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Canadian Association of Critical Care Nurses
CACCN National Office
Chief Operating Officer:
Christine R. Halfkenny-Zellas, CIM
P.O. Box 25322, London, Ontario N6C 6B1
caccn.ca
email: caccn@caccn.ca
phone: 519-207-7007
toll-free: 1-866-477-9077

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Author Enquiries: All manuscript submissions are to be sent to Chief Editor, Canadian Journal of Critical Care Nursing (CJCCN): cjccneditor@caccn.ca and CACCN National Office: caccn@caccn.ca. For Author Guidelines, refer to the Canadian Journal of Critical Care Nursing (CJCCN) website: https://cjccn.ca/

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CANADIAN ASSOCIATION OF CRITICAL CARE NURSES

Canadian Association of Critical Care Nurses

Vision statement

All critical care nurses provide the highest standard of patient- and family-centred care through an engaging, vibrant, educated and research-driven specialized community.

Mission statement

We engage and inform Canadian critical care nurses through scholarship, education and networking providing a strong unified national identity.

Values and beliefs statement

Our core values and beliefs:

- Excellence and Leadership
  - Collaboration and partnership
  - Pursuing excellence in education, research, and practice
- Dignity and Humanity
  - Respectful, healing and humane critical care environments
  - Combining compassion and technology to advocate and promote excellence
- Integrity and Honesty
  - Accountability and the courage to speak up for our beliefs
  - Promoting open and honest relationships

Pathways to success

1. **Leadership:**
   - Lead collaborative teams in critical care interprofessional initiatives
   - Develop, revise and evaluate CACCN Standards of Care and Position Statements
   - Develop a political advocacy plan

2. **Education:**
   - Provision of excellence in education
   - Advocate for critical care certification
3. **Communication and Partnership:**
   - Networking with our critical care colleagues
   - Enhancement and expansion of communication with our members
4. **Research:**
   - Encouraging, supporting, facilitating to advance the field of critical care
5. **Membership:**
   - Strive for a steady and continued increase in CACCN membership

Letter from the Chief Editor

Spring! There are so many clichés surrounding this time of year. A time of renewal, a time of growth, a time of hope. While these may be clichés, at CJCCN, they are resonating with us. Our Editorial Board is moving forward and shaping the direction of the Journal. We have been in a phase of transition, from the previous leadership to our new team, and we are feeling rejuvenated, excited, and hopeful, as we continue to rebuild the journal to engage our readers with new and interesting content.

Within this issue, we are offering some new features, as well as re-introducing columns that were previously offered by the Journal. We welcome you to read the Letter to the Editor, which calls on critical care nurses to continue to advocate for healthy, equitable, and safe workplaces. We are happy to re-introduce the Institute for Safe Medication Practices (ISMP Canada). ISMP had been a strong partner and regular contributor to the Journal in the past, but we lost our connection along the way. We are thrilled to have ISMP back and encourage you to read their column that identifies the work they do and encourages critical care nurses and team members to engage with ISMP to support safe medication practice. We are introducing a new feature "Practice Pearls" written by Brenda Morgan MN, RN, CNCC(C). This feature is a one-page summary of the latest information focusing on specific practice issues. In this issue, Brenda is offering information about Targeted Temperature Management. We hope these infographics will be used in ICUs across Canada and beyond to help support and standardize practice supported by the best available evidence. We are pleased to publish an article by Danielle Moverley BScN, RN, Tanya Park PhD, RN, and Carmel Montgomery PhD, RN

entitled **Debriefing and Reflective Interventions to Address Moral Distress: A Narrative Review**, which explores practices to support moral distress among ICU nurses. Finally, Melissa Jones MN, RN has written an article exploring barriers to and strategies for **Improving Family Communication in Critical Care**.

In future issues, we will be expanding some of our feature columns, including a regular feature addressing anti-racism within healthcare, and incorporating strategies and tools to help critical care nurses address the Call to Action in the Truth and Reconciliation Report. We will be refreshing our Editorial Review Board to bring new voices to our team that reflect the current ICU environments, and we will be looking forward to more engagement from our readership. If you wish to be part of this publication as an author, a peer reviewer, a critic, or someone who has suggestions to help us improve and grow, I welcome you to contact me at CJCCNeditor@caccn.ca.

Asha Pereira PhD, RN
Chief Editor
Canadian Journal of Critical Care Nurses

Letter to the Editor: A feminist perspective on post-pandemic burnout in critical care nurses

By Leslie Brugger, BSFNH, BSN, RN

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Historically, nursing has been a gendered profession. Still today, women dominate the nursing landscape. In 2019, the Canadian Nurses Association reported that 91% of registered nurses were female in Canada (Canadian Nurses Association, 2019, p.1). Given this strong female presence, it is disconcerting that nursing remains inequitable for women in 2023. Feminist theory explores the importance of women's perspectives, social justice, and feminist values, providing the theoretical and philosophical groundwork for the progression of gender equality (Im & Meleis, 2001). 2021 was one of the most challenging years in critical care nursing history, with record numbers of women leaving the profession due to safety, burnout, workload, and compensation issues. Exploring some of these challenges through a feminist perspective that promotes women's values and interests may offer a lens for understanding the needs of nurses in the post-pandemic healthcare setting (Burton, 2016).

I am saddened by the compromising climate of critical care nursing in Canada today, where working conditions have forced nurses to choose between their ethical and professional obligations. Nurses are leaving behind their pensions, job security, and love for helping others, in hopes of finding new employment where they are valued and supported. Critical care nurses working in areas such as intensive care and emergency departments that took the brunt of surging demands during the COVID-19 pandemic are resigning due to unsustainable work environments. They have witnessed extraordinary suffering and have experienced severe staffing shortages. In addition to intensified pandemic-related stress, nurses in these front-facing areas concurrently experience an unacceptable amount of violence. Pich and Roche (2020) claim that nurses are "more likely to be attacked at work than prison guards and police officers" (p.522). The increased violence, workload, expectations, and responsibility should lead to immediate action to improve the working environment and monetary compensation. Yet, nursing, particularly critical care nursing, is slow in realizing marked improvements.

Women in nursing are further disenfranchised in this profession when required to work extended hours and alternating shifts while caring for a family. Daycare services run for eight hours and are exceptionally unaffordable in Canada. Part-time and flexible schedules are notoriously difficult to obtain in nursing. How are nurses with small children expected to manage a full-time position with these limitations? Nursing, as a gendered profession, fails to create a family-friendly workplace. Statistics Canada (2022) has shown that the lack of support for nurses' workplace needs and the resulting magnified stress and burnout disproportionally affect female nurses compared to other healthcare workers.

I am proud that nurses have finally taken a stance against these unsafe work conditions. One of critical care nurses' most outstanding skills is their ability to advocate for their patients. Post-pandemic, nurses now need policymakers and health authorities to advocate for them during this time of reflection and opportunity for progression. Women in nursing must see real change in gender equality, equity, workplace safety, and mental and physical health support to remain in these careers. Most importantly, nurses want to practice in an environment that allows them to confidently uphold the ethical obligations of their professional practice licensure. We must continue to recognize the challenges and advocate for change for the health of our profession and for those we care for.

Author notes

Leslie Brugger, BSFNH, BSN, RN, Critical Care RN, Vancouver Coastal Health; Family Nurse Practitioner Program, The University of Alberta.

***Corresponding author:** Leslie Brugger, BSFNH, BSN, RN, 411-725 Marine Drive, North Vancouver, BC V7M 0G2*

Email: lbrugger@ualberta.ca

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Debriefing and reflective interventions to address moral distress: A narrative review

Danielle Moverley, BScN, RN, Tanya Park, PhD, RN and Carmel Montgomery, PhD, RN

Abstract

Moral distress is a common phenomenon found in all areas of nursing practice with a high prevalence in specialties such as critical care nursing. The under-management of moral distress is associated with the development of burnout, issues with nursing turnover, and patient safety concerns. Identification of effective interventions to address moral distress remains a novel topic of investigation. The aim of this project was to explore the use of debriefings and reflective practices to address and alleviate moral distress. The population of interest was comprised of nurses working in all acute care areas, including adult and pediatric populations, with a focus on critical care. A narrative literature review was completed using a combination of both quantitative and qualitative studies. Database searches were conducted on both MEDLINE and CINAHL. A total of 10 studies were included in the review. The majority of the studies utilized interventions with both an educational and reflective or debriefing component. A variety of approaches were used in relation to intervention implementation including timing, the profession of both the participants and facilitators, moral distress measurement instrument, and intervention duration and frequency. Most of the studies did not find a significant change in moral distress levels or severity between pre- and post-implementation of the moral distress intervention. No longitudinal studies were conducted to assess the long-term implementation of programs or moral distress measurements. Given the high prevalence and cost of moral distress in the nursing profession, more investigation into interventions is required.

