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Interdisciplinary simulation for nursing and medical students about final conversations: Catalyzing relationships at the end of life (CAREol)

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Abstract

Objectives. Final conversations (FCs) go beyond how patients want to be cared for at the end of life (EOL) and focus on messages of love, identity specific, and unique to an individual and relationship that requires self-examination, everyday talk that normalizes a difficult situation, religious/spiritual messages, and if needed, difficult relationship talk to heal broken relationships. The purpose of the Catalyzing Relationships at the End of Life (CAREol) program was to provide interdisciplinary education to nursing and medical students and clinical faculty about facilitating FCs among patients and families.

Method. This two-part, quasi-experimental program consisted of a cognitive (online) and experiential (live simulation) curriculum experience. Program curriculum, including video vignettes, readings, and live simulation (utilizing actors), was developed by the study team. Reflective journaling and researcher designed pre- and post-tests were used to assess comfort, confidence, importance, and distress regarding FCs and collaboration with other disciplines.

Results. The pre-/post-test questions demonstrate statistical significance based on a paired *t*-test with effect sizes supporting the practical importance of the findings for effect size. Preliminary content and thematic analysis of qualitative responses describe categories of the mock team meeting experience and interaction with the actors to change patient and family outcomes.

Significance of results. Early intervention with the CAREol program provides a framework to help students and clinical faculty facilitate FCs that may result in peace and comfort for patients and families during a difficult time.

Introduction

Interprofessional patient and family-centered care at the end of life (EOL) aims to identify the needs and abilities of families to care for their loved ones, but also serves as a catalyst for communication among family members. While one might expect families to make decisions and form emotional bonds during an EOL experience, often the opposite occurs (Lippe et al., 2019; Hamano et al., 2021). Conversations about death and dying are difficult, uncomfortable, and frequently avoided due to cultural, spiritual, and family norms (Keeley, 2007; Sallnow et al., 2022). Without essential and effective communication requiring experience and practice in EOL conversations, the healthcare provider (HCP), patient, and family are vulnerable to distress.

Final conversations (FCs) are conversations between the patient and their family members from the moment of terminal illness diagnosis through death (Keeley, 2007). FCs go beyond how a patient wants to be cared for at the EOL. Specifically, FCs focus on messages of love, religious/spiritual messages, self-examination of individual identities and their relationships to others, everyday talk that normalizes a difficult situation, and if needed, difficult conversations aimed at healing broken relationships. These conversations focus on family connections that may lead to a peaceful death for the patient and effective grieving for family members. FCs provide the dying patient the opportunity to help their family members move forward after their death through conversations about advice, direction, and permission to move on while creating a sense of closure and completion of the relationship (Hansen et al., 2015; Manusov and Keeley, 2015; Keeley and Generous, 2017). Although not a term provider would use with patients and families, providers may use FCs as the organizing framework and larger construct to facilitate important messages such as love messages and identity messages. Thus, FCs are operationalized to facilitate the six messages mentioned above (Keeley and Yingling, 2007). With encouragement and guidance from trained health professionals,

participation in FCs will help achieve the goal of a good death that most people say they want (Generous and Keeley, 2014). Specifically, a good death is one that prioritizes compassion over false hope, provides more honest communication and better choices for the terminally ill and their family members, and eases pain and anguish (Goldsmith and Ragan, 2017). FCs can help health professionals create interpersonal scripts for family members as they navigate the EOL journey (Generous and Keeley, 2014).

Interprofessional collaborative education models that educate and socialize providers in overlooked areas of the healthcare curriculum are needed to improve quality of care related to EOL experiences (Newman, 2016). Interprofessional curriculum enables HCPs to gain comfort and understanding of the benefits of collaborative learning that will impact clinical practice. Known to build professional success and resilience, communication skills are critical for health-related curriculum and should include interprofessional communication, critical problem-solving, faculty development, and patient/family-centered care (Coyle et al., 2015; Ferrell et al., 2016, 2019; Costello et al., 2017; Bloomer et al., 2018; Buller et al., 2019). The Catalyzing Relationships at the End of Life (CAREol) program teaches communication skills that improve family relationships at the EOL while training faculty to be clinical role models and promoting interprofessional collaboration.

