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The implementation and evaluation of a communication skills training program for oncology nurses

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Abstract

Many nurses express difficulty in communicating with their patients, especially in oncology settings where there are numerous challenges and high-stake decisions during the course of diagnosis and treatment. Providing specific training in communication skills is one way to enhance the communication between nurses and their patients. We developed and implemented a communication skills training program for nurses, consisting of three teaching modules: responding empathically to patients; discussing death, dying, and end-of-life goals of care; and responding to challenging interactions with families. Training included didactic and experiential small group role plays. This paper presents results on program evaluation, self-efficacy, and behavioral demonstration of learned communication skills. Three hundred forty-two inpatient oncology nurses participated in a 1-day communication skills training program and completed course evaluations, self-reports, and pre- and post-standardized patient assessments. Participants rated the training favorably, and they reported significant gains in self-efficacy in their ability to communicate with patients in various contexts. Participants also demonstrated significant improvement in several empathic skills, as well as in clarifying skill. Our work demonstrates that implementation of a nurse communication skills training program at a major cancer center is feasible and acceptable and has a significant impact on participants' self-efficacy and uptake of communication skills.

Keywords

Communication skills training, Nursing, Self-efficacy, Standardized patient assessments, Oncology

Effective communication is critical to the successful delivery of health care services. The Joint Commission supports a number of efforts to improve communication between health care providers and patients and recommends an approach to communicating health information that encompasses language needs, individual understanding, and cultural and other communication issues [1]. Similar values were echoed by the Institute of Medicine (IOM)'s 2001 report *Crossing the quality chasm* that identified patient-centeredness as

Implications

Practice: Communication skills training for oncology nurses (as well as for other health providers) is feasible and an effective way of improving communication between nurse and patient/families.

Policy: Communication skills training program for nurses should be offered at cancer centers to improve communication between nurse and patient/families.

Research: Research should examine the impact of communication skills training on relevant patient outcomes.

one of six core elements of high-quality health care and defined it as "providing care that is respectful of and responsive to individual preferences, needs, and values and ensuring that patient values guide all clinical decisions" (p. 6) [2]. Communication is an essential part of the patient-centered focus.

Nurses play a key role on the oncology health care team and accompany and support the patients and their families throughout their cancer journey, as described in the 2011 IOM report *The future of nursing* [3]. Nurses spend more time with patients than do other health care providers and have multiple opportunities to interact and communicate with them, and patients report being more comfortable communicating with nurses than their physicians [4, 5]. According to Jenerette and Mayer [6],

> Oncology nurses across all areas of practice, including clinical care, research, and education, can play a significant role in achieving positive outcomes by being a part of the paradigm shift to meet the dynamic needs of cancer patients with effective patient-provider communication (p. 140).

However, communication between nurse and patients is not always optimal. Several studies have found that

sub-optimal communication has detrimental effects on patients and may increase their levels of uncertainty, anxiety, and dissatisfaction with care [7, 8]; may increase lack of compliance with recommended treatment regimens [9]; and is associated with poorer quality of life (QOL) [10]. Additionally, research indicates that many nurses express difficulty in communicating with their patients, especially in oncology settings where there are many challenges and high-stake decisions during the course of diagnosis and treatment. Some areas in which oncology nurses report challenges are as follows: supporting patients and families after they were given bad news from their physicians [11], responding to patients' and family members' strong emotions like anger [12], and feeling caught in the middle between patients, families, and physicians [13]. Qualitative reports from focus group discussions with oncology nurses also reiterate the findings that difficult family dynamics (e.g., family member behaving aggressively toward patient or demanding staff attention), patient behaviors (e.g., behaviors, psychiatric symptoms and/or lack of emotional disclosure to staff), and end-of-life care issues (e.g., navigating intrafamily barriers to prognostic understanding) often interfere with psychosocial care [14]. These aspects of care may be challenging because patients come from culturally, linguistically, and socio-economically diverse backgrounds [15]. Nurses are trained for clinical expertise but often need support in handling such delicate patient situations.

