These programs promote resilience by addressing burnout, compassion fatigue, and post-traumatic stress (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). Peer support can be formal with a facilitator and set topics or informal (e.g., two colleagues engaging in discussion at shift change). Peer support fosters a supportive workplace, enhancing emotional health, validating registered nurses' experiences, reducing isolation, and increasing job satisfaction, ultimately benefiting the healthcare system (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023).

Summary of Consultations

After I completed the literature review, I used a questionnaire to consult key stakeholders to gain insight and feedback to inform the evaluation. The questionnaire was available from August 1st until August 9th, 2024, and I sent invitation emails to each stakeholder, which varied

slightly based on the role. In the next section, I will provide an overview of the consultation process and the findings which informed the evaluation.

Data Collection

I distributed a questionnaire to determine the most effective ways to evaluate CARED rounds and the optimal strategies for engaging with local stakeholders. I consulted key stakeholders including registered nurses, a nurse manager, a bioethicist and a bioethics nurse. The questionnaire consisted of multiple-choice questions, one about demographics (i.e., tenure in the CCCU), and free-text questions to gather comprehensive responses. As a current clinician in the CCCU, I collaborated with the nurse manager to deliver the questionnaire to all registered nurses via email using Google Forms. I received responses from 22 registered nurses, one nurse manager, one bioethicist, and one bioethics nurse.

Data Management and Analysis

After the allotted time for the questionnaire (i.e., eight days) had ended, I input the responses into an Excel spreadsheet and separated the free-text responses from the multiple-choice. I organized the spreadsheets by stakeholder group, calculated response frequencies, and converted them into percentages. The most common responses were used to plan the evaluation. I used thematic coding to analyze the free-text responses (Gibbs, 2018).

Consultation Results

The emails sent to each stakeholder varied slightly based on the role. The questionnaire included the same multiple-choice questions for all stakeholders with free-text questions tailored to each stakeholder's role. I employed thematic coding to categorize and examine the free-text responses (Gibbs, 2018). The codes and categories that emerged can be found in the consultation report (Appendix D).

Preferred Evaluation Methods and Communication Strategies

The multiple-choice responses identified questionnaires as the preferred evaluation method and email as the optimal communication channel with registered nurses. Demographic data revealed that most respondents (seven of ten) had over ten years of experience. Organizational barriers, such as staffing shortages and heavy workloads, were barriers to participation in self-care activities, echoing findings in the literature (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). Notably, 14 registered nurses had not attended CARED rounds when completing the questionnaire. Therefore, for the evaluation, I developed targeted questions for non-participants to explore their unique perspectives and barriers to attendance. Limited questionnaire completion during the consultation(ten out of 22 respondents) underscored the need for the evaluation to be clearly designed and the addition of interviews to obtain richer, more comprehensive data (Paradis et al., 2016).

Based on feedback from stakeholders and common practices in the CCCU, I chose Microsoft Forms for administering the evaluation questionnaire and email as the primary communication method. Moral distress levels were identified as an effective metric for evaluating CARED rounds, supported by feedback from registered nurses and the bioethics nurse. The literature further validates this approach for assessing a unit's ethical climate and the impact of peer support (Wocial et al., 2017). Accordingly, I used the MDS-R, a validated, 21-item tool that measures a respondent's moral distress level by rating the frequency and intensity of their experiences concerning particular situations. The total score for each respondent is calculated and categorized as low moral distress (a score of 0 to 112), moderate moral distress (a score of 113 to 224), or high moral distress (a score of 225 to 336) (Wocial et. al., 2017). Many barriers such as scheduling conflicts were identified during the consultations, warranting further

exploration in the CARED rounds evaluation. To address this, I included tailored questions to examine these barriers.

Summary of the CARED Rounds Evaluation

The CARED rounds evaluation occurred from September 26th to October 10th, 2024. Tailored invitation emails were sent to registered nurses, a nurse manager, and bioethicists, with a reminder email sent on October 3rd, 2024. Registered nurses were also invited to respond to the email if they wanted to participate in an interview.

The evaluation consisted of role-specific questionnaires, the MDS-R to measure moral distress levels among registered nurses, and interviews to obtain comprehensive data and allow for immediate follow-up if a response required further clarification. I incorporated open-ended questions in all questionnaires to capture a comprehensive perspective from each respondent. I prepared separate questionnaires and interview questions for registered nurses who had not yet participated in CARED rounds to understand their unique experiences and barriers. My practicum advisor and the bioethics nurse reviewed all questions to ensure their relevance, clarity, and appropriateness before distribution.

I used thematic coding to categorize and summarize interview responses (Gibbs, 2018). The codes and categories are in the evaluation report (Appendix D). I received responses from 18 registered nurses, a nurse manager, one bioethics nurse, and one bioethicist, with three registered nurses agreeing to interviews. In the next section, I will review findings organized by respondent role.

Registered Nurses

Participants and non-participants in CARED rounds exhibit commonalities and distinctions in their experiences and perceptions. The findings provided insight into the impact of

CARED rounds on moral distress, professional development, and peer support while also identifying barriers to participation. I summarized the findings from registered nurses into the following observations.

Moral Distress Levels and CARED Rounds Attendance

Most respondents from the participant and non-participant groups reported moderate levels of moral distress, highlighting the prevalence of ethical dilemmas in practice. Of the 18 respondents, 12 reported experiencing moderate moral distress, evenly distributed between the participant and non-participant groups, with six individuals each. Moderate moral distress levels suggest that ethical dilemmas are frequently encountered although not entirely overwhelming. In addition, these moral distress levels indicate that registered nurses experience significant emotional and psychological strain, which can impact job satisfaction, retention, and patient outcomes (Whitehead et al., 2015; Wocial et al., 2017).

These findings could suggest that CARED rounds offer some level of support, although they may not fully address the broader sources of moral distress experienced by registered nurses. For instance, caring for patients from marginalized communities can elicit ethical distress however, the systemic inequities contributing to this distress can extend beyond the scope of CARED rounds sessions (Sale & Smith-Morris, 2023). Both groups' moderate levels of moral distress highlight that ethical dilemmas could persist in the CCCU.

Formal and Informal Support Systems

Participants acknowledged that CARED rounds offered a structured forum to process moral distress, citing improved communication and moral reasoning as key benefits. Ethical reflection was also a noted benefit acquired through CARED rounds attendance, with registered nurses being able to "pause" and reflect on their emotions when faced with an ethical dilemma,

enabling thoughtful consideration of both the patient's and family's perspectives and acknowledging the inherent difficulty in arriving at a care plan decision. Participants valued the opportunity for ethical reflection and camaraderie, which reduced feelings of isolation.

In contrast, non-participants relied on informal support systems, which may lack the structure and expertise of CARED rounds. While convenient, these systems often lacked the structured guidance and depth of peer engagement offered by peer support programs (Pereira et al., 2023; Simpson et al., 2023). Participants and non-participants expressed interest in future or increased attendance at CARED rounds, emphasizing the importance of addressing barriers to enhance accessibility.

Barriers to Attendance

Barriers to participation in CARED rounds identified by both groups include scheduling conflicts, heavy workloads, and patient care demands. These challenges often left little time for registered nurses to attend sessions. Non-participants noted a lack of awareness of the purpose and benefits of CARED round sessions, which contributed to their non-engagement. This gap in understanding, combined with logistical obstacles, resulted in limited participation. For participants, these logistical obstacles disrupted consistent attendance, reducing the impact of CARED rounds sessions, and limiting the ability of registered nurses to fully benefit from them.

To address these challenges, respondents suggested flexible scheduling to accommodate night shift workers, integrating CARED rounds into existing workflows (e.g., scheduling sessions during less demanding periods) or offering sessions at varying times. Additionally, improving communication about the objectives and benefits of CARED rounds could increase awareness and motivate registered nurses to participate.

Bioethics Nurse and Bioethicist

The bioethics nurse and bioethicist play integral roles in facilitating and refining CARED rounds. They described CARED rounds as a peer-support platform to help registered nurses navigate ethical dilemmas and mitigate moral distress. In addition, they highlighted that CARED rounds aim to enhance ethical awareness, reflective decision-making, and interdisciplinary connections. The content of the sessions includes general discussions and case-specific ethical reflections and has evolved to include other allied healthcare professionals (e.g., respiratory therapists and child life specialists).

The bioethics nurse and bioethicist observed participants more attuned to ethical challenges, distinguishing emotional from ethical responses and demonstrating increased willingness to engage in ethical discussions. This aligns with literature supporting the value of peer support and ethical dialogue in fostering moral resilience (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). Additionally, experienced nurses were noted to provide meaningful support to less experienced colleagues, strengthening team dynamics.

The bioethics nurse and bioethicist identified barriers such as patient care demands, time constraints, reluctance to display vulnerability, fear of potential repercussions, and uncertainty regarding the relevance of discussions to individual practice – many of which align with the feedback from registered nurses. Strategies to address these challenges include increasing awareness among new staff, providing opportunities for anonymous topic suggestions, offering refreshments, and improving staffing for more consistent participation.

Nurse Manager

The nurse manager's responses highlight both the strengths and the limitations of CARED rounds in supporting the nursing team as they navigate ethical dilemmas. The nurse

manager acknowledged the efficacy of CARED rounds; however, they also recognized participation is contingent on registered nurses being able to step away from patient care reflecting a key barrier also noted by registered nurses, a bioethics nurse, and a bioethicist. The nurse manager suggested that increasing the frequency of CARED rounds (e.g., bi-weekly instead of monthly) and improved pre-planning (e.g., invitations earlier in the shifts) could enhance accessibility. Additionally, the nurse manager recommended integrating CARED rounds into broader unit practices, such as biannual education days, to foster meaningful ethical reflection without the distractions that can occur while registered nurses are providing patient care.

The Process Evaluation Approach

Process evaluation allowed for the structured assessment of whether CARED rounds were implemented as originally designed (Stratton et al., 2021). The bioethicist and bioethics nurse explained that CARED rounds were intended to mitigate moral distress, foster interdisciplinary dialogue, and enhance moral resilience among healthcare workers, ultimately improving patient care. This aligns with feedback from participating registered nurses, who reported benefits such as emotional support, solidarity, and opportunities for ethical reflection.

Discrepancies between the program's intended design and its implementation were identified in the feedback. Logistical challenges, including scheduling conflicts, inconsistent attendance, and limited communication, were identified by the registered nurses and the nurse manager as barriers to broader engagement. While participants valued CARED rounds, non-participants often cited disinterest or lack of awareness as reasons for not attending, suggesting a disconnect between the program's benefits and perceived value.

Next Steps

After completing the CARED rounds evaluation, the next step is disseminating the findings to the bioethics team and the nurse manager within the CCCU. I plan to share the findings with the bioethics team and the nurse manager, inviting them to attend my practicum project presentation. I intend to engage with the nurse manager to discuss the data pertinent to registered nurses and disseminate this information to the nursing staff.

The results from the evaluation could provide the bioethics team with data that can help refine CARED rounds to address ethical dilemmas more effectively. For instance, feedback indicated that CARED rounds occur at inconvenient times for some registered nurses. As such, the bioethics team could integrate feedback to offer CARED rounds at varied times. Additionally, given the low response rate to the questionnaire and interviews, future evaluations could benefit from a prolonged data collection period. Moreover, tracking moral distress levels before and after participation in CARED rounds could provide valuable insights into the program's direct impact on alleviating moral distress.

Discussion of Advanced Nursing Practice (ANP) Competencies

Advanced practice nursing (APN) core competencies encompass a comprehensive integration of nursing knowledge, theory, research, and clinical experience, transcending specialty boundaries and demonstrated by all advanced practice nurses (Canadian Nurses Association, 2019). Through this practicum project, I demonstrated research utilization, consultation and collaboration, and leadership competencies (CNA, 2019).

Research Utilization

An APN is "committed to generating, synthesizing, critiquing and applying research evidence" (CNA, 2019, p. 32). In this practicum project, I demonstrated this competency through

a literature review that informed the evaluation design. The literature review was instrumental in developing both the evaluation questionnaire and interview questions. During the consultations and evaluation, I gathered and examined data regarding CARED rounds, identifying benefits, challenges, and areas for improvement.

Consultation and Collaboration

The CNA (2019) postulates that "effective collaboration and communication with clients, other health-care team members and stakeholders services impact the determinants of health represent important aspects of all nursing practice" (p. 33). I collaborated with key stakeholders throughout the consultation and evaluation, including registered nurses, a nurse manager, a bioethics nurse, and a bioethicist. These collaborative efforts ensured that the evaluation was conducted appropriately to address the specific needs of the target population.

Leadership

Advanced practice nurses who exemplify leadership are "agents of change, consistently seeking effective new ways to practice, improve care and promote APN" (CNA, 2019, p. 33). Throughout the evaluation, I demonstrated leadership as I aimed to identify the benefits, challenges, and areas for improvement within CARED rounds, demonstrating proactive problem-solving and initiative in fostering change. Addressing the adverse sequelae of ethical dilemmas through the potential improvement of CARED rounds will ideally improve the support the registered nurses in the CCCU receive.

Conclusion

The literature review, consultation process, and evaluation of CARED rounds have provided valuable insights into the impacts of ethical dilemmas on registered nurses as well as the healthcare system in the local setting, the value of peer support as a strategy to mitigate the

impacts of ethical dilemmas, and the significance of evaluating the efficacy of a peer support intervention. Through feedback from registered nurses, the bioethics nurse, the bioethicist, and the nurse manager, CARED rounds can address ethical dilemmas and mitigate moral distress for those participating. Yet, several barriers continue to hinder broader engagement. Scheduling conflicts, logistical concerns, limited understanding of the program's benefits, and patient care demands were observations that warrant further attention.

A significant observation from the findings of the evaluation process was that moral distress scores were moderate among most registered nurse respondents (67%), regardless of whether registered nurses had participated in CARED rounds. This observation suggests that CARED rounds could provide a platform for ethical reflection; however, they may not wholly address broader sources of moral distress. Furthermore, these results highlight the importance of further investigation into the complex factors contributing to the adverse effects of encountering ethically challenging situations. Additionally, the findings emphasize the value of analyzing whether modifications to CARED rounds could improve their effectiveness in mitigating these impacts.

This evaluation process has underscored the importance of fostering a supportive environment for healthcare professionals dealing with ethical challenges. The mixed engagement levels suggest that CARED rounds may not be operating at their full potential, though the foundational goals of the program remain sound. Adjustments such as varied scheduling and improved communication about the program's benefits may help enhance participation, ensuring that the program more fully aligns with its intended design, which can better assist registered nurses and ultimately improve patient care.

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Appendix A: Literature Review

Literature Review: Peer Support to Address Ethical Dilemmas

When competing priorities conflict with an individual's ethical values, an ethical dilemma may be the outcome (Haahr et al., 2020; Rainer et al., 2018). The unfortunate reality is that ethical dilemmas are a common occurrence in the healthcare setting. Registered nurses frequently face ethically challenging situations like the perception of futility in care, care that conflicts with their understanding of what would be most beneficial for the patient, or workloads that hinder the delivery of comprehensive, patient-centred care (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018). The daily practices of nurses may be challenged by ethical dilemmas and can lead to a variety of negative sequelae at the individual and organizational levels (Haahr et al., 2020; Rainer et al., 2018). For example, nurses may experience burnout with repeated exposures to ethical dilemmas leading to turnover (Berger et al., 2015; Whitehead et al., 2015). Furthermore, ethical dilemmas arising in the care of pediatric patients and their families present an additional layer of complexity, given the unique needs and considerations associated with this patient population (Berger et al., 2015; Choe et al., 2019).

A strategy that could mitigate the impact of ethical dilemmas is peer support. Peer support is "a dynamic socio-emotional relationship between people who share various commonalities, such as environment, experiences, or mental health to bring about the desired change" (Pereira et al., 2021., p. 114). As a result, peers are in a unique and ideal position to be a supportive resource to one another (Pereira et al., 2021; Simpson et al., 2023). Peer support has been implemented in a variety of care environments, however, its value in the pediatric setting is unclear and has not been explored in great detail (Simpson et al., 2023). A peer support program implemented locally in a pediatric, quaternary institution in Toronto has been implemented since 2020, yet there has been no evaluation. To explore whether this program meets the needs of

nurses experiencing ethical dilemmas in the local clinical setting, I have proposed to evaluate this program. I plan to conduct the evaluation guided by relational inquiry as a foundational theory and process evaluation as a guiding framework. The peer support program mentioned, known locally as CARED rounds, offers debriefing of ethical dilemmas to healthcare providers at the bedside and is led by an interdisciplinary team including nurses, bioethicists, and a bioethics nurse. To complete this evaluation, I will conduct a literature review and consultations with local key stakeholders to develop the plan for both the development and implementation of the evaluation tool(s).

The purpose of this paper is to critically examine and appraise existing literature on ethical dilemmas nurses experience, peer support programs in pediatric nursing, and the significance of evaluating peer support programs. I will also explore the theoretical framework of relational inquiry and discuss its application to the evaluation of CARED rounds. Further, I will explore the efficacy of peer support as an intervention for ethical dilemmas, particularly the utilization among healthcare providers in pediatrics. Finally, I will examine the necessity of evaluating peer support through process evaluation to ensure nurses are appropriately supported when managing ethical dilemmas.

Literature Search Methods

I searched the topics of ethical dilemmas and peer support using the databases CINAHL and PubMed. Of note, PubMed had more relevant studies related to the topic of choice. The terms used in the databases included ethical dilemma; peer support; debriefing; moral distress; resilience; compassion fatigue; resilience; healthcare providers and ethical dilemma; peer support and healthcare provider; ethical distress; compassion fatigue; pediatrics and ethical dilemma; pediatrics and moral distress; pediatrics and peer support; pediatrics and debriefing. I kept the

timeframe within 10 years (i.e., 2014 – 2024) to ensure that data were current and thus, relevant to current practice. The literature was appraised using the infection prevention and control guidelines critical appraisal tool kit for quantitative studies and the Joanna Briggs Institute checklist for qualitative studies (Joanna Briggs Institute, 2017; Public Health Agency of Canada, 2014). The research yielded less pediatric data compared to adult data. The relevant studies utilized for this paper can be found in the literature summary tables below with quantitative studies under Appendix A, qualitative studies under Appendix B, systematic reviews under Appendix C, and a descriptive review under Appendix D.

In the following section, I will define and review relational inquiry. The subsequent analysis of relational inquiry will provide deeper insights into the application of relational inquiry to the evaluation of peer support initiatives.

Theoretical Framework - Relational Inquiry

Relational inquiry is an approach in nursing that emphasizes understanding and addressing the complex, dynamic relationships between patients, healthcare providers, and the broader social context (Younas, 2017; Younas, 2020). Relational inquiry requires a nurse to be conscious of personal experiences, interpersonal dynamics, socio-political contexts, and how they influence a nurse's practice and patient outcomes. Additionally, nurses who practice with relational inquiry are reflective practitioners and are cognizant of their perspectives and biases, while actively engaging with patients and colleagues to foster mutual understanding and collaborative problem-solving. Relational inquiry fosters holistic care by encouraging the interconnectedness of all elements involved in the healthcare experience (Younas, 2017; Younas, 2020).

The application of relational inquiry to the evaluation of a peer support program encourages the individual to understand the nurse's experience who has participated in a peer support program. Understanding the individual experience could be achieved by seeking the input of nurses on the ideal method of evaluation and eventually, the efficacy, benefits, challenges and opportunities for improvement of the peer support program. With a particular focus on the nurses who have participated in a peer support program, a nuanced understanding of the peer support program's impact on their personal and professional lives could be gained (Younas, 2017; Younas, 2020).

Using relational inquiry can also aid in the examination of interpersonal relationships and dynamics within a peer support session (Younas, 2017; Younas, 2020). An evaluation of a peer support program through the lens of relational inquiry would consider the impact on the broader work environment including shift dynamics, collaborative practices and overall morale (Younas, 2017; Younas, 2020). An example of considering a work environment with a relational inquiry lens is consulting with stakeholders as to the ideal method of evaluation (i.e., surveys and/or interviews) or asking about their observed improvements to staff morale as a result of peer support meetings.

Using relational inquiry would also encourage an individual to maintain compassion for the effect of reliving the ethical dilemmas on the nurses. Ethical dilemmas have led to nurses experiencing distress and thus, negative feelings could resurface as a result of the evaluation process, requiring the conscientiousness of relational inquiry. Ultimately, relational inquiry would provide a comprehensive assessment of a peer support program's efficacy in fostering a supportive and ethically aware nursing culture (Younas, 2017; Younas, 2020).

I have chosen process evaluation as the framework to explore the effects of a peer support program associated with ethical dilemmas. In the next section, I will discuss process evaluation as a guiding framework for assessing the efficacy, benefits, challenges and opportunities for improvement in peer support programs.

Evaluating Peer Support Using Process Evaluation

Evaluating peer support is critical to understanding its efficacy and sustainability in reducing the negative effects of ethical dilemmas (Pereira et al., 2021; Whitehead et al., 2015). While the evaluation of peer support is not novel, evaluation specific to nurses practicing in pediatrics is limited (Pereira et al., 2021; Whitehead et al., 2015). The ethical dilemmas experienced by the pediatric population have added complexities and therefore, evaluating peer support in this setting is necessary (Berger et al., 2015; Walden et al, 2018).

Whitehead et al. (2015) acknowledge that healthcare environments have gross variety in terms of organizational culture, resources and staff dynamics, which can influence the uptake and efficacy of peer support initiatives in their single-centre study. Therefore, the evaluation of a peer support strategy locally would provide insight into constraints, specific staff engagement levels, challenges and benefits (Whitehead et al., 2015). As a result, peer support can be tailored to the setting where it has been implemented (Pereira et al., 2021; Whitehead et al., 2015).

Process Evaluation as a Guiding Framework

Stratton et al. (2021) describe process evaluation as used to "identify the strengths and weakness of an ongoing program with the primary objective being to determine how the programs could be improved" (p. 204). Smith and Ory (2014) suggest that process evaluation occurs while the intervention is in progress and examines the nature and quality of processes and procedures. Through process evaluation, an individual can assess whether the intervention

reached the ideal population and was appropriate for the envisioned population. Furthermore, process evaluation helps determine if an intervention was delivered as intended (Smith & Ory, 2014; Stratton et al., 2021).

Evaluating a peer support program through the lens of process evaluation involves the analysis of several critical components. The evaluation would focus on the program's implementation fidelity, confirming whether support sessions were conducted as designed (Stratton et al., 2021). Evaluation would also include the frequency, duration, attendance, and content of peer support sessions. The evaluation of these elements would assist in identifying if there were any deviations from the primary intention and if the deviations need to be addressed promptly. Determining the frequency, duration, and content will aid in examining if the peer support sessions were ideally implemented (Stratton et al., 2021). For example, are the peer support sessions held at time impractical for registered nurses to attend (e.g., if peer support sessions are being held when nurses are busy administering medications which may hinder attendance).

Process evaluation also involves obtaining participant feedback (Stratton et al., 2021). The feedback could provide perceptions of the program's relevance and efficacy and be gathered via surveys and/or interviews. The feedback would shed light on nurses' experiences with peer support sessions, including the efficacy of addressing ethical dilemmas and whether improvements in coping strategies and emotional well-being were gained. Feedback would be critical to identify strengths, weaknesses, and opportunities for improvement. For example, nurses could share a preference for the peer support sessions to have a predetermined topic rather than an open discussion (Stratton et al., 2021). Ultimately, feedback can provide clarity

regarding potential adjustments to identify the benefits, challenges and opportunities for improvement in peer support sessions.