Keywords: moral distress, critical care nursing, intensive care unit, emotional exhaustion, debriefing, moral distress interventions

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Implications for nursing

Moral distress is a common phenomenon found in all areas of nursing practice with a high prevalence among critical care nurses. Identification of effective interventions to address moral distress is a priority need in critical care nursing practice across Canada. Further study is needed to address the challenges of implementing moral distress programs in the intensive care unit (ICU) setting.

Moral distress has been defined as the product of the healthcare professional's inability to follow the ethically deemed appropriate action despite having awareness of the morally correct choice (Jameton, 1993). This inability can be due to several external barriers, such as time constraints, institutional policies, power hierarchies, or legal constraints (Mobley et al., 2007). Value conflicts and team dynamics contribute to internal barriers (Corley, 2002). Moral distress can elicit emotional, physical, and social consequences, with lasting effects both personally and professionally (Mobley et al., 2007; Langley et al., 2015).

Moral distress has been studied in a variety of healthcare settings, with clear research evidence of its occurrence in critical care areas, such as the intensive care unit (ICU) (Mealer & Moss, 2016; Mobley et al., 2007). Critical care nurses are at risk for moral distress related to repeated ethical conflicts associated with advances in medical technology, high-stress work environments, and frequent exposure to end-of-life situations (McAndrew et al., 2018). Moral distress is highly prevalent among critical care nurses, with reported incidence as high as 80% in some studies (Corley, 2002; Mealer & Moss, 2016). Nurses have higher rates, in comparison to other healthcare professionals, due to their integral role in patient care, perceived lack of power and feelings of voicelessness in ethically complex scenarios (Mealer & Moss, 2016).

The COVID-19 pandemic, declared in March 2020, led to an overwhelmed healthcare system with an increased number of critically ill patients (Petrisor et al., 2021). The pandemic also added personal and professional psychological burden on healthcare professionals with exposure to increased workloads, reduced resources, and high incidence of patient mortality (Petrisor et al., 2021). The frequency and duration of exposure to precipitants contribute to ICU nurses being susceptible to moral distress and its lasting consequences. The pandemic has prompted greater research on moral distress (Petrisor et al., 2021). This will help gain an understanding of the impact of moral distress in critical care nurses, its precipitants, outcomes, and possible solutions (Petrisor et al., 2021).

Consequences of moral distress

The negative implications of moral distress can have lasting impacts on the well-being of the nurse, patient, and the nursing profession. If left unidentified or untreated, moral distress can lead to emotional, bodily, and social consequences for the individual nurse (Forozeiya et al., 2019). Feelings of stress, frustration, anxiety, insomnia, and withdrawal from social interactions are a few of the personal impacts that can be experienced due to moral distress (Forozeiya et al., 2019).

There is both an acute and a chronic component to moral distress (Epstein & Hamric, 2009; Rushton, 2016). Acute levels of moral distress can be experienced via the body's stress response to ethically challenging scenarios (Rushton, 2016). Over time, unprocessed moral distress can accumulate and create a lingering crescendo effect, called moral residue (Epstein & Hamric, 2009; Rushton, 2016).

It has been argued that critical care nurses primarily use evasive coping strategies and avoidance of the distressing issue altogether (Forozeiya et al., 2019). This can lead to nurses becoming increasingly withdrawn and disengaged from their practice (Forozeiya et al., 2019). These changes to their practice can have negative impacts on nursing care and elicit decreased patient/family support, higher frequency of medication errors, and reduced patient advocacy (Henrich et al., 2017).

Negative effects are also seen in job attrition and turnover rates in the nursing profession. Dodek et al. (2016) found 52% of ICU nurses responding to a survey (n = 428) in British Columbia indicated they had considered leaving or had left their job in the past due to moral distress. An Ontario provincial report on critical care services identified the overall provincial nursing turnover rate was 10% and a vacancy rate of 5.4% in critical care units (Critical Care Services Ontario, 2019). There has been a recognized nursing shortage for many years in Canada, which has been heavily emphasized by increased demands on the healthcare system during the COVID-19 pandemic (Canadian Nurses Association, 2021).

Moral distress interventions

There has been an abundance of research conducted on the existence of moral distress in both critical care nursing and health care in general (Browning & Cruz, 2018). However, the implementation and evaluation of interventions to address moral distress are emerging topics of interest (Browning & Cruz, 2018). There is a growing body of literature related to the use of debriefings, as a method to mitigate the negative effects of moral distress for healthcare professionals. However, there has not been a formalized approach to how these services are provided (Hamric & Epstein, 2017). A multitude of models has been used to frame debriefing sessions, including the 3D (i.e., debriefing, defusing, discovering) model of debriefing, American Association of Critical Care Nurses (AACN) 4As (i.e., ask, affirm, assess, and act) of moral distress, and models of structured reflection (Fontenot & White, 2019; Mezaine et al., 2018; Savel & Munro, 2015; Zigmont et al., 2011). The majority of debriefing sessions include both a reflective and educational component to increase program participant knowledge of moral distress and effective coping strategies (Mezaine et al., 2018).

The measurement of moral distress

The predominant tool used to measure moral distress is the moral distress scale (MDS) introduced by Corley in 2001 (Tian et al., 2021). This was the first instrument developed to measure both the frequency and severity of moral distress in ICU nurses (Tian et al., 2021). The revised version of this tool, the MDS-R, was first introduced in 2005 and extensively validated (Tian et al., 2021). There are currently six versions of this instrument designed for various healthcare providers and patient populations (Tian et al., 2021). The MDS and MDS-R use a seven-point Likert scale to measure moral distress disturbances related to patient care situations. These scales produce numerical scores to represent both frequency and severity of moral distress and are combined to make a composite moral distress score. The higher the moral distress score, the greater the level of moral distress (Tian et al., 2021). There are a number of other moral distress measurement instruments used in clinical practice and research. These include the measure of moral distress for healthcare professionals (MMD-HP) by Epstein et al. (2019), the moral distress thermometer, and other revised versions of the MDS-R (Hamric et al., 2012; Wocial & Weaver, 2012). However, they all fail to exhibit the extensive validity and reliability that the MDS and MDS-R present (Tian et al., 2021). These tools provide a quantitative measure to illustrate moral distress presence and severity, and demonstrate the effectiveness of moral distress interventions.

Purpose

A narrative literature review was completed to summarize the findings on the use of debriefing and reflective programs to manage moral distress (Ferrari, 2015; Frederiksen & Phelps, 2020). A narrative literature review provides an "overview of research on a particular topic that critiques and summarizes a body of literature" (Frederikson & Phelps, 2020). The narrative review also entails an analysis and discussion of methodologies, findings, limitations, and areas for future development (Frederikson & Phelps, 2020). The aim of this project was to explore the use of debriefings and reflective practices to address and alleviate moral distress. Debriefings included programs delivered in both group and individual settings. The narrative literature review process allowed for a comprehensive summary of existing literature on this subject and the ability to identify gaps for future areas of study (Frederiksen & Phelps, 2020). Due to the narrative literature review method, a rigorous evaluation of the individual study quality of the chosen articles was not completed. The narrative review process is at risk for introducing a subjective analysis, but clear selection and exclusion criteria were used to minimize bias (Frederiksen & Phelps, 2020). Additionally, barriers and facilitators to program implementation were evaluated to gain understanding of how to implement successful debriefing and reflective practice programs.

Methods

Qualitative, quantitative, and mixed-method studies were included in the review. Database searches were conducted in both MEDLINE and CINAHL from January 2010 to January 2022 to ensure information gathered was relevant to current practice. Search terms included ("moral distress" or "moral stress" or "ethical distress" or "ethical stress" or "moral dilemma" or "ethical dilemma") and (educat* or workshop* or teaching or learning or debrief* or "de-brief" or reflection* or train*) and nurs* and ("acute care" or "critical care" or "intensive care" or ICU or emergency or "trauma cent*"). The focus was on nurses, with studies involving nursing students alone excluded from the search.

All articles were read by the primary author and were assessed for pre-determined inclusion and exclusion criteria (Table 1). Critical care nurses were the primary population of interest, but other acute care nurses were included to capture interventions that may be transferable to the ICU (Epstein et al., 2019). Adult and pediatric populations were included due to the ubiquitous nature of moral distress and use of similar interventions across age groups (Epstein et al., 2019).