Providing specific training in communication skills is one way to enhance the communication between nurses and their patients. In a recent study, oncology nurses clearly articulated their need and request for communication skills training [16]. Several communication skills training interventions have been designed and delivered to nurses [17–21], with varying degrees of success [22]. A Cochrane review of communication skills training for health care professionals working with people who have cancer included 15 randomized controlled trials, with six trials focused on nurses, and three of those conducted in an inpatient setting [22]. The review noted that effective programs are the ones that are focused on acquisition of communication skills, and highlighted several limitations of the communication skills training programs for oncology health care professionals. A limitation of many of these programs is that most (1) do not report whether nurses were involved during the development of the program and curriculum, (2) focus on general or basic communication skills, and (3) require longer time commitments from nurses as training programs can span from multiple days or weeks [22]. The Communication Skills Training and Research Laboratory at Memorial Sloan Kettering (MSK) was created to train providers in communication skills to support the patient throughout the cancer disease trajectory. As such, we took an interest to this aforementioned critique of communication skills training program for oncology nurses and initiated a nurse training development committee that included faculty from our laboratory, nurse leaders, two inpatient oncology nurses, and a social worker.

The Comskil Training Program for Nurses at MSK

The curriculum development committee identified three areas for communication skills training for nurses: communication of empathy with patients and families; discussions of death, dying, and end-of-life goals of care; and navigating through difficult family interactions. The next step included surveying the MSK oncology nurses. Based on the findings of a qualitative online survey that asked nurses to describe common communication challenges in each of the three aforementioned areas [23], we developed a learner-centered nurse communication skills training program at MSK. The 1-day curriculum consists of three modules: responding empathically to patients [24]; discussing death, dying, and end-of-life goals of care [25]; and responding to challenging interactions with families [26]. We refer to this course outline as the Comskil training program for nurses.

The development of this curriculum followed best practices in the literature and used the same conceptual and methodological approach developed as part of the Comskil conceptual model [27] and that were used in the Comskil training program developed for oncologists [28]. Based on our prior successful implementation of communication skills training program for oncologists [28], we hypothesized the following:

- H1: A large majority of nurse participants (>80%) will provide favorable evaluations for each individual nursing Comskil module.
- H2a: Nurse participants will report improved self-efficacy in use of skills from pre- to post-training.
- H2b: A significant improvement in the frequency of skills used will be observed in nurse-standardized patient assessments (SPAs) from pre- to post-training.

METHODS

Participants

Three hundred forty-two ($N = 342$) inpatient nurses working in oncology at MSK participated in a 1-day nursing Comskil training program from January 2012 to November 2014. There were approximately 12 nurse participants per training day. These inpatient nurses were from a number of settings across the hospital including acute care, pediatrics, critical care, and urgent care and were selected by their nurse leaders to attend the Comskil training. Selection was based on convenience sampling, and was determined based on various factors, including the participant requesting to attend, a nurse leader selecting a nurse to attend for specific reasons, or nurses being assigned to attend based on scheduling and coverage availability. This training and research reported in this paper received exemption from MSK Institutional Review Board.

Nursing Comskil Training

The Comskil training program for nurses is a 1-day training program, comprising of an introductory lecture

followed by three 2-h modules (a total of 6 h of communication skills training). Each module is comprised of two parts: (1) a 30-min presentation that provides a rationale for the module's topic, reviews current literature on the topic, presents our recommended communication approach to the module, and shows demonstration videos that illustrates MSK nurses using this approach with a simulated patient (each participant is also provided a printed booklet on the module) and (2) a 90-min small group role play session that allows the participants to take turns and practice during an encounter with simulated patients (SPs). In the small group, which are co-facilitator-led sessions, participants reflect upon their interaction with the SP immediately following their role play, receive feedback from their peers/group members and facilitators, and review their performance on video playback.

To the extent possible, small groups were assigned based on participant specialty (for instance, acute care nurses, ICU nurses, pediatric nurses) and the scenarios used in the small group were written by experts in their specialty to be an accurate representation of their clinical work environment. Small groups typically consist of three participants and two trained facilitators. A unique feature of our Comskil program is this co-facilitation model in which each small group role play session is facilitated by a communication skills specialist (faculty, interventionists, and researchers specializing in communication skills training) and a specialty-specific nurse (also trained in facilitation). The majority of time in each training module was devoted to small groups of three learners each working through role play scenarios led by one or two facilitators (from 2012 to 2014, we conducted 245 small group role play session and 218 of those sessions (89%) were co-facilitated). In order to have necessary nurse facilitators, we followed a train-the-trainer model in which we first had interested senior nurses go through the Comskil training program followed by a separate 3-h training on facilitation [29].