Based on the practicality as a guiding framework to evaluate peer support programs, I plan to use process evaluation as a guiding framework in developing and implementing the evaluation of CARED rounds. In the following sections, I describe ethical dilemmas and contributing factors to ethical dilemmas to provide the background for implementing this peer support program in the local clinical setting and why evaluation is necessary.

Definition and Prevalence of Ethical Dilemmas

Ethical dilemmas can arise from "conflicts among values, norms and interests and can be understood as the tension of knowing the right thing to do, but experiencing institutional or other constraints making it difficult to pursue the desired course of action" (Haahr et al., 2020, p. 260). Schulz et al. (2023) further describe that ethical dilemmas go beyond opposing values that cannot be resolved. Ethical dilemmas refer to any situation where opposing values create a challenging environment, difficult decision-making or an ethical resolution cannot be achieved (Schulz et al., 2023).

Through their meta-analysis, Haahr et al. (2020) describe that the foundation of ethical care encourages nurses to adhere to four bioethical principles, including autonomy, beneficence, non-maleficence and justice (Haahr et al., 2020; Stephany, 2020). The four principles align with the CNA code of ethics and the ethic of care which "instructs nurses to consistently provide, safe, compassionate, competent and ethical care" (Stephany, 2020, p. 64). Autonomy refers to an individual's right to choose between treatment and care and their values and beliefs. Beneficence denotes that actions intend to benefit others and non-maleficence is the commitment to not harm others. Justice suggests that ethical decision-making is grounded in fairness and equity.

Ultimately, an ethical dilemma can arise when any of the four principles are threatened (Haahr et al., 2020).

Ethical Dilemmas in the Healthcare

Ethical dilemmas in the healthcare setting often concern life and death, end-of-life care, withdrawal/withholding of treatment or a decision between clinical pathways that are equally traumatizing (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). Nurses, central to these situations, are unable to step away due to organizational structure, power dynamics, and workload volume (Jesmont et al., 2021; Schulz et al., 2023). Additionally, ethical dilemmas in the healthcare setting can also encompass feelings of internal conflict. Internal conflict can occur when a nurse's actions do not reflect or clash with their values (i.e., a nurse implementing a care plan they do not believe is in the best interest of the patient) (Dos Santos et al., 2023; Haahr et al., 2020; Schulz et al., 2023). Internal conflict can extend to when a nurse's values disagree with an external source's (i.e., patient or family) decision-making. However, when a nurse experiences an internal conflict with an external source (i.e., patient or family) they often must suppress their feelings and continue to provide care despite a nurse's internal struggle causing an ethical dilemma (Dos Santos et al., 2023; Haahr et al., 2020; Schulz et al., 2023). Ethical dilemmas call for a decision that will have consequences that could be displeasing and require a balanced approach to problem-solving with nurses often caught in the midst of it all (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023).

Ethical Dilemmas in the Pediatric Setting

Ethical dilemmas in the pediatric setting can be complicated by the vulnerability of the population and the proclivity to protect children from harm (Berger et al., 2015; Choe et al., 2019). In Schulz et al. (2023) moderate strength, low-quality study, a sample of 281 pediatric

nurses discovered that all respondents to their study reported facing at least one ethical dilemma "often" or "sometimes." The most frequently reported ethical dilemma was being unsure of how to respond when a parent or patient asked about a test result with 68% of nurses experiencing this "sometimes" or "often," demonstrating the internal conflict that can cause an ethical dilemma for nurses. The most frequently reported ethical dilemma also demonstrates a nurse's inability to step away despite the discomfort of knowing the results of a test and being unable to disclose the results (Browning & Cruz, 2019; Dos Santos et al., 2023; Schulz et al., 2023).

The most frequently reported dilemma (i.e., a nurse being unsure how to respond when a family/patient is requesting the results of a test) reported by Schulz et al. (2023) aligns with a theme found in their medium strength, moderate quality study by Dos Santos et al. (2023). Dos Santos et al. (2023) interviewed ten nurses caring for pediatric patients diagnosed with cancer. Dos Santos et al. (2023) describe that ethical dilemmas can stem from intrinsic conflicts and internal disagreements between a nurse and other allied healthcare professionals. Nurses experienced conflict as a result of their assessments, beliefs and values, and information gathered about the family not being considered in the decision-making of a child's treatment plan. The treatment plan then implemented by the nurse generates "guilt and sadness" as the nurse must suppress their disagreement with the approach of the healthcare team (Dos Santos et al., 2023). Overall, the feeling of being silenced leads to a perception of powerlessness and the ethical dilemma of instituting a treatment plan that a nurse believes may not be the right course of action for the patient (Browning & Cruz, 2019; Dos Santos et al., 2023).

In the pediatric setting, a line of communication must be cultivated and maintained with the patient and all family members (i.e., a nurse would be updating and mainly communicating with parents as their child could be pre-verbal or non-verbal) (Dos Santos et al., 2023; Jesmont et

al., 202; Reeder & Morris, 2021). As a result, decision-making is done by the parent, and there are times when decisions can be perceived as aggressive, non-beneficial to the patient, or futile. In futile circumstances, nurses can experience an ethical dilemma whereby the child's main advocate (i.e., the child's guardian) is making a decision that is regarded as not ideal for the child or induces suffering (Dos Santos et al., 2023; Jesmont et al., 202; Reeder & Morris, 2021). While ethical dilemmas occur in all healthcare areas, the critical care environment presents unique ethical challenges, given the acuity of the environment and the complexity of the patient population (Browning & Cruz, 2019; Schulz et al., 2023; Silverman et al., 2022; van Zuylen et al., 2023).

Ethical Dilemmas in the Critical Care Environment

Due to the nature of the critical care environment, having a complex interplay between higher patient acuity, dynamic environment, and families experiencing extremes of crisis, critical care nurses experience ethical dilemmas at increased rates (Browning & Cruz, 2019; Schulz et al., 2023; Silverman et al., 2022; van Zuylen et al., 2023). In addition to the most commonly reported ethical dilemma (i.e., a nurse being unsure of how to respond to families requesting the test result and a nurse being unable to disclose a diagnosis due to professional constraints), nurses in critical care environments experience higher rates of feeling discomfort with a patient or family's decision (Browning & Cruz, 2019; Schulz et al., 2023).

Aligning with Schulz et al. (2023) moderate strength, medium quality study, Browning and Cruz (2019), in their moderate strength, low-quality study interviewed twenty-seven nurses in the intensive care unit (ICU) and found a higher prevalence of "perceived nonbeneficial intervention" compared to other inpatient settings (p.50). The provision of nonbeneficial intervention led to ethical distress for all ICU staff, especially for nurses who spent "much of

their time in direct patient care" circumstances (p.50). A commonly reported ethical concern in the critical care environment is continuing medical treatment despite perceived futility (Browning & Cruz, 2019; Jesmont et al., 2021; Schulz et al., 2023). Futility in critical care could include following a family's wishes for life-sustaining therapies that the nurse believes would not benefit the patient (e.g., intubating a patient with an irrecoverable neurological injury). In a futile situation where life-sustaining measures are being offered, a nurse may feel that palliation is the ideal course of action. An ethical dilemma can occur as the nurse implements life-sustaining therapies despite opposing beliefs (Browning & Cruz, 2019; Jesmont et al., 2021; Schulz et al., 2023).

The critical care environment typically includes patients with a higher acuity level, necessitating advanced medical technologies (Browning & Cruz., 2019; Silverman et al., 2022; Schulz et al., 2023). The complexity of the environment and the volume of interventions can be overwhelming for both patients and families. As such, patients and families may lack a comprehensive understanding of the ongoing medical procedures, care plans, and possible outcomes, and may not know the questions to ask to have a comprehensive understanding. As a result, the onus lies on the healthcare team to provide a fulsome explanation of the patient's condition and all associated aspects of care. An inability to provide a detailed explanation of the patient's condition, violates a patient and their family's ability to remain autonomous, creating an ethical dilemma (Browning & Cruz., 2019; Silverman et al., 2022; Schulz et al., 2023).

Ethical dilemmas may be more pronounced in the pediatric critical care environment because of the combination of highly acute, complex patients who depend on others for decision-making (i.e., families).

The Pediatric Critical Care Environment

The pediatric critical care environment is uniquely susceptible to ethical dilemmas due to the intrinsic vulnerabilities of the patient population (Mills & Cortezzo, 2020; Prentice et al., 2016; Schulz et al., 2023). In the critical care environment, life-sustaining measures or the perceived use of technology for prolonging life occur at increased rates. Specifically, in the pediatric critical care environment, these measures are intertwined with decision-making that typically occurs by proxy (i.e., the child's guardian) and the uncomfortable idea of palliating a patient whose life has just begun. In adult critical care, patients typically participate in their own care decisions, thereby providing clear guidance to healthcare providers. In the pediatric critical care environment, a child's guardian(s) is/are entrusted with the decision-making, which may not align with the nurse's idea of the ideal treatment plan for the patient, causing ethical distress (Lang & Paquette, 2018; Mills & Cortezzo, 2020; Prentice et al., 2016).

In their review, Mill and Cortezzo (2020) describe that healthcare providers and parents struggle to find a balance and determine what is in the child's best interest, creating a morally distressing circumstance for nurses performing the interventions of the care plan. Life-sustaining measures can require time-sensitive actions involving significant risk and unknown prognoses, inhibiting a family's ability to make sound decisions. Nurses can be in the midst of these circumstances, where they must bear witness to and provide comfort to families during interventions that could be perceived as ethically distressing. Nurses must balance the risk of delaying treatment with the need to avoid adding pressure on the family, all while advocating for the patient's best interest (Lang & Paquette, 2018; Mills & Cortezzo, 2020; Prentice et al., 2016).

In their meta-analysis, Lang and Paquette (2018) describe the ethically challenging situation where a "minor" (i.e., a child under a certain age with age varying depending on

location) refuses medical treatment however, their guardian(s) would prefer to continue treatment. For example, a ten-year-old patient decides to forego additional treatment for a long-term illness that has been life-limiting, in opposition to their guardian's wish to continue treatment. Such situations raise the question of a child's capacity to form an autonomous decision and trust a parent's ability to decide, at minimum, a course of action that avoids harm. As pediatric patients are typically not viewed as autonomous, the clashing decision between the child and a guardian can become ethically complex and challenging. Nurses can have a difficult time providing care in these situations, wanting to advocate for a patient's wishes and respect the perspective of their family members while grappling with their perspective on the ideal treatment plan for the patient (Lang & Paquette, 2018).

Palliation of a pediatric patient occurs at increased rates in the pediatric critical care environment (Mills & Cortezzo, 2020; Schulz et al., 2023). The grief that families experience can extend to the nurse, with nurses mourning that loss, feeling sadness, compassion, guilt and anger (Zarataloudi et al., 2021). Zartaloudi et al. (2021) conducted a single-centre, moderate-strength, low-quality study where they surveyed 170 pediatric nurses and 73% wished they were not present during a death because of the negative impact it had on their mental well-being. Repeated and consistent exposure to these experiences can lead to fatigue in nurses, affecting the quality of care provided and violating the principle of beneficence. Beneficence dictates that a nurse's care must benefit others, creating an ethical dilemma (Berger et al., 2015; Haahr et al., 2020; Walden et al., 2018). If nurses feel their care does not benefit the patient, it can result in an ethical dilemma.

Nurses at the Centre of Ethical Dilemmas

A common thread found in the literature reviewed is the central role that nurses find themselves in when ethical dilemmas arise (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). Due to the nature of a nurse's role, the workload could preclude their participation in discussion or voice concerns regarding ethical dilemmas (e.g., a nurse managing a huge workload could be unable to attend a care plan discussion on a long-term, complex care patient). Furthermore, structural organizational hierarchy and power dynamics within institutions can also affect a nurse's ability to manage ethical dilemmas appropriately (e.g., excluding nurses from the care plan discussion of a long-term, complex care patient). Paradoxically, nurses must carry out the care plan that could be the source of the ethical dilemma or are required to continue to provide holistic care despite being acutely aware of an ethical dilemma they are battling internally. As a result, nurses have an unfortunate predisposition to be exposed to ethical dilemmas and efforts to reduce the negative sequelae should be instituted (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). It is significant to note that Schulz et al. (2023) and Jesmont et al. (2021) are single-centre studies with small sample sizes, perhaps affecting the generalizability of the studies. Nevertheless, many other studies reviewed and presented report similar results (Choe et al., 2019; Prentice et al., 2016; Rainer et al., 2018; Sullivan et al., 2019).

Many factors can contribute to the occurrence of ethical dilemmas (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). For example, a negative workplace culture could influence the safety culture by discouraging a nurse from speaking up (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018;). In the next section, I will discuss the factors that influence ethical dilemmas, particularly how they may increase the nurses' experience of ethical dilemmas, leading to negative adverse sequelae.

Contributing Factors

Commonly reported factors that contribute to ethical dilemmas include organizational constraints, conflicting perspectives from healthcare team members and family members, and end-of-life care/futility in care (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). Furthermore, ethical dilemmas in the pediatric setting pose nuanced contributing factors unique to this patient population's care (Choe et al., 2019; Jesmont et al., 2021; Walden et al., 2018).

Organizational Constraints

Constraints at the organizational level can preclude nurses from being able to provide ideal care to patients, placing nurses in positions where they may need to omit care or make decisions that could challenge their values as healthcare professionals. (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). For instance, a staffing shortage could cause a nurse to have an increased workload, and as a result, interventions could be delayed or neglected altogether, violating a nurse's commitment to provide beneficent care. A staffing shortage is an example of an organization's failure to prioritize the needs of nurses, contributing to an ethical dilemma. For example, a chronically understaffed unit can lead to nurses being unable to have adequate breaks, and a lack of self-care could manifest in negative patient interactions, impacting the patient experience. When organizational priorities do not align with the well-being of nursing staff, it places undue stress on nurses, compelling them to make difficult decisions that may compromise patient care. Such scenarios create a moral and ethical burden, as nurses are often caught between the demands of the organization and their professional and ethical obligations to their patients. Consequently, a lack of organizational support and resources exacerbates the

ethical challenges nurses face, ultimately affecting the quality of care patients receive (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018).

An additional organizational constraint is workplace culture. An example of a negative culture is an institution that discourages or punishes nurses for speaking up for patient safety (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). A negative workplace culture discounts a nurse's important role in the healthcare team and silences a nurse's ability to advocate for patients and families. A hierarchical power structure could also negatively impact workplace culture (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). Schulz et al. (2023) describe institutions placing more significance on medical professionals' decision-making. This can create a barrier to nurse engagement in managing ethical dilemmas and leave a nurse feeling powerless. Schulz et al. (2023) further describe that although the power structure between nurses and medical professionals is not novel, the power structure is often unacknowledged. Additionally, devaluing a nurse's role in the healthcare team can distance a nurse from the other members of the healthcare team and patients, with the nurse demonstrating indifference towards the patients they care for (Schulz et al., 2023).

Conflicting Perspectives

Conflicting perspectives from other healthcare team members and family members is another reason that nurses can experience an ethical dilemma (Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). Disagreements over treatment plans are prevalent when exploring ethical dilemmas with pediatric nurses. This could be especially conflicting for nurses as they must carry out a plan or perform interventions they disagree with or believe are not in the best patient's best interest. Additionally, nurses having a more forward-facing role with patients (i.e., spending the most one-on-one time with patients as opposed to other healthcare disciplines) can

be in the midst of a breakdown or omission of communication (Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). As previously discussed, an example of ineffective communication is when a nurse is aware of a lab result or diagnosis that is not ideal (e.g., a life-limiting illness) and is unable to disclose the lab result or diagnosis to a family that is persistently asking. In this example, a nurse could feel distressed waiting for a medical professional to disclose to a family; however, the nurse must maintain composure while providing holistic care.

Nurses may also disagree with treatment plans that families prefer. For example, families may advocate for a treatment plan that a nurse deems aggressive and is not in the patient's best interest (Jesmont et al., 2021 & Rainer et al., 2018). A nurse could feel conflicted as a family member maintains hope in their loved one's outcome when continuing care however, a nurse could perceive the circumstance as inducing suffering and being futile. Furthermore, family members can be inappropriate or hostile, with nurses receiving the brunt of the negative emotions. The stress that a family member experiences while their loved one is ill can manifest in the mentioned inappropriate or hostile behaviours. Likely being the healthcare team members they see the most, nurses can become the individual who must manage a family's negative emotions and must continue to provide holistic care to a patient in an uncomfortable environment (Jesmont et al., 2021; Rainer et al., 2018).

End-of-Life Care and Perceived Futility

End-of-life care and perceived futility can also elicit an ethical dilemma (Choe et al., 2019 & Rainer et al., 2018). Technological advances have allowed for the extension of life, and further treatment can be perceived as futile and can foster suffering. Nurses could feel that palliation would preserve dignity, often accepting the dying process before anyone else on the healthcare team. In situations where life is perceived to be inappropriately extended, nurses

could also feel that communication surrounding prognosis and offering palliation is inadequate, leading to improper decision-making for the patient or family. The perceived ideal process in these situations would be providing comfort; however, with the continuation of care, a nurse could experience ethical distress (Choe et al., 2019 & Rainer et al., 2018).

Consistently witnessing prolonged suffering due to perceived futile interventions can lead to moral distress among nurses, generating feelings of powerlessness when advocating for what they believe is in the patient's best interest (Choe et al., 2019; Whitehead et al., 2015). As such, a dissonance between a nurse's professional judgement and the prescribed interventions by the medical team can result in psychological strain and burnout (Choe et al., 2019; Rainer et al., 2018; Whitehead et al., 2015). Furthermore, the differing opinion on the ideal course of action can be perceived as a lack of support from other members of the healthcare team, creating a divide between the nurses and other healthcare team members and contributing to a negative workplace culture (Jesmont et al., 2021; Rainer et al., 2018; Whitehead et al., 2015).

The Nuances of the Pediatric Setting

The pediatric setting has additional contributing factors that need to be considered in the face of ethical dilemmas (Berger et al., 2015 & Walden et al., 2018). Children can have disease states that can be perceived as futile and cause distress for nurses to bear witness to. The scope of pediatric care ranges from infancy to young adulthood, creating a wide range of acute and chronic diagnoses. Technological and genomic science advances have allowed infants as premature as 23 weeks gestation to survive. Premature infants often experience chronic illness (e.g., neurological deficits, chronic lung disease, cerebral palsy, etc.) and are susceptible to prolonged hospitalizations, impacting the family's quality of life and attitudes during admission. These disease states exemplify that futility in pediatric care exists and can be further exacerbated

by the idea that children cannot always be self-advocates. A child's guardian may believe they are acting in the best interest of their child; however, prolonging treatment can be perceived as inducing suffering. Furthermore, futility can be compounded by children being be pre-verbal or non-verbal, inhibiting their ability to self-advocate (Berger et al., 2015; Reeder & Morris, 2021; Walden et al., 2018).

Nurses could also experience distress managing children who are victims of physical and emotional abuse (Berger et al., 2015; Walden et al., 2018). Children are often regarded as needing to be safeguarded and protected from harm; thus, when they are victims of abuse, their care can become particularly distressing (Berger et al., 2015). For example, it can be distressing when nurses must navigate complex family dynamics and legal obligations or find themselves reporting suspected abuse while maintaining therapeutic relationships with the child and family. As a result, a conflict between professional responsibilities and emotional involvement can arise, leading to moral distress (Berger et al., 2015; Walden et al., 2018). Furthermore, the distress from managing children who have experienced physical and/or emotional abuse is compounded by the emotional burden of advocating for vulnerable patients who may not be able to articulate their needs or experiences. Therefore, nurses who practice in pediatrics have additional circumstances that pose ethical dilemmas (Berger et al., 2015; Walden et al., 2018). As a result of numerous contributing factors, navigating ethical dilemmas can be quite challenging, with numerous adverse sequelae. In the following section, I will discuss the impact of the experience of ethical dilemmas.

The Impact of Ethical Dilemmas

Ethical dilemmas can significantly impact nurses and, as a result, have a downstream effect on the healthcare system (Choe et al., 2019; Whitehead et al., 2015). Individual impacts of

ethical dilemmas include moral distress and compassion fatigue (Berger et al., 2015; Choe et al., 2019; Sullivan et al., 2019; Walden et al., 2018; Whitehead et al., 2015). Organizational-level effects include staff retention and a decrease in job embeddedness (Li et al., 2023; Whitehead et al., 2015).

The Individual Level

At the individual level, ethical dilemmas can lead to moral distress and affect nurses' relationships with families and patients (Choe et al., 2019; Whitehead et al., 2015). Moral distress is the psychological discomfort or anxiety experienced when an individual cannot act according to their ethical beliefs as a result of external constraints, conflicting duties or institutional barriers (Whitehead et al., 2015). Moral distress can foster feelings of powerlessness and frustration, leading to emotional exhaustion and indifference towards the quality of care provided. When nurses experience these feelings, their relationships with patients and their families are negatively affected (Choe et al., 2019; Whitehead et al., 2015). Nurses can become desensitized toward patient experiences and become neglectful towards patient needs. As a result, the relationship between the nurse and patient is affected and trust can be broken (Whitehead et al, 2015 & Choe et al, 2019).

Compassion fatigue is another individual-level impact (Berger et al., 2015; Sullivan et al., 2019; Walden et al., 2018). Berger et al. (2015) describe compassion fatigue "as physical, emotional, and spiritual depletion when caring for patients" (p.11). Compassion fatigue occurs when a nurse's ability to cope with ethical dilemmas or distress is exceeded by their ability to recover from ethical dilemmas (Berger et al., 2015; Walden et al., 2018). Compassion fatigue has numerous health consequences including anxiety, depression, post-traumatic stress disorder, hypertension, coronary artery disease and diabetes (Berger et al., 2015; Walden et al., 2018).

Compassion fatigue can lead to nurses experiencing apathy towards patients and diminishes the compassion central to establishing and maintaining a relationship with the patient. A reduction in compassion also leads to a reduction in empathy, leading to a nurse detaching from the patient and becoming unmotivated to provide adequate care (Berger et al., 2015; Walden et al., 2018). Compassion fatigue also strains relationships within the workplace, with nurses exhibiting irritability due to emotional exhaustion (Berger et al., 2015 & Walden et al., 2018).

The Organizational Level

Ethical dilemmas can also affect the healthcare system (Li et al., 2023; Whitehead et al., 2015). Job satisfaction and retention are consistently mentioned themes in the literature reviewed. In Whitehead et al. (2015) moderate strength, medium quality study, 592 participating healthcare providers were surveyed, with 53.6% of the sample reporting they considered leaving their current position or went on to leave their position. Retaining a skilled workforce is paramount to ensuring quality care is provided and losing skilled nurses can create a significant financial burden on their healthcare system, reducing the quality of training for future nurses and the quality of care patients receive (Whitehead et al., 2015).

Li et al. (2023) referred to retention concerns as job embeddedness in their moderate strength, medium quality study. Job embeddedness is "the degree to which individuals intend to stay in their job and organization, and turnover intention" (Li et al., 2023, p. 2). Regarding the nursing profession, job embeddedness is the cumulative number of positive factors that encourage nurses to remain in their role. In the study by Li et al. (2023), 458 nurses demonstrated a negative correlation between moral distress, a product of experiencing ethical dilemmas, and job embeddedness. Therefore, reducing moral distress and exposure to ethical dilemmas would support job satisfaction and retention (Li et al., 2023; Whitehead et al., 2015).