Results and discussion

Studies were reviewed and selected in a systematic manner, beginning with the title and abstract screening, followed by full-text reviews. Results of the screening process are summarized in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart (Page et al., 2021; Figure 1).

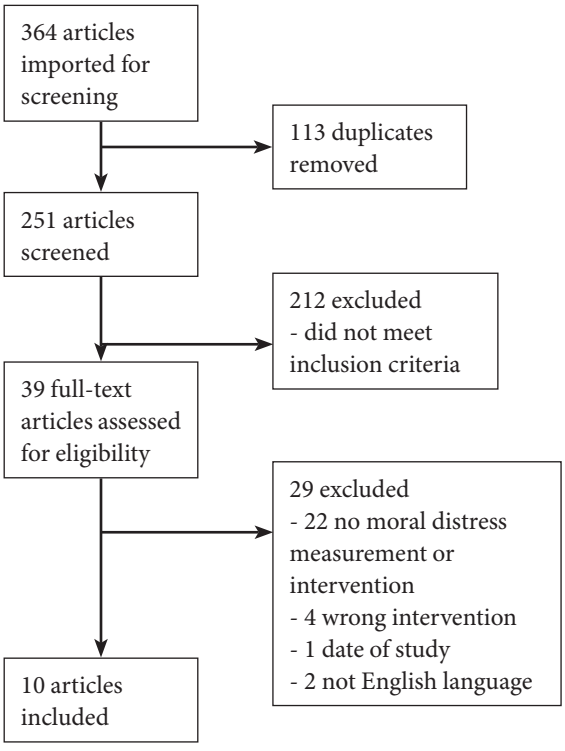
Table 1

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Written in English language • International sources • Peer-reviewed publications • All study designs (quantitative, qualitative, mixed methods) • Debriefing and reflective interventions targeting moral distress in nurses working in critical and acute care. • Adult and pediatric ICU staff and physicians • Papers published from January 2010 to January 2021	• Written language other than English • Editorials, comments and letters • Papers published prior to 2010 • No clear measure of moral distress or intervention evaluation parameters are reported

Figure 1

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Flow Diagram



Adapted from "The PRISMA 2020 statement: An updated guideline for reporting systematic reviews", by Page et al., 2021, BMJ, 372(n71), p. 5. ©2021 BMJ Publishing Group Ltd.

The initial search identified 364 studies; 113 duplicates were removed at this primary stage. Abstracts and titles were then screened, and 212 studies did not meet the inclusion criteria. Full-text reviews were completed on 39 articles. At this stage, a further 29 articles were excluded because they were published editorials, letters, or did not meet the inclusion criteria of having implemented interventions or measures of moral distress.

The studies included in the review used a variety of study designs: seven quantitative designs, two qualitative designs, and one mixed methods. The studies were conducted in a number of countries, including seven studies from the United States, two from Iran, and one from Canada (Table 2). A summary of the chosen studies and their characteristics (i.e., setting, moral distress instrument, intervention, outcome, facilitators, and barriers) are outlined in Table 2.

Content analysis was performed by systematically reading each study and identifying and analyzing the instrument used to measure moral distress, the components of the intervention, the outcomes of the study, and identified barriers and facilitators of the interventions. A conventional approach to content analysis was performed, where the chosen studies were read as a whole, and common themes/categories were derived from them (Hsieh & Shannon, 2005). These categories were then utilized to build the summary of included studies (Table 2), and analysis of these categories between the various research studies as outlined in the discussion.

Components of the intervention

The studies captured a variety of details related to the programs, including the intervention, length and frequency of sessions, profession of facilitators, and staff included in the program. Most of the programs included educational and reflective components to allow staff to learn about moral distress, increase their self-awareness of moral distress, and to discover effective coping strategies. Additionally, through reflective practices, staff could develop an understanding of how to apply these skills in clinical scenarios and practice. Most of the studies included real-life morally distressing situations experienced in the workplace, either provided by the nursing staff themselves or unit leadership. Rushton et al. (2021) included simulation scenarios and role-playing to help grow these skills further, through repeated practice and discussion. None of the studies compared the difference in moral distress levels with the utilization of hypothetical clinical scenarios versus real-life scenarios during the debriefing sessions. The research approaches used either real-life or hypothetical scenarios in isolation from each other. This will be an interesting area for future research to determine if the use of one approach has more impact on moral distress. Other programs included narrative writing (Saeedi et al., 2018) and interdisciplinary care plan discussions (Wocial et al., 2017). These may be useful adjunct interventions and need further study in combination with moral distress education programs to determine if they contribute to long-term reductions in moral distress.

Interventions varied between intensive isolated workshops studied by Abbasi et al. (2018) to more frequent weekly or monthly sessions studied by Browning and Cruz (2018), Chiafery et al. (2018), Fontenot & White (2019), Leggett et al. (2013), and

Table 2

Summary of Included Studies

Author and Year	Setting	Moral Distress Instrument	Intervention	Outcome	Intervention Barriers and Facilitators
Abbasi et al. (2018)	Medical/ surgical adult ICU in Iran	Moral distress scale revised (MDS-R)	2-day workshop hosted for 6 hours per day. Education on definition of moral distress, symptoms, adverse consequences, and strategies to overcome moral distress. Also, it provided reflective group discussion on morally distressing experiences.	No significant change in moral distress score at 2 weeks post-intervention. Moral distress score significantly decreased at 1-month post-intervention.	Facilitators: Providing a longer and more comprehensive education on moral distress, not just providing ethics training. Providing follow-up briefings after completion of the workshop. Barriers: Cultural barriers between health care professionals, including physician dominance.
Browning & Cruz (2018)	Medical/ surgical adult ICU in the United States	MDS-R	Reflective debriefings and educational workshops on moral distress, moral efficacy and common end-of-life issues experienced in the ICU. Held monthly for 6 months and facilitated by a social worker.	No significant change between MDS-R pre- and post-intervention. Non-significant decline in MDS-R scores between experimental and control group. Number of sessions negatively correlated with nurses' desire to leave position.	Facilitators: The monthly frequency of hosting the intervention was found most effective. Barriers: Largest hurdle to attending sessions was timing, due to shift work. Need to incorporate the interdisciplinary healthcare team to ultimately improve and support interdisciplinary culture on the unit.
Chiafery et al. (2018)	Adult burn-trauma ICU, adult mixed surgical ICU, and adult medical ICU in the United States	Moral distress thermometer (MDT)	Nursing ethics huddles; small group meetings hosted by a nurse ethicist. Discussion was facilitated around reflection, ethical principles surrounding ethically troubling cases chosen by the nurses.	Significant decrease in pre- and post-intervention MDT scores. 68% of the nurses reported a decrease in moral distress after participation in a huddle. Nurses' perspectives changed on the ethically challenging situation as a result of the discussion. The majority of the nurses reported improvement in patient advocacy skills.	Facilitators: Offering extra individual time for debriefing time on a volunteer basis. When leadership is present, it provides them an opportunity to learn about issues that otherwise would not be vocalized. Barriers: Requires flexible scheduling of sessions. During a number of sessions staff were pulled away for patient care.
Fontenot & White (2019)	Adult medical ICU in the United States	MDT	Debriefing sessions designed based on AACN's 4As of moral distress. Sessions were moderated by a social worker trained in group therapy and moral distress. Held for 30 minutes 4 times over 10 weeks.	No significant difference between mean pre- and post-intervention MDT scores. No relationship found between the number of sessions and post-intervention MDT scores. A temporary increase in nurses' MDT scores. Nurses reported sessions increased self-awareness, connection with colleagues and fostering self-care habits.	Facilitators: Hosting sessions near shift change allowed both day and night shift staff the opportunity to attend. Barriers: Attendance at debriefing sessions was small due to patient care commitments and shift work.
Leggett et al. (2013)	Adult burn ICU in the United States	MDS-R and self-efficacy scale	Education sessions on moral distress and strategies to cope with moral distress. One 60-minute session hosted each week for 4 weeks. Facilitated by nurse researcher.	Significant decrease in the median MDS-R scores between the pre-and post-intervention scores. No significant difference when retested at 6 weeks post-intervention. No significant difference between median pre- and post-intervention self efficacy score.	Facilitators: The nurses found it beneficial to have both an individual and group-based component. The length of 60 minutes was deemed most appropriate to enable discussion and learning. Nurses found this helpful when combined with other programs as a proactive and ongoing approach to moral distress interventions. Barriers: Timing of sessions to accommodate both day and night shift staff.