Evaluation

Our evaluation of the Comskil training program for nurses was based on the Kirkpatrick model, which is widely used in program evaluation, to test the effectiveness of training [30]. The Kirkpatrick model is comprised of four levels that measure (1) the reaction of the participants, (2) their learning, (3) their behavior, and (4) the overall results on patient outcomes. When adapted to our training program, we operationalized the four levels in the following ways: (1) eliciting a reaction from the nurse participants about their perceptions of the training, (2) testing participants' self-reported and demonstrated learning using self-efficacy measures and standardized patient assessments (SPAs; simulated patients using standardized scripts) respectively, (3) testing participants' use of communication skills with real patients, and (4) testing the efficacy of the program on patient-reported outcomes [30]. We have used the Kirkpatrick model in evaluation of Comskil training program for oncologists [28]. For

Table 1 | Participant-rated evaluations for nurse communication skills training (N = 342)

Item from Program Evaluation	M (SD)[b]				Agree or Strongly Agree (%)			
	Module 1	Module 2	Module 3	Overall	Module 1	Module 2	Module 3	Overall
1. I feel confident that I will use the skills I learned today.	4.43 (.55)	4.41 (.57)	4.17 (.62)	4.34 (.59)	97.4	96.4	91.1	95.0
2. The skills I learned today will allow me to provide better patient care.	4.45 (.59)	4.49 (.57)	4.22 (.63)	4.38 (.61)	97.4	98.2	91.5	95.7
3. The workshop prompted me to critically evaluate my own communication skills.	4.57 (.58)	4.56 (.60)	4.26 (.67)	4.47 (.63)	97.5	96.8	90.5	95.0
4. The experience of video feedback/large group role play was helpful to the development of my skills.	4.25 (.84)	4.36 (.81)	4.02 (.84)	4.21 (.84)	82.3	88.6	77.2	82.7
5. The skills I learned were reinforced through the feedback I received in the small group.[a]	4.50 (.55)	4.51 (.60)	–	4.50 (.58)	97.4	97.0	–	97.2
6. The small group/fishbowl facilitator was effective.	4.70 (.51)	4.69 (.51)	4.27 (.73)	4.55 (.62)	97.6	98.5	89.3	95.2

Module 1 = Responding empathically to patients. Module 2 = Discussing death, dying, and end-of-life goals of care. Module 3 = Responding to challenging interactions with families

[a] Participants in module 3 did not get tailored feedback as in Modules 1 and 2, so this item was excluded from Module 3 course evaluations

[b] These 6 items were scored on a 5-point Likert scale with anchors at (1) "strongly disagree" to (5) "strongly agree"

Table 2 | Participant-rated training component evaluation for nurse communication skills training (N = 342)

Item from Program Evaluation	M (SD)ᵃ				Somewhat Aided my Learning or Aided My Learning a Lot (%)			
	Module 1	Module 2	Module 3	Overall	Module 1	Module 2	Module 3	Overall
1. Didactic teaching	2.47 (.57)	2.62 (.53)	2.44 (.58)	2.52 (.56)	96.1	97.8	95.6	96.6
2. Exemplary video	2.54 (.57)	2.73 (.46)	2.56 (.56)	2.62 (.54)	96.1	99.1	96.9	97.4
3. Role play/fishbowl experience	2.85 (.38)	2.86 (.38)	2.59 (.53)	2.77 (.45)	99.4	98.8	98.2	98.8
4. Booklet	2.21 (.50)	2.28 (.56)	2.26 (.58)	2.25 (.54)	95.8	94.6	92.9	94.6

Module 1 = Responding empathically to patients, Module 2 = Discussing death, dying, and end-of-life goals of care. Module 3 = Responding to challenging interactions with families

ᵃThese 4 items were scored on a 3-point Likert scale with anchors at (1) "Did not aid in my learning at all" to (3) "Aided in my learning a lot"

the early phase of the Comskil training program for nurses, our focus was on determining the acceptability and preliminary efficacy of the program, and we focused on the first two levels of assessments that measure the reaction of the participants and their learning.