A lack of job satisfaction leading to turnover translates to issues with resource allocation and increased healthcare costs (Berger et al., 2015; Li et al., 2023; Whitehead et al., 2015). The occurrence of ethical dilemmas requires additional resources, which can consume valuable time and take away from patient care. For example, an ethically challenging patient situation may require regular meetings between the healthcare team and the family, taking time away from patient care. Additionally, a nurse's dissatisfaction with their job leads to reduced quality of care and extended hospital stays. Extended hospitalization further burdens institutions financially and leaves patients vulnerable to additional adverse sequelae (e.g., hospital-acquired infections) (Berger et al., 2015; Li et al., 2023; Whitehead et al., 2015).

In summary, the impacts of ethical dilemmas are experienced at an individual level and by extension, the healthcare system. In particular, ethical dilemmas can lead to multiple emotional and physical manifestations (i.e., moral distress and compassion fatigue) for the individual and poor job satisfaction at the organizational level. In the next section, I will explore peer support as a method to mitigate the negative sequelae of ethical dilemmas.

Peer Support as an Intervention Strategy

Peer support programs are a potential strategy to reduce the effects of ethical dilemmas on the individual and an organization (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). When implemented, peer support programs emerge as "preclinical psychological support for people involved in tiring situations…based on mutual respect and on voluntary and not prejudicial help" (Carbone et al., 2023 p. 13).

Peer Support Programs

Peer support has been used to promote resilience in response to ethical dilemmas, among other adverse reactions in healthcare (i.e., burnout, compassion fatigue, post-traumatic stress

etc.) (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). In their scoping review, Carbone et al. (2022) summarize that peer support programs train individuals in strategies that guide peers to support one another. Peer support programs can be one-on-one meetings (e.g., peers that are paired up and meet individually), in a group setting (e.g., a group of nurses meeting to discuss an ethically distressing patient situation with a facilitator), or through online platforms.

Peer support programs can be held formally, where meetings would be at a scheduled time, led by a trained facilitator and can have a predetermined topic (e.g., the death of a long-term patient) or can allow for open dialogue among peers (Carbone et al., 2022; Simpson et al., 2023; Sullivan et al., 2019). These meetings would be a safe space where nurses are encouraged to openly discuss their experiences, share coping strategies and receive guidance. Additionally, formal sessions can promote a sense of community among nursing staff (Carbone et al., 2022; Simpson et al., 2023; Sullivan et al., 2019).

Informal peer support can occur through everyday colleague interactions (Carbone et al., 2022; Simpson et al., 2023). Peers trained in support strategies (i.e., active listening or debriefing techniques) can provide emotional support in informal settings such as during shift change or break time. Informal peer support can occur immediately after a challenging situation (e.g., a cardiac arrest), providing support in real-time. Informal peer support aids in building interpersonal relationships and shared experiences, allowing nurses to express feelings and receive empathetic feedback. The combination of formal and informal peer support can play a role in alleviating the negative effects of ethical dilemmas and enhancing emotional well-being and professional satisfaction in high-stress environments (Carbone et al., 2022; Simpson et al., 2023).

Benefits of Peer Support

Peer support provides a safe environment for nurses to share experiences, normalizing their feelings and promoting validation, while decreasing feelings of isolation (Pereira et al., 2021; Simpson et al., 2023). Peer support also fosters a sense of camaraderie among team members (Pereira et al., 2021; Simpson et al., 2023). When discussing ethical dilemmas, nurses can gain a new perspective on ethical challenges they may not have considered and, in turn, learn to navigate ethical dilemmas in cohesion. Moreover, colleagues within the same work area have a deeper understanding of the ethical dilemmas their co-worker is experiencing and, thus, can empathize on a more profound level. Nurses may be more inclined to use a peer support program and speak openly when receiving support from a peer who is a familiar face. A collaborative peer support approach has demonstrated nurses' enhanced ability to manage ethical dilemmas effectively (Pereira et al., 2021; Simpson et al., 2023).

With the implementation of peer support programs, nurses report feeling validated and seen by their institution (Pereira et al., 2021; Simpson et al., 2023). As a result, improved job satisfaction and retention were common themes noted in response to peer support programs. Peer support reduces the emotional toll on nurses and encourages a positive work environment. All of the benefits mentioned above lead to resilience among nurses and better patient outcomes (Pereira et al, 2021; Simpson et al, 2023).

Conclusion

The prevalence of ethical dilemmas among pediatric nurses underscores the complex and emotional challenges nurses often face (Jesmont et al., 2021; Schulz et al., 2023). These dilemmas, often emerging from end-of-life scenarios, organizational constraints, and conflicting perspectives, have detrimental effects on the nurse as an individual and the healthcare system by

extension (Choe et al., 2019; Whitehead et al., 2015). Peer support provides a safe environment for emotional expression, promotes camaraderie, facilitates shared learning experiences, and contributes to an organization's health (Pereira et al., 2021; Simpson et al., 2023). Thus, the literature supports the implementation of peer-supportive CARED rounds in the local practicum setting.

While it is evident in the literature reviewed that peer support is advantageous, understanding the perspective of pediatric nurses is required to address the unique constraints and dynamics of pediatric nursing (Choe et al., 2019; Pereira et al., 2021; Whitehead et al., 2015). Understanding how peer support affects individual institutions requires understanding the unique organizational limitations, challenges and opportunities for refinement (Choe et al., 2019; Pereira et al., 2021). To enhance this understanding, evaluation of peer support strategies among pediatric nurses and specific institutions is necessary to understand the efficacy for the individual and the organization. Like the support for implementing CARED rounds as a peer support initiative, the need for evaluation is also well supported (Pereira et al., 2021; Whitehead et al., 2015).

To facilitate this evaluation, relational inquiry is well-suited as a guiding theory within a process evaluation framework. Using relational inquiry as a guiding theory to evaluate peer support would honour the complex, dynamic relationships between patients, nurses and the broader social context (Younas, 2017; Younas, 2020). A process evaluation framework will provide a structure for evaluating a peer support program's implementation fidelity and the necessary feedback to understand the benefits, challenges and opportunities for improvement of a peer support program.

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Appendix B: Literature Summary Table

Quantitative Studies

Study/Design/Purpose	Sample and Methods	Key Results	Comments
Authors: Jesmont et al. (2021) Design: Case - Control Purpose: Identify patients with sources of "tension" – tension encompasses the themes of ethics, unresolved safeguarding concerns and end-of-life issues	N = 153 patients Country/setting: United Kingdom/Pediatric Inpatient Setting Methods: • Twice weekly survey was given to the nursing and medical team over 4 weeks • Clinical data were obtained from electronic patient records Data Collection: • Surveys were given to the nursing and medical team • Surveys inquired about whether the patients admitted had sources of "tension" Outcomes include: • 65 patients had a source of tension • 31 patients had multiple sources present • "staff-family" conflict and "staff-staff" conflict were sources of tension • Tension associated with longer length of stay	Outcome 1: Staff-family conflict – include unrealistic expectations/excessive healthcare demands (50%), communication breakdown (48%), treatment disagreements (30%) Outcome 2: Staff-staff conflict – multiple team involvement with no clear plan (47%), conflict in care decisions (30%), parental refusal of recommended interventions (26%)	Strength of Design: **Moderate** Quality: **Low** • Clear, focused and highly relevant research question • Random sampling was not used • Single-centre study affecting generalizability • Unclear if data assessors were adequately trained • The research was approved by an appropriate research ethics board
Authors: Berger et al. (2015) Design: Cross -sectional survey study Purpose: • Determine the prevalence and severity of	N = 239 (across 5 hospitals) Country/setting: United States/various pediatric inpatient units Data Collection: • Hard copies and web-based surveys available to nurses • The Cronbach alpha reliabilities are CS: .88; burnout: .75; and STS: .81.	Outcome 1: Moderate to high compassion satisfaction (71.5% of the sample) Outcome 2: Low compassion satisfaction (28.5%) correlated with high burnout (29%) and high secondary traumatic stress (27%)	Strength of Design: **Moderate** Quality: **Medium** • Cohort studies are regarded as having moderate strength. • There is no missing data and there appeared to be no attrition in study participants. However, the exclusion

Study/Design/Purpose	Sample and Methods	Key Results	Comments
compassion satisfaction and compassion fatigue among pediatric nurses working in various subspecialties • Variations in prevalence and severity of compassion satisfaction and compassion fatigue based on respondent demographics • Sources of compassion fatigue in pediatric nurses and methods to address compassion fatigue	Outcomes included: • Moderate to high compassion satisfaction • Low compassion satisfaction correlated with high burnout and high secondary traumatic stress • Nurses aged 18 – 39 had significantly lower levels of compassion satisfaction, higher levels of burnout and secondary traumatic stress	Outcome 3: Nurses aged 18 – 39 had significantly lower levels of compassion satisfaction (F (1, 23) = 15.00, p b .01), higher levels of burnout (F(1, 23) = 4.4, p b .05) and secondary traumatic stress STS (F(1, 23) = 4.6, p b .05)	criteria were vast and many patients were excluded from the study • Protocols provided clarity and consistency for all providers • Inconsistent measures to obtain data and chance for duplicate data (i.e., participant completing both web-based survey and hard copy)
Authors: Li et al. (2023) Design: Cross-sectional study Purpose: To investigate the relationship between moral distress, moral resilience, and job embeddedness, and explore the mediating	N: 458 nurses Country/Setting: China/Pediatric Units across several hospitals Method: • Moral Distress Scale – adapted to pediatric – to determine levels of moral distress • Moral Resilience Scale – a higher score represents a higher level of resilience	Outcome 1: Moral distress negatively correlated with job embeddedness (r = - 0.535, p < 0.01) – Pediatric nurses in this study face “more moral problems” due to China’s population planning policy Outcome 2: Moral resilience positive impact on job embeddedness (β=0.525, p <	Strength of Design: **Moderate** Quality: **Medium** Comments: • Convenience sampling • Statistical significance reached with adequate power • Precaution is taken to code-match and screen questionnaires

Study/Design/Purpose	Sample and Methods	Key Results	Comments
role of moral resilience between moral distress and job embeddedness among nurses	• Job Embeddedness Scale- determines a nurse's intention to remain in their role as a nurse Data collection: • Data were collected 3 times over 2 months to mitigate common method bias • Electronic and paper questionnaires were available • At the end of each survey, the research team code-matched and screened the questionnaires to eliminate invalid responses, such as responses that exhibited excessive regularity, failed matches, an excessive number of missed responses and unqualified responses; the same procedure was used for the subsequent data collection process • Participant demographics were also obtained Outcomes were: • Moral distress negatively correlated with job embeddedness • Moral resilience has a significant positive impact on job embeddedness • Moral resilience partially mediates the relationship between moral distress and job embeddedness	0.01) – high levels of moral resilience are associated with lower levels of stress, anxiety and depression Outcome 3: • Moral resilience partially mediates the relationship between moral distress and job embeddedness (β=0.087, p< .01)	• Validated tools used to ensure the reliability of data obtained
Authors: Schulz et al. (2023) Design: Cross-sectional Survey Purpose: Explore the scope of nurses' ethical	N = 281 patients Country/setting: Australia/Tertiary Pediatric Centre Methods: • Anonymous online survey	Outcome 1: The majority of the dilemmas were reported as "every day" dilemmas – "every day" ethical dilemmas are the daily interactions that add a moral load on nurses (i.e.,	Strength of Design: **Moderate** Quality: **Low** • Low response rate • Random sampling was not used • No mention of CI or Power

Study/Design/Purpose	Sample and Methods	Key Results	Comments
dilemmas in a pediatric hospital and their engagement with the hospital's clinical ethics service	• Barwon Health study amended for use with pediatric nurses • The free text segment of the survey allowed nurses to expand further Data Collection: • Demographic details were included in the survey • The survey included 16 questions or circumstances with ethical dilemmas and participants were to respond on a Likert scale • Highest response rates from critical care areas Outcomes include: • The majority of the dilemmas were reported as the "every day" dilemmas • Inclusive view of ethical dilemmas • Challenges in managing ethical dilemmas • Nursing engagement with ethics service	resources being ineffectively allocated) Outcome 2: Inclusive view of ethical dilemmas - Ethical issues can arise when different ethical values or principles come into conflict, but also when ethical values or principles as a whole come into conflict with non-ethical considerations, such as organizational efficiency and professional roles Outcome 3: Challenges in managing ethical dilemmas – common ethical situations include: a perceived lack of recognition of the nursing voice and power structure making nurses feel powerless Outcome 4: Nursing engagement with ethics service – 70% of the sample were aware of clinical ethics service, 70% were unaware of the process of formal case consultations and 90%of sample never attended any ethics meetings	• Single-centre study affecting generalizability • The research was approved by an appropriate research ethics board
Authors: Simpson et al. (2023) Design: Uncontrolled before-after Purpose: Describe a framework for a peer support program design and implementation	N = 391 Country/setting: United States/various pediatric inpatient units Data Collection: • Survey sent via email to evaluate feasibility and effectiveness of peer support program	Outcome 1: Participants reported feeling somewhat or very positive after being offered support – 234 individuals were offered support after an adverse event and 172 (73.5%) felt somewhat or very positive after being offered support	Strength of Design: **Moderate** Quality: **Medium** • There is no missing data and there appeared to be no attrition in study participants. However, the exclusion criteria were vast and many

Study/Design/Purpose	Sample and Methods	Key Results	Comments
	• Free text response sections included to provide feedback • All allied healthcare professionals included Outcomes included: • Participants reported feeling somewhat or very positive after being offered support • Emotional fatigue and preservation showed significant improvement after receiving support • Postimplementation survey respondents agreed that peer support was a valuable resource	Outcome 2: Emotional fatigue and preservation showed significant improvement after receiving support – respondents reported decreased negative feelings after a peer support encounter (P < .01, Wilcoxon rank sum) Outcome 3: Postimplementation survey respondents agreed that peer support was a valuable resource (71.8%) and 80% said they would recommend peer support to others	participants were excluded from the study • Additional organizational strategies implemented at the same time • Single centre study • Adequate power used for statistical analysis
Authors: Whitehead et al. (2015) Design: Cross-sectional study Purpose: To assess and compare moral distress among all healthcare professionals in all settings in one large healthcare system	N: 458 nurses Country/Setting: United States/Level 1 trauma, tertiary medical centre Method: • Included all allied healthcare professionals • Moral Distress Scale – modified to address practice differences between clinicians • Demographics also obtained • HECS-S used to gauge hospital ethical climate Data collection: • Web-based survey to all healthcare professionals • 22% response rate Outcomes were: • Moral distress present in all groups • Nurses had the highest levels of emotional distress	Outcome 1: Moral distress present in all groups Outcome 2: Nurses and other professionals involved in direct patient care had significantly higher moral distress than physicians (p=.001) and other indirect care professionals (p<.001). Outcome 3: Moral distress was negatively correlated with ethical workplace climate (r =-0.516; p<.001)	Strength of Design: **Moderate** Quality: **Medium** Comments: • Convenience sampling • Self–reported data resulting in recall and reporting bias • Statistical significance reached with adequate power • Precaution is taken to code-match and screen questionnaires • Validated tools used to ensure the reliability of data obtained

Study/Design/Purpose	Sample and Methods	Key Results	Comments
	• Moral distress negatively correlated with ethical workplace climate • Those who considered quitting a previous position or who had left a position reported significantly higher scores than those who had not		
Authors: Sullivan et al. (2019) Design: Controlled Before-After Study Purpose: Develop an evidence-based compassion fatigue program and evaluate its impact on nurse-reported burnout, secondary traumatic stress and compassion satisfaction	N = 59 nurses Country/setting: United States/Pediatric Oncology Unit "Pre-intervention" phase: • Participants were given a questionnaire to determine levels of secondary traumatic stress, burnout, satisfaction, resilience, and coping style • Demographic variables were also obtained 2 – month follow up: • Follow-up questionnaire to assess compassion fatigue variables 4 – month follow up: • Follow-up questionnaire to assess compassion fatigue variables 6 – month follow up: • Follow-up questionnaire to assess compassion fatigue variables Data Collection: • Measures were completed in hard copy and kept in a secure location • The project nurse hand-delivered assessment tools to each participant and followed up with nurses who did not return the survey Outcomes include:	Outcome 1: Reduction in secondary traumatic stress when comparing pre-intervention to 4-month follow-up ($p = 0.029$) Outcome 2: Behavioral disengagement and self-blame were negatively correlated with compassion satisfaction ($p < 0.01$) Outcome 3: Being able to adapt and bouncing back were not significantly correlated with burnout and secondary traumatic stress	Strength of Design: **Moderate** Quality: **Medium** • Clear, focused and highly relevant research question • Random sampling was not used • An adequate alpha and statistical significance was reached for 3 of the outcomes. • Appears to have consistent measures applied to all participants, minimal missing data • Assessors were not blinded to the participants' group, patients were not blinded, however no difference to the study • A high proportion of participants completed the study (>98%) • The research was approved by an appropriate research ethics board

Study/Design/Purpose	Sample and Methods	Key Results	Comments
	• Reduction in secondary traumatic stress when comparing pre-intervention to 4-month follow-up • Behavioural disengagement and self-blame were negatively correlated with compassion satisfaction • Being able to adapt and bouncing back were not significantly correlated with burnout and secondary traumatic stress		
Authors: Browning & Cruz (2018) Design: Controlled Before-After Study Purpose: This project aimed to develop and test a protocol for alleviating moral distress through regular, social work-facilitated debriefings with ICU nursing staff, including both reflective and educational components, with a secondary goal of evidencing organizational recognition and support for nurses coping with moral distress	N: 43 nurses Country/Setting: ICU Method: • RNs recruited at a unit staff meeting • Moral Distress Scale – modified for use with critical care nurses • Demographics also obtained • Non-Intervention group: individuals who completed MDS-R at pre-intervention and did not attend any debriefing sessions • Intervention group: individuals who completed MDS-R at 2-time points and attended at least one reflective debriefing session Data collection: • Web-based survey • 61% response rate Outcomes were: • Correlation between moral distress and considering leaving a nursing position • Debriefing demonstrated a reduction in moral distress scores	Outcome 1: Correlation between moral distress and considering leaving a nursing position – (9/42 = 21%) Outcome 2: Debriefing demonstrated a reduction in moral distress scores - before the debriefings, there were no significant differences between these control and experimental groups. After 6 months of debriefings, an independent samples t-test revealed a potentially significant difference between the moral distress scores of the control group ($n = 23$, $M = 42.87$, $SD = 55.73$) and the experimental group ($n = 19$, $M = 96.50$, $SD = 51.26$), ($t(40.86) = -3.29$; $p = .002$	Strength of Design: **Weak** Quality: **Medium** • Clear, focused and highly relevant research question • Random sampling was not used • An adequate alpha was used and statistical significance was reached for 3 of the outcomes. • Appears to have consistent measures applied to all participants, minimal missing data • Small sample size

Study/Design/Purpose	Sample and Methods	Key Results	Comments
Authors: Silverman et al. (2022) Design: Cross-sectional Purpose: • Determine the perception of the ethical climate, levels of moral distress, and intention to leave one's job among nurses and physicians, and between the different ICU types and • Determine the association between the ethical climate, moral distress, and intention to leave.	N = 206 nurses, nurse practitioners and physicians Country/setting: United States/Tertiary academic university hospital that included adult and pediatric ICUs Method: • Ethical climate assessed using the Ethical Decision-Making Climate Questionnaire (EDMQ) • Moral distress assessed using the moral distress for healthcare professionals' tool (MMD-HP) • Intention to leave is measured with Likert sale with a statement that says "I have thoughts about leaving my current position/job" Data Collection: • Email sent out to respective staff informing them of a survey • Flyers and posters were displayed with a QR code • Incentivized to participate in the study, could enter to win a gift card • The sample consisted of 73% nurses, physicians were 27% Outcomes include: • Nurses had higher "intention to leave" scores compared with physicians • Differing perceptions in ethical climate between disciplines • Differing perceptions in ethical climate between different ICUs	Outcome 1: Nurses had higher "intention to leave" scores compared with physicians – 54% of nurses vs 38% of physicians Outcome 2: Differing perceptions in ethical climate between different ICUs – a high percentage of staff in NICUs and PICUs rated ethical climate as "good" (28.6%) compared to 18.6% of Medical ICU and 16.9% of Surgical ICUs Outcome 2: Differing perceptions in ethical climate between disciplines – a smaller percentage of nurses (15.9%) perceived their ethical climate as "good" compared to physicians (29.1%)	Strength of Design: **Moderate** Quality: **Medium** • Clear, focused and highly relevant research question • Convenience Sample • An adequate alpha was used and statistical significance was reached • Appears to have consistent measures applied to all participants • Possible self-selection bias as only those interested may participate • Nurse practitioners and nurses combined into one group – each of whom may have different perceptions due to their various roles and interactions with physicians • The research was approved by an appropriate research ethics board

Study/Design/Purpose	Sample and Methods	Key Results	Comments
Authors: Walden et al. (2019) Design: Cross-sectional Purpose: • Examine the prevalence of compassion fatigue and life stress of pediatric nurses	N = 268 nurses Country/setting: United States/Pediatric hospital Method & Data Collection: • Professional Quality-of-Life scale to determine the prevalence of compassion fatigue • Life stress scale used to measure stress related to major life events • Demographics were also obtained • Survey conducted with an online survey tool Outcomes include: • Moderate to high compassion satisfaction, low to moderate secondary traumatic stress • High burnout rates	Outcome 1: Moderate to high compassion satisfaction, low to moderate secondary traumatic stress – 51.49% of participants had an average amount of compassion satisfaction, 48.51% had high compassion satisfaction, indicating resilient nurses, 54.85% had low secondary traumatic stress Outcome 2: High burnout rates – 51.12% had high levels of burnout	Strength of Design: **Moderate** Quality: **Low** • Convenience sampling • Statistical significance reached with adequate power • Low response rates to the survey • Single site study • Validated tools used
Authors: Wocial et al. (2017) Design: Controlled Before-After Design Purpose: • Evaluated the impact of weekly meetings (PEACE rounds) to establish goals of care for patients with longer than 10 days length of stay in the ICU for a year.	N = 126 Country/setting: United States/PICU Method & Data Collection: • Pre-intervention group – 66 patients taken from historical control group • Post-intervention group • Moral distress is measured intermittently using the Moral Distress Scale and using Moral Distress Thermometer (MDS), which defines moral distress and asks the respondent to also rate their level of distress • Pediatric Ethics and Communication Excellence (PEACE) Rounds are designed to be a formal facilitated discussion about setting realistic care goals and the ethics inherent in caring	Outcome 1: Moral distress scores, measured on the moral distress scale revised (MDS-R), were lower for respondents in all categories (non-significant) Outcome 2: Decrease in patient LOS - 4.94 control vs 3.37 PEACE p = 0.015 Outcome 3: Decrease in patient LOS 11 % control, 28 % PEACE, p = 0.013 Outcome 4: Increase in-hospital death 9 % control, 25 % PEACE, p = 0.015	Strength of Design: **Moderate** Quality: **Medium** • The research question clearly defined • Study design suitable for the research objective • Statistical significance reached with adequate power • Low response rates to the survey • Single site study • Random sampling was not used • Validated tools used • Ethical approval obtained