continued…

Mezaine et al. (2018)	Acute care medical/ surgical unit in Canada, providing end-of-life care.	MDS-R	Reflective and educational sessions lasting between 45-75 minutes given every 2-3 weeks. Sessions included education on moral distress, palliative care and encouraged individual written reflection about difficult end-of-life situations. The sessions were led by the principal nurse investigator and palliative care clinical nurse specialist.	Small and non-significant decrease observed in the nurses' MDS-R scores post-intervention.	Facilitators: To promote attendance, sessions were hosted during work hours or monetary compensation was provided outside of work hours. Capping session participant size to between 3 to 10 participants stimulated discussion. Barriers: Only including nursing, hindered in-depth patient care discussions and the ability to implement patient care changes.
Reilly & Jurchak (2017)	Adult cardiac ICU in the United States	Qualitative focus groups conducted by the nurse ethicist and independent cofacilitator.	Group discussions were hosted by nurse ethicist and unit nurse manager twice a month over 9 months. Ethically conflicting cases were chosen by nursing staff and extensively discussed.	Group discussion facilitated the process of reflection and learning about moral distress. Increased nurses' feelings of being valued. Reported decrease in moral distress and increase in growth and development on coping moral distress coping strategies.	Facilitators: The skilled nurse ethicist provided structure, guidance and containment of discussion. Attendance of nursing leadership to the session implied permission for nursing staff to openly reflect and further understand daily unit practices and issues.
Rushton et al. (2021)	Adult medical/ surgical ICU and medical/ surgical acute care units in the United States	Perceived ethical confidence scale, moral sensitivity questionnaire, moral competence questionnaire, brief resilience scale, multidimensional emotional empathy scale, work engagement, MDT and mindful attention awareness scale.	Educational curriculum including 6 sessions of training and education including role play, didactic experiential practices and group activities. Reflective debriefings facilitated following high-fidelity simulation scenarios. Educating and facilitating daily mindfulness and reflective practices.	No significant changes in moral sensitivity, empathy, burnout or moral distress. Resilience and mindfulness negatively correlated with moral distress.	Facilitators: Experiential learning and high-fidelity simulations were effective to enhance nurses' skills in mitigating morally distressing scenarios. Multidisciplinary approach enhanced the educational/reflective program. Barriers: ICU nurses have a higher exposure to ethically conflicting care scenarios compared to other acute care areas and can be difficult when programs are provided to both nursing groups. Financially demanding and time-consuming program to build and implement.
Saeedi et al. (2018)	Adult and neonatal ICU in Iran	MDS-R	Educational session held to teach basics of writing clinical narratives. Nurses asked to write narratively about their thoughts and emotions on their clinical practice at least once per week for 8 weeks.	No significant difference in moral distress intensity and frequency between the control and test group.	Facilitators: Nurses are already experienced with the skill of reflective writing from their education. Barriers: High workloads and time restrictions of the nurses. Nursing practice already includes a large amount of written work. Oral narration may be more effective. Lack of designated physical space to facilitate effective narrative writing.
Wocial et al. (2017)	Pediatric ICU in the United States	MDS-R and MDT	Formal facilitated discussion about care plans for extended length of stay patients. Discussions revolved around establishing realistic goals and were held on a weekly basis. Attended by interdisciplinary team including physician, ethicist, bedside nurse, social worker, respiratory therapist and chaplain.	Significant decrease in MDS-R scores from pre- to post-intervention. Range of moral distress thermometer scores narrowed with a decreased median value as the number of sessions attended increased. Largest decline seen in nurses' moral distress post-intervention scores compared to physician scores.	Facilitators: Tracking moral distress in real-time, using the moral distress thermometer, may provide opportunity to identify outliers that could benefit from an intervention. The participation of the interdisciplinary team improved communication and promoted a unified approach to patient care. Barriers: Finding an appropriate time to accommodate all team members' schedules and accommodate outside specialties that are removed from the hospital setting.

Mezaine et al. (2018). To enhance the program's impact, a combined approach may be useful, including both intensive initial workshops and long-term shorter sessions. The initial intensive workshops would provide a knowledge base and improved understanding of moral distress while long-term, shorter sessions would address the chronic aspects of moral distress (i.e., the moral residue). However, further research is needed to determine the optimal frequency and duration of programs.

Moral distress instrument

Six of the studies applied the Corley MDS-R, which measured both the intensity and frequency of moral distress (Tian et al., 2021). However, a variety of other quantitative and qualitative instruments were used simultaneously in the studies, including the moral distress thermometer (Chiafery et al., 2018). The moral distress thermometer measures the presence of moral distress in an acute period, within the previous two weeks, and provides a rapid measurement of current levels of moral distress (Wocial & Weaver, 2012). Therefore, it may be useful in screening for moral distress and trending repeated measures of moral distress over time in response to interventions.

Rushton et al. (2021) used a number of collateral instruments to measure the downstream impacts of moral distress, such as work engagement, mindful attention, emotional empathy, and perceived ethical confidence scale. Although these scales do not specifically measure for moral distress, they provide insight into the incidence of moral distress complications and correlational relationships. Reilly and Jurchak (2017) evaluated focus group responses about perceived levels of moral distress, degree of moral distress knowledge, and coping strategies in a qualitative study.

The majority of the studies did not find a significant change in levels of moral distress following program implementation (Abbasi et al., 2018; Browning & Cruz, 2018; Fontenot & White, 2019; Mezaine et al., 2018; Rushton et al., 2021; Saeedi et al., 2018). Results were similar across all moral distress instruments. All studies measured moral distress in an acute time period ranging from six weeks to nine months following short-term implementation of programs. No longitudinal studies were completed to determine the intervention's long-term impact on moral distress. This is a key limitation, as nurses may require time following the interventions to translate their new moral distress knowledge into routine practice. Although these studies may fail to show a decline in moral distress levels, results of the intervention's true impact may have shown different results if measured after a longer timeframe.

Three studies identified a significant decline in the moral distress scores when comparing pre-and post-intervention measures (Chiafery et al., 2018; Leggett et al., 2013; Wocial et al., 2017). Some reasons these authors hypothesize that led to a significant decline include small sample sizes, significant outliers in their sampling, and the acute time of their measurements post-debriefings. However, further analysis will have to be conducted to thoroughly support or dispute these reasonings as to their significant findings versus the multitude of others with nonsignificant results.

Barriers and facilitators to program implementation

Barriers

The studies included in this review highlight several obstacles to implementing an effective program to deal with moral distress. The most common barrier experienced was ensuring program participation and scheduling of the intervention. The majority of nursing in acute care areas encompasses both day and night shifts and finding an appropriate time that is ideal for both groups is challenging. Fontenot and White (2019) found that hosting the program near shift change allowed staff from both day and night shifts the opportunity to attend. Another challenge is ensuring patient care on the unit is adequately managed and that the program is provided at an optimal time aligned with a lighter workload on the unit.

The majority of the studies assessed programs provided only to nurses. It is well studied that the nursing profession holds the highest incidence rates of moral distress and, thus, is the greatest in need of moral distress interventions (Mobley et al., 2007). However, major challenges discussed included interdisciplinary team relationships and communication (Mezaine et al., 2018; Wocial et al., 2017). Incorporating a component of interdisciplinary participation in the programs may foster improved collaboration and a supportive work culture, thus minimizing nurses' feelings of voicelessness, powerlessness, and frequency of morally distressing situations. The programs can be both financially challenging and time-consuming to build and implement into a workplace (Rushton et al., 2021). Support and participation must be facilitated by healthcare leadership to aid in the effective implementation of these vital supports to ultimately encourage change.

Facilitators

There were a number of positive attributes identified from the various interventions implemented in the studies. Browning and Cruz (2018) identified that monthly frequency for debriefing and education sessions was most effective. However, they did not assess if the services should be provided for a finite period or indefinitely. Abbasi et al. (2018) found that providing briefings following educational workshops was helpful to ensure knowledge retention and to address proactively questions that may have arisen.

Chiafery et al. (2018) and Leggett et al. (2013) showed that a combined individual and group approach to debriefing is the most beneficial to promote participation and decrease moral distress levels. Providing an individual component ensures that participants who may be uncomfortable participating in a group environment are still offered an opportunity to reflect and debrief. Also, individualized debriefing services can be provided to those who may be outliers experiencing higher moral distress than their coworkers and are at higher risk for moral distress downstream complications. Moreover, Mezaine et al. (2018) found that limiting the group size to a maximum of 10 participants allowed for effective group discussion and debriefing.