Program evaluation—Each nurse participant completed a paper-and-pencil evaluation survey after completion of each of the three modules (see Tables 1 and 2). The evaluation survey contained six statements assessing post-training attitudes regarding the skills learned and application of skills in nursing clinical practice, measured on a 5-point Likert scale with anchors at (1) "strongly disagree" to (5) "strongly agree." For example, "The skills I learned in this module will allow me to provide better patient care," "The module prompted me to critically evaluate my own communication skills," and "I feel confident that I will use the skills I learned in this module." In addition, nurses were asked to rate the effectiveness of the curricular activities including the didactic teaching, exemplary videos, and role play experiences on a 3-point Likert scale with anchors at (1) "Did not aid in my learning at all" to (3) "Aided in my learning a lot."

Participant learning—Participant learning was assessed in two different ways: a self-reported self-efficacy measure and demonstration of skills used in pre- versus post-training SPAs. First, nurse participants' self-efficacy was assessed by a retrospective pre-post measure for self-efficacy [31], in which nurse participants were asked the following two questions post-training (the question were tailored to match the module): (1) "Before this module, I felt confident responding empathically to patients/discussing death, dying, and end-of-life goals of care/ responding to challenging interactions with families" and (2) "Now that I have attended this module, I feel confident responding empathically to patients/discussing death, dying, and end-of-life goals of care/responding to challenging interactions with families."

Second, we assessed nurse participant learning through demonstration of skills in SPAs in pre- and post-training. A SPA involved an 8-min video-recorded interaction between the nurse and the simulated patient (SP; a trained actor) on a given clinical scenario, using standardized scripts by the SP. SPAs were completed both pre- and post-training, and two trained coders coded all the SPA videos using the Comskil coding system adapted to inpatient clinical scenarios [32].

Coding

We used the Comskil coding system (CCS) [32] to code all the video-recorded SPAs. The CCS codes verbal utterances (skills) that are present in the nurse-standardized patient interaction, but does not code non-verbal behaviors (see Table 3 for a list of skills that were coded). We modified the existing coding manual (created for physician Comskil training) that operationalized each of the skills, by providing examples of when a particular verbal utterance by a nurse should or should

Table 3 | Inpatient nurse training SPA (skills coding) results ($N = 342$)

Skills	Pre-training M (SD)	Post-training M (SD)	t (df = 333)
Agenda setting	.08 (.30)	.08 (.27)	−.30
Declare agenda	.07 (.26)	.07 (.25)	−.17
Invite agenda	.01 (.08)	.01 (.09)	.45
Negotiate agenda	.00 (.00)	.00 (.00)	−
Take stock	.01 (.08)	.00 (.00)	−1.42
Checking	.61 (.95)	.70 (.92)	1.65^
Check understanding	.58 (.91)	.66 (.86)	1.40
Check preference	.02 (.17)	.04 (.32)	1.04
Questioning	4.63 (2.10)	4.85 (2.21)	1.50
Ask open questions	3.39 (1.76)	3.33 (1.77)	−.54
Clarify	.19 (.52)	.38 (.77)	3.85***
Restate	.14 (.43)	.19 (.45)	1.35
Endorse question asking	.13 (.37)	.19 (.43)	1.77^
Invite questions	.78 (.92)	.75 (.85)	−.50
Information organization	.35 (.58)	.37 (.58)	.58
Preview	.02 (.13)	.01 (.09)	−1.00
Summarize	.01 (.11)	.04 (.19)	2.34*
Transition	.09 (.33)	.06 (.29)	−1.42
Review next steps	.22 (.45)	.26 (.44)	1.20
Empathic communication	2.31 (2.16)	2.91 (2.29)	4.03***
Encourage expression of feelings	.36 (.73)	.56 (.79)	3.87***
Acknowledge	.46 (.81)	.60 (.80)	2.47**
Validate	1.28 (1.57)	1.26 (1.42)	−.22
Normalize	.07 (.28)	.17 (.42)	3.88***
Praise patient efforts	.13 (.40)	.31 (.67)	4.37***
All skills	7.96 (3.37)	8.90 (3.40)	4.27***

^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

not be coded as a skill. For instance, *ask open questions* is a skill that is operationalized as "The nurse asks any questions during the interaction that allow the patient to respond in any manner they choose – this may include both medical and psychosocial topics. These are different from closed questions that ask for a yes/no or short response, a leading question (e.g., "you are feeling better, right?"), or asking for a list." For instance, the following are coded as open questions: "Is there anything else I can do for you today?," "What's the most important thing I can do for you today?," or "How have you been doing lately?" We further clarify that in some cases, a grammatical closed question really serves the function of an open question (allowing the patient to respond in any manner, per the definition above), such as "Tell me about your back pain?" or "Can you tell me your medical history?" These questions also get coded as an open question. However, if a nurse asks an open question, but immediately follows it with a closed question, we do not count it as an open question. For example, in the following example "How has your sleep been? Are you able to sleep through the night?," the open question was immediately followed by a closed question, so it does not get coded.