Many professional organizations provide education and core competencies for EOL care focused on patient symptom management, support of family caregivers through lessoning burden, and communication involving the disease and its treatments [The Center to Advance Palliative Care (n.d.); National Institute for Nursing Research (n.d.); NHPCO, 2018; Ferrell et al., 2019; Stacy et al., 2019; American Association of Colleges of Nursing-ELNEC, 2020]. Sparse research exists describing HCP collaborative interventions (in practice and training) that enhance EOL family relationships, especially interventions designed to test robust, interprofessional training for HCPs that focus on family communication and relationships. FCs go beyond planning for an illness, death, and funeral — they validate relationships, clarify religious and spiritual beliefs, create opportunities for difficult conversations, and provide the opportunity to heal relationships (Keeley, 2007; Keeley and Generous, 2017). When family relationships are unattended or avoided, a peaceful patient death and effective bereavement for the family are more difficult to achieve (Hansen et al., 2015; Hansen et al., 2016; Keeley and Generous, 2017).

The study aims and purpose included (1) developing a curriculum that socializes future HCPs with complex care situations to collaboratively identify the challenges and burdens of providing patient/family-centered care at the EOL; (2) strengthening HCP interprofessional communication skills to improve family-centered care and family relationships at the EOL; and (3) training faculty to become clinical mentors for students and providers in practice settings.

Theoretical framework

The CAREol program was guided by the Interdisciplinary Framework for Palliative Care and Hospice Education and Practice. The framework emphasizes the interdisciplinary team working within a holistic caring lens and an iterative process that embraces reflection but holds caring as its basic principle (Dyess et al., 2020).

Methods

Program development description

The CAREol program includes cognitive and experiential components of learning (see Table 1). The cognitive component was delivered online via Blackboard. Required for all students and clinical faculty prior to a live simulation, this component presented family relationships and FCs at the EOL and consisted of readings and researcher-developed video vignettes (see Table 1) with four reflective journaling opportunities to provide

Table 1. CAREol program

	Module Descriptions	Student Activities	Timeframe
Cognitive Content Module 1	• Included program objectives and introduction of the study team • Content included interprofessional collaborative practice, professional resilience, and importance of clinical role models	Pre-test, consent, readings, and voice-over PowerPoint	February through March
Cognitive Content Module 2	• Provided content about family relationships at the EOL, including family well-being, interaction, and communication (verbal and non-verbal messaging)	View voice-over PowerPoint Journal 1 — reflection about facing one's own death	
Cognitive Content Module 3	• Provided content about each FC theme: love messages, individual and relational identity messages, religious and spiritual messages, everyday talk, difficult relationship messages, and instrumental illness and death messages • Voice-over PowerPoint with embedded vignettes for difficult relationship messages, identity messages, and religious/spiritual messages	View voice-over PowerPoint and three embedded vignettes Journal 2 — reflections on identity, difficult relationships, and religious and spiritual messages	
Experiential Component	• EOL scenarios with live, student actors team meetings, and feedback to actors • Live simulation featured two case scenarios scripted by the CAREol research team that presented both the "common way" of handling EOL discussions and the "CAREol way" reflecting FC content more responsive to patient values and their holistic needs • Interaction occurred through mock team meetings	View Live Simulation (on Zoom) 1. Common Way Live Simulation 2. Mock Team Meetings (small groups) 3. CAREol Live Simulation based on mock teams' recommendations. After simulation, post-test completed.	April

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a comprehensive learning experience. Journaling results are not reported in this article. Each vignette showed student actors (majoring in theatre) portraying a "common way" situation depicting EOL conversations that might typically be encountered in practice. Following the common way vignette, participants (i.e., nursing and medical students and clinical faculty) completed an online journaling assignment containing prompts prior to viewing the "CAREol way" that portrayed the same situation using FCs.