Reilly and Jurchak (2017) identified that the skill of the program facilitator is important to the program's effectiveness. Nurse ethicists and social workers have specialized education and training in debriefing situations contributing to moral distress and are a great resource for intervention programs

(Browning & Cruz, 2018; Reilly & Jurchak, 2017). Their professional background and expertise equip them to provide structure, guidance, and direction to debriefing discussions and to ensure session goals are achieved (Reilly & Jurchak, 2017).

Attendance of clinical leaders at the debriefings was seen as a positive asset and provided further support for nursing staff to openly reflect and debrief (Reilly & Jurchak, 2017). Attendance also provided leadership the opportunity to learn about workplace issues that may not otherwise be evident to them (Chiafery et al., 2018). The presence of leadership at the debriefings also helps mobilize change strategies identified at the sessions and promotes a supportive work environment.

Further research

The findings of this study outline promising interventions to address the growing burden of moral distress among nurses (Browning & Cruz, 2018). Investigation into potential strategies to prevent and mitigate moral distress is a novel topic (Browning & Cruz, 2018). The minimal existing literature in this area shows varied results and the need for future attention to effectively evaluate the impact of moral distress interventions (Dacar et al., 2019; McAndrew et al., 2018; Morley et al., 2021).

As previously mentioned, all current literature on moral distress interventions assesses their effectiveness on an acute timeline. Longitudinal studies are required to effectively assess the intervention's impact on moral distress levels, and it remains unknown what the best timeline is for follow-up measurement.

Another area of potential research is the assessment of workshop effectiveness versus long-term interventional supports. One of the largest barriers to providing supportive programs is the scheduling and availability of staff due to shift scheduling constraints. Therefore, an intensive two to three-day workshop may be beneficial to overcome this dilemma. However, the efficacy of this approach versus long-term intermittent programming needs to be assessed.

The studies in the review used a variety of frameworks to build their programs and supports. Further work is required to assess the impact of these models and determine an influential program to address moral distress. The majority of the programs studied addressed debriefing of morally distressing clinical situations. However, the COVID-19 pandemic has introduced a new array of moral distress triggers in the ICU, including an increase in the volume of dying patients, visitor restrictions, increased workloads and staffing shortages, vaccine hesitancy, concern for personal safety, and the use of novel treatments and interventions (Godshall, 2021). These topics require exploration regarding their contribution to moral distress and further highlight the urgent need for the development and implementation of moral distress interventions.

Conclusion

Moral distress is a highly prevalent phenomenon among healthcare professionals, with ICU nurses being most susceptible. While there is a wealth of research and knowledge on the presence, triggers, and downstream complications of moral distress, few studies have focused on interventions. The novel studies focusing on assessing supports for moral distress use a variety of approaches to program implementation. However, they all largely include an educational and reflective component to the program. Most of the studies were unable to show a significant change in moral distress severity and frequency following program implementation, although, all studies were limited to evaluating program implementation and moral distress measurement on a short-term timeline. Further longitudinal studies are required to effectively assess program impact on acute and chronic moral distress. Additional work is required to address the challenges of implementing moral distress programs in the ICU setting and providing vital support to ICU nurses.

Author notes

Danielle Moverley, BScN, RN, Faculty of Nursing, College of Health Sciences, University of Alberta

Tanya Park, PhD, RN, Associate Professor, Faculty of Nursing, College of Health Sciences, University of Alberta

Carmel L. Montgomery, PhD, RN, Assistant Professor, Faculty of Nursing, College of Health Sciences, University of Alberta

Corresponding author:*Danielle Moverley, BScN, RN, University of Alberta, College of Health Sciences, Faculty of Nursing, Level 3 ECHA, 11405 87 Avenue NW, Edmonton, AB, T6G1C9.*

Telephone: 780-492-4547; Facsimile: 780-492-2551; Email: moverley@ualberta.ca

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Improving family communication in critical care

By Melissa Jones, MN, RN

Abstract

Communication with family members in critical care is challenged by socioeconomic, environmental, and organizational factors. Ineffective communication between healthcare providers and family members results in psychological distress and anxiety among family members and can lead to misunderstanding of the patient's condition and ineffective decision-making. This manuscript aims to explore barriers to effective communication, understand standardized communication tools, and support their implementation in critical care. An extensive search of various databases provided a variety of articles meeting the criteria of communication barriers in critical care, end-of-life, and strategies to overcome these barriers. Health literacy, diversity, and environmental factors are significant barriers to communication in critical care. The COVID-19 pandemic has further complicated communication, necessitating organizations to implement creative communication strategies. An effective strategy that is consistently identified for improving communication is the implementation of communication skills training. The READY framework, VALUE (Value, Acknowledge, Listen, Understand, and Elicit) guide, and Psychosocial Assessment and Communication Evaluation (PACE) tool are presented as frameworks to improve communication in critical care, and important elements of family meetings are identified. The collaborative efforts of the healthcare team and organization are essential in overcoming the specific challenges of communicating in critical care. Healthcare organizations and individuals are obligated to ensure that healthcare providers are appropriately trained, provided adequate resources, and are competent in communicating complex information with family members.

Keywords: family communication, critical care, communication training, communication framework, communication barrier

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Implications for nursing

- Nurses are integral members of the healthcare team; their proximity to patients and family members provides an important opportunity for their participation in improving interdisciplinary communication and ensuring effective communication between the health care team and family members.
- Nurses are strong advocates for patient and family member needs; ineffective communication witnessed by nursing staff can be identified and addressed by the healthcare team by implementing communication training and structured communication tools.
- Nurses are leaders in healthcare change; demonstrating the need for change is crucial to developing and implementing change practices across the interdisciplinary team.
- Nurses can provide critical feedback on the effectiveness of new strategies to improve communication with family members.

Critical care is a multidisciplinary and interdisciplinary approach to care designated to address acute life-threatening illnesses and injuries (Marshall et al., 2017). The life-sustaining technologies and invasive monitoring in intensive care units (ICUs) can be overwhelming for family members of patients requiring such care (Adams et al., 2017). Although families are often unprepared for these new roles, they are important critical care team members, acting as substitute decision-makers, informants for the healthcare team, and providers of support and comfort for patients (Lopez-Soto et al., 2021; Montauk & Kuhl, 2020). Effective communication between the healthcare team and families is critical in ensuring families have a clear understanding of the patient's condition, reducing negative psychological distress and post-traumatic stress disorder (PTSD), and ensuring treatment plans are congruent with patient wishes (Newcomb et al., 2020; Seaman et al., 2017). Many communication barriers exist in critical care; therefore, it is important for organizations and healthcare professionals (HCPs) to make efforts to provide effective communication. Educating HCPs in using communication frameworks and tools supports the development of effective communication skills and overcoming barriers to communication. This manuscript aims to explore barriers to effective communication, analyze the literature on standardized communication tools, and support their implementation in critical care.

Background

Patients in the ICU often cannot communicate for themselves, placing an increased burden and emotional strain on family members (Bernild et al., 2021). The burden of uncertainty and the emotional toll of having a family member in the ICU place family members at risk of experiencing psychological distress, depression, and PTSD (Adams et al., 2017; Bernild et al., 2021; Newcomb et al., 2020). HCPs, including both doctors and nurses, are critical in supporting patients to reduce these risks by providing effective communication, emotional support, and education (Edward et al., 2020; Newcomb et al., 2020). Unfortunately, during a patient's stay in critical care, the multidisciplinary team may be composed of numerous HCPs, resulting in variations of who, when, what, and how information is communicated (Bernild et al., 2021).

As family members face many challenges and fears when making decisions on behalf of their loved ones (Adams et al., 2017; Cussen et al., 2020), collaboration between the healthcare

team and their families in decision-making can ensure there are considerations for the patient's values and beliefs alongside evidence-based recommendations (Cussen et al., 2020). This shared decision-making process is important to ensure that the healthcare team and family members have a common understanding of the issues in order to facilitate decision-making and treatment planning (Cussen et al., 2020; Edward et al., 2020). Unfortunately, misunderstanding of treatments, diagnoses, and prognoses is a common problem, occurring in 71% of families of ICU patients (Mathew et al., 2015).

Methods

Multiple databases, including CINAHL, PubMed, MEDLINE, and Science Direct, were accessed through the Athabasca Library in an extensive search to gather the most current and relevant literature. Search terms included family communication, critical care, intensive care, communication framework, communication policy, barriers, and communication education. Due to the nature of critical care, the search was extended to include articles discussing communication in the context of end-of-life care. A health systems librarian verified the search for scholarly articles, and a selection of current articles was chosen for this discussion. Included articles were chosen based on their relevance to communication in ICUs, communication tools or frameworks, and strategies for improving communication. Screening reference lists of the selected articles identified further articles relevant to this discussion.

