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THE ART OF ONCOLOGY:
When the Tumor Is Not the Target

Faculty Development to Change the Paradigm of Communication Skills Teaching in Oncology

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INTRODUCTION

Dr B, a faculty oncologist supervising fellows at an outpatient oncology clinic, faces a common teaching quandary. A second-year oncology fellow presents a patient with metastatic lung cancer, which has progressed despite second-line palliative chemotherapy. The fellow concludes his presentation, which was technically impeccable, by saying, "I thought the patient was not getting how bad this is, so it was time to hang crepe. I told him it was a choice between phase I or nothing." Dr B knows the fellow to be a careful physician who is genuinely concerned about the well-being of his patients. Yet the fellow's comment about hanging crepe raises a red flag for Dr B, because in his experience, blunt disclosures of poor prognoses may lead patients to wonder if their physician is still on their side. In addition, Dr B does not like telling patients that there is nothing more to be done. But he is not sure how to get the fellow to understand this. Should he confront the fellow about this, or just let the comment pass?

WHY IS FACULTY DEVELOPMENT FOR TEACHING COMMUNICATION NEEDED?

Empirical studies on cancer communication converge on a few key points. Patients are extremely sensitive to the way oncologists communicate. What oncologists say and how they say it can shape the trajectory of care, including decisions about treatment options[1] and decisions about end of life.[2] Oncologists tend to focus on medical issues, giving less attention to patient understanding, emotional reaction, and coping.[3] The subsequent disconnect can result in patients not understanding their prognoses,[4] struggling alone with worry and distress,[5] and failing to plan for end of life.[6,7] In response to these findings, a number of leading policy makers—including the American Society of Clinical Oncology,[8] the Institute of Medicine,[9,10] and the Accreditation Council for Graduate Medical Education[11]—have emphasized the importance of communication and addressing the patient as a whole.

The communication skills that enable oncologists to integrate providing technical biomedical content with addressing the patient as a whole are not innate but learned, and fellowship is a developmentally optimal time to provide trainees with these skills. During fellowship, oncologists acquire the core expertise—comprising skills, dispositions, and values—that they will use throughout their careers. Oncology fellows must learn how to present difficult decisions about chemotherapy, talk about when chemotherapy is no longer likely to be effective, and discuss phase I trials.[12,13] For many fellows, these impending difficult conversations create a readiness to learn communication skills; before this point in their careers, they did not possess the knowledge or expertise required to assume responsibility for such decision making. Learning how to deliver bad news as a medical student is insufficient preparation for these new tasks. Recent studies have shown that with targeted education using evidence-based interventions, fellows can improve their skills and acquire new ones.[14,15] In this article, we describe a model for faculty development that incorporates a new paradigm for teaching communication skills.

OLD TEACHING HABITS VERSUS A NEW PARADIGM

The time-honored method of teaching communication, which we will refer to as the old paradigm, can be summarized as watching the expert. Fellows are immersed in clinical care and are expected to acquire communication skills through a process of osmosis. In educational terms, trainees watch mentors communicate and then model themselves after their mentors. Role models can be valuable, especially when trainees have not yet seen what excellent practice looks like. For example, trainees who have not seen bad news delivered competently should begin by watching role models, rather than by trying it out themselves. However, the debriefing stage crucial to learning from a role-model experience is often omitted. More problematic is that many fellows receive little formative feedback—meant to guide improvement—on the quality of their communication skills when they have been doing the

talking. The old paradigm is changing in response to the new requirements of the Accreditation Council for Graduate Medical Education, but many programs rely on lectures, a teaching method unlikely to change behavior.[16,17]

The research on communication indicates that the paradigm of watching the expert is not ideal, and this experience alone does not improve communication skills as well as do other methods.[18,19] In addition, the current landscape of oncology training limits opportunities of trainees to watch the experts. Work-hour limitations have decreased the contact time that trainees have with attending physicians, from the student level on up.[20] The shift in oncology to outpatient practice means that decision making has shifted to a clinical setting, in which attendings often have difficult conversations with patients when fellows are not present.

From the educational perspective, there are other problems with the time-honored method.[21] The learning process by which professionals acquire expertise involves more than observation. Expecting communication skills to improve by watching a mentor is akin to believing that by watching Tiger Woods, one will improve one's golf game. Empirical studies in expertise development indicate that professionals in training need clear learning goals, feedback on their performance, and a clear framework of the skills they are trying to develop.[22,23] In oncology training, the goals, feedback, and framework are much clearer when a trainee is trying to learn the chemotherapy regimens for metastatic colon cancer than they are when he is trying to learn the communication skills needed to counsel the patient who is receiving the chemotherapy.