Designed as a quasi-experimental study, this two-part curriculum program consisted of a pre-test administered prior to completion of the online cognitive component and a post-test administered after completion of the live simulation. Due to COVID-19 restrictions, live simulation was broadcast from a simulation room at the College of Nursing to participants watching on Zoom, which easily accommodated 182 participants.

After the "common way" simulation, the Zoom coordinator placed each participant into one of 15 break-out groups led by an expert in palliative/hospice care. Leaders guided each group through conversations about care for a cancer patient, his wife, and two children using a detailed guide to discuss the first scene featuring the common way for managing EOL care. Participants then provided the actors with feedback for reenactment of the same scene encompassing the "CAREol way" using the live chat feature in Zoom. A nursing honors student monitored the chat and provided the actors with feedback from the teams. Student actors were trained in improvisation and easily adjusted to participant feedback to portray the final scene using the CAREol way.

The experiential component of this study culminated with a larger debriefing. The Promoting Excellence and Reflective Learning in Simulation (PEARLS) framework guided final debriefing and integrated three common educational strategies: (1) learner self-assessment; (2) facilitated, focused discussion; and (3) provision of information in the form of feedback (Cheng et al., 2016). The 2-h virtual live Zoom simulation ended with closing remarks from Dr. Maureen Keeley addressing the importance of FCs for patients and families. This study has IRB approval from both universities.

Table 2. Demographics

	Nursing students	Medical students	Clinical faculty
Female	111	18	22
Male	16	6	2
Total	**127**	**24**	**24**
Total Participants: 182			

Participants

A total of 164 students (nursing and medical) and 18 clinical faculty, all English-speaking, from two universities in Northeast Ohio participated in the cognitive and experiential aspects of the CAREol program (see Table 2). Of the 182 participants, 150 participants (91%) completed both the pre- and post-test, and 180 participants (CAREol faculty, clinical experts, clinical faculty, and students) participated in the experiential component (live simulation) via Zoom. After the live simulation, the post-test was administered in Blackboard (see Table 3).

Questionnaire

The researcher-developed, pre- and post-test consisted of six Likert scale questions ranging from 0 (not at all) to 5 (always) with two open-ended questions on the pre-test and three open-ended questions on the post-test. Two of the six Likert scale questions were designed to assess comfort level with the interprofessional collaborative process, and four assessed levels of confidence, importance, and distress related to FCs. The Cronbach's α for the six items were pre-test: $\alpha = 0.56$; post-test: $\alpha = 0.62$. Development of these questions was guided by the literature that identified comfort and confidence with skills in working in interdisciplinary teams and communication as relevant (Carvajal et al., 2019; Edwards et al., 2020). Open-ended pre-test questions focused on what participants were looking forward to and most apprehensive about; post-test questions (following the mock team meeting experience) addressed what went well with the live simulations and what could have been done differently.

Results

Quantitative pre- and post-test results

Using a paired t-test, statistically significant differences between pre- and post-test responses were found for all quantitative measures (Table 3). Confidence in identifying [$t(150) = -14.42$] and

Table 3. Statistical results

Question		Pre-test mean (SD)	Post-test mean (SD)	Significance (*P*)	Effect size (Cohen's *d*)
1	How comfortable are you collaborating with other HCPs? $n = 151$	3.74 (0.96)	3.99 (0.80)	<0.001	0.28
2	How confident are you in identifying final conversation themes? $n = 148$	2.50 (1.16)	3.77 (0.75)	<0.001	1.30
3	How confident are you in facilitating final conversation themes? $n = 151$	2.05 (1.27)	3.54 (0.81)	<0.001	1.40
4	How important do you think final conversations are to the patient and family at the patient's end of life? $n = 149$	4.83 (0.52)	4.91 (0.33)	0.05	0.18
5	How often do you feel a high level of distress when you think about facilitating final conversations? $n = 149$	3.10 (1.02)	2.77 (1.07)	<0.001	0.32
6	How comfortable are you discussing patient and family issues in a team environment? $n = 149$	3.44 (1.08)	3.97 (0.78)	<0.001	0.56

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facilitating [$t(148) = -1.96$] FCs demonstrated the greatest effect size, followed by comfort with discussions in a team environment [$t(148) = -5.86$]. Other effect sizes, such as comfort with collaboration [$t(147) = -13.02$] and decreasing levels of distress [$t(150) = 3.50$] related to FCs, were small (see Table 3).