Findings

Multiple influences affect the health of individuals and populations, including income, social status, literacy and education, physical environments, access to health services, gender, culture, and race (Government of Canada, 2022). Several of these health determinants are recognized as significant barriers to effective communication, including health literacy (Halm, 2021); cultural diversity (Brooks et al., 2019); and environmental factors (Edward et al., 2020). The COVID-19 pandemic has further complicated communication in critical care. In this section, communication barriers are further described, along with recommended strategies for communicating with families.

Barriers to communication

Health Literacy

Health literacy can be defined as an individual's ability to make health decisions that promote well-being and demonstrate their ability to seek, understand, and apply health information (Fields et al., 2018; Halm, 2021; Sentell et al., 2020). Health literacy encompasses one's ability to use health information, their confidence in navigating the healthcare system, and their ability to comprehend health information (Fields et al., 2018). Being in stressful and unfamiliar environments, such as the ICU, can affect a person's ability to understand health information (Halm, 2021). Family members with limited health literacy are two-and-a-half times more likely to have difficulty communicating and navigating within the healthcare system (Fields et al., 2018). When communication strategies are targeted to the individual, their burdens are reduced, they are more self-efficient, and have an improved quality of life (Fields et al., 2018). Interventions at both the system and individual levels can be applied to improve communication impaired due to health literacy. Fields et al. (2018) suggest that family members with low health literacy may benefit from being active participants in the patient's admission, allowing them to better integrate and understand the information they receive, ask questions directly, and receive immediate feedback from the healthcare team. At a systems level, organizations should consider training HCPs to support the development of communication skills, the application of communication tools, and the understanding of health literacy (Fields et al., 2018; Halm, 2021). Halm (2021) also recommends developing resources available in simple and clear language that HCPs can access and provide to families to enhance communication.

Diversity

Canada is a nation of diverse populations with whom HCPs must strive to ensure equitable care provision; unfortunately, health inequities continue to exist concerning social determinants of health (Government of Canada, 2022). Language, religion, culture, race, socioeconomic status, and sexual orientation are some characteristics that socially isolate individuals, requiring special care considerations from HCPs and organizations (Zurca et al., 2020). Culturally sensitive communication is the "effective verbal, nonverbal, and written interactions among individuals or groups, with a mutual understanding and respect for other's values, beliefs, preferences, and culture, to promote equity in health care" (Brooks et al., 2019, p. 516). Lack of culturally sensitive communication results in patients and families feeling unheard (Zurca et al., 2020), impacts decision-making, and leads to distress in patients, families, and HCPs (Brooks et al., 2019). Many HCPs feel unprepared to provide culturally sensitive care, especially in end-of-life discussions (Brooks et al., 2019), emphasizing the need for communication training that supports cultural sensitivity (Brooks et al., 2019; McKivett et al., 2019). Various studies further support communication training to encourage shared decision-making and improve patient satisfaction (Cussen et al., 2020; Edward et al., 2020; Newcomb et al., 2020).

Environmental factors and COVID-19

Communication practices prior to the pandemic were challenging. However, the COVID-19 pandemic further complicated communication efforts when hospitals were required to restrict visitors to reduce virus transmission (Bernild et al., 2021; Montauk & Kuhl, 2020; Rose et al., 2021). Unfortunately, these limitations left many patients alone at the end of life in the ICU (Montauk & Kuhl, 2020) or facing challenging recoveries and uncertain outcomes alone (Rose et al., 2021). These restrictions have negatively impacted patients, families, and HCPs. Problems identified with ineffective communication, such as psychological distress, poor understanding of patient wishes and medical history, and moral distress among HCPs, have been exacerbated by implementing these restrictive measures (Rose et al., 2021). HCPs and organizations needed to creatively and quickly develop measures to allow communication with families. Unique measures, such as family liaison teams (FLTs) (Lopez-Soto et al., 2021) and virtual visits (Montauk & Kuhl, 2020; Rose et al., 2021; Savino & Crispino, 2020), were implemented to enhance communication.

An FLT implemented in a health organization in the United Kingdom designated a team to provide daily communication and updates for families and friends of patients in the ICU (Lopez-Soto et al., 2021). The study demonstrated the importance of communication and its impact on family satisfaction. Challenges identified in the study that designated members of the FLT were not ICU trained or trained in communication skills; FLT members only met with the health team twice a day to share and gather information; and end-of-life discussions required more support than the FLT could provide (Lopez-Soto et al., 2021). These issues emphasize that communication goes beyond providing objective information; communication skills and close contact with the patient and healthcare team are invaluable tools.

A recent study identified certain aspects of communication that families value when communicating with HCPs. Bernild et al. (2021) identified that families value receiving valid and accurate objective information; the information provided in the proper context, with the right people, and in an appropriate manner; and finally, that HCPs show honesty regarding what is known and not known about the patient's condition. Some examples of this approach include having designated times for families to communicate with the healthcare team, having HCPs proactively initiate communication in a consistent pattern, and using video to communicate with the family (Bernild et al., 2021). The impact of the COVID-19 pandemic has emphasized the challenges of providing effective communication in critical care, demonstrating the need for strategies to overcome the specific communication challenges faced in critical care.

Discussion

Implementing structured communication tools, such as communication frameworks and family meetings (Gruenewald et al., 2017; Nelson et al., 2009; Piscitello et al., 2019), offers many benefits to improve communication with family members, such as enhancing comprehension, reducing family distress, and increasing satisfaction (Halm, 2020; Sviri et al., 2019). Ensuring HCPs are trained in communication tools is important in improving communication.

Communication frameworks

Communication tools are commonly used to improve communication (Shannon et al., 2011). Three frameworks developed to support communication between HCPs and family members in critical care include the READY (Right language, Environment, Assessment of families' readiness to communicate, Do your preparation, and You have the opportunity to deliver different news) framework (Mackie et al., 2021), the VALUE (Value, Acknowledge, Listen, Understand, and Elicit) guide (Rhoads & Amass, 2019), and the Psychosocial Assessment and Communication Evaluation (PACE) tool (Higginson et al., 2013). These tools are recommended to allow HCPs and organizations to choose which tool best fits the needs of their population and HCPs (see a comparison of these frameworks in Appendix A).

The READY mnemonic aims to prepare HCPs to communicate with family members in challenging situations (Mackie et al., 2021). The framework was developed during the COVID-19 pandemic to support communication with family members with limited access at the bedside and ensures HCPs consider the barriers created by health literacy, the environment, and communication preferences. The framework comprises a training workshop and a visual tool (see Appendix B). The framework can improve confidence and skills and reduce the effects of ineffective communication (Mackie et al., 2021).

The VALUE guide supports HCPs in communicating with families during challenging end-of-life discussions (Rhoads & Amass, 2019). This guide (see Appendix C) has been shown to reduce PTSD, anxiety, and depression scores among family members and helps HCPs respond appropriately and empathetically to family members' concerns (Davidson et al., 2017; Rhoads & Amass, 2019).

The PACE tool was designed to facilitate the assessment of patients and families and communication throughout their ICU admission (Higginson et al., 2013). The PACE tool addresses barriers that arise from low health literacy and communicating with culturally diverse patient populations. The program comprises a training program for HCPs, additional learning resources, and a PACE record to ensure accountability and documentation. This program was designed for ICU environments and gathers information regarding the patient's family, relationships, social details, patient preferences, communication preferences, and any concerns (see Appendix D for the adapted PACE tool). The tool can be integrated into electronic health record systems and has shown positive outcomes on family satisfaction, symptom control, and support for patient and family members' needs (Higginson et al., 2013). These structured frameworks are a starting point for training HCPs to communicate skillfully; however, communication in formal situations, such as family meetings, should be considered.

Family meetings are a valuable tool for communicating with families in the ICU; unfortunately, family meetings are typically held with the goal of negotiating the withdrawal of life support instead of supporting the patient and family (Piscitello et al., 2019). Further, family meetings require a wide range of communication skills, for which many HCPs do not receive formal training (Singer et al., 2016). When used appropriately and offered in a timely, reliable manner, family meetings can reduce conflict of care goals and hospital length of stay (Nelson et al., 2009). The shared decision-making process between family members and the multidisciplinary team supports therapeutic relationships and enhances communication (Powazki et al., 2018). Family meetings should be planned, structured events led by HCPs trained in leading family meetings and should include members from more than one involved discipline (Gruenewald et al., 2017; Nelson et al., 2009; Powazki et al., 2018). Family meetings are inherently stressful for family members and HCPs. Ensuring appropriate measures are in place is not a light recommendation; an unplanned family meeting can result in negative outcomes or cause potential harm (Powazki et al., 2018).