Two research assistants worked as coders on this project and were blinded to the pre- or post-status of SPAs. After completing coding training, coders were asked to code a designated set of communication videos for skills (previously coded by multiple members of the Comskil program). Only if 80% coding adherence was achieved were they approved to code the nursing SPA data. Both coders started with coding the same designated subset of videos (10% of the 2012 video recordings), followed by independently coding 20% of the first year dataset. Figure 1 provides a visual description of the procedure.

All codes for this subset were checked by the first author for inter-coder agreement to assess coder drift from the CCS. Inter-coder agreement was assessed by checking coders' percentage agreement on 15-s blocks of an 8-min interaction (i.e., 32 blocks). We continued with coding only when the coders achieved a minimum of 75% agreement. All disagreements were resolved by the first author. After inter-coder agreement coding, each coder independently coded 20% of the SPAs. A second inter-coder agreement was assessed to check for coder drift from the CCS. Following the same procedures, both coders coded 10% of the remaining data, inter-coder agreement was assessed with discrepancies resolved by the first author, and then both coders independently coded 20% of the SPAs. This coding pattern was followed for each of the 3 years' set of SPA data.

Step 1: Coders demonstrate at least 80% agreement with gold-standard coding (selected subset of coding to test for coder competence).

Steps 2-7 shown in table below

Step 2: Both coders code the same 10% randomly selected SPA recordings for IRR check #1.

Step 3: Inter-rater reliability is assessed for the 10% SPA recordings, and discrepancies resolved by a Comskil Faculty for Skills coding. The reconciled codes will be entered as data.

Step 4: Both coders independently code 20% randomly selected SPA recordings.

Step 5: Both coders code the same 10% randomly selected SPA recordings for IRR check #2

Step 6: Inter-rater reliability is assessed for the final 10% SPA recordings, and discrepancies resolved by a Comskil Faculty for Skills coding. The reconciled codes will be entered as data.

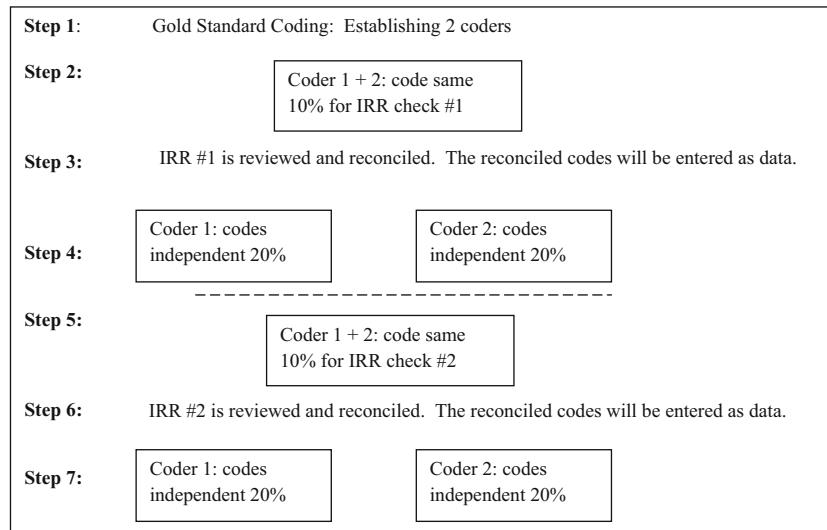**Step 7**: Both coders independently code 20% randomly selected SPA recordings.