To equip an oncology fellow with the skills necessary to do a better job communicating, the learning experience should include a definition of performance expectations (fellows should understand not only what is adequate but also what constitutes excellence), opportunities for practice and reflection, and ample feedback. In addition, the learning experience should strengthen the fellow's own motivation to become an oncologist, given that the work of an oncologist is difficult and the burnout rate substantial.[24] These learning needs demand a particular set of teaching skills and competencies, which are distinct from the teacher's own communication skills. Being a good communicator does not guarantee that one will be an effective teacher of communication skills; this is the reason Shulman[25] introduced the seminal concept of pedagogical content knowledge to characterize what good teachers possess in addition to the content knowledge necessary to teach in their domains.

Thus, faculty development is needed for the serious dissemination of communication skills. However, the components of teaching expertise have not been well defined for this context, and most of the published work on the expertise involved in teaching communication addresses medical students (with two notable exceptions[26,27]). Also, this body of work, developed on the basis of the workshop or residential model, is impractical for oncology training programs.

We thus designed a new faculty development program, Oncotalk Teach, to develop and test a new paradigm of expertise in teaching communication in the domain of oncology (www.oncotalk.info). We built this program on the basis of prior successful postgraduate courses and models of communication learning, as well as on the basis of a qualitative study of our own teaching in a previous communication skills workshop for fellows. As part of our previous workshops, we audiotaped and videotaped our teaching sessions to identify effective teaching behaviors, and published a guide for teachers on the Web[28] and a qualitative study of reflective teaching practices.[29]

The new paradigm for teaching communication that we use in Oncotalk Teach stresses three skills: fellow engagement, goal setting, and reflective feedback (Table 1). If the instructions to a trainee in the old paradigm were, "Watch me do it," the instructions in the new paradigm are, "Let me set you up for a successful encounter." In the new paradigm, the faculty help the trainees identify learning goals, make careful observations of the trainees with the patients, and debrief the trainees to identify what worked, providing formative assessments of what did not work, and what they might try next time to improve their skills. In the old paradigm, the faculty waited passively for teachable moments. In the new paradigm, the faculty actively create teachable moments with real-time clinical encounters.

NEW PARADIGM TEACHING COMPETENCIES

To put the new paradigm into operation, we created a cognitive roadmap of a teaching encounter. The roadmap is a heuristic teaching process that defines specific teaching tasks that occur at the beginning, middle, and end of a teaching encounter (Table 2). These teaching

Table 1. New Teaching Paradigm for Communication Skills

Characteristic	Old Paradigm	New Paradigm
Role of teacher	Expert	Coach
Teaching approach	"Watch the expert in action"	"Let me set you up for a successful encounter"
Learning aids	Teacher lists desirable communication behaviors	Teacher builds strategy with learner on basis of what oncologist needs to accomplish with this particular patient in this visit
Work of teaching	Teacher has primary communication responsibility, and explains his or her thinking to learner afterward	Before encounter, teacher engages learner in goal setting and problem solving Learner has some primary communication responsibility After encounter, teacher debriefs learner
Outcome of feedback	Learner thinks, "I should have said…"	Learner thinks, "Next time, I am going to…"
What teacher knows	"This is the right way to do it"	Novices are different from experts, and learner is moving along developmental path
Evaluation of learner	Summative judgment about learner's competence (or incompetence)	Formative judgment about learner's professional development

Table 2. Cognitive Map of Real-Time Clinical Teaching Encounter

Stage of Encounter	Teaching Objectives	Examples of Teaching Strategies
Beginning, setting up learning encounter	Engage fellow	Ask fellow where he gets stuck
	Identify realistic learning goals for specific encounter	Ask fellow to identify learning goals
	Discuss how fellow will know if he or she has been successful	Point out what competence looks like, and reframe misconceptions
Middle, during encounter	Collect specific observations for use in feedback later	Take notes to make specific observations
	Understand where fellow is in professional development	Ask yourself, "Where is the fellow in his or her professional development?"
	Balance fellow's learning needs with needs of patient/family	Track fellow's behavior and patient's behavior
End, after encounter	Provide goal-directed feedback using learner's goals	Ask fellow for self-assessment
	Leave learner with sense of what he or she has accomplished	Ask for take-home learning point
	Encourage reflective work	Show interest in and empathy for fellow in his or her professional development