Study/Design/Purpose	Sample and Methods	Key Results	Comments
	for children with life-threatening illness • Patient demographics obtained Outcomes include: • Moral distress scores, measured on the moral distress scale revised (MDS-R), were lower for respondents in all categories (non-significant) • Decrease inpatient LOS • Increase in code status changes (DNR) • Increase in-hospital death		
Authors: Zaratouldi et al. (2021) Design: Cross-sectional Purpose: Investigate pediatric nurses' attitudes toward death	N = 170 nurses Country/setting: Greece/Pediatric hospital Method & Data Collection: • Questionnaire asking for information related to previous training and clinical experience regarding death issues in general and dying children's care in particular • Demographics obtained	Outcome 1: 68.6% reported that the death of a child affects them very much, while 44.7% of the participants didn't feel well prepared to manage death issues. Outcome 2: Pediatric nurses were greatly affected by children's death, expressing mainly feelings of sadness (44%), compassion (22%), guilt (22%) and anger (22%) Outcome 3: 73% of the sample wished the hospitalized child, died when they were not present. 53.5% had been trained regarding the care of dying patients and the management of death and mourning as part of their curriculum and 21.2% had attended a relative seminar/lecture	Strength of Design: Weak Quality: Low • Convenience sampling • Low response rates to the survey • Single site study • Unclear if validated tools used • Unclear if statistical significance reached

Study/Design/Purpose	Sample and Methods	Key Results	Comments
Authors: van Zuylen et al. (2023) Design: Mixed-methods study Purpose: • Describe the experienced moral distress, challenges and ethical climate concerning end-of-life care of Intensive Care Unit staff during the first wave of the COVID-19 pandemic • Describe the positive experiences and lessons learned, which function as directions for future forms of ethics support.	N: 178 Country/Setting: The Netherlands/Intensive Care Unit Method: • Included quantitative and qualitative elements • A 36-item survey about moral distress (concerning quality of care and emotional stress), team cooperation, ethical climate, ways to manage ethical climate, end-of-life decisions • 2 open-ended questions about positive experiences and suggestions for work improvement Data collection: • The questionnaire was emailed to the participants • Nurses, Nurse anesthetists, Surgical assistants, physicians, and ancillary services who possibly worked during the first wave of the COVID-19 crisis invited • Demographics obtained Outcomes were: • Participants showed signs of moral distress • Quality of care affected • Positive experiences connected to "team cooperation," "Team solidarity," and "work ethic"	Outcome 1: Participants showed signs of moral distress – all 178 respondents showed signs of moral distress Outcome 2: Quality of care affected- 56% felt quality of care was not the same as before the COVID-19 pandemic Outcome 3: Positive experiences connected to "team cooperation," "Team solidarity," and "work ethic" – 74% had confidence in the professional competencies of their colleagues	Strength of Design: **Moderate** Quality: **Medium** • Clear, focused and highly relevant research question • Appropriate methodology for the research question • Random sampling was not used • Quantitative and qualitative methods confirmed and clarified the closed questions • Not all respondents worked at the ICU throughout the first COVID-19 wave • During the first COVID-19 wave, many adjustments were made to both the quality and delivery of care therefore, responses will vary based on the time the participant is considering when answering questions

Qualitative Studies

Study/Design/Purpose	Sample and Methods	Key Results	Comments
Authors: Dos Santos et al. (2023) Design: Thematic data analysis Purpose: This study aimed to explore ethical and moral conflicts arising in the field of pediatric oncology from the perspective of nursing professionals	N: 10 nurses Country/Setting: Sao Paulo, Brazil/Inpatient and ICU specializing in Pediatric Oncology Method: • Participants were recruited using a snowball sampling method • Semi-structured interviews used • Analyzed using thematic data analysis Data collection: • All participants interviewed by the author • Interviews digitally recorded • Interviews were deidentified Outcomes were: • living with conflicts intrinsic to the relationships • developing moral resilience	Outcome 1: living with conflicts intrinsic to the relationships - multiple sources of conflict in the relationships of nursing professionals with the team, with the family, and with seriously ill children, summarizing trigger-sensitive topics to be addressed for its mediation Outcome 2: represents how nurses reframe the conflicts and make use of strategies to avoid being personally harmful	Strength of Design: **Moderate** Quality: **Medium** Comments: • Review question clearly stated • The research question and objectives clearly stated • Appropriate methodology for addressing a research question • Implications for practice supported by reported data
Authors: Reeder & Morris (2021) Design: Constructivist grounded theory methodology Purpose: • Aims to explore the important theme of uncertainty and how this is experienced by parents of children with	N: 14 Country/Setting: United Kingdom/Inpatient setting Method: • Employed a constructivist grounded theory methodology • The researcher had a dual role of researcher/clinician within the organization Data collection: • Semi-structured interviews • Participants were given the option to be interviewed as a mother/father dyad or individually	Outcome 1: Minimizing Concerns – Upon initial diagnosis, guardians might feel that a child's long-term disability is a "passing phase" or a form of denial that their child had a long-term disability was Outcome 2: Getting an answer – as a child's "difficulties and differences" continue to be noticed, guardians become focused on a diagnosis Outcome 3: Prioritizing diagnosis – helped parents make sense of their situation and	Strength of Design: **Moderate** Quality: **Medium** • Clear, focused and highly relevant research question • Appropriate inclusion criteria for review question • Implications for practice supported by reported data • Methods to minimize errors in data extraction – single researcher conducted, transcribed and analyzed data • Researcher had dual role of researcher and clinician within institution

long-term disability • Aims to consider how health professionals might offer support to parents to manage their uncertainty without taking away their hope	• Digitally recorded and labelled with a pseudonym to de-identify Outcomes were: • Minimizing Concerns • Getting an answer • Prioritizing a diagnosis	influenced hopes and expectations for the future	
Authors: Choe et al. (2015) Design: Giorgi's phenomenological method Purpose: explore the ethical difficulties faced by pediatric nurses during bedside care for hospitalized children	N: 14 nurses Country/Setting: South Korea/Pediatric Units across 6 hospitals Method: • Participants were recruited using a snowball sampling method • Giorgi's phenomenological method – focuses on the description of an individual's experiences of a given event or phenomenon to comprehend the meaning of those experiences from the perspective of these individuals Data collection: • Some of the nurses recruited by the coauthor who used to work at one of the hospitals • Nurses were individually interviewed, face-to-face, by the same interviewer • Unstructured, open-ended questions regarding the ethical difficulties they experienced Outcomes were: • 3 themes were identified: ethical numbness in a task-oriented context,	Outcome 1: Ethical numbness in a task-oriented context – Rapid completion of tasks was prioritized over providing ethical care. This resulted in shame or remorse toward the patients Outcome 2: Negative feelings toward family caregivers – negative perceptions/feelings occurred when caregivers had conflicting opinions on care. Outcome 2: Difficulty in expressing oneself in an authoritative climate – Difficult to express opinions in a physician-centred authoritative climate	Strength of Design: **Moderate** Quality: **Medium** Comments: • Review question clearly stated • Implications for practice supported by reported data • Adequate representation of pediatric nursing specialty with nurses recruited across 6 hospitals • Reference mentions that a coauthor works at one of the hospitals

	negative feelings toward family caregivers and difficulty expressing oneself in an authoritative climate		

Systematic Reviews

Authors: Haahr et al. (2020) Design: Meta-analysis Purpose: Describe and discuss ethical dilemmas described and experienced by nurses in clinical practice today	N = 15 articles Country/setting: Denmark Method: • Literature review following the matrix method • Reviewed studies published between 2011 and 2016 Data Collection: • PubMed, CINAHL, Scopus, and SveMedþ were the databases used • The assistance of a librarian was sought after • The following search terms were used: nursing, nursing care, ethical dilemmas, existential dilemma, empirical and moral distress • Only articles written in English or Scandinavian languages were included Outcomes include: • Balancing harm and care • Work overload affecting the quality of care • Navigating in disagreement	Outcome 1: Balancing harm and care – when nurses were forced to act against what they considered to be good and appropriate care, this could lead to an ethical dilemma Outcome 2: Work overload affecting the quality of care – the quality of care is affected by a lack of balance between patient care and administrative duties Outcome 3: Navigating in disagreement – conflict with other disciplines is a source of distress (e.g., disagreeing on treatment strategy)	Strength of Design: **Strong** Quality: **Medium** • Meta-analysis considered strong • Only peer-reviewed studies included • Articles were not screened for quality and no articles were excluded because of a lack of quality • 15 studies included in the review
Authors: Pereira et al. (2021) Design: Meta-analysis Purpose: Describe the existing peer support programs published in the literature and evaluate the quality of	N = 11 articles Country/setting: Canada/ Method: • Literature review following the PRISMA checklist Data Collection:	Outcome 1: Importance of confidentiality – online support groups could be preferred due to privacy. With hidden identities, participants felt comfortable and received their full benefit Outcome 2: Lack of time is a barrier to seeking peer support –	Strength of Design: **Strong** Quality: **Strong** • Meta-analysis considered strong • 2 reviewers independently screened all titles and abstracts

the program descriptions provided by each published article	• Ovid MEDLINE, EMBASE, PubMed, and Ovid ERIC were the databases used • The assistance of a librarian was sought after • Published articles featuring the target population as participants of peer support programs at post-secondary, graduate or professional levels were included Outcomes include: • Importance of confidentiality • Lack of time is a barrier to seeking peer support • In-person programs have the benefit of receiving immediate feedback • A gender divide exists	in-person programs could be a challenge due to the inconvenience of commuting Outcome 3: In-person programs have the benefit of receiving immediate feedback- in-person sessions were well received with participants gaining valuable experiences and increasing interest in peer support Outcome 4: A gender divide exists – more women than men wanted to learn about mental health	• The validated quality rating checklist for peer support programs was tailored to the research question • 11 studies included in the review
Authors: Carbone et al. (2022) Design: Scoping review Purpose: A scoping review was conducted to clarify the key concepts available in the literature and understand Peer Support characteristics and methods of implementation	N = 49 articles Country/setting: Italy/ Method: • Literature review followed Joanna Briggs Method Manual for Scoping Review • Inclusion criteria included: English and Italian language, any type of study, including grey literature, exclusive interest in the field of healthcare professionals in the hospital and extra-hospital environment Data Collection: • Ovid, EMBASE, PubMed, Google Scholar, CINAHL, and Cochrane Library were the databases used Outcomes include: • Peer support definition	Outcome 1: Peer support definition - is a psychological process through which people gain a sense of self-efficacy and aim, by sharing one's narrative, emotions and perspectives. Peer support is a way to give and receive support, to face professional fatigue, weariness, stress and burnout, to support emotional well-being and improve healthcare workers' resilience. Outcome 2: Peer support training modalities - Training courses vary from 2 hours to 5 hours, with recalls during other learning days, in person or through online	Strength of Design: **Strong** Quality: **Strong** • 2 reviewers independently screened all titles and abstracts • Excluding languages outside of Italian and English could limit the data obtained • The validated quality rating checklist for peer support programs was tailored to the research question • 49 studies included in the review

	• Peer support training modalities • Peer support modalities	platforms. In some cases, follow-up meetings and debriefings are organized after months, with the possibility to ensure a continuative trust in the role Outcome 3: Peer support modalities - individual meetings, video call platforms, group meetings	
Authors: Rainer et al. (2018) Design: Systematic review Purpose: Identify themes and gaps in the literature to stimulate researchers to develop strategies to guide decision-making among clinical nurses faced with ethical dilemmas	N = 35 articles Country/setting: Denmark/pediatric settings Method: • Literature review following Garrard's matrix method • Reviewed studies published between 2000 and 2017 Data Collection: • PubMed, CINAHL, Scopus and OVID • Articles from non-acute settings, niche specialties, without an abstract and neonatal studies were excluded • Search terms included: ethics, ethical dilemma and nurse Outcomes include: • Ethical dilemmas arose from end-of-life issues, conflict with physicians or families, patient privacy concerns and organizational constraints • Study location made a difference in the results	Outcome 1: End-of-life care – the most frequently cited ethical dilemma often relating to communication about prognosis, inadequate palliation questions of potential healing and futility Outcome 2: Conflict with physicians or families – Conflict over treatment plans from the perspective of the physician or family was often cited as an ethical dilemma. Outcome 3: Organizational constraints – Staffing shortages are an example that made nurses unable to provide holistic care Outcome 4: Privacy and Dignity – The nurse may be unable to provide privacy and dignity to her patients due to external constraints (i.e., leaving a patient alone in the bathroom could be a safety risk).	Strength of Design: **Moderate** Quality: **Medium** • Only peer-reviewed articles included • Only included studies with moderate or Strong design strength • More qualitative studies were included compared to quantitative • Only included articles that studied acute care and ambulatory
Authors: Prentice et al. (2016)	N = 13 articles Country/setting: Australia/NICU and PICU Method:	Outcome 1: Overly "burdensome" and disproportionate use of	Strength of Design: **Moderate** Quality: **Medium**

Design: Systematic review Purpose: Review the literature on moral distress experienced by nursing and medical professionals within neonatal intensive care units (NICUs) and pediatric intensive care units (PICUs)	• Literature review following PRISMA • Reviewed studies published between 1985 and 2015 Data Collection: • PubMed, EBSCO, and Scopus • Articles limited to those performed in an "industrialized country setting and written in English" • Search terms included: neonate, infant, pediatric, premature or preterm (moral distress OR moral responsibility OR moral dilemma OR conscience OR ethical confrontation) AND intensive care. Outcomes include: • Overly "burdensome" and disproportionate use of technology perceived not to be in a patient's best interest, and powerlessness to act • Moral distress is expressed differently within the nursing and medical literature	technology perceived not to be in a patient's best interest, and powerlessness to act - With an increasing reliance on life-sustaining technology within intensive care, moral distress is a significant issue for healthcare professionals working in these environments Outcome 2: Moral distress is expressed differently within nursing and medical literature – nurses are portrayed as victims, while physicians are seen as perpetrators instigating "aggressive care"	• Included studies with moderate or strong design strength • More qualitative studies were included compared to quantitative • Only included articles that studied acute care and ambulatory • Studies reviewed by 2 authors independently

Descriptive Studies

Authors: Mills and Cortezzo (2020) Design: Review Purpose: Describe moral distress and the situations that give rise to it in the NICU, ways in which various members of the medical team experience it, how it impacts care delivery, and approaches to address it.	N = unclear Country/setting: United States Method: unclear Data Collection: unclear Outcomes discussed: • End-of-life/Palliative Care • Medical Utility/Futility • Perviability • Conflict and Disagreement	Outcome 1: End-of-life/Palliative Care - End-of-life care in the NICU, which involves difficult decisions to limit or withdraw life-sustaining treatments and significantly impacts both parental coping and medical team attitudes, often leads to moral distress among providers due to differing views on aggressive care and the timing of death. Outcome 2: Medical Utility/Futility - Determining medical futility in neonatal care is challenging due to uncertain outcomes and advancing technologies, causing moral distress among providers who struggle to balance the perceived benefits of life-sustaining interventions with the potential for undue suffering and differing values regarding quality of life. Outcome 3: Perviability - Periviable deliveries and resuscitation are highly controversial due to institutional variations, uncertain outcomes, and the moral and ethical challenges providers face in balancing their values with parental wishes and the available evidence.	Strength of Design: **Weak** Quality: **Low** • Review design and method of data collection not stated • Research question clearly stated and data highly relevant to research question • Implications for practice • Inclusion criteria for review question not stated • Search strategy was not mentioned • Criteria to appraise studies unclear • Included high quality references in review • Review provides an in-depth analysis of the studies, however does not describe methodologies

		Outcome 4: Conflict and Disagreement - While differing views within a care team can foster progress, they can also cause moral distress, degrade relationships, and create variability in parental discretion, ultimately necessitating consensus to mitigate ethical discomfort.	

Appendix C: Consultation Report

Consultation Report: Peer Support to Address Ethical Dilemmas

To reduce the adverse consequences of ethical dilemmas, the Cardiac Critical Care Unit (CCCU) at Sick Kids Hospital in Toronto implemented a peer support program referred to locally as CARED rounds. Ethical dilemmas commonly experienced in the pediatric critical care setting include futility in care, conflicting perspectives on patient management, and end-of-life care (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018). Ethical dilemmas can have negative emotional and physical manifestations on healthcare providers and, in turn, unfavourably affect the healthcare system (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018). For instance, encountering ethical dilemmas can induce moral distress among registered nurses, diminishing job satisfaction and adversely affecting the quality of care. Peer support has emerged as a potential intervention to mitigate the effects of ethical dilemmas, fostering a sense of camaraderie, promoting validation, and reducing the emotional toll of ethical dilemmas, thus encouraging a positive work environment (Pereira et al., 2021; Simpson et al., 2023). Carbone et al. (2022) describe "the main objective of peer support interventions is indeed to provide support based on the sharing of information and experiences, mutual consultation and exchange among peers" (p. 2).

Established in 2020, CARED rounds offer a secure environment for allied healthcare professionals, including registered nurses, to share their experiences and receive support in addressing ethical dilemmas. The purpose of CARED rounds is to alleviate the negative impacts of ethical dilemmas that healthcare professionals encounter in the CCCU. However, since their implementation, no formal evaluation has been conducted. Evaluating peer support is essential for assessing its efficacy and sustainability in reducing the negative effects of ethical dilemmas (Pereira et al., 2021; Whitehead et al., 2015). While the evaluation of peer support is well-established, there are relatively few resources specifically addressing registered nurses with

expertise in pediatrics (Berger et al., 2015; Choe et al., 2019). Therefore, it is warranted that peer support among pediatric registered nurses be evaluated. Thus, I have chosen to develop and implement an evaluation of CARED rounds for my Master of Science in Nursing (MScN) practicum project.

I began this project by reviewing the literature to explore ethical dilemmas in nursing, the effects of such dilemmas, and the importance of peer support to mitigate the negative sequelae of ethical dilemmas. I also explored program evaluation in healthcare settings. Whitehead et al. (2015) explain that healthcare environments exhibit significant variations in organizational culture, resources and staff dynamics, which can impact the adoption and effectiveness of peer support initiatives. As such, a local evaluation of peer support could reveal specific constraints, staff engagement levels, challenges, and benefits (Whitehead et al., 2015). Consequently, peer support initiatives can be customized to meet the unique needs of the setting where they are implemented (Pereira et al., 2021; Whitehead et al., 2015).

Based on my literature review, I have chosen to use process evaluation as the guiding framework in developing and implementing CARED rounds evaluation. Stratton et al. (2021) postulate that process evaluation is utilized to "identify the strengths and weakness of an ongoing program with the primary objective being to determine how the programs could be improved" (p. 204). A critical component of process evaluation is the collection of feedback. For this project, I will collect feedback in two ways: first, I will gather feedback through consultations regarding local registered nurses' and nurse leaders' experiences with CARED rounds and their perspectives regarding *how* CARED rounds should be evaluated, including questions that should be explored within the evaluation. Additionally, during the evaluation itself, I will also seek feedback. Therefore, I am seeking feedback *regarding how to evaluate CARED rounds and*

during the actual evaluation to be implemented in my final course in the MScN program. This feedback is critical to the overall success of the evaluation.

A bioethicist, a bioethics nurse, registered nurses, and a nurse manager participated in the local consultations. These individuals were selected because of their specialized expertise and ability to provide valuable guidance on the data required for a comprehensive evaluation of CARED rounds. An online questionnaire was distributed to these local stakeholders to gather feedback. Through the questionnaire, I aimed to identify the ideal evaluation methods (e.g., moral distress scales), a preferred mode of communication (e.g., email), and relevant demographic data (e.g., preferences of junior registered nurses compared to senior registered nurses). In this paper I will discuss the consultation process, including recruitment, data collection and analysis, and the results.

CARED Rounds

CARED rounds are a peer support initiative implemented in the local practicum setting (CCCU) to reduce the negative sequelae associated with encountering ethical dilemmas. A bioethics nurse (registered nurse with additional education in bioethics) or bioethicist (has bioethics expertise but is not a registered nurse; consults on ethically challenging patient cases) facilitates CARED rounds at regular intervals (i.e., monthly and as necessary), interchanging between in-person (i.e., engaging with the registered nurses directly at the point of care) and virtual meetings. Since CARED rounds commenced in 2020, the COVID-19 pandemic required social distancing and therefore, a choice to meet virtually has been provided and it continues to be an option. Furthermore, should an ethically challenging circumstance require urgent attention, a CARED round session can be available on the unit.

In-person, the bioethicist/bioethics nurse would connect with registered nurses in the

patient care areas, inviting them verbally. If the registered nurse or registered nurses were available (i.e., not busy providing patient care), they would convene at a patient's bedside or the nursing desk and maintain confidentiality by ensuring other guardians were not present. Virtually, a Microsoft Teams invite would be disseminated to all staff within the critical care area coordinating a meeting at a predetermined date and time. In either format, attendance is voluntary and a preselected topic may be introduced by the bioethicist/bioethics nurse, such as a current patient case presenting ethical challenges. Alternatively, the bioethicist/bioethics nurse may facilitate CARED rounds without a specific agenda, fostering open dialogue and allowing registered nurses to discuss ethically challenging situations of their choosing.

The Consultation Process

I will discuss the consultation process in detail in the following sections, including the objectives, setting and sample, data collection and analysis.

Specific Objective(s) for the Consultations

Through the consultations, I aimed to:

- Collaborate with stakeholders to explore and identify the most effective method for acquiring feedback on CARED rounds
- Explore and identify optimal communication strategies for engaging with local stakeholders who will contribute feedback on CARED rounds
- Demonstrate advanced nursing practice competencies such as research utilization, consultation and collaboration and leadership (Canadian Nurses Association (CNA), 2019).

Setting and Sample

The CCCU at Sick Kids Hospital specializes in caring for children from infancy to young adulthood with heart disease (Sick Kids Hospital, 2022a). Children cared for in the CCCU may present with either congenital heart disease (e.g., hypoplastic left heart syndrome) or acquired heart disease (e.g., myocarditis). These patients come from various regions across Canada, with a significant number originating from Eastern Canada. The patient care in the 25-bed unit involves comprehensive post-operative management, end-organ function support (e.g., dialysis), mechanical ventilation, and mechanical support of the circulatory system (Sick Kids Hospital, 2022a). I sent an invitation to participate in the consultations to CCCU registered nurses, the nurse manager, a bioethicist and a bioethics nurse (Appendix A).

Although all disciplines are invited to participate in CARED rounds, I selected registered nurses as the target population for this practicum project. The literature review revealed that registered nurses often find themselves at the centre of ethical dilemmas (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). Registered nurses spend more one-on-one time with patients compared to any other healthcare discipline and the demands of their workload may limit their ability to engage in discussions about ethical dilemmas (e.g., a registered nurse working on an understaffed unit may not have the time to participate in a family meeting regarding an ethically distressing patient situation), potentially leaving their feelings unaddressed (Jesmont et al., 2021; Rainer et al., 2018; Schulz et al., 2023). Of significance is the ethically distressing circumstance in which registered nurses may disagree with the care plan, yet paradoxically, they are often the team members responsible for implementing it (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023).

Data Collection

I used a questionnaire to gather data. Paradis (2016) explains questionnaires are "ideal for documenting perceptions, attitudes, beliefs or knowledge within a clear, predetermined sample of individuals" (p.263). I emailed the questionnaire to stakeholders; the questions I utilized can be found in Appendix B. The questionnaire included multiple choice and free text options to attain comprehensive responses. Additionally, the questionnaire incorporated a demographic question seeking the number of years each respondent had worked in the CCCU, intending to identify if any correlations could inform the prospective evaluation. For example, junior registered nurses may prefer a questionnaire to evaluate CARED rounds, while senior registered nurses may prefer interviews.