Step 1:	Gold Standard Coding: Establishing 2 coders
Step 2:	Coder 1 + 2: code same 10% for IRR check #1
Step 3:	IRR #1 is reviewed and reconciled. The reconciled codes will be entered as data.
Step 4:	Coder 1: codes independent 20% — Coder 2: codes independent 20%
Step 5:	Coder 1 + 2: code same 10% for IRR check #2
Step 6:	IRR #2 is reviewed and reconciled. The reconciled codes will be entered as data.
Step 7:	Coder 1: codes independent 20% — Coder 2: codes independent 20%

Fig 1 | Inter-reliability assessment for skills coding

Data analysis

For program evaluation, a rating of "agree" or "strongly agree" was considered to be an indicator of satisfaction with the module, and was analyzed descriptively. For assessing improvements in self-efficacy, paired t tests were used to assess significant differences. Finally, for measuring increase in skills usage from pre- to post-training, frequency of individual skills was used as the unit of measurement, and paired t tests were used to assess changes in outcomes from pre- to post-training. Given that we conducted paired t tests on 20 individual skills, 5 skill categories, and 1 overall skill index, we applied Bonferroni correction ($.05/26 = .002$), and only considered t values that were significant at the $p < .001$ level.

RESULTS

Evaluations

Overall, nurse participants rated the training favorably. Specifically, more than 90% of nurse participants indicated that they agreed or strongly agreed with five of the six evaluation items (with one item receiving endorsement by more than 80% but less than 90% of participants; see Table 1). In addition, the majority of nurse participants (>80%) rated each individual module component as aiding in learning (as indicated by ratings of "somewhat aided my learning" to "aided my learning a lot"; see Table 2).

Self-efficacy

Paired sample t tests were performed to assess overall changes in self-efficacy and self-efficacy for each of the specific modules. Overall, nurses' self-efficacy significantly improved [$t(1016) = 31.17$, $p < .001$] from pre- ($M = 3.31$, SD = .88) to post-training ($M = 4.05$, SD = .65). In particular, nurse participants' self-efficacy in responding empathically to patients significantly increased [$t(340) = 18.59$, $p < .001$] from pre- ($M = 3.59$, SD = .69) to post-training ($M = 4.22$, SD = .56). Similarly, nurse participants' self-efficacy in discussing death, dying, and end-of-life goals of care significantly increased [$t(338) = 21.52$, $p < .001$] from pre- ($M = 3.03$, SD = 1.02) to post-training ($M = 3.99$, SD = .70). Finally, nurse participants' self-efficacy in responding to challenging family interactions significantly increased [$t(336) = 15.11$, $p < .001$] from pre- ($M = 3.30$, SD = .79) to post-training ($M = 3.93$, SD = .64).

Increase in skill use after training

There was a significant increase in overall skill use from pre- to post-training. The biggest gain was observed in empathic skills, while other skill categories failed to

demonstrate clear significance. In particular, three out of five empathic skills (encourage expression of feelings, normalize, and praise patient efforts) significantly increased from pre- to post-training. Additionally, significant increase was observed in one out of five questioning skills (clarify). No significant gains from pre- to post-training were observed in any of the agenda setting skills, information organization skills, or checking skills.

DISCUSSION

This study demonstrated a successful implementation of a communication skills training program for nurses at a major cancer center, as evidenced through favorable program evaluation, significant gains in self-efficacy regarding communicating with patients in various contexts, and significant improvement in several empathic skills, as well as in clarifying skills. A summary of findings for the study indicated that (1) H1 was supported, and large majority of nurse participants (>80%) provided favorable evaluations for each nursing Comskil module; (2) H2a was supported, and nurse participants reported significantly improved self-efficacy in use of skills (both overall and for each of the three modules) from pre- to post-training; and (3) H2b was partially supported, and significant improvements were observed primarily in empathic communication skills in pre- to post-training SPAs. With encouraging favorable evaluation of the program, and support from nursing leadership, the next steps include offering the communication skills training for other nurses in the institution on a regular basis.

Significant increases in skill uptake were not observed for all the skill categories and for respective skills under each category. For instance, there was no change in any of the four skills under agenda setting (declare agenda items, invite agenda, negotiate agenda, take stock). The reason could be attributed to the role of inpatient nurses. Given their frequent interactions with patients during the course of the day, they typically do not engage in a clinic-style interaction. Outpatient or ambulatory oncology nurses, on the other hand, function in nurse-run clinics that provide services such as long-term follow-up care to patients with cancer, pre-screening prior to chemotherapy administration, the management of fatigue, or general symptom management [33] A natural extension of this study would be to conduct communication skills training for outpatient oncology nurses and compare skill uptake.