Implications for practice

Critical care imposes unique challenges on communication that are difficult to overlook. Challenges such as patients' inability to represent their values and wishes, the uncertainty and unpredictability of outcomes, and the common need for end-of-life discussions, illustrate the need for structured and consistent communication strategies. Overcoming these challenges is a collaborative effort between all health team members, including nurses, physicians, and family members. Organizations also play an important role in providing adequate support and resources, training, and supporting quality improvement initiatives. Communication is an essential component of care that demands consistent and effective strategies implemented by HCPs. As a basic competency, HCPs should be held accountable for ensuring they have adequate knowledge and skills to communicate effectively with family members. Health care organizations should be responsible for adequately providing resources and support to HCPs, as they endeavour to improve communication skills and implement communication strategies. The described frameworks and tools can guide HCPs and organizations in improving communication and incorporating best-practice communication processes.

Conclusion

Effective communication with family members in ICUs can be challenging and complicated by socioeconomic factors, environmental factors, and organizational processes. Due to the stressful environment and uncertainty in the ICU, it is critical that family members are encouraged to participate as healthcare team members and supported throughout the process to mitigate the negative consequences of ineffective communication. HCPs and organizations should consider taking steps to overcome communication barriers by improving communication skills through the implementation of communication frameworks, communication skills training, and best practice communication processes. Although frameworks and communication strategies exist, there remains a significant gap between research and actual strategy used in practice; further research in implementation strategies and the challenges of implementing such strategies in the current work climate would help bridge this gap.

Author notes

Melissa Jones, MN, RN, The University of Ottawa Heart Institute

Address for correspondence: *Melissa Jones, MN, RN*

Email: Melissa.ejones18@gmail.com

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Appendix A

Communication Framework Table

Framework	Purpose	How it Works
READY Framework	To prepare health care providers to better communicate with family members regarding challenging situations. A five-part mnemonic and training intervention. (Mackie et al., 2021)	Contextualized for use in critical care. A half-day training workshop for health care professionals led by a research team and a patient's family representative, consisting of real-life stories and case studies. A feasible training intervention that improves the confidence and skills of health care providers in delivering challenging news, managing emotions, and reducing negative impacts. Includes a simple visual representation. (Mackie et al., 2021)
VALUE Guide	Provides guidance to health care providers in discussions with family members of critically ill patients and at the end of life (Rhoads & Amass, 2019).	Demonstrates reduced rates of PTSD, anxiety, and depression among family members (Rhoads & Amass, 2019). Helps address concerns appropriately and with empathy (Rhoads & Amass, 2019). A five-part mnemonic implemented through a two-hour didactic training session for ICU staff (Pagnamenta et al., 2016). A simple pocket card was provided to staff with the mnemonic (Pagnamenta et al., 2016).
PACE Tool	An interventional tool was developed to improve communication and palliative care in critical care (Higginson et al., 2013).	A two-part program that consists of a PACE training program and a PACE record. Training lasts one week prior to implementation. Posters and information leaflets were made available on the unit. A representative from the palliative care team and researchers remain present for 3 to 4 hours each day to help staff adjust. A brief 2-page record is to be completed within 24 hours and used to log further communications. (Higginson et al., 2013)

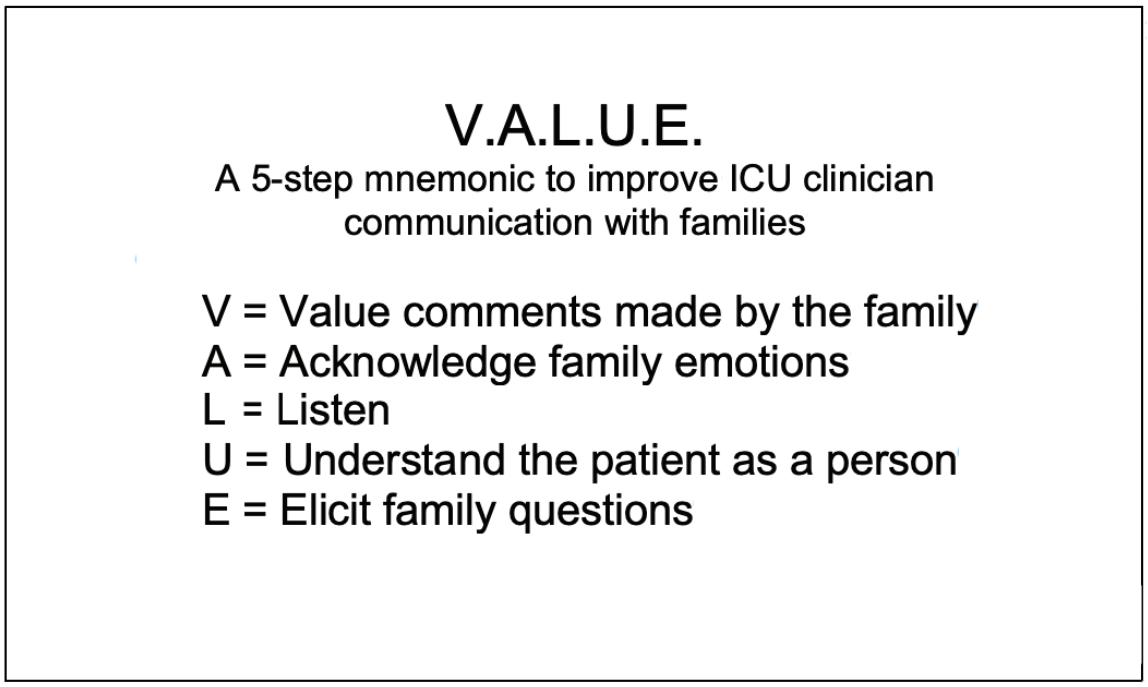
Appendix B

READY Framework

(Mackie et al., 2021, p. 298; Reprinted with Permission)

Appendix C

VALUE Reference Card



"VALUE" was developed by the University of Washington End-of-Life Care Research Program at Harborview Medical Center (End-of-Life Care Research Program, n.d.; Reprinted with Permission)

Appendix D

PACE Tool

This tool was adapted from the author's (Higginson et al., 2013, electronic supplementary material) online version, publicly available for use at https://bmcmedicine.biomedcentral.com/articles/10.1186/1741-7015-11-213#Sec22.

Additional file 3

PACE: Psychosocial Assessment and Communication Evaluation

Any member of the MDT to commence within 24 hours of admission and continue use until discharge

Patient name: _____ DOB: _____ Hospital Number: _____

Date / time of admission: _____/_____ Date / time form completed: _____/_____

Staff member completing form (sign & print): _____

Family member completing form: _____

Key family contact: _____

1. Family details including key relationships:

If yes to any of the following, detail action taken below:

Children under 18?	☐ Yes	☐ No	If yes, contact palliative care social
Guardianship issues of any children?	☐ Yes	☐ No	worker to discuss supported visits
Vulnerable adults?	☐ Yes	☐ No	(page KH6081)

Action taken:

2. Social details (incl. employment; religious, spiritual & cultural needs; perceptions of hospital/ ICU):

Financial concerns?	☐ Yes	☐ No
Religious / spiritual needs?	☐ Yes	☐ No
Language / cultural needs?	☐ Yes	☐ No
Transport / parking needs?	☐ Yes	☐ No
Other supportive needs?	☐ Yes	☐ No

Action taken:

3. Patient Preferences

Has the patient previously expressed views about any treatment / care wishes: ☐ Yes ☐ No
Specify: _____

Has the patient expressed a preference for place of care? ☐ Yes ☐ No
Specify: _____

Does the patient have an advance directive / statement? ☐ Yes ☐ No
Details and action taken: _____

☐ Not appropriate to discuss currently (must give reason)
_____
_____
(NB staff cannot witness signing of wills - for advice contact Consultant or palliative care team social worker)

4. Communication and information:

Is the **patient** aware of the current situation and likely outcome? ☐ Yes ☐ No, alert
☐ No, conscious level
Is the **NOK** aware of the current situation and likely outcome? ☐ Yes ☐ No
Details and **action** taken: _____
_____
Names of people information about patient to be given to: _____
Has the ITU been explained to the patient OK?