Pre- and post-test open-ended questions

Open-ended questions were analyzed utilizing an inductive descriptive qualitative approach. Each researcher independently coded the data. Data saturation for each question was reached at 30 participants; however, all data was coded. Researchers met to discuss their independent findings, and disagreements among the investigators during the coding process were resolved by consensus and based on current scientific evidence.

For data extraction and analysis, several methods were adopted to enhance validity, including triangulation of researchers and evidence (Carter et al., 2014). An audit trail of processes was kept, and tables were used to organize the data (Jansen, 2010). Researchers did not ascertain respondent verification. Two open-ended questions on the pre-test asked participants what they were looking forward to and apprehensive about prior to the cognitive component (see Tables 4 and 5).

The research team reached consensus on an overarching theme of *Interdisciplinary Competence Development* which encompassed participants' desire to become more comfortable and confident communicating with patients, families, and members of the interdisciplinary team, as well as understand how to use FCs in patient and family situations at the EOL. In response to Question 2 (Table 5), many participants voiced apprehension about becoming too emotional or distressed about FCs. Although themes for this question aligned with the overarching theme of Interdisciplinary Competency Development, the focus was emotional distress (reported as fear, anger, and stress), lack of confidence, and communication skills.

Post-test open-ended questions

Post-test open-ended questions (Table 6) focused on the mock team meeting experience and what went well (and could be improved) overall with the CAREol program. Question 2 (what went well) and question 3 (what could improve) elicited similar responses. Themes from those two questions are reported collectively as *Transformative Learning*. Overwhelmingly, participants spoke about the usefulness of the interdisciplinary experience in response to the question about participating in mock team meetings. Evidence from student participants revealed impact on their own practice and reflected transformative learning. General comments about the program were positive and verified the need for this type of education. Some participants preferred the live simulation on Zoom while others would have preferred a face-to-face experience.

Significance of results

The CAREol project demonstrated a successful multi-dimensional and interdisciplinary educational activity that offers promise to

Table 4. Pre-test 1

Interdisciplinary Competency Development	
Pre-test question 1. What are you most looking forward to learning?	
Themes	**Exemplars**
Comfort	"How to comfortably and appropriately tell a family and health partners about final conversations. To learn the appropriate ways to talk with family about these difficult times." Participant 12
Confidence	"I'm most looking forward to learning how to confidently facilitate conversations regarding end of life and how to best support my patients and their families through these times." Participant 160
Interdisciplinary Teams	"I am most looking forward to learning how a group of healthcare members is supposed to go about end-of-life discussions not only with the patient but also with the patient's family and amongst ourselves." Participant 140
Communication	"I am looking forward to learning about how I can best approach the topic of final conversations/end-of-life conversations with patients and families in a therapeutic manner that satisfies the patient and family's wants and needs regarding end-of-life discussion and care." Participant 136

Table 5. Pre-test 2

Interdisciplinary Competency Development	
Question 2. What are you most apprehensive about learning related to the CAREol program?	
Themes	**Exemplars**
Emotional Distress (fear, anger, stress)	"Death is a sensitive subject, so there is a small amount of apprehension going into this topic. I fear that discussions of death might trigger an increased awareness of loss in my own life." Participant 83
Lack of Confidence	"Facilitating in end-of-life situations may be distressed and sad for everyone involved. I just want to be confident that I have the skills needed." Participant 125
Communication (with patients, other providers, and families)	"I am a little nervous to practice starting these kinds of conversations; however, I think it is a very important skill to learn." Participant 34 "I am most apprehensive about learning how to work as a team when it comes to end-of-life situations." Participant 88

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Table 6. Post-test open-ended questions