The largest gains were observed in empathy skills, which is highly significant for oncology nursing. In fact, prior research identifies challenges and obstacles that oncology nurses face in communicating empathically with patients and their families [34, 35]. Also, our own research demonstrates that nurses report distinct communication needs of inpatient oncology nurses, including lack of skills in knowing how to respond to patients and families in certain situations, finding the right words to express empathy, and understanding unique needs of patients (such as assessing patient/family readiness to have end-of-life conversations, discussing transitioning to palliative care, and finding appropriate ways of approaching angry patients) [23]. Offering a communication skills training program that addresses relevant communication challenges that oncology nurses face highlights the commitment of the institution to encourage and support communication between nurses and patients, therefore focusing on patient-centered care. This commitment was also strengthened through the use of facilitators from each nursing discipline facilitating participants from the same discipline, providing effective role models.

An important aspect of our training is the focus on role plays. Whereas didactics help orient participants to the training and provide evidence and best practices from literature, role plays provide experiential learning for participants and can result in sustained learning of communication skills. We used SPs for role plays that allowed us to re-create a realistic communication experience for the participants. Other studies can also experiment with participants taking turns playing the role of the patient in the role play sessions, particularly when institutions have limited resources to implement a similar training [36].

There are several implications of our work that should be noted. First, communication skills training for oncology nurses (as well as for other health providers) is an effective way of improving communication between nurse and patient/families, with putative improvements in patient-related outcomes. Prior research clearly demonstrates that effective communication has numerous benefits including improving the rates of patient recovery, pain control, adherence to treatment regimens, psychological functioning, and quality of life [37–39]. Future research should examine the impact of communication skills training on relevant patient outcomes. Second, communication skills training for nurses can also be a supportive platform for nurses to seek help in areas they find challenging. Prior research highlights that oncology nurses have limited opportunities to receive communication training [13, 15, 16], and report a greater need for more education on communication [15]. Ineffective communication may negatively affect the nurses by increasing their levels of stress, lack of job satisfaction, and emotional burnout [40, 41]. Providing a communication skills training can be considered as an institutional resource to invest in uplifting the morale of their nurses. Finally, although communication skills training is a resource intensive undertaking, it can be implemented with limited resources, as described in Bylund et al. [28] study. For instance, using participants to role play, presenting the training in large groups, and using hand-held cameras for recording role play interactions and feedback can be accomplished with limited resources.

Limitations

The study had some limitations. This study was carried out at one cancer center in the North-East USA, and results may not be generalizable to other cancer

hospital settings. Second, we conducted this training with inpatient oncology nurses (and used convenience sampling), and results may be different with varied nursing populations, such as ambulatory nurses and nurse practitioners working in oncology settings. Third, we limited our evaluation of the program to self-reports and demonstration of behavior in a lab setting. Future work should assess more broad applications of training, i.e., communication skills of nurses with real oncology patients and patient-reported outcomes. Finally, we did not assess nurse participants' prior experience with communication skills training. Future research could assess moderators of program effectiveness including prior communication skills training, years of experience, and attitude toward communication skills training.

CONCLUSION

This paper presents development, implementation, and assessment of a communication skills training program for oncology nurses, consisting of three teaching modules: responding empathically to patients; discussing death, dying, and end-of-life goals of care; and responding to challenging interactions with families. Results demonstrate that such a training program at a major cancer center is feasible and acceptable and has a significant impact on participants' self-efficacy and uptake of communication skills.

Compliance with ethical standards The findings reported in this paper have not been previously published and the manuscript has not been simultaneously submitted elsewhere.

This manuscript presents implementation and evaluation of a nursing communication skills training program, from 2012 to 2014. The program consists of three modules. We have described the development of the program in this paper briefly because three individual manuscripts on the detailed development of each of the three modules are published and referenced in the manuscript.

This article does not contain any studies with animals performed by any of the authors.

The authors have full control of all primary data and we agree to allow the journal to review the data, if requested.

Memorial Sloan Kettering's Institutional Review Board waiver was approved to allow the researchers' laboratory to operate this training as a quality improvement initiative to the nursing communication skills training curriculum. The exempt status allowed the laboratory to conduct CST training as a routine educational practice and permitted release of de-identified data on the effectiveness of this training program. Thus, informed consent was not obtained from all individual participants included in the study.

Conflict of interest: The authors declare that they have no conflicts of interest.

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