Leveraging my role as a clinician in the CCCU and collaborating with the nurse manager, I accessed an email list of all employed registered nurses and distributed the questionnaire to the entire staff of registered nurses. I used the online platform Google Forms, which did not require a respondent to input their email or personal information, thus de-identifying the results. I emailed the questionnaire to my practicum advisor for a test, and we determined that the questionnaire was properly functioning. I emailed the questionnaire to the stakeholders, which was available for eight days. I worked with my practicum advisor to confirm that the data collected was accurately interpreted, managed and analyzed.

Bioethicist/Bioethics Nurse – The bioethicist/bioethics nurse possesses extensive knowledge in managing ethical dilemmas and is thus well-positioned to guide healthcare professionals in navigating these complex issues. The bioethics nurse at Sick Kids Hospital is also a registered nurse in the CCCU and has completed a Master of Health Science in Bioethics (Sick Kids Hospital, 2022b). The bioethics nurse provides peer support by facilitating CARED rounds or

offering one-on-one consultations to those needing more personalized assistance (e.g., a registered nurse who has made a medication error and seeks confidential guidance). A bioethicist holds advanced degrees in either bioethics, health policy, or related disciplines. The bioethicist provides expert guidance on ethical issues in healthcare and clinical decision-making. The bioethicist helps to navigate complex moral dilemmas and ensure that clinical practices align with ethical standards and principles. At Sick Kids Hospital, bioethicists can facilitate CARED rounds and are consulted by the medical teams across the institution as an unbiased party that can provide formal recommendations on ethically challenging cases (Sick Kids Hospital, 2022b). For instance, in a scenario where a parent is adamant about maintaining life-sustaining measures despite the medical team's recommendation to seek comfort care, a bioethicist could help navigate the ethical complexities, facilitate communication between the healthcare team and the family, and provide recommendations that respect the ethical principles of beneficence, non-maleficence, autonomy, and justice (Haahr et al., 2020; Shapiro & Layde, 2008, Sick Kids Hospital, 2022b).

As a result of this extensive knowledge, the bioethicist/bioethics nurse typically facilitates CARED rounds in the CCCU. With their firsthand experience in conducting CARED rounds, I aimed to gather their important perspectives to inform the future evaluation process. Furthermore, given that the bioethicist/bioethics nurse regularly collaborates with the registered nurses in the ICU, I learned that they are well-equipped to streamline the evaluation process. For example, the bioethics nurse can share preliminary informal feedback received on CARED rounds. One bioethicist and one bioethics nurse participated in the questionnaire.

Registered Nurses – Registered nurses working in the CCCU encounter a high volume of ethical dilemmas and constitute a significant portion of those who participate in CARED rounds.

As such, I consulted registered nurses to determine the most effective approach for evaluating CARED rounds. For instance, registered nurses may suggest that moral distress scales, a validated tool that measures moral distress levels, are the most effective method for assessing the impact of CARED rounds (Wocial et al., 2016). I also inquired about the optimal mode to effectively communicate with registered nurses. For example, registered nurses may prefer correspondence via email. I predetermined a target of 25 registered nurses to be a practical number of respondents, given the timeline and expectation that this number of registered nurses would generate sufficient data for project development. Registered nurses with less than five years of experience were defined as junior, while registered nurses with greater than five years of experience were defined as senior. I received 22 responses from registered nurses. The questionnaire specific to registered nurses also accommodated feedback from registered nurses who had not participated in CARED rounds. This approach could ensure that even non-participants in CARED rounds could contribute valuable insights for future participation, informing the prospective evaluation.

Nurse Manager – I consulted a nurse manager as they possess expertise in the various resources the CCCU may have that could be used for the prospective evaluation. For example, the nurse manager provided an updated staff email list to send out the consultation questionnaire. Additionally, the nurse manager, who regularly communicates with all staff registered nurses, possesses valuable insights on strategies to enhance engagement with the questionnaire. For example, the nurse manager might suggest promoting the questionnaire during staff meetings could encourage participation. One nurse manager participated in the questionnaire.

Data Management and Analysis

Upon conclusion of the questionnaire period, I gathered responses and entered them into an Excel spreadsheet. I separated the multiple-choice answers from the free-text responses. Additionally, I discovered that analyzing responses from the respective respondent groups was simplified if each group was further separated. As such, I created a separate spreadsheet for each group's responses. Using a calculation function in Excel, I conducted a frequency count of the multiple-choice responses and translated the frequency count into percentages. The online platform used, Google Forms, translated the data into pie charts, creating a visual aid for the responses gathered (found in Appendix C). I plan to use the results with the highest percentages to guide the development of the evaluation process.

I coded the free-text responses using thematic coding. Thematic coding is a research method used to identify, analyze, and report patterns or themes within a data set (Gibbs, 2018). This method facilitates a deeper understanding of the underlying meanings and insights within the data, identifying meaningful conclusions and trends (Gibbs, 2018). Initially, I intended to input codes into an Excel spreadsheet; however, maintaining a running Microsoft Word document was more practical and efficient. Coding the data enabled a more structured categorization of information, thereby enhancing the data's management. Codes that emerged from this process can be found in Appendix D.

Ethical Considerations

I completed the Health Research Ethics Authority (HREA) screening tool, referenced in Appendix E. I determined this practicum project qualifies for exemption from Health Research Ethics Board approval as it meets the criteria outlined in item three on the checklist. In particular, the practicum project is conducted exclusively for assessment purposes, is classified as a

program evaluation activity, and aligns with standard educational requirements. I upheld ethical standards by informing stakeholders of the rationale for their consultation in an introductory email (referenced in Appendix A). Furthermore, the email detailed that their feedback would contribute to evaluating CARED rounds' efficacy.

I maintained the confidentiality and integrity of the data collected by storing it on a password-protected computer, which I restricted to myself. The platform used for the questionnaire, Google Forms, did not require a respondent to input identifying information, so the data collected was de-identified. Additionally, the questionnaire was only accessible to me, with my practicum advisor receiving access strictly for review before sending it to the potential respondents. My email contact information was provided for follow-up questions or concerns; however, I received no inquiries.

Results

I emailed potential respondents on August 1st, 2024, with a link to the questionnaire, available from August 1st until August 9th, 2024. The content of the emails differed slightly depending on the stakeholder as shown in Appendix A. Additionally, the questionnaires had the same multiple-choice questions however, the free-text questions differed slightly depending on the stakeholder's role.

Multiple Choice Questions

The questionnaire had three multiple-choice questions that were the same across the three groups (found in Appendix B). The multiple-choice responses were converted into pie charts as a visual aid and can be viewed in Appendix C. The responses according to each role were as follows:

Bioethicist/Bioethics Nurse

The bioethicist and bioethics nurse have facilitated CARED rounds in the past; thus, both participated in CARED rounds. In retrospect, I recognized that the wording of this question might have been interpreted differently by these specific stakeholders, as the phrase "participating in CARED rounds" could be understood as referring to either being a participant or a facilitator. Given that the bioethics nurse is also employed as a charge nurse in the CCCU, it is possible that they participated in CARED rounds in addition to facilitating them. I will regard both as facilitators for this consultation because they both have had this experience. The demographics question revealed that the bioethicist and the bioethics nurse possess considerable experience (i.e., 5 – 10 years and greater than 20 years). Finally, the bioethicist and the bioethics nurse felt that a questionnaire would be the most effective way to evaluate CARED rounds.

Registered Nurses

In total, there were 22 responses from registered nurses. Fourteen of the respondents did not attend CARED rounds, while eight respondents had participated in CARED rounds. This particularly intriguing result made me consider whether potential barriers exist to accessing CARED rounds. It was clear from the literature review that organizational barriers, such as a staffing shortage and increased workload, can inhibit registered nurses from being able to perform adequate self-care, placing undue stress on registered nurses and potentially exacerbating the adverse effects of ethical dilemmas (Choe et al., 2019; Jesmont et al., 2021; Rainer et al., 2018). I reflected on whether factors might deter registered nurses from accessing CARED rounds. In the prospective evaluation, I think it would be valuable to explore obstacles in accessing CARED rounds and thus, identify methods to enhance accessibility. Additionally, if

I were to revise the questionnaire, I would have included specific questions to individuals who had not participated in CARED rounds, including why they had not participated.

Ten registered nurses responded to the other multiple-choice questions (i.e., demographics and the preferred method to evaluate CARED rounds). The decision by some registered nurses not to answer these questions may be attributed to the possibility that those who had not participated in CARED rounds assumed they were not obligated to respond. In hindsight, making all questions mandatory could have prevented missing data, considering that these registered nurses may participate in CARED rounds in the future. Their perspectives, even before participation, are valuable. In the prospective evaluation, I will consider making all questions mandatory and having different questions for individuals who have not accessed CARED rounds.

There were various responses to the demographic information question (i.e., the number of years the registered nurses had worked in the CCCU) (Appendix C). These results indicate that two registered nurses were junior and eight were senior registered nurses. The last question identified a questionnaire as the ideal method to evaluate CARED rounds, followed by interviews and observations receiving the same number of responses. A correlation that I noted was that registered nurses with 15 years or less of experience preferred questionnaires over other evaluation methods.

I also considered whether interviews would have been a valuable addition to the consultation process and whether they could be effectively utilized in the prospective evaluation. Paradis et al. (2016) describe that “many research questions that can be answered with surveys can also be answered through interviews, but interviews will generally yield richer, more in-depth data than surveys” (p. 263). For example, an interview could facilitate immediate follow-

up with respondents who have not participated in CARED rounds, allowing for exploring existing barriers. As such, I plan to incorporate interviews into the prospective evaluation.

Nurse Manager

The nurse manager's response indicated they had not participated in CARED rounds. CARED rounds are accessible to all healthcare team members. As mentioned, the bioethicist and bioethics nurse would provide verbal invites for in-person rounds or via email if rounds were done virtually. I considered whether the nurse manager had not been verbally invited to in-person CARED rounds. I reviewed my emails (as a staff nurse in the CCCU) and confirmed that virtual invitations had been sent to the entire CCCU team, including the nurse manager. As a result, I reflected on the same barriers registered nurses faced which may have deterred the nurse manager from participating in in-person CARED rounds. For example, an increased workload may have limited the nurse manager's ability to participate in CARED rounds. During the evaluation, I plan to explore this further by including questions that specifically address barriers to accessing CARED rounds by all CCCU staff, including the nurse manager.

The nurse manager also shared that their experience exceeded 20 years. In retrospect, I realized that this question could be interpreted as referring either to their role as a manager or as a bedside nurse – an insight I gained from my familiarity with the unit as a clinician. For this consultation, I considered the nurse manager in the context of their current role and recognized that perspectives from either role are valuable. Finally, the nurse manager suggested that a questionnaire would be the most effective method for evaluating CARED rounds.

In summary, the multiple-choice questions yielded responses that will be used for the prospective evaluation of CARED rounds. The questionnaire results were informative, with stakeholders possessing immense experience in the CCCU and identifying a questionnaire as the

ideal method of evaluating CARED rounds. Therefore, I plan to evaluate CARED rounds through a questionnaire. In addition to the questionnaire, I plan to invite all registered nurses who complete the questionnaire to an interview to facilitate immediate follow-up on responses and obtain "richer, more in-depth data" (Paradis et al., 2016, p. 263). Moreover, the number of individuals who do not participate in CARED rounds is noteworthy, and examining the obstacles that deter participation will be a component of the future evaluation.

Categories and Codes Identified

The latter half of the questionnaire included free-text questions that aimed to provide a platform for respondents to offer open and comprehensive responses. These questions differed slightly depending on the stakeholder's role. I analyzed and coded the responses using thematic coding to categorize the data effectively. Coding the data obtained from the questions aimed to assess the efficacy of CARED rounds facilitated the categorization and subsequent analysis of the data. I identified the following categories in the consultations: *optimal communication methods* and *measuring CARED rounds' effectiveness*. Codes that emerged from the free text portion and related sub-codes can be found in Appendix D.

Optimal Communication Methods

The category *optimal communication methods* included the following codes: *effective communication methods, questionnaire administration, stakeholder preferences*, and *feedback utilization*. "*Effective communication methods*" refers to strategies for engaging with registered nurses throughout the whole evaluation process (e.g., sharing the questionnaire results via email). "*Questionnaire administration*" involves the processes and practices used to distribute the questionnaire (e.g., emailing the registered nurses a hyperlink to access the questionnaire). "*Stakeholder preferences*" refers to the needs of the stakeholders, influencing the design and

implementation of the evaluation (e.g., providing a QR code to access the questionnaire as suggested by feedback from a stakeholder). "*Feedback utilization*" encompasses how the collected feedback is applied to inform the evaluation of CARED rounds (e.g., exploring barriers to attending CARED rounds due to the number of respondents who have not participated).

One of the objectives of the consultation process was to identify the most effective method of communication with the registered nurses in the CCCU, whether for the prospective evaluation or delivering feedback on the results. The bioethicist/bioethics nurse and the manager were asked about suggested platforms for prospective evaluation. These stakeholders have experience creating and distributing questionnaires, providing a critical perspective on communication with CCCU registered nurses. Microsoft Forms is frequently used for questionnaires in the CCCU and thus, was the suggested platform. Additionally, a QR code that could be scanned was an additional response. To enhance the response rate among registered nurses for the evaluation, I could use Microsoft Forms to allow the registered nurses to fill out the questionnaire and have a QR code to facilitate easy access.

Another objective of the consultations was to identify optimal methods of delivering the evaluation questionnaire and the outcome of the consultation results to the stakeholders. The consensus among all stakeholders was that email was the preferred method of correspondence for all aspects of the CARED rounds evaluation (i.e., accessing the link to the questionnaire and receiving the results of the evaluation). This method is convenient for all stakeholders to access. Additionally, many registered nurses indicated that regular updates regarding implemented changes to CARED rounds would help ensure that the feedback from the evaluation is utilized effectively with statements such as "keep nurses in the loop with changes that are made," and "let us know what you find out."

Measuring CARED Rounds' Efficacy

The category measuring CARED rounds' effectiveness included the following codes: *efficacy measurement, stakeholder feedback, attendance barriers,* and *registered nurse experience*. "*Efficacy measurement"* pertains to methods that can effectively measure CARED rounds' efficacy (e.g., utilizing moral distress scales to gauge the existing levels of moral distress in the CCCU, demonstrating if participation currently impacts moral distress). "*Stakeholder feedback"* relates to collecting and integrating feedback from the selected stakeholders (e.g., using Microsoft Forms to provide feedback as suggested by multiple stakeholders). "*Attendance barriers*" refers to the challenges that prevent registered nurses from attending CARED rounds, as evidenced by the number of registered nurses who have not participated. Finally, "*registered nurse experience*" refers to the overall experience of registered nurses with CARED rounds, including their recommendations for potential improvements.

How to measure CARED rounds' efficacy was one of the primary objectives of the consultation process. A part of the process evaluation framework is to explore if a program has the intended effect for which it was designed (Stratton et al., 2021). In this case, one of the key intents of the CARED rounds evaluation will be to explore how the rounds help registered nurses navigate and mitigate ethical dilemmas. As such, all stakeholders were asked a free text question regarding specific metrics that would most effectively measure CARED rounds' efficacy. I provided examples such as moral distress levels and stress levels. The predominant response was "moral distress levels," prompting me to reflect on whether responses were influenced by having moral distress levels in the example provided. However, the bioethicist or the bioethics nurse responded, *"I think moral distress levels would be the most effective metric to measure as CARED Rounds are primarily intended for the mitigation of moral distress."* The

bioethicist/bioethics nurse's expertise, along with the predominant response from registered nurses suggests that measuring moral distress levels would be an appropriate method for assessing the efficacy of CARED rounds and thus, will be used for the prospective evaluation.

Registered nurses' overall satisfaction with rounds was a secondary response to measuring CARED rounds' efficacy. The nurse manager advised to *"work with nurses who use CARED rounds and ask them about their opinion,"* which aligns with registered nurses suggesting to "gauge" if registered nurses are "happy" with rounds and the bioethicist/bioethics nurse's emphasis on determining if registered nurses feel their questions are being answered. As such, in addition to moral distress scales, the prospective evaluation of CARED rounds will also aim to assess the registered nurses' experiences and perceptions of CARED rounds. This could be explored through an open-ended question such as, "How do you feel about your experience with CARED rounds?" or "What aspects do you find most valuable or need improvement?"

The questionnaire also received responses that provided further insight into the barriers to accessing CARED rounds. Two responses from the registered nurse questionnaires indicate that shift work, especially night shifts, presents challenges in attending CARED rounds. These responses offer a valuable perspective on the barriers to attending CARED rounds and align with the finding that many respondents have not yet participated. This reinforces the importance of further exploring obstacles that prevent registered nurses from attending CARED rounds.

To summarize, through the free-text questions, I aimed to capture detailed and comprehensive answers to questions about the most effective method to evaluate CARED rounds (e.g., moral distress scales) and the ideal methods of correspondence with registered nurses for evaluation and reporting results (e.g., email). Respondents suggested using Microsoft Forms and QR codes for easy accessibility and email for correspondence, with the additional suggestion of

providing consistent updates/feedback about the evaluation via email. Through the consultations, I also identified moral distress levels as the most preferred metric to evaluate CARED rounds. Additionally, assessing registered nurses' overall satisfaction with CARED rounds was recommended, with insights indicating that shift work, particularly night shifts, presents barriers to attendance.

Conclusion

The registered nurses in the CCCU at Sick Kids Hospital can regularly encounter ethical dilemmas. As such, CARED rounds, a peer support program to address ethical dilemmas was instituted. Peer support programs have effectively reduced the negative emotional and physical impacts that healthcare providers experience due to ethical dilemmas (Carbone et al., 2022; Pereira et al., 2021). As a result, peer support programs influence organizational outcomes, such as improving job satisfaction and decreasing staff turnover (Carbone et al., 2022; Pereira et al., 2021). Since the establishment of CARED rounds in 2020, no formal evaluation has been conducted, and CARED rounds' effectiveness in managing the effects of ethical dilemmas remains undetermined. Therefore, a comprehensive evaluation of CARED rounds is warranted.

Consultations with key stakeholders are essential to informing the evaluation of CARED rounds' efficacy. Using process evaluation as a guiding framework, I consulted a bioethics nurse, a bioethicist, registered nurses, and the nurse manager. I used Google Forms to distribute a questionnaire and recruited key stakeholders to participate via email. Questions were aimed to identify the preferred method of evaluating CARED rounds (e.g., moral distress scales), the most effective way to communicate all aspects of CARED rounds evaluation with registered nurses (e.g., distributing the questionnaire and sharing future results via email) and administer the questionnaire (e.g., Microsoft Forms).

The analysis of the consultations revealed key insights for the prospective evaluation. The responses indicated that while moral distress levels emerged as the most preferred metric for evaluating CARED rounds' effectiveness, it is also vital to evaluate registered nurses' overall satisfaction with the program. The analysis also revealed that some registered nurses had not participated in CARED rounds, potentially due to barriers such as shift work. This underscores the need to explore obstacles to attendance. Microsoft Forms, QR codes, and email were suggested to effectively distribute the CARED rounds evaluation and results to enhance response rates. Finally, data coding facilitated the categorization and analysis of themes, including efficacy measurement, stakeholder feedback, and barriers to attendance, which will inform the prospective evaluation of CARED rounds.

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Appendix A

Invitation Emails

Email for Registered Nurses

Dear colleague,

I hope that this email finds you well. I am currently pursuing a graduate degree in nursing at Memorial University of Newfoundland, and as part of my program requirements, I am undertaking a practicum project. For this project, I have chosen to evaluate CARED rounds. Our unit has instituted CARED rounds as an attempt to address the ethical dilemmas that are frequently experienced when providing patient care. While CARED rounds have been accessible since 2020, evaluation of CARED rounds has not been completed to determine their efficacy. An initial step to evaluation is to determine the optimal method of evaluation (i.e., questionnaire versus interviews) and the content/questions to be asked. As a Registered Nurse on the unit and/or a key stakeholder who has accessed CARED rounds, your perspective is important to inform the evaluation process. As such, you are invited to participate in the following questionnaire, accessible at the following link:

https://docs.google.com/forms/d/e/1FAIpQLSfKL70emGQEbAV8-AeQYzweKITU0q2Lbzd8mnBa4oISI_ALVg/viewform?usp=sf_link

The questionnaire will be available from August 1st, 2024 until August 9th, 2024. If you have any questions, comments or concerns, please feel free to connect with me via email at the following email: lelaurio@mun.ca

Warm regards, Leslie Laurio

Email for Nurse Manager:

Dear colleague,

I hope that this email finds you well. I am currently pursuing a graduate degree in nursing at Memorial University of Newfoundland, and as part of my program requirements, I am undertaking a practicum project. For this project, I have chosen to evaluate CARED rounds. Our unit has instituted CARED rounds as an attempt to address the ethical dilemmas that are frequently experienced when providing patient care. While CARED rounds have been accessible since 2020, evaluation of CARED rounds has not been completed to determine their efficacy. An initial step to evaluation is to determine the optimal method of evaluation (i.e., questionnaire versus interviews) and the content/questions to be asked. As the manager on the unit and a key stakeholder, your perspective is important to inform the evaluation process. As such, you are invited to participate in the following questionnaire, accessible at the following link: https://docs.google.com/forms/d/e/1FAIpQLSf_UwadnDehFDrNxfcZdidwM6iIpF84Lk6K2CjfEO-VAtHKWA/viewform?usp=sf_link

The questionnaire will be available from August 1st, 2024 until August 9th, 2024. If you have any questions, comments or concerns, please feel free to connect with me via email at the following email: lelaurio@mun.ca

Warm regards, Leslie Laurio

Email for Bioethicist/Bioethics Nurse

Dear colleague,

I hope that this email finds you well. I am currently pursuing a graduate degree in nursing at Memorial University of Newfoundland, and as part of my program requirements, I am undertaking a practicum project. For this project, I have chosen to evaluate CARED rounds. Our unit has instituted CARED rounds as an attempt to address the ethical dilemmas that are frequently experienced when providing patient care. While CARED rounds have been accessible since 2020, evaluation of CARED rounds has not been completed to determine their efficacy. An initial step to evaluation is to determine the optimal method of evaluation (i.e., questionnaire versus interviews) and the content/questions to be asked. As the bioethics team member who facilitates CARED rounds, your perspective is important to inform the evaluation process. As such, you are invited to participate in the following questionnaire, accessible at the following link: https://docs.google.com/forms/d/e/1FAIpQLSfe0x7KwMhH7lmjoRMFJeQ8bH-aeoyFuVLW0eFGR1Gy3ntH5A/viewform?usp=sf_link

The questionnaire will be available from August 1st, 2024 until August 9th, 2024. If you have any questions, comments or concerns, please feel free to connect with me via email at the following email: lelaurio@mun.ca

Warm regards, Leslie Laurio

Appendix B

Questionnaires

Questions for Registered Nurses:

1.) Have you participated in CARED rounds in the cardiac critical care unit? Yes or No

2.) How long have you been working in the cardiac critical care unit?

   a. Less than 5 years

   b. 5 – 10 years

   c. 10 – 15 years

   d. 15 – 20 years

   e. Greater than 20 years

3.) What would be the most effective way to evaluate CARED rounds?

   a. Questionnaire

   b. Interviews

   c. Observational

   d. Other

4.) What specific metrics should be measured to evaluate the effectiveness of CARED rounds (e.g., stress levels, moral distress levels etc.)?