Transformative Learning	
Questions: 1. During the live simulation, the scene was stopped, and you had the opportunity to debrief and offer input to the actors. What was that like? 2 & 3. After completing the CAREol experience, please tell us what went well in this experience/what could be done differently?	
Themes	**Exemplar**
Interprofessional Team	"I really enjoyed working among various ranges of healthcare professionals. It lets you see how and what various workers' roles and thoughts are on approaching such a difficult subject. Listening to how everyone would approach this gave good insight on things either to take away or even areas we should improve on. This is a great way to show us how this scenario can be handled professionally versus poorly." Participant 112
Practice Impact	"I think this experience was really great. Prior to this, I never had much exposure to end-of-life conversations, or really the end of anyone's life. I think that it was helpful for all who were involved and especially us as students who are still pretty uncomfortable in those types of situations. I think the live simulation was a great way for everyone to watch a particular scene together, and the breakout groups were a good time for everybody to share their feelings and thoughts on the matter." Participant 57

future HCPs and clinical faculty with early socialization to facilitate meaningful conversation among family members at the end of life. The program had two dimensions: cognitive and experiential. Each dimension has multiple learning activities and a mixed-methods approach to collect data. By designing interdisciplinary, active, and engaged learning activities about FCs, nursing and medical students have an opportunity to recognize the anxieties, concerns, and wishes concerning the EOL journey for patients and families, while utilizing a holistic caring lens (Dyess et al., 2020). This study highlights the important role that healthcare professionals can play in encouraging open and honest communication at the EOL within and between the terminally ill and the family members with the goal of less suffering and a better death journey.

Filling gaps and addressing resource needs

This study addresses the lack of research about family interaction and communication at the EOL and addresses the need for interdisciplinary education to improve collaborative care in practice. This program is adaptable to a variety of academic and practice settings. Although the expectation in practice includes the needed skills to work with patients and families during sensitive EOL moments, many students have limited or no personal experience with death and receive sparse training. This educational activity extended the current approach to EOL communication limited to providers and focused on family communication. Future empirical advances include adjustments to the researcher-developed questionnaire, continued evaluation of the program, and utilization of the CAREol program in practice. Barriers to achieving these goals include funding for continued evaluation and research and limited understanding of the importance of operationalizing FCs.

Discussion

Grounding the curriculum in FCs research with live simulation empowered students and clinical faculty with skills to affect the care of patients and families in a holistic manner. Extending the current practices of EOL communication to include emphasis on communication important to the family (death talk, identify messages, spiritual and religious messages, difficult relationship talk, love messages, and instrumental talk) enhances practice skills and interprofessional delivery of high-quality EOL care to patients and families. Findings mirror other studies concluding that interdisciplinary team meetings and online education about EOL care improve communication and patient care (Gullatte et al., 2019; Washington et al., 2020). Designed using multiple disciplines and approaches, the CAREol program's robust curriculum successfully addressed complex family relationships during a loved one's dying experience and improved confidence in identifying FCs and communicating with other team members.

Comfort, confidence, and importance

Comfort and confidence in working with interdisciplinary teams to improve family relationships at the EOL occurred. Participants remarked in the open-ended question that they hoped to improve comfort levels with EOL conversations for patients and families. Quantitative results for comfort regarding patient and family discussions in a team environment yielded a moderate effect size. Interestingly, comfort collaborating with other HCPs yielded a small effect. Differences between these two results may involve the wording of the questions, thus, researchers plan to revise the questionnaire for future use. Qualitative results support participants' desire to develop comfort and skill with interdisciplinary collaboration. In fact, most participants commented positively about the interdisciplinary experience during the live simulation.

Participants identified that FCs are important; however, the effect was small. One explanation is that on the 5-point Likert scale, participants reported moderate-to-high scores for importance. Despite the significant change pre- and post-test, the effect size was small, perhaps because pre-test scores were already high. Although confidence identifying and facilitating FCs had the largest effect size, confidence was also frequently mentioned in the qualitative data regarding FCs and communication with the interdisciplinary team. In the pre-test qualitative data, the research team found distress expressed, indicating the need for continued development of provider skill and expertise. Additionally, the change in confidence and comfort pre- and post-test highlights the need for this curriculum design. In a scoping review of the literature, Carvajal et al. (2019) uncovered barriers for nurses in providing person-centered EOL care, which included competence, interpersonal skills, knowing self, and effective and supportive relationships with colleagues.