Visiting hours	☐ Yes	☐ No
Who to ask for information	☐ Yes	☐ No
Who the different staff members are	☐ Yes	☐ No
Has the relative information leaflet been given?	☐ Yes	☐ No

5. Any other concerns / issues:

Action taken:

6. Communication Update - please complete each time the patient/ NOK/other is updated

Date	Update given by		Update given to	Communication documented?		
	Name	Designation		Yes/No	Medical notes	Nursing evaluation

Useful Contact Numbers

Palliative Care Team
Palliative Care Social Worker
Safeguarding:

Hospital social work team
Social work team for elderly
Counselling service
Chaplaincy Services
PALS

Out of hours Emergency Social Services in Southwark
Lambeth

Macmillan Information and Support Centre

For admin use only
Code: Unit: APACHE II: Outcome: Diagnosis:

Medication Safety Practice Corner: Sharing and learning from medication incidents

By Dorothy Tscheng, RPh, Alice Watt, RPh, Sylvia Hyland, RPh, Carolyn Hoffman, RN
Institute for Safe Medication Practices Canada

Tscheng, D., Watt, A., Hyland, S., Hoffman, C. (2023). Medication Safety Practice Corner: Sharing and learning from medication incidents. *The Canadian Journal of Critical Care Nursing, 34*(1), 25–26. DOI: 10.5737/23688653-34125

ismp CANADA Report a med error

In this regular column, ISMP Canada will feature a critical care-related medication story and share practical learning for critical care nurses.

LEARN: Incident Report Shared with ISMP Canada

A young child presented with an inadvertent acetaminophen overdose. The antidote *N*-acetylcysteine was prescribed according to the provincial poison centre protocol, with the loading and maintenance doses determined by the child's weight. Protocol guidance included preparing the medication in a one-litre bag of intravenous fluid. A number of factors led to a pump programming error, administration of a large volume of fluid, and an overdose of the medication. The child deteriorated and subsequently died.

What is a medication incident?

A medication incident (also known as a medication error) is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer (ISMP Canada, 2023, Definitions of terms).

Critical care nurses work in a busy, high-intensity clinical setting. Numerous medications are administered, often involving programming and monitoring multiple infusion pumps and lines. Medication errors typically occur due to several contributing factors related to the task, equipment, work environment, patient, care team and/or organization (CPSI, 2012), that permit the incident to occur and go undetected before reaching the patient.

Figure 1

ISMP Canada's Learn-Share-Act Framework (ISMP Canada, 2022, Strategic Plan 2022–2026)

Why should you report a medication incident to ISMP Canada?

Hospitals typically have established incident reporting processes. Sharing select medication incidents or near misses that merit further analysis by a national organization focused on medication safety beyond these usual processes offers opportunities for broader sharing and learning.

Medication-use practices that may lead to errors in one hospital often exist in other hospitals. When a nurse or other practitioner shares a medication incident report directly with the Institute for Safe Medication Practices Canada (ISMP Canada), the learning from one hospital is further disseminated, allowing healthcare practitioners across the health system to take proactive action, so that another patient does not need to experience the same or similar error. ISMP Canada is a national, independent, and not-for-profit organization that purposefully partners with organizations, practitioners, consumers, and caregivers to advance medication safety in all healthcare settings.

ISMP Canada is also a key partner in the Canadian Medication Incident Reporting and Prevention System (CMIRPS), together with Health Canada, Canadian Institute for Health Information (CIHI), Patients for Patient Safety Canada and Healthcare Excellence Canada (ISMP Canada, 2023, CMIRPS Program Overview). The goal of this national, collaborative program is to reduce and prevent harmful medication incidents in all healthcare settings.

SHARE: What Happens to the Reports of Medication Incidents?

ISMP Canada's multidisciplinary analysis team, including nursing, pharmacy, medicine and informatics experts, reviews medication incidents submitted to CMIRPS reporting and learning programs.

A prioritization framework identifies incidents that carry a high risk of causing significant patient harm or death and these are selected for further analysis, dissemination of learning, and system improvement initiatives.

The incident report described above contributed to an early alert (ISMP Canada, 2022, ALERT) and led to a recently completed multi-incident analysis of *N*-acetylcysteine errors. The analysis identified a number of contributing factors related to the preparation of the infusion, infusion pump functionality and protocol design. Quality improvement opportunities are being identified as a direct result of the reports shared.

ACT: What's Next?

Shared learning leads to quality improvement. Every report provides an opportunity to learn and share improvement strategies to strengthen the safety of our medication-use systems. Together with partners and system stakeholders (e.g., standard-setting organizations), healthcare providers, consumers and caregivers, and others, ISMP Canada collaborates to implement recommendations with the goal of creating safer systems for staff and patients.

- Look for an upcoming ISMP Canada Safety Bulletin later this year that will describe in-depth findings from the *N*-acetylcysteine analysis, as well as recommendations for hospitals, poison centres, and infusion pump manufacturers to improve the safe delivery of this antidote.
- Join ISMP Canada's mailing list to directly receive the Safety Bulletins by e-mail as soon as they are released: https://ismpcanada.ca/safety-bulletins/#footer
- Report key medication errors and near misses directly to ISMP Canada's Individual Practitioner Reporting program at https://www.ismp-canada.org/err_ipr.htm. Each report makes a difference to future practice and systems.

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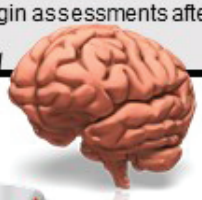
Practice Pearls

Targeted Temperature Management (TTM) in 2023

- Recommended for comatose/non-responsive patients post ROSC
- Requires tight control over body temperature using strict protocols for **induction, maintenance, rewarming and fever avoidance periods**
- Maintain target temperature for 24-40 hours (intervention period)
- Avoid fever for ≥72 hours
- Do not cool prehospital; quickly after ROSC and hospital admission
- Do not delay post-ROSC interventions (e.g., PCI, CT head, shock management)
- Do not warm patients who are spontaneously cooled

Neuroprognostication

Begin assessments after 72 hours



- Choose hypothermic (32-34C) or normothermic (36-37.5C) targets
- Monitor CORE temperature continuously (esophageal, bladder or vascular)
- Achieve target temperature quickly and maintain strict control
- Use surface and/or intravascular cooling as required
- Consider and treat suspected sepsis if temperature difficult to maintain

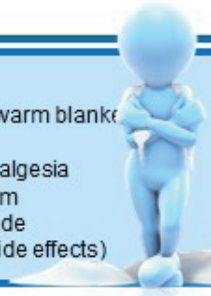
Rewarming

- Maintain sedation until temperature ~36
- Rewarm passively, avoid rapid warming
- Rewarm 0.25 – 0.5C per hour
- Keep temperature <37.7C for ≥ 72 hours; active cooling may be required after intervention period ends

- Maintain sedation and mechanical ventilation during intervention period
- Treat seizures (prophylaxis not recommended)
- Avoid hyperoxia, hypoxemia and hypocarbia.
- Hypokalemia and metabolic disturbances may occur during cooling
- Bradycardia, arrhythmia and coagulopathy may occur during cooling but usually does not require treatment
- Consider maintaining MAP > 65 mmHg for cerebral perfusion

Control Shivering

- Wrap extremities with warm blanke
- Acetaminophen
- Increased sedation/analgesia
- Consider IV magnesium
- Neuromuscular blockade
- Buspirone (watch for side effects)



Summary of Current Evidence and Critical Points

- TTM is recommended by several professional guidelines.
- Outcomes appear to be the same between normothermic vs hypothermic TTM. Current TTM guidelines support TTM targets between 32 – 37.5C and fever avoidance for ≥72 hours.
- Optimal temperature targets, timing, duration (of cooling or fever avoidance), pharmacotherapy and BP management remain unknown.
- In the largest RCT (TTM3) comparing normothermic vs hypothermic TTM, all patients were sedated and ventilated for 40 hours with fever avoidance for 72 hours. Of note, close to 50% of patients in the normothermic group required active cooling to maintain target temperatures (Dankiewicz, 2021)
- All TTM studies have been conducted with bundled interventions; it is unknown whether any one intervention is more important than another or if there is a benefit to the collective interactions between bundle components. TTM requires strict adherence to protocols regardless of temperature targets or intervention periods selected.
- TTM trials include patients with presumed cardiac origin of their cardiac arrest. The applicability of findings to patients with non-cardiac causes (e.g., hypoxemic respiratory arrest, neurological event or strangulation) is unknown.

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