5.) How would you prefer to receive feedback on the results of the evaluation and subsequent changes (if any) to CARED rounds (e.g., email)?

6.) Do you have any suggestions for ensuring that feedback from the evaluation is used effectively to improve CARED rounds?

Questions for Nurse Manager:

1.) Have you participated in CARED rounds in the cardiac critical care unit? Yes or No

2.) How long have you been working in the cardiac critical care unit?

   a. Less than 5 years

   b. 5 – 10 years

   c. 10 – 15 years

   d. 15 – 20 years

   e. Greater than 20 years

3.) In your opinion, what would be the most effective way to evaluate CARED rounds?

   a. Questionnaire

   b. Interviews

   c. Observational

   d. Other

4.) What specific metrics would be most effective to evaluate the effectiveness of CARED rounds (e.g., stress levels, moral distress levels etc.)?

5.) How would you prefer to receive feedback on the results of the evaluation and subsequent changes (if any) to CARED rounds (e.g., email)?

6.) Do you have any suggested platforms to perform the evaluation (e.g., Microsoft Forms, Google Forms)?

7.) In your opinion, what is the best way to advertise a questionnaire to the nurses in the CCCU (e.g., flyers, signage on the unit, emailing nurses directly)?

Questions for Bioethicist/Bioethics Nurse:

1.) Have you participated in CARED rounds in the cardiac critical care unit? Yes or No

2.) How long have you been working in the cardiac critical care unit?

   a. Less than 5 years

   b. 5 – 10 years

   c. 10 – 15 years

   d. 15 – 20 years

   e. Greater than 20 years

3.) In your opinion, what would be the most effective way to evaluate CARED rounds?

   a. Questionnaire

   b. Interviews

   c. Observational

   d. Other

4.) What specific metrics do you think would be most effective to measure the effectiveness of CARED rounds (e.g., stress levels, moral distress levels etc.)?

5.) How would you prefer to receive feedback on the results of the evaluation and subsequent changes (if any) to CARED rounds (e.g., email)?

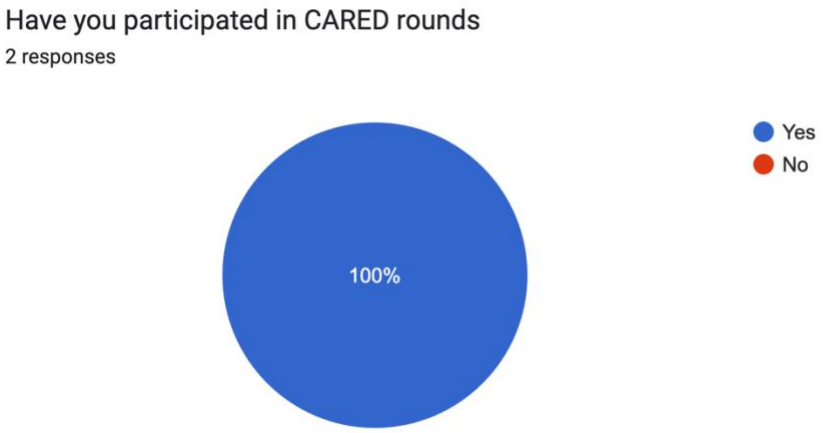
6.) What platform do you think would be most suitable for obtaining feedback for the evaluation (i.e., Microsoft Forms, Google Forms)?

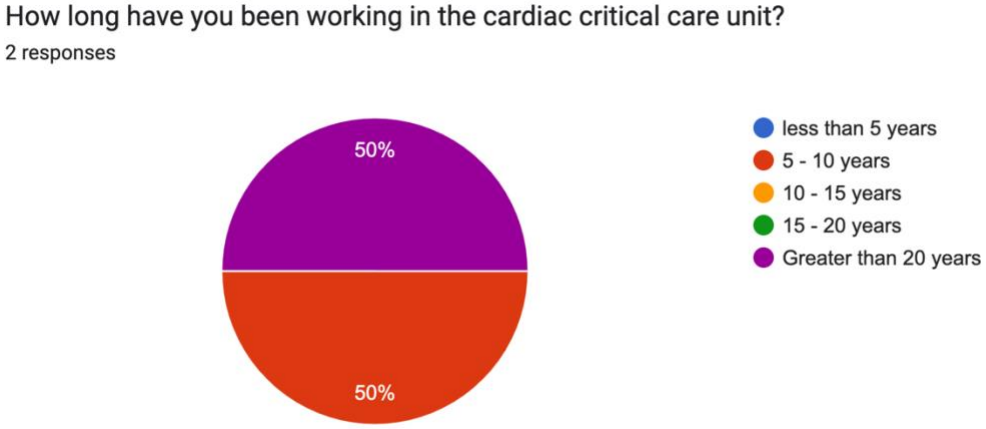
7.) Did you receive preliminary feedback during CARED rounds that you are willing to share that could inform the future evaluation?

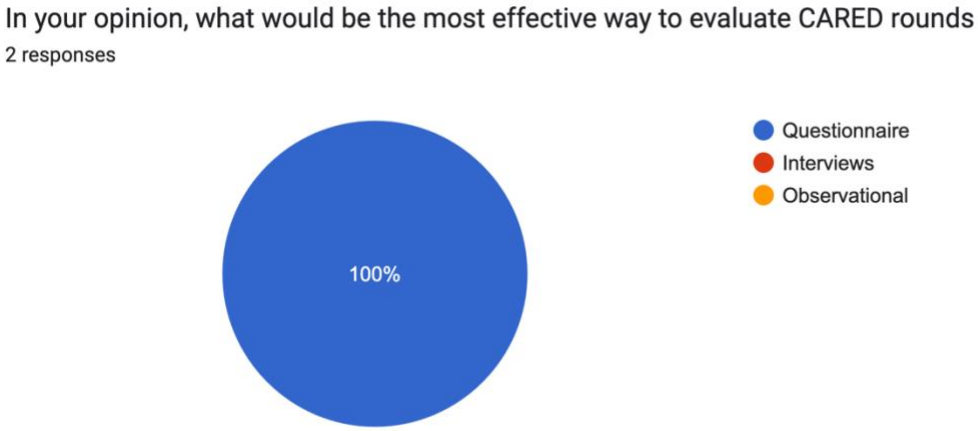
Appendix C

Questionnaire: Multiple Choice Responses

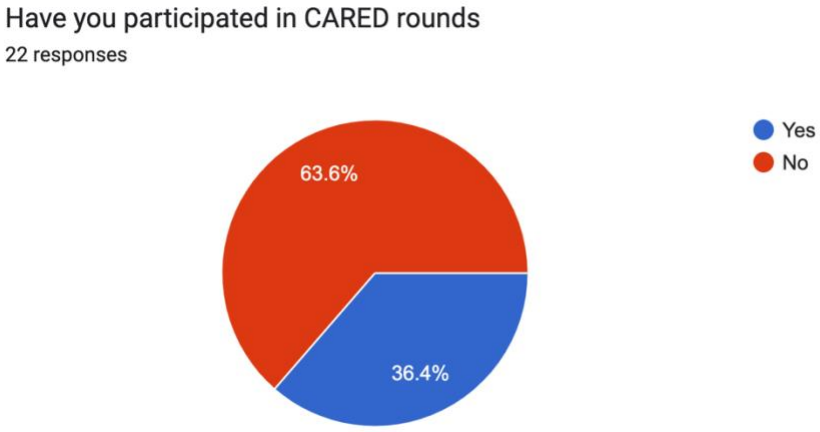
Multiple Choice Responses from Bioethicist/Bioethics Nurse



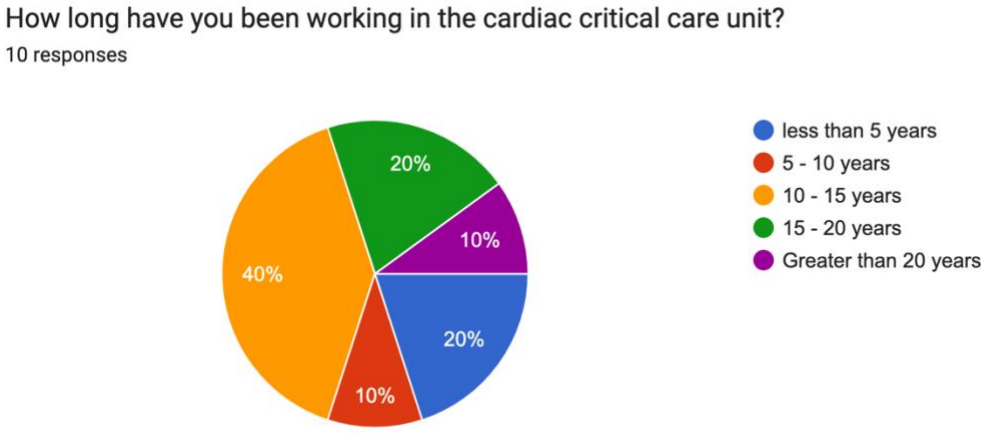




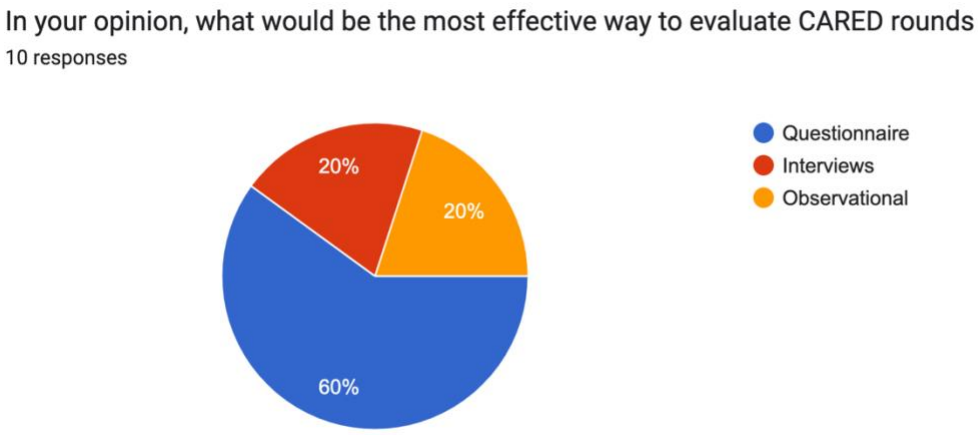
Multiple Choice Responses from Registered Nurses



Note. 14 respondents answered “No.” 8 respondents answered “Yes.”



Note. 2 respondents have less than 5 years of experience, 1 respondent has 5 – 10 years of experience, 4 respondents have 10 – 15 years of experience, 2 respondents have 15 – 20 years of experience, and 1 respondent has greater than 20 years.

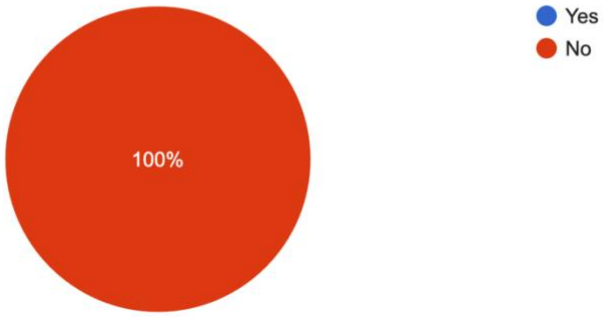


Note. 6 respondents felt questionnaires would be the most effective way to evaluate CARED rounds, while 2 respondents believed interviews to be the most effective and 2 considered observational would be the most effective method.

Multiple Choice Responses from the Nurse Manager

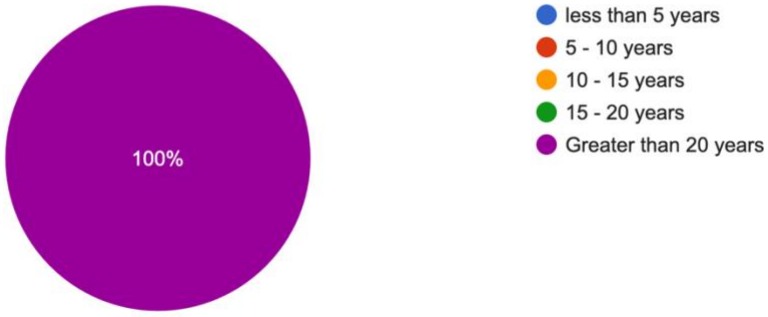
Have you participated in CARED rounds

1 response



How long have you been working in the cardiac critical care unit?

1 response



In your opinion, what would be the most effective way to evaluate CARED rounds

1 response

Appendix D

Codes and Categories

Emerging Codes from Data

1) Effective Communication Methods
    - Preferred communication platforms
2) Questionnaire Administration
    - Microsoft Forms
    - QR code
    - Enhancing responses
3) Stakeholder Preferences
    - Preferred mode of communication
    - Email preference
4) Feedback Utilization
    - Update stakeholders
    - Effectively using feedback
    - Transparency
5) Efficacy Measurement
    - Moral distress levels
    - Stress levels
    - Overall satisfaction
6) Stakeholder Feedback
    - Preferred evaluation methods
7) Attendance Barriers

- Shift work
- Night shift
- Lack of participation

8) Registered Nurse Experience
    - Experience with CARED rounds
    - Areas for improvement

Appendix E: Health Research Ethics Authority (HREA) Screening Tool

Student Name: Leslie Laurio

Title of Practicum Project: Evaluation of Ethics Check-In Rounds (CARED rounds) in Pediatric Cardiac Critical Care

Date Checklist Completed: June 4th, 2024

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: Evaluation Report

Evaluation Report: Peer Support to Address Ethical Dilemmas

An ethical dilemma can arise when a choice must be made between two or more opposing principles, where prioritizing one may undermine the other (Haahr et al., 2020; Rainer et al., 2018). This is the reality for registered nurses as they can face ethical challenges when providing care (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018). Examples of ethical dilemmas that registered nurses encounter include conflicting perspectives on a patient's care plan, care that is perceived to be futile, and workload that limits a registered nurse's capacity to deliver holistic care (Afoko et al., 2022; Bartholdson et al., 2016; Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018). Frequent experiences with ethical dilemmas can result in negative emotional and physical impacts on registered nurses, affecting an institution at an organizational level (Haahr et al., 2020; Rainer et al., 2018). For instance, registered nurses who consistently face ethically challenging patient circumstances can develop compassion fatigue, contributing to job dissatisfaction and increased turnover within healthcare institutions (Berger et al., 2015; Li et al., 2023; Whitehead et al., 2015). The pediatric setting possesses additional complexity in ethical dilemmas due to the distinct considerations required for the patient population, such as proxy decision-making for a child's care (Berger et al., 2015; Choe et al., 2019; Prentice et al., 2016).

Peer support is an intervention to mitigate the impacts of ethical dilemmas (Pereira et al., 2021; Simpson et al., 2023). Peer support involves individuals with shared experiences offering each other emotional and practical support to navigate challenges linked to ethical dilemmas (Pereira et al., 2021; Simpson et al., 2023). A local peer support program, known as CARED rounds, is offered to all healthcare providers in the pediatric cardiac critical care unit (CCCU) as a platform to address the sequelae associated with ethical dilemmas. Since CARED rounds were introduced in 2020, no formal evaluation has been conducted. Consequently, their effectiveness

in addressing ethical dilemmas remains unknown. Peer support within the pediatric critical care context is underrepresented in the literature and thus highlights the need for evaluation (Berger et al., 2015; Choe et al., 2019).

Throughout the evaluation process, relational inquiry was the guiding theoretical framework, while process evaluation provided the structural foundation (Stratton et al., 2021; Younas, 2017; Younas, 2020). Relational inquiry encourages the analysis of registered nurses' unique perspectives on the benefits, challenges, and areas for improvement within CARED rounds sessions. Moreover, relational inquiry emphasizes maintaining sensitivity to the emotional impact of revisiting ethically challenging experiences and compassionate acknowledgement of the ethical dilemmas registered nurses encounter (Younas, 2017; Younas, 2020). Throughout this process, I maintained awareness of potential biases, such as the risk of projecting my positive experience with CARED rounds onto participants. To minimize the influence of these biases, I utilized standardized interview questions to ensure consistency across all respondents. I also structured interviews to offer moments for participants to pause and process their emotions.

Process evaluation guided the assessment of CARED rounds' fidelity (if the rounds were implemented as originally intended), examining key aspects such as session frequency, duration, attendance, and content (Stratton et al., 2021). This framework offered a structured approach for identifying the strengths and limitations of CARED rounds, enhancing the understanding of how they might be refined to better support the local practicum setting (Stratton et al., 2021). For example, I prepared questions for the bioethics nurse and the bioethicist that aimed to understand the original intent of CARED rounds. I also inquired with registered nurses about potential areas for enhancement.

For my practicum project, I aimed to evaluate the effectiveness of CARED rounds in alleviating the impact of ethical dilemmas on registered nurses and assess whether CARED rounds meet the specific needs of the local practicum setting. In the following section, I will provide an overview of CARED rounds and a description of the setting and target population.

CARED Rounds

CARED rounds aim to address the impacts of ethical dilemmas by giving staff in the CCCU a safe space to receive peer support. Facilitated by a bioethicist or bioethics nurse, these rounds can be held in person or virtually. CARED rounds are offered monthly, with additional sessions provided as necessary (e.g., an ethically complex patient situation may necessitate prompt support for staff).

In-person, the facilitator connects with registered nurses in patient care areas, gauges their interest, and extends a verbal invitation. When nurses are available (i.e., not engaging in direct patient care), they gather at the patient's bedside or the nursing desk. To maintain confidentiality, the facilitator ensures that guardians are not present. For the virtual format, a Microsoft Teams invitation is sent to all critical care unit staff, setting up a session at a predetermined date and time. Participation is voluntary in both formats. Sessions may start with a facilitator introducing a selected topic, such as a recent ethically complex case that caused distress among nursing staff. Alternatively, sessions may proceed without a set agenda, allowing staff to openly discuss ethically challenging situations they wish to explore. As a registered nurse in the CCCU, I participated in CARED rounds in both formats. I observed that the sessions were well-attended (i.e., greater than 5 participants), facilitated meaningful discussion, and I perceived that participants felt comfortable sharing personal stories.

The Evaluation Process

A literature review and consultations with key stakeholders informed the evaluation process. The literature review and consultations facilitated the development of a comprehensive analysis of CARED rounds' benefits, challenges, and opportunities for improvement. I will provide an overview of the evaluation process in the following sections, detailing the objectives, setting and sample, the evaluation methods employed, and the results obtained. Additionally, I will discuss observations identified within the findings.

Objectives

To fulfill the goals of the evaluation, I established the following objectives:

- Explore and describe how CARED rounds are conducted within the CCCU
- Explore and assess the perceived impact of CARED rounds using MDS-R scales, questionnaires and interviews
- Explore and identify the benefits, challenges and opportunities for growth for CARED rounds
- Evaluate the implementation fidelity of CARED rounds, including frequency, duration, attendance, and content
- Demonstrate advanced nursing practice competencies such as research utilization, consultation and collaboration, and leadership (Canadian Nurses Association, 2019).

Setting and Sample

The CCCU is a pediatric critical care unit that provides care for children from infancy to young adulthood diagnosed with congenital or acquired heart disease (Sick Kids Hospital, 2022). The patient demographic mainly includes individuals from areas across Canada, however mainly from Eastern Canada. Additionally, the CCCU accommodates international patients seeking

specialized services. The unit has 25 beds and offers comprehensive care that includes post-operative management, mechanical ventilation, circulatory support, and end-organ support (Sick Kids Hospital, 2022).

While CARED rounds involve all healthcare disciplines, this practicum project explicitly focused on registered nurses. Registered nurses often find themselves navigating ethical dilemmas (Haahr et al., 2020; Jesmont et al., 2021; Schulz et al., 2023). Various factors contribute to pediatric nurses facing these dilemmas, including internal conflicts stemming from disagreements with a parent or medical team regarding the patient's care plan, the challenge of implementing care plans they oppose, decision-making by proxy, and the perception of futile care (Berger et al., 2015; Lang & Paquette, 2018; Mills & Cortezzo, 2020; Prentice et al., 2016; Walden et al., 2018). Although the literature highlights the importance of evaluating peer support, resources specifically addressing pediatric nurses remain limited (Berger et al., 2015; Choe et al., 2019). Therefore, examining the effectiveness of peer support for pediatric nurses is justified.

Evaluation Methods

The evaluation period was from September 26th to October 10th, 2024. I emailed an invitation to complete a questionnaire to registered nurses, a nurse manager, a bioethics nurse, and bioethicists on September 26th, 2024 and sent a reminder email on October 3rd, 2024. I tailored the emails (Appendix A) and questionnaires (Appendix B) to the role of each respondent. Before the distribution of the questionnaire and the initiation of the interviews, the questions were reviewed by the bioethics nurse and my practicum supervisor. I involved the bioethics nurse and my practicum advisor in reviewing the questions to ensure the content was appropriate and to promote a thorough evaluation. Additionally, I invited registered nurses to

participate in an interview and developed a distinct set of questions for those who had not yet participated in CARED rounds.

Moral Distress Scale-Revised

Through the literature review, moral distress was identified as a possible consequence of frequently encountering ethical dilemmas (Berger et al., 2015; Choe et al., 2019; Whitehead et al., 2015). Furthermore, based on stakeholder consultations, registered nurses and the bioethicist suggested that using moral distress scales would provide an effective approach to evaluating the efficacy of CARED rounds.

The MDS-R is a validated tool designed to assess an individual's level of moral distress (Wocial et al., 2017). The MDS-R is comprised of 21 items that prompt a respondent to evaluate their moral distress by rating both the frequency and intensity of their experiences related to specific situations. Each respondent's total score is calculated and classified into one of three categories: low moral distress (scores ranging from 0 to 112), moderate moral distress (scores from 113 to 224), or high moral distress (scores between 225 and 336). Low moral distress indicates a minimal impact on the individual's life, suggesting infrequent ethical conflicts and relative comfort in navigating moral dilemmas. Moderate moral distress signifies that the individual experiences a notable level of discomfort, which may affect their professional satisfaction and emotional well-being, indicating that ethical concerns are influencing their practice to some extent. High moral distress reflects a profound and pervasive impact on the individual, characterized by significant emotional turmoil that may compromise their ability to fulfill professional responsibilities effectively, potentially leading to burnout and decreased job performance (Wocial et al., 2017).

Regardless of whether a respondent had participated in CARED rounds or not, they were invited to complete an MDS-R. I received MDS-R scores from 18 registered nurses, eight of which had participated in CARED rounds. The MDS-R results demonstrated a complex distribution of moral distress levels among respondents, perhaps reflecting the intricacies of their ethical experiences within the critical care setting. Many participants reported moderate levels of moral distress, with scores ranging from 135 to 209 (Appendix C). This indicates that these registered nurses frequently face ethically challenging situations (Wocial et al., 2017). Furthermore, moderate levels of moral distress indicate that while respondents do not feel overwhelmed by ethical dilemmas, they nonetheless endure considerable emotional and psychological strain, adversely affecting job satisfaction, retention, and patient outcomes (Whitehead et al., 2015; Wocial et al., 2017). In contrast, a smaller segment of respondents exhibited lower levels of moral distress, with scores between 23 and 97. This group may experience fewer ethically troubling scenarios or may have cultivated effective coping strategies, such as resilience or robust support from colleagues to navigate their distress (Wocial et al., 2017).