Negative feelings of emotional distress

Participants expressed negative feelings of emotional distress such as fear, anger, and stress driven by participant, patient, or family responses. These findings support the practical importance seen

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in the large effect size in confidence and decrease in distress surrounding the use of FCs. Participants expressed fears regarding lack of confidence and awakening their own grief, but through a curriculum-based educational approach, the research team provided participants with learning strategies in the cognitive component and guidance for facing their fears in the experiential component. As expertise evolves over time, resilience to the expressed fear will also develop. However, study findings provide evidence for the need to continue professional development. As identified by study participants, the need to gain confidence and communicate more effectively with patients and families at the EOL are strong indicators for further development in this area.

Communication and collaboration

Similarly, pre-test responses revealed fears about lack of confidence to provide care in an EOL situation such as being nervous and making communication mistakes. Although previous research has concluded that EOL communication should be taught to interdisciplinary groups, communication skills training is often taught in the form of lectures, discussions, and role play without the expertise of communication scholars. Case studies, self-study, and clinical visits are rarely used, and sparse training is available online or with live simulation (Brighton et al., 2017). The CAREol program offers both online learning and a live simulation experience in which participants interact with simulation by providing critical feedback to change patient and family outcomes. Research has found that a collaborative approach to care improves professional resiliency (Bar et al., 2018). Edwards et al. (2020) found similar results with EOL simulation to improve self-efficacy and confidence among new graduate nurses.

Clinical implications

It is clear from the literature that terminally ill patients and their families view close personal relationships as important. Equally important is the need for all family members to express feelings related to their relationships (Hansen et al., 2015; Keeley and Generous, 2017). Even when conflict and hurt are unavoidable, helping family members communicate and address their feelings is helpful for patients, family members, and relationships. Results of this study have implications for nursing and medical schools as well as their clinical partners as they orient new graduates to practice.

Clinical role models in practice are influential for developing and refining skills that further strengthen communication and critical thinking skills among HCPs and ultimately improve patient and family outcomes. The research team trained 18 clinical faculty within the CAREol program embedded into the College of Nursing and Medical College curriculum with the expectation that faculty will provide training and education to future generations of students while reinforcing the importance of interprofessional team-based care and their own communication skill sets (Bahmanbijari et al., 2017). When students observe clinical faculty role models collaboratively discussing and applying CAREol methods while validating students' feedback in a dynamic group setting, there is greater propensity to validate the EOL values and needs of patients and families.

Limitations

Limitations of the study include the quasi-experimental design which lends itself to problems inherit to that design such as lack of generalizability and threats to validity. For this study, the effect of the pandemic was significant. While COVID-19 upset plans for delivery of the live simulation, the Zoom platform worked well, and many participants commented on its success. The virtual platform also accommodates multiple sites, even geographic locations which increases its usability and reach. The six questions for this study were researcher-developed based on the literature; however, items measured were not unidimensional and measured several constructs, resulting in a low initial alpha.

Conclusion

The CAREol program provided interdisciplinary and early socialization to complex care situations at the EOL. Data supported improvement in communication and critical thinking skills for participants that improve family-centered care and family relationships. However, more work is needed training providers to communicate with team members and value the importance of that communication. Additionally, study findings support the importance of engaged learning among interdisciplinary students in which the focus is on the patient and family as the care unit (Dyess et al., 2020). Clinical faculty were trained as clinical role models to facilitate FCs for families facing EOL issues. Future research includes utilizing the CAREol program to educate HCPs in the acute care setting and examining family relationships cross-culturally to determine how FCs may vary, perhaps exploring how families experienced (or did not experience) FCs during COVID-19 and the potential effects on bereavement.