Questionnaire

The questionnaire included questions tailored to each respondent's role. I aimed to capture each respondent's unique perspective about CARED rounds. Additionally, many registered nurses who did not participate in CARED rounds did not complete the consultation questionnaire potentially due to their impression that their perspective was not warranted. As a result, I prepared a separate questionnaire for non-participants. In the following section, I will present the questionnaire results, organized by each respondent's role.

Bioethics Nurse

The bioethics nurse's questionnaire included free text questions designed to capture a thorough understanding of CARED rounds' original intent, along with insights into their benefits, challenges, and potential opportunities for enhancement. Given the bioethics nurse's integral role in the development, inception and progression of CARED rounds, their perspective provided valuable context regarding the program's primary objectives and current status. Additionally, the bioethics nurse is currently employed in the CCCU as a registered nurse and possesses advanced degrees in bioethics. One bioethics nurse completed the questionnaire.

The bioethics nurse described that CARED rounds were initially implemented to create a safe space for registered nurses to openly discuss ethical dilemmas and address moral distress. The main objectives of CARED rounds included strengthening registered nurses' ability to recognize, articulate, and manage ethical challenges, while also encouraging collaboration with the bioethics department. Since their implementation, CARED rounds had to evolve to provide a flexible format, accommodating both general check-ins as well as case-specific discussions and involving a broader interprofessional team (e.g., inviting respiratory therapists, child life specialists, physicians, etc.). The bioethics nurse explained that CARED rounds had to adapt to include virtual and in-person formats to remain accessible and responsive to the shifting needs of the healthcare setting. During the COVID-19 pandemic, for example, creative solutions like iPads for registered nurses during shifts ensured continuity and support despite physical restrictions.

The bioethics nurse observed CARED rounds positively influence registered nurses to "*more readily identify ethical challenges and (have) an increased willingness to discuss these tensions*." Engaging in discussions about ethical dilemmas offers registered nurses new

perspectives on ethical challenges they may not have considered, thereby enhancing their ability to navigate ethically challenging circumstances (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023). Furthermore, peers discussion fosters a sense of camaraderie and reduces feelings of isolation (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023).

Despite the perceived value of CARED rounds, the bioethics nurse identified barriers that hinder registered nurses from fully engaging in CARED rounds. These barriers include a reluctance to show vulnerability in front of peers, concerns about potential repercussions from managers or medical teams, and general uncertainty regarding the personal significance of CARED rounds discussions. To address these challenges, the bioethics nurse suggested raising awareness among newer staff and creating anonymous avenues for registered nurses to propose topics for discussion. The bioethics nurse explained that this approach could alleviate concerns about judgement and foster greater involvement.

Bioethicist

I administered the same questionnaire to the bioethicists as to the bioethics nurse, given that both fulfill facilitator roles within the context of CARED rounds sessions. Bioethicists are essential to developing, progressing, and maintaining CARED rounds. However, given that Sick Kids employs multiple bioethicists whose expertise is utilized across all hospital departments, their facilitation within the CCCU may be less frequent than the bioethics nurse, who primarily focuses on providing support within the CCCU. One bioethicist completed the questionnaire.

The bioethicist noted that the impetus for establishing CARED rounds stemmed from the observation that staff members gained value not only from the ethical guidance offered but also from the supportive environment that allowed them to voice their feelings and thoughts. The bioethicist described that integrating ethical education and emotional support has proven

essential for staff working in high-stress settings such as critical care. The bioethicist indicated that a primary objective of CARED rounds was to "*increase the visibility of ethics consultants and create a platform for nurses, who cannot get away from the bedside, to interact with the ethicists and obtain ethics insights."* The open format of CARED rounds, led by the nursing staff, encouraged discussions on ethical dilemmas arising from specific events occurring within the unit on that day. Furthermore, the bioethicist mentioned that modifications to CARED rounds were made to involve additional members of the interprofessional team, such as respiratory therapists, child life specialists, and occupational therapists when particular clinical cases warranted their participation.

A notable positive outcome highlighted by the bioethicist was that registered nurses who participated more regularly in CARED rounds developed a greater capacity to differentiate their emotional responses from their ethical responses, leading to a more composed and reflective demeanour in distressing situations. The bioethicist describes "*people are more reflective, thoughtful, and able to separate their moral intuitions from ethics principles and analysis.*" These registered nurses also become proficient at supporting their less experienced peers.

The bioethicist explained barriers to participating in CARED rounds persist despite their positive impacts. Time constraints resulting from patient care responsibilities remain a significant challenge. The bioethicist suggested that improving staffing levels and potentially providing refreshments during rounds could enhance attendance. Additionally, the bioethicist recommended expanding participation to include more allied health professionals who have expressed a desire to engage. This could further enrich the interdisciplinary nature of CARED rounds and provide more comprehensive support for nursing staff. Colleagues in the same work environment possess a more nuanced understanding of the ethical dilemmas peers face, enabling

them to empathize at a deeper level (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023).

Insights from Registered Nurses Engaged in CARED Rounds Participation

Eight of the questionnaire respondents had participated in CARED rounds. The questions for the participation group were designed to evaluate the perceived effects of these sessions on their professional experiences and overall well-being. The feedback revealed that most respondents (63%) perceived CARED rounds as beneficial, rating them as moderately to extremely useful for peer support and professional development. Notably, a significant portion of registered nurses (78%) expressed that they felt better prepared to navigate ethical dilemmas following their attendance, rating CARED rounds as at least neutral, attributing this to improved communication skills and enhanced moral reasoning. Additionally, there was strong agreement that CARED rounds offered a valuable opportunity for emotional processing, helping to alleviate feelings of isolation when confronted with ethically challenging cases. For instance, one respondent described that CARED rounds provided "*a space to be heard, where I can feel not so alone when dealing with feelings that come up from dealing with difficult situations."*

The registered nurses who participated in CARED rounds reported that CARED rounds sessions positively impacted teamwork and collaboration, particularly concerning interprofessional relationships. Many indicated that the sessions promoted a better understanding of the roles and responsibilities of various healthcare providers, which, in turn, improved team cohesion during ethically complex scenarios. The overall sentiment of the feedback was favourable, with most registered nurses agreeing that CARED rounds fostered a supportive and inclusive workplace environment. This is consistent with the findings of the literature review, which indicate that peer support alleviates the emotional burden associated with ethical

dilemmas faced by registered nurses and fosters a positive work environment by enhancing collaboration, improving communication, and promoting mutual understanding among healthcare professionals (Carbone et al., 2022; Pereira et al., 2021; Simpson et al., 2023).

Several respondents identified scheduling conflicts and workload as significant factors that hindered consistent participation. Many respondents expressed a desire to attend more sessions however, the timing of CARED rounds frequently coincided with their shift schedules, complicating regular involvement. One respondent who participated in CARED rounds suggested "*support to step away from the bedside without having to use break time to participate in a discussion*" to improve CARED rounds. Another respondent supported this by explaining "*I wish we could get support to attend CARED rounds instead of using our break time to attend. I feel like more people would attend. It's hard to get a break sometimes so it's hard to get to a scheduled time*." Many registered nurses proposed that flexible scheduling, such as offering sessions for night shift workers, could enhance accessibility.

Insights from Registered Nurses Not Engaged in CARED Rounds Participation

Ten registered nurses who had not yet participated in CARED rounds responded to the questionnaire. For the non-participant group, the questionnaire was designed to explore reasons for non-attendance and assess potential interest in future involvement. Many non-participants identified a lack of awareness regarding the existence or purpose of CARED rounds as a key reason for their absence. Some respondents noted that, although they had heard of CARED rounds, they were unclear about the specific benefits or objectives, discouraging them from attending. This could suggest a need for enhanced communication and promotion of CARED rounds.

Additionally, non-participants cited similar logistical obstacles as those noted by their colleagues who do attend CARED rounds, such as scheduling conflicts (80%) and demanding workloads (30%). One respondent described a strategy to improve CARED rounds as "*maybe support to attend, it's hard enough to get out for break*s." This statement aligns with many registered nurses who reported feeling too overwhelmed by shift demands to attend CARED rounds despite their interest. Respondents also mentioned the difficulty of balancing patient care responsibilities with the time for peer support, indicating that greater institutional support could promote greater participation.

When asked whether they perceived CARED rounds as potentially beneficial, most non-participants recognized the value of peer support initiatives. Several non-participant respondents expressed a willingness to attend future sessions if barriers were addressed, particularly if CARED rounds were more seamlessly integrated into their work schedule or offered at varied times to accommodate night shift staff. For instance, one respondent described "*The timing of them, they are not easy to get to. I've seen them scheduled around the time that are the busiest on the unit.*" Overall, the non-participant group's feedback suggested an underlying interest in participating, provided that structural challenges to attendance could be reduced.

Comparative Findings Between Participants and Non-Participants

Comparing responses from registered nurses who have participated in CARED rounds with those who have not, several key insights emerged. Both groups identified workload demands and scheduling conflicts as significant barriers to attendance, emphasizing the necessity for more accessible formats that accommodate varied shift schedules. This alignment underscores the potential impact of logistical challenges on participation, suggesting that current scheduling may inadvertently limit access to valuable peer support.

Participants of CARED rounds consistently highlighted the positive impacts of sessions, reporting benefits such as enhanced moral reasoning, increased emotional resilience, and strengthened interprofessional collaboration. These registered nurses noted that attending CARED rounds provided them with a structured environment to process complex ethical issues and gain practical insights from their peers. This helped reduce feelings of isolation and build a stronger sense of community within the CCCU. Their feedback suggests that the program supports both professional development and emotional well-being, helping to promote a more cohesive and supportive clinical setting. Additionally, participants expressed a heightened sense of confidence in handling ethical challenges and a deeper understanding of their colleagues' roles and perspectives, which contributed to improved team cohesion and collaborative problem-solving during complex cases.

In contrast, non-participants were more likely to attribute their non-attendance to a lack of awareness about the purpose or benefits of CARED rounds. Many registered nurses in this group reported having a limited understanding of the program, which contributed to their reluctance to participate. This feedback could suggest that the perceived relevance and value of CARED rounds may not be effectively communicated to all nursing staff, resulting in missed opportunities for engagement. Despite these barriers, there was widespread acknowledgement among non-participants of the potential value of CARED rounds. Many expressed an interest in attending if the scheduling conflicts could be addressed and more clarity was provided about the purpose and benefits of CARED rounds.

The findings indicate the strengths of the current CARED rounds structure and opportunities for improvement. Expanding communication efforts to raise awareness about CARED rounds, particularly emphasizing its dual role in ethical support and peer connection,

could help bridge the informational gap among non-participants. Furthermore, scheduling flexibility should be increased by offering sessions at various times to include night shift workers. Overall, these comparative insights highlight that while CARED rounds successfully achieve their intended goals among current participants, adjustments could extend their reach and enhance the impact on addressing the consequences of ethical dilemmas.

Nurse Manager

The questions posed to the nurse manager were to gain insight into the practical and organizational factors influencing CARED rounds' implementation and to assess the perceived impact on moral distress, team support, and ethical decision-making among staff. I administered free text questions to gain a more comprehensive insight into the nurse manager's unique perspective on CARED rounds. The nurse manager's responses reveal the advantages and limitations of CARED rounds in assisting the nursing team with ethical challenges. One nurse manager responded to the questionnaire.

The nurse manager highlighted that CARED rounds have the potential to support nurses, provided they can step away from patient responsibilities to participate. This response aligns with the responses from registered nurses identifying staffing availability as a primary barrier to attendance. Additionally, the manager described that CARED rounds could be essential in reducing moral distress but suggests that more frequent sessions could increase accessibility and provide more consistent support for ongoing ethical issues. The nurse manager described "*CARED rounds are one tool to mitigate moral distress and would be more effective if done regularly (i.e., weekly, biweekly) to capture a larger audience*."

Structural and organizational barriers, particularly patient care demands were also highlighted as significant challenges. The nurse manager suggested that advanced planning, such

as notifying staff earlier in the shift, could allow registered nurses to integrate CARED rounds into their schedules. Furthermore, the nurse manager proposed hybrid formats, combining in-person and remote options to allow more staff to participate despite heavy workloads.

Despite the benefits of CARED rounds, the manager noted a gap in incorporating the insights gained from these sessions into unit-wide policies and practices, potentially indicating that a more systematic approach could strengthen the overall ethical framework of the team. For instance, biannually, the CCCU provides education days where new policies, equipment, and guest speakers are introduced. The education day could be an opportunity to hold a CARED rounds session as registered nurses' attendance is not hindered by a patient assignment, allowing them to engage fully and gain insight into the benefits of ethical reflection. These responses could suggest that while CARED rounds are valuable, addressing logistical issues and enhancing integration with broader policies could further optimize their impact and support for the nursing team.

Interviews

The consultation process highlighted the potential of interviews to gather more comprehensive data and facilitate immediate clarification if any responses needed further elaboration (Paradis et al., 2016). The email that invited registered nurses to complete the questionnaire also invited them to participate in interviews. Interested registered nurses could respond to the email, and I would connect with them at their convenience. I interviewed three registered nurses, two of whom had not participated in CARED rounds, while one had previously attended. The interview questions were tailored to the registered nurse's previous involvement in CARED rounds, ensuring they were relevant to each individual's experience. I conducted the interviews by phone and analyzed the responses using thematic coding to identify codes and

categories (Gibbs, 2018). The following section will outline the codes and categories that emerged from the interviews with the registered nurses.

Insights from CARED Rounds Participant

Three codes emerged from the interview with the registered nurse who had attended CARED rounds, including *impact on ethical decision-making*, *peer support and shared experiences*, and *perceived limitations.* These codes highlight how CARED rounds have influenced the registered nurse's professional journey and point to areas where the program could improve. The code "*impact on decision-making*" refers to the respondent's participation in CARED rounds, which influences their approach to ethical challenges by having greater thoughtfulness and consideration of diverse perspectives. The respondent shared that the sessions prompted them to pause and reflect more deeply when confronted with ethical issues, broadening their approach to include a broader range of viewpoints. *"Peer support and shared experiences"* refers to the emotional and professional value the registered nurse obtained from participating in CARED rounds. The respondent described CARED rounds sessions as a "safe space" where they could express frustrations, feel understood, and find reassurance among colleagues who faced similar challenges. This shared experience helped them feel more connected and supported, easing some of the stress of dealing with ethically complex situations. "*Perceived limitations*" refers to areas the nurse feels could be improved, particularly regarding accessibility. While the respondent appreciated the expertise shared during these sessions, they noted that attending could be difficult due to timing and visibility issues, which sometimes made it challenging to join consistently.

Three categories that emerged from the codes include ethical reflection, supportive professional environment, and participation barriers. "*Ethical reflection*" captures the registered

nurse's sense of increased deliberation when faced with ethical dilemmas, which they attribute to their involvement in CARED rounds. They explained how they now make a conscious effort to "*take a pause"* and reflect on their emotions when facing ethical challenges, considering both the patient's and family's perspectives. This empathetic approach allows them to see the complexity of the decision-making process, shifting their focus from solely on patient outcomes to a more comprehensive understanding of the entire care journey.

The second category, "*supportive professional environment,"* reflects the emotional support the respondent experienced within a CARED rounds session. Having a formal space for peer support enabled the respondent to share their feelings about difficult cases, receive validation, and learn coping strategies for managing moral distress. This sense of solidarity reduced feelings of isolation and reinforced the understanding that they were not alone in these challenges. The respondent also mentioned the presence of the bioethics nurse, whose support and expertise provided an added layer of professional reassurance when navigating ethically challenging situations.

The third category, "*participation barriers*," underscores the logistical challenges the respondent encountered when attempting to attend CARED rounds. Although the respondent acknowledged the benefits of CARED rounds, they found it difficult to regularly attend due to scheduling conflicts and patient care demands. The nurse felt that better awareness and more flexible timing would make it easier for them and others to join, suggesting that if CARED rounds were more accessible, they might see even greater benefits from these supportive sessions.

Insights from CARED Rounds Non-Participants

I identified four codes from the interviews with registered nurses who had not attended CARED rounds including *scheduling conflicts, informal support systems, perceived value of CARED rounds*, and *barriers to participation*. "*Scheduling conflicts*" highlights the difficulty nurses face in attending CARED rounds due to work schedules and clinical demands, such as inconvenient timing for those on night shifts. "*Informal support systems"* capture how registered nurses find alternative ways to handle ethical challenges without the structure of CARED rounds, often by engaging in spontaneous discussions with colleagues. "*Perceived value of CARED rounds"* reflects the awareness of potential benefits among those who have not attended, including receiving ethical guidance and emotional support. Lastly, "*barriers to participation*" describe the obstacles that make it challenging for registered nurses to join CARED rounds, such as high patient acuity and workday demands.

Categories from the results include timing and accessibility, current strategies for addressing ethical dilemmas, perceived benefits of CARED rounds, and institutional barriers. The "*timing and accessibility*" category emphasizes how registered nurses' workloads and schedules impact their ability to participate. The respondents shared that they perceived attending CARED rounds would require considerable effort and often competes with their primary responsibilities. For instance, one interviewee highlighted the difficulty of stepping away from patient care, especially during busy shifts. The same respondent described that if patient acuity is high and if there is limited patient coverage, the priority will always be safe patient management.

The category "*current strategies for addressing ethical dilemmas*" refers to the informal support systems registered nurses use as an alternative to CARED rounds. When faced with

ethical challenges, the respondents reported turning to colleagues, managers, or social workers for informal discussions. One participant expressed, "*…I work with amazing nurses who listen and support.*" While these informal networks offer some degree of support, in the absence of a structured forum like CARED rounds, registered nurses may lack opportunities for in-depth reflection on ethical issues (Pereira et al., 2023; Simpson et al., 2023). Spontaneous discussions amongst colleagues may provide some relief. However, formalized peer support such as CARED rounds may enable a more comprehensive and reflective approach to managing ethical challenges, benefiting from expert facilitation (Pereira et al., 2023; Simpson et al., 2023).

The "*perceived benefits of CARED rounds*" category reflects the awareness of non-participants regarding the potential advantages of these sessions. One respondent expressed curiosity about learning how others manage ethical dilemmas and how structured peer support might help them cope with moral distress. The respondents recognized the value of CARED rounds; however, they discussed the persistent barriers that inhibit them from attending. Participants noted that more flexible scheduling and greater awareness of the benefits of attending CARED rounds could encourage broader participation.

"*Institutional barriers*" encompasses organizational and cultural factors that hinder registered nurses from attending CARED rounds. These include staffing shortages, high patient acuity, and staff's limited awareness of CARED rounds. One respondent voiced concerns about the location of rounds, suggesting that proximity to patient areas might compromise confidentiality. This response points to a possible lack of understanding about the privacy measures in place, as the bioethicist and bioethics nurse prioritize confidentiality by ensuring that CARED rounds occur away from patient areas where family members are present.

Discussion

Through the data collected from the MDS-R, questionnaire, and interviews, the registered nurses, nurse manager, bioethicist, and bioethics nurse provided insight into the registered nurse experience of encountering and managing ethical dilemmas. In the following sections, I will provide an overview of the observations I noted in the data obtained and explore the possible implications.

Moral Distress Levels and CARED Rounds Attendance

A primary objective of this practicum project was to determine if CARED rounds could effectively address the negative sequelae of ethical dilemmas. Given that moral distress can arise for registered nurses frequently facing ethical dilemmas, and as indicated during the consultation process, the MDS-R was used to assess the levels of moral distress experienced by registered nurses (Berger et al., 2015; Choe et al., 2019; Sullivan et al., 2019; Walden et al., 2018). An interesting observation from the data is that moral distress levels appeared similar between those who had participated in CARED rounds and those who did not (Appendix C). Among the eight respondents who attended CARED rounds, six respondents' scores indicated moderate levels of moral distress. These respondents generally indicated that CARED rounds had a neutral or slightly positive effect on their ability to handle ethically challenging situations.

Out of the ten respondents who had not attended CARED rounds, six also had MDS-R scores that imply moderate levels of moral distress. This could suggest that the experiences of moral distress are pervasive among registered nurses in the CCCU and that CARED participation alone may not significantly impact distress levels. The similarity in distress levels between participants and non-participants may indicate that while CARED rounds provide a supportive environment, they may not fully address the broader, systemic sources of moral distress that are

commonly faced in the pediatric critical care environment (i.e., high patient acuity, limited resources, and ethical complexities of patient care) (Dryden-Palmer et al., 2018; Haahr et al., 2020; Rainer et al., 2018).

Additionally, respondents' overall neutrality concerning CARED rounds' effectiveness in alleviating distress may point to areas for improvement in the program's structure. The consistent report of moderate distress levels among both groups highlights the persistent nature of moral distress in this environment. It suggests that while CARED rounds may contribute positively, additional interventions may be necessary to observe a difference in moral distress levels.

Comparing Perspectives of the Nurse Manager, Bioethicist, and Bioethics Nurse

The responses from the nurse manager, bioethics nurse, and bioethicist present intersecting and unique perspectives regarding the significance and challenges associated with CARED rounds. All respondents strongly endorsed the role CARED rounds play in navigating ethical dilemmas and promoting a more supportive workplace atmosphere. They recognized that peer support and candid dialogue during these sessions can help mitigate the adverse effects of ethical challenges registered nurses face. Additionally, there was a consensus that CARED rounds provide a structured opportunity to address ethical issues that might otherwise go unnoticed amid the demands of a busy clinical setting.

In contrast, the nurse manager's responses prioritized logistical considerations, such as difficulties with scheduling, the impact of staff workloads, and the challenge of engaging employees across all shifts, particularly those who predominantly work night shifts. Conversely, the bioethicist and bioethics nurse placed greater emphasis on the philosophical aspects of CARED rounds, advocating for the establishment of a secure environment conducive to ethical reflection and the necessity of ensuring that discussions result in actionable strategies. These

similarities and differences underscore the complexity of the barriers to attending CARED rounds, suggesting that to enhance CARED rounds, it is essential to address both the logistical concerns and the depth of content discussed during CARED rounds. Collaborative efforts between the nurse manager, bioethicist and bioethics team could effectively bridge this divide, thereby enhancing the accessibility of CARED rounds for all staff members and more effectively addressing the needs of registered nurses within the CCCU.

Leadership Support and Scheduling Conflicts

Strong leadership support is frequently mentioned as a critical component in ensuring the success of CARED rounds. The nurse manager and the bioethicist highlighted that active engagement from leadership is essential for fostering a workplace culture that values ethical reflection and open communication. The nurse manager noted that when leaders visibly advocate for initiatives such as CARED rounds, it conveys a clear message to staff, highlighting the significance of their participation. In agreement, the bioethicist emphasized that leadership endorsement provides legitimacy to CARED rounds and demonstrates its importance in promoting staff well-being and facilitating ethical decision-making. Therefore, leadership support emerged as a pivotal factor in helping registered nurses integrate CARED rounds into their workflow.

Respondents widely cited scheduling conflicts as a significant obstacle to consistent attendance. The bioethics nurse observed that while CARED rounds are well-received by those who can attend, the unpredictability of clinical responsibilities often hinders regular participation. Registered nurses echoed this concern, highlighting heavy workloads and shift rotations as frequent barriers. These logistical challenges affect individual attendance and compromise the continuity of peer support and ethical reflection provided by CARED rounds.