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References

American Association of Colleges of Nursing - ELNEC (2020) End-of-life nursing education consortium curriculum. Available at: https://www.aacnnursing.org/ELNEC

Bahmanbijari B, Beigzadeh A, Etminan A, *et al.* (2017) The perspective of medical students regarding the roles and characteristics of a clinical role model. *Electronic Physician* **9**(4), 4124–4130. doi:10.19082/4124

Bar MA, Leurer MK, Warshawski S, *et al.* (2018) The role of personal resilience and personality traits of healthcare students on their attitudes towards interprofessional collaboration. *Nurse Education Today* **61**, 36–42.

Bloomer M, Botti M, Runacres F, *et al.* (2018) Cultural considerations at end of life in a geriatric inpatient rehabilitation setting. Collegian, Online First. doi:10.1016/j.colegn.2018.07.004

Brighton L, Koffman J, Hawkins A, *et al.* (2017) A systematic review of end-of-life care communication skills training for generalist palliative care providers: Research quality and reporting guidance. *Journal of Pain Symptom Management* **54**(3), 417–425. doi:10.1016/j.jpainsymman.2017.04.008

Buller H, Virani R, Malloy P, *et al.* (2019) End-of-life nursing and education consortium communication curriculum for nurses. *Journal of Hospice and Palliative Nurses* **21**(2), E5–E12. doi:10.1097/NJH.0000000000000540

Carter N, Bryant-Lukosius D, Dicenso A, *et al.* (2014) The use of triangulation in qualitative research. *Oncology Nursing Forum* **41**(5), 545–547. doi:10.1188/14.ONF.545-547.

https://doi.org/10.1017/S1478951522000992 Published online by Cambridge University Press

Carvajal A, Haraldsdottir E, Kroll T, *et al.* (2019) Barriers and facilitators perceived by registered nurses to providing person-centered care at the end of life. A scoping review. *International Practice Development Journal* **9**(2), 1–22. doi:10.19043/ipdj.92.008

Center to Advance Palliative Care (CAPC) (n.d.) Communication skills. https://www.capc.org/training/communication-skills/.

Cheng A, Grant V, Robinson T, *et al.* (2016) The promoting excellence and reflective learning in simulation (PEARLS) approach to health care debriefing: A faculty development guide. *Clinical Simulation in Nursing* **12**(10), 419–428. doi:10.1016/j.ecns.2016.05.002

Costello M, Huddleston J, Atinaja-Faller J, *et al.* (2017) Simulation as an effective strategy for interprofessional education. *Clinical Simulation in Nursing* **13**(12), 624–627. doi:10.1016/j.ecns.2017.07.008

Coyle N, Manna R, Shen M, *et al.* (2015) Discussing death, dying, and end-of-life goals of care: A communication skills training module for oncology nurses. *Clinical Journal of Oncology Nursing* **19**(6), 697–702. doi:10.1188/15.CJON.697-702

Dyess SM, Prestia AS, Levene R, *et al.* (2020) An interdisciplinary framework for palliative and hospice education and practice. *Journal of Holistic Nursing* **38**(3), 320–330. doi:10.1177/0898010119899496

Edwards C, Hardin-Pierce M, Anderson D, *et al.* (2020) Evaluation of self-efficacy and confidence levels among newly graduated nurses exposed to an end-of-life simulation: A comparison study. *Journal of Hospice and Palliative Nursing* **22**(6), 504–511. doi:10.1097/NJH.0000000000000698

Ferrell B, Malloy P, Mazanec P, *et al.* (2016) CARES: AACN's new competencies and recommendations for educating undergraduate nursing students to improve palliative care. *Journal of Professional Nursing* **32**(5), 327–333. doi:10.1016/j.profnurs.2016.07.002

Ferrell B, Buller H, Paice J, *et al.* (2019) End-of-life nursing and education consortium communication curriculum for interdisciplinary palliative care teams. *Journal of Palliative Medicine* **22**(9), 1082–1092. doi:10.1089/jpm.2018.0645

Generous MA and Keeley MP (2014) Creating the final conversations (FCs) scale: A measure of end of life relational communication with terminally ill loved ones. *Journal of Social Work in End-of-Life & Palliative Care* **10**(3), 257–281. doi:10.1080/15524256.2014.938892

Goldsmith J and Ragan S (2017) Palliative care and the family caregiver: Trading mutual pretense (empathy) for a sustained gaze (compassion). *Behavioral Sciences* **7**(2), 19. doi:10.3390/bs7020019

Gullatte M, Allen S, Botheroyd E, *et al.* (2019) Improving end-of-life communications using technology-assisted continuing education with interprofessional teams. *Journal for Nurses in Professional Development* **35**(1), 25–31. doi:10.1097/nnd.0000000000000514

Hamano J, Masukawa K, Tsuneto S, *et al.* (2021) Are family relationships associated with family conflict in advanced cancer patients? *Psycho-Oncology* **31**(2), 1–11. doi:10.1002/pon.5801

Hansen DM, Higgins PA, Warner CB, *et al.* (2015) Exploring family relationships through associations of comfort, relatedness states, and life closure in hospice patients: A pilot study. *Palliative and Supportive Care* **13**(2), 305–311. doi:10.1017/S1478951514000133

Hansen DM, Sheehan D and Stephenson P (2016) The caregiver's experience with an illness blog: A pilot study. *Journal of Hospice and Palliative Nursing* **18**(5), 464–469. doi:10.1097/NJH.0000000000000276

Jansen H (2010) The logic of qualitative survey research and its position in the field of social research methods. *Forum Qualitative Social Research* **11**(2). doi:10.17169/fqs-11.2.1450

Keeley MP (2007) Turning toward death together: The functions of messages during final conversations in close relationships. *Journal of Social and Personal Relationships* **24**(2), 225–253. doi:10.1177/0265407507075412

Keeley MP and Generous MA (2017) Final conversations: Overview and practical implications for patients, families, and healthcare workers. *Behavioral Science* **7**(17), 2–9. doi:10.3390/bs7020017

Keeley MP and Yingling J (2007) *Final Conversations: Helping the Living and the Dying Talk to Each Other*. Hawthorne: VanderWyk & Burnham.

Lippe M, Stanley A, Ricamato A, *et al.* (2019) Exploring end-of-life care team communication: An interprofessional simulation study. *American Journal of Hospice & Palliative Medicine* **37**(1), 65–71. doi:10.1177/1049909119865862

Manusov V and Keeley MP (2015) When talking is difficult: Nonverbal communication at the end of life. *Journal of Family Communication* **15**, 387–409. doi:10.1080/15267431.2015.1076424

National Hospice and Palliative Care Organization (NHPCO) (2018) Standards of practice for hospice programs. Available at: https://www.nhpco.org/wp-content/uploads/2019/04/Standards_Hospice_2018.pdf

National Institute for Nursing Research (NINR) (n.d.) Palliative care: Conversations matter. https://www.ninr.nih.gov/newsandinformation/conversationsmatter/conversationsmatter-patients.

Newman AR (2016) Nurses' perceptions of diagnosis and prognosis-related communication: An integrative review. *Cancer Nursing* **39**(5), E48–E60. doi:10.1097/NCC.0000000000000365

Sallnow L, Smith R, Ahmedzai SH, *et al.* (2022) Report of the lancet commission on the value of death: Bringing death back into life. *The Lancet* **399** (10327), 837–884. doi:10.1016/S0140-6736(21)02314-X

Stacy A, Magdic K, Rosenzweig M, *et al.* (2019) Improving knowledge, comfort, and confidence of nurses providing end-of-life care in the hospital setting through use of the CARES tools. *Journal of Hospice & Palliative Nursing* **21**(3), 200–206. doi:10.1097/NJH.0000000000000510

Stephenson PS and Berry DM (2015) Describing spirituality at the end of life. *Western Journal of Nursing Research* **37**(9), 1229–1247. doi:10.1177/0193945914535509

Washington K, Demiris G, Oliver D, *et al.* (2020) ENVISION: A tool to improve communication in hospice interdisciplinary team meetings. *Journal of Gerontological Nursing* **46**(7), 9–14. doi:10.3928/00989134-20200605-03

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