While endorsement from leadership is foundational for a successful peer support program, accommodating the practical demands of clinical schedules is equally critical. One strategy proposed by respondents involves holding CARED rounds at varying times to enhance accessibility. Many registered nurses reported that the sessions often occur during morning or early afternoon hours, which may not align with the schedules of those working night shifts or rotating shifts. Nurses recommended scheduling sessions when clinical activity tends to be lighter or when night shift staff could feasibly attend. As a registered nurse in the CCCU, I reviewed my work email and noted that CARED rounds are indeed primarily scheduled for morning or afternoon time slots, which could limit participation among night shift workers. Adjusting the timing of CARED rounds to better accommodate diverse shift patterns could reduce scheduling conflicts, thereby strengthening the program's accessibility.

The Process Evaluation Approach

To guide the evaluation of CARED rounds, I employed a process evaluation framework, which provided a structured approach to assess if the program was being implemented as originally designed (Stratton et al., 2021). Process evaluation allowed for examining program fidelity and helped pinpoint areas where CARED rounds could be improved by identifying strengths, challenges, and potential areas for refinement (Stratton et al., 2021). This framework enabled me to review aspects such as frequency duration, attendance, and content of peer support sessions, gathering feedback from registered nurses, the nurse manager, the bioethicist, and the bioethics nurse.

A primary purpose of CARED rounds, as articulated by the bioethicist and bioethics nurse, was to address the rising levels of moral distress and ethical dilemmas among healthcare staff, especially registered nurses. They envisioned CARED rounds as a structured forum where

ethical issues could be openly discussed, to provide peer support, enhance communication, and foster resilience in healthcare staff. As a result, the bioethics nurse and bioethicist expected CARED rounds to improve patient care quality through enhanced ethical reflection and collaborative support. The overall goal was to create a safe space for moral reflection that could mitigate the negative impacts of moral distress.

When comparing the intended purpose with feedback from registered nurses, certain areas appear to be aligned. Registered nurses who attended CARED rounds explained that they valued the sessions as a supportive platform for discussing ethical issues, reflecting the program's original goal of providing a space for addressing moral distress. Many registered nurses noted benefits such as improved emotional support and a sense of solidarity with colleagues, which is consistent with findings in the literature (Pereira et al., 2021; Simpson et al., 2023).

There were also gaps between the program's intended design and its current implementation. Some registered nurses identified logistical issues, such as scheduling conflicts, as barriers to effective participation. The nurse manager also expressed concerns about the practical challenges of attendance, including difficulties in maintaining consistent participation across shifts. These barriers suggest that while the program's goals are well-articulated, its execution – particularly in attendance- does not fully align with the original design.

Registered nurses showed varying levels of engagement and satisfaction with CARED rounds. Those who participated generally appreciated the sessions, valuing them as spaces to discuss ethical concerns and alleviate moral distress. In contrast, registered nurses who had not attended identified barriers to attendance such as disinterest and a lack of understanding of CARED rounds' benefits. This suggests a potential disconnect between the perceived value of

CARED rounds among non-participants and the positive experiences reported by those who attended.

While CARED rounds appear beneficial for participants, challenges related to accessibility and communication remain. Despite aligning the content and objectives with the program's intended purpose, inconsistent attendance persists. In addition to scheduling conflicts and varying attendance rates, there may be insufficient communication about CARED rounds' purpose, which could limit engagement. Addressing these logistical and informational challenges could improve program fidelity and expand CARED rounds' capacity to provide ethical reflection and peer support for registered nurses. For instance, offering sessions at varied times could increase accessibility while providing additional education on the benefits of CARED rounds when inviting staff to attend may help raise awareness and interest among staff.

In summary, the evaluation of CARED rounds provided valuable insights from registered nurses, the bioethics nurse, the bioethicist, and the nurse manager. Responses revealed that, regardless of participation in CARED rounds, most individuals had moderate levels of moral distress, suggesting that while CARED rounds offer some support, they may not entirely address broader sources of moral distress. For instance, registered nurses can experience moral distress as a result of caring for patients from marginalized communities and facing challenges such as system inequities may extend beyond the scope of the peer support offered in CARED rounds (Sale & Smith-Morris, 2023).

Many respondents recognized CARED rounds as a constructive tool for reducing the adverse effects of ethical dilemmas, though logistical issues (e.g., scheduling conflicts, workload, and engagement across all shifts) hinder consistent attendance. Participants in CARED rounds underscored leadership support as crucial to reinforcing CARED rounds' value,

while logistical barriers such as scheduling conflicts, present persistent challenges. Lastly, while participating registered nurses generally valued CARED rounds sessions, non-participants cited a lack of interest or awareness of CARED rounds' benefits as barriers, highlighting the need for improved communication and accessibility to optimize CARED rounds' impact.

Ethical Considerations

I utilized the Health Research Ethics Authority (HREA) screening tool, found in Appendix D, to determine that this practicum project does not require approval from the Health Research Ethics Board. According to item three of the checklist, this project is exempt as it is strictly for assessment purposes, qualifies as a program evaluation activity, and meets standard educational criteria. To ensure transparency, I notified the potential respondents of the evaluation purpose in the invitation email, clarifying that their insights would aid in assessing the effectiveness of CARED rounds. To maintain ethical standards, I prioritized the confidentiality and security of collected data. All data was stored on a password-protected computer accessible only to me. The questionnaire was distributed through Microsoft Forms, ensuring respondents' anonymity by not requesting identifying information and therefore keeping responses de-identified. Additionally, I included my email address in case respondents had any follow-up questions or concerns, though no inquiries were received.

Recommendations

Based on the evaluation findings, I recommend three strategies to increase the accessibility, engagement, and effectiveness of CARED rounds for registered nurses. First, implementing varied scheduling options for CARED rounds could make these sessions more accessible to registered nurses who work night shifts or rotate between day and night schedules. Holding sessions during less busy times in the CCCU could reduce scheduling conflicts,

enabling more staff to attend without compromising patient care or other responsibilities. This could enhance participation and allow for a more diverse group of voices within each session, enriching the discussions with a broader range of perspectives and experiences.

Second, strengthening leadership support for CARED rounds could further encourage regular attendance and highlight the importance of peer support in addressing ethical dilemmas. When individuals in leadership positions actively promote these rounds and visibly participates, it could signal to staff that CARED rounds are valued and essential within the healthcare setting. Such support could also alleviate potential concerns from registered nurses who may feel that taking time for CARED rounds detracts from clinical duties. Leadership involvement in both planning and attending sessions can model the value of ethical reflection and create a more inclusive atmosphere where staff feel encouraged to participate regularly.

Finally, enhancing communication around the purpose and benefits of CARED rounds could address barriers for non-participating registered nurses. Many registered nurses who have not attended CARED rounds cited a lack of awareness or understanding of the potential value these sessions offer in managing moral distress and building resilience. Informative outreach could help bridge this gap. For instance, including a concise overview of the benefits of peer support in the invitation emails sent to registered nurses may encourage greater participation. By articulating how peer support can alleviate moral distress, enhance resilience, and contribute to a healthier work environment, registered nurses may better understand the value of attending.

This evaluation was conducted as a quality improvement project focusing on insights to enhance CARED rounds. While valuable, the findings are limited and direct inferences cannot be made. A future research study could provide more robust data, offering a deeper understanding of CARED rounds' impacts and its ability to address ethical dilemmas.

Conclusion

The evaluation of CARED rounds highlights the value of structured, interdisciplinary peer support sessions in addressing ethical challenges and moral distress registered nurses face in the CCCU. The findings indicate that while CARED rounds offer meaningful support for ethical reflection, logistical barriers such as scheduling conflicts and inconsistent attendance could limit CARED rounds' accessibility and effectiveness. Leadership support emerged as a factor that fosters a culture that prioritizes open communication and ethical reflection, suggesting that active endorsement and involvement by leadership could enhance staff engagement and reinforce the importance of these sessions.

Notably, moral distress scores were found to be moderate among most of the registered nurse respondents (67%), regardless of their participation status in CARED rounds. This finding could suggest that while CARED rounds may provide a supportive space for ethical reflection, they may not fully address broader sources of moral distress. These results highlight the need for further research to explore the complex factors contributing to the adverse effects of encountering ethical dilemmas and to assess whether adaptations to CARED rounds could improve their effectiveness in addressing the impacts of such challenges.

Overall, this evaluation highlights the strengths of CARED rounds and areas for improvement to maximize the impact on nursing practice. Adjustments to increase accessibility, leadership endorsement, and improved awareness, CARED rounds have the potential to further support registered nurses in managing ethical dilemmas and reducing moral distress, ultimately enhancing the quality of patient care.

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Appendix A: Invitation Emails

Email Invite for Registered Nurses

Dear colleague,

I hope this message finds you well. My name is Leslie Laurio. I am a graduate student pursuing my Master of Science in Nursing (MScN) degree at Memorial University. As part of my practicum project, I am evaluating the CARED rounds program within our unit to assess its impact on addressing ethical dilemmas registered nurses face.

I invite you to participate in this evaluation by completing a questionnaire to gather feedback on the program's effectiveness, assess areas for improvement, and gauge the current moral distress levels in the unit. Your participation is voluntary, and the survey will be open until October 10th, 2024. Please find the survey link below: https://forms.office.com/r/WafNaPWUzc

Additionally, I also invite you to participate in a follow-up interview. This interview would allow us to delve deeper into your experiences and provide a richer understanding of your perspective. If you are interested in participating in an interview, please indicate your interest in your response to this email, and I will reach out to schedule a convenient time. Should you have any questions or require further information, please do not hesitate to contact me at lelaurio@mun.ca. Thank you for your time and contribution.

Best regards, Leslie Laurio

Email Notification/Invite for Nurse Manager

Dear Colleague,

I hope this message finds you well. I am writing to inform you that I will evaluate the CARED rounds program within our unit. This evaluation is a part of my graduate practicum project for my Master of Science in Nursing (MScN) degree at Memorial University. This evaluation aims to assess the program's impact on addressing ethical dilemmas registered nurses encounter and identify areas for potential improvement.

This evaluation will involve gathering feedback from registered nurses through a survey that I will distribute via email. The survey is designed to capture registered nurses' experiences with the CARED rounds program and will be open until October 10th, 2024.

Given your pivotal role and regular contact with the nursing staff, I would greatly appreciate your support in encouraging registered nurses' participation in the evaluation. Additionally, I would value your unique perspective and insights as a nurse manager, and if you agree, please access the questionnaire explicitly tailored to your role at this link: https://forms.office.com/r/L4MDU29RKR

Should you have any questions or need further details about the evaluation, please feel free to contact me at lelaurio@mun.ca

Thank you for your support and assistance in this important project.

Best regards, Leslie Laurio

Email to Bioethicist/Bioethics Nurse

Dear Colleague,

I hope this message finds you well. I am writing to inform you that I will evaluate the CARED rounds program within our unit. This evaluation is part of my graduate practicum project at Memorial University for my Master of Science in Nursing (MScN). This evaluation aims to assess the program's impact on addressing ethical dilemmas registered nurses face and identify areas for improvement.

Your expertise in bioethics and extensive experience with ethical dilemmas are important for this evaluation. As such, I invite you to review the evaluation questions and provide feedback. Specifically, I would appreciate your insights on any additional questions pertinent to assessing CARED rounds' effectiveness and impact. I have attached the current evaluation plan, including the questions that have been prepared for the questionnaire and interviews.

In addition to seeking your feedback on the evaluation plan, I invite you to participate by completing a questionnaire tailored specifically to your role. Your unique perspective will provide insights into the effectiveness of CARED rounds. The questionnaire is accessible until October 10th, 2024 at this link: https://forms.office.com/r/7qUSV0URgJ

Throughout the evaluation process, I also ask if I may reach out with follow-up or clarifying questions as the evaluation progresses. Your expertise and insights will be invaluable to ensure the accuracy and depth of this evaluation. Please do not hesitate to contact me at lelaurio@mun.ca if you have any questions or if there is anything you would like to discuss further.

Thank you for your ongoing support and collaboration.

Best regards, Leslie Laurio

Appendix B: Evaluation Questions

The Moral Distress Scale-Revised (MDS-R) assesses both the frequency and intensity of moral distress in healthcare professionals. For each of the 21 items, rate how often you encounter the described situation using a scale from 0 (never) to 4 (frequently), and then rate the level of distress it causes, from 0 (no distress) to 4 (extreme distress). Answer each item based on your personal experience, ensuring you respond to both frequency and intensity. Your responses are confidential and will inform strategies to address ethical challenges and support healthcare professionals in your setting.

1) Provide less than optimal care due to pressures from administrators or insurers to reduce costs.
2) Witness healthcare providers giving “false hope” to a patient or family.
3) Follow the family’s wishes to continue life support even though I believe it is not in the best interest of the patient.
4) Initiate extensive life-saving actions when I think they only prolong death.
5) Follow the family’s request not to discuss death with a dying patient who asks about dying.
6) Carry out the physician’s orders for what I consider to be unnecessary tests and treatments.
7) Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support.
8) Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it
9) Assist a physician who, in my opinion, is providing incompetent care.

10) Be required to care for patients I don't feel qualified to care for
11) Witness medical students perform painful procedures on patients solely to increase their skill.
12) Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death.
13) Follow the physician's request not to discuss the patient's prognosis with the patient or family.
14) Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death
15) Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing.
16) Follow the family's wishes for the patient's care when I do not agree with them but do so because of fears of a lawsuit.
17) Work with nurses or other healthcare providers who are not as competent as the patient care requires.
18) Witness diminished patient care quality due to poor team communication.
19) Ignore situations in which patients have not been given adequate information to ensure informed consent.
20) Watch patient care suffer because of a lack of provider continuity.
21) Work with levels of nurse or other care provider staffing that I consider unsafe

Questionnaire for Nurses who have participated in CARED rounds

1) How long have you been a registered nurse in the CCCU?
    a. 2 years or less
    b. 3 to 5 years
    c. 5 to 10 years
    d. 10 years or more
2) What shift do you primarily work?
    a. Day shift
    b. Night shift
    c. Combination of day and night shift
3) How would you rate the overall usefulness of CARED rounds in helping you navigate ethically challenging situations?
    a. Not useful at all
    b. Slightly useful
    c. Neutral
    d. Moderately useful
    e. Very useful
4) To what extent do you feel CARED rounds have reduced your feelings of moral distress?
    a. Not at all helpful
    b. Somewhat helpful
    c. Neutral
    d. Helpful
    e. Very helpful

5) How effective do you feel the peer support provided during CARED rounds has been in addressing challenges?
    a. Not at all effective
    b. Somewhat effective
    c. Neutral
    d. Effective
    e. Very effective
6) Since attending CARED rounds, have you experienced any changes in how you manage ethical dilemmas?
    a. No change
    b. Slight Change
    c. Neutral
    d. Slight improvement
    e. Significant improvement
7) In your opinion, do CARED rounds contribute to a healthier work environment for nurses?
    a. Strongly disagree
    b. Disagree
    c. Neutral
    d. Agree
    e. Strongly Agree
8) What aspects of CARED rounds could be improved to better meet your needs as a nurse?

Questionnaire for Nurses who have not participated in CARED rounds?

1) How long have you been a registered nurse in the CCCU?
    a. 2 years or less
    b. 3 to 5 years
    c. 5 to 10 years
    d. 10 years or more
2) What shift do you primarily work?
    a. Day shift
    b. Night shift
    c. Combinations of day and night shift
3) Are you aware of the CARED rounds program offered within our institution?
    a. Yes
    b. No
4) What are the main barriers you face in being able to attend CARED rounds? (select all that apply)
    a. Time
    b. Workload
    c. Lack of interest
    d. Scheduling conflicts
    e. Other (please specify)
5) Do you feel that you have adequate support in addressing ethical challenges at work?
    a. Not at all
    b. Somewhat

   c. Neutral
   d. Moderately
   e. Fully supported

6) What factors would make you more likely to attend CARED rounds in the future? (select all that apply)
   a. Better scheduling
   b. More information on benefits
   c. More support from leadership
   d. Other (please specify)
7) If you were to attend CARED rounds, what would you hope to gain from participation?
8) What aspects of CARED rounds could be improved to better meet your needs as a nurse?

Interview Questions for Nurses Who Have Participated in CARED Rounds

1) How has your participation in CARED rounds influenced your approach to ethical dilemmas in your practice? Please explain.
2) Could you share an experience where CARED rounds helped you address moral distress or an ethical challenge?
3) In your opinion, what distinguishes CARED rounds from other forms of peer support or ethical consultation?
4) How do you feel about the level of peer support during CARED rounds—does it meet your expectations? (Yes or No) – (In which ways, can you explain)
5) What improvements could be made to enhance the effectiveness of CARED rounds for nurses?
6) Have you noticed any broader changes in team dynamics or communication as a result of participating in CARED rounds? Please explain.
7) In what ways do you think CARED rounds have contributed to your overall well-being in the workplace?
8) Do you think participating in CARED rounds affects the quality of care provided?

Interview Questions for Nurses Who Have Not Participated in CARED Rounds

1. What are the primary reasons you have not participated in CARED rounds thus far?
2. How do you currently handle situations where you face ethical dilemmas in your practice?
3. Have you experienced any challenges in finding adequate peer or institutional support for addressing moral distress? Please explain further.
4. What, if any, factors would encourage you to attend CARED rounds in the future?
5. How do you perceive the potential benefits of CARED rounds compared to other methods of dealing with ethical dilemmas?
6. Can you identify any institutional or personal barriers that prevent you from attending CARED rounds?
7. What do you think could be done to make CARED rounds more accessible or relevant to nurses like yourself?

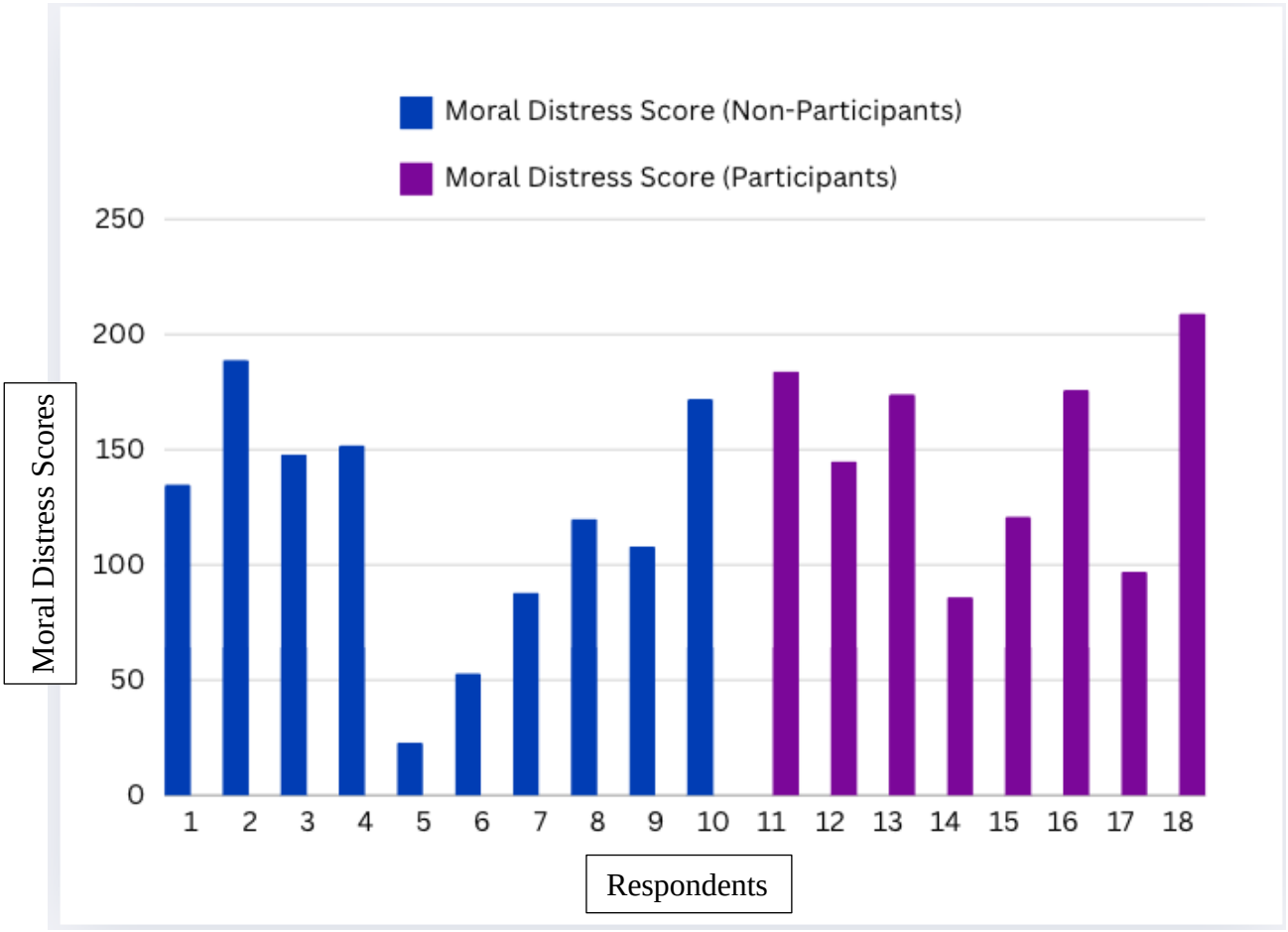
Questionnaire Questions for Nurse Manager

1. How do you perceive the effectiveness of CARED rounds in supporting your nursing team when dealing with ethical dilemmas?
2. Do you believe CARED rounds are an effective tool for mitigating moral distress and its negative outcomes, such as burnout, in your team? Why or why not? Please explain.
3. Have you observed any changes in the decision-making processes or ethical awareness among nurses who regularly attend CARED rounds? Please explain.
4. What feedback, if any, have you received from nurses about CARED rounds? How has this influenced your support or involvement in the program?
5. How could CARED rounds be adapted to better fit the needs of your unit, particularly in dealing with ethical challenges?
6. Are there organizational or structural barriers that affect nurses' participation in CARED rounds? If so, what steps can be taken to minimize these?
7. How do you integrate the outcomes or discussions from CARED rounds into broader discussions about ethical practices and policies within your unit?

Questions for Bioethicist/Bioethics Nurse:

1. What was the catalyst behind implementing CARED rounds as a peer support intervention?
2. When originally implemented, what was the overall goal of CARED rounds?
3. Is there an outline that you follow to structure CARED rounds? Explain further.
4. Have you had to make adjustments to how CARED rounds are performed since they were first established? Please explain.
5. Have you noticed any patterns in how CARED rounds influence nurses' responses to ethical challenges, both emotionally and professionally?
6. In your view, what barriers prevent nurses from fully benefiting from CARED rounds, and how could these barriers be reduced?
7. Are there any opportunities for improvement that you feel important for CARED rounds? Please explain.

Appendix C: Moral Distress Scores



Note. 18 respondents completed the MDS-R scales

Appendix D: Health Research Ethics Authority (HREA) Screening Tool

Student Name: Leslie Laurio

Title of Practicum Project: Evaluation of Ethics Check-In Rounds (CARED rounds) in Pediatric Cardiac Critical Care

Date Checklist Completed: June 4th, 2024

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

9. 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.
10. 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).
11. 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).
12. Research based on review of published/publicly reported literature.
13. 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.
14. Research based solely on the researcher's personal reflections and self-observation (e.g. auto-ethnography).
15. Case reports.
16. 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/