tasks require faculty competencies that are not generally part of routine clinical teaching. For example, in the first stage of the roadmap, called the setup, the faculty are asked to elicit learning goals from the trainees. This may seem simple, but it actually involves engaging the trainees to identify communication skills they would like to improve, then helping the trainees refine these perceptions into learning goals, with strategies for the trainees to use and evaluation metrics that will enable the trainees to judge their success in the teaching encounters. These teaching skills require that the faculty step back from acting as experts, who simply tell the trainees what they should be doing, and act more as guides, who coach the trainees to achieve higher levels of performance.

The new paradigm is based on a large body of empirical work in the learning sciences. This research describes the importance of developing learning environments that enable trainees to develop their own capacities, use their own talents, and develop sets of personal skills and competencies that will serve them throughout their careers.[22] In addition, the new paradigm enables faculty to equip trainees to face challenges in the cancer care of the future that neither the faculty nor the trainees can anticipate—a capacity that learning scientists call adaptive expertise.[22]

A PROGRAM THAT PROMOTES SKILL DEVELOPMENT

To introduce oncology faculty to the teaching paradigm, cognitive map, and teaching competencies, we designed a faculty development program that provides a unique setting for learning, practice, and collaborative learning in both face-to-face and distance settings. The Oncotalk Teach program consists of two retreats separated by 6 months of distance learning (Table 2). The first program was conducted in October 2007 (Retreat 1) and April 2008 (Retreat 2). At Retreat 1, we presented the teaching paradigm and cognitive map, and the bulk of the time was spent in small-group practice sessions that involved simulated encounters between patients and fellows, who had been trained to present common outpatient teaching scenarios. Those representing the patients and fellows had been trained to improvise in response to the faculty teaching interventions; we recruited physicians to play the simulated oncology fellows to give the encounters a convincing degree of authenticity. Thus equipped with basic teaching competencies, participating faculty returned home to use and practice their teaching skills.

In the distance learning segment, we used two kinds of learning activities designed to stimulate practice, reflection, and feedback, because practice is essential for skill acquisition and expertise development. The first learning activity was a reflective teaching exercise to encourage the faculty to be more aware of which skills they were using. Participating faculty were asked to design teaching encounters, according to their own learning goals; ask partners to help observe their skills; and then spend some time, with their partners' help, assessing their teaching strengths and areas for improvement. The second learning activity was a series of videotaped teaching encounters showing one of the investigators teaching fellows at an outpatient clinic. The videotapes were presented on a Web site using WebDIVER (Stanford University, Stanford, CA), a collaborative Web-based learning program.[30,31] WebDIVER enabled the faculty to comment on the videos and annotate specific frames or segments on each video in a threaded discussion. This enabled learners to sharpen their skills in observing communication between a fellow and patient. This virtual collaborative learning environment was intended to parallel in some way the learning that had occurred in small groups at the retreat.

For Retreat 2, we designed another sequence of simulated encounters involving fellows and patients that would enable faculty to troubleshoot their skills, practice again, and develop new learning goals for themselves. Having faculty return for a second face-to-face meeting enabled them to consolidate their skills and see their own growth. The simulated encounters of Retreat 2 introduced advanced teaching skills, including ways to support fellows' reflections on difficult cases and spontaneous role playing that would enable fellows to try out new language.

OUTCOMES THAT EVALUATE FACULTY PERFORMANCE AND REFLECTIVE SKILLS

We designed an evaluation for Oncotalk Teach that focuses on faculty acquisition of new teaching skills, including reflective skills. We are measuring acquisition of teaching skills using standardized teaching encounters at the beginning of Retreat 1 and the end of Retreat 2. Actors are trained to portray a patient and fellow having a conversation in which some bad news is communicated, and the faculty participant is instructed to teach the fellow communication skills relevant to the clinical situation. The faculty participant meets the fellow before seeing the patient, the two see the patient together, and then the faculty

participant has the opportunity to give the fellow some feedback. After the feedback stage, we ask faculty to think aloud about their teaching to understand the changes in how they think about teaching. These think-aloud metacognitions are transcribed for qualitative analysis. Our project will continue for 3 more years.

At this point, we can report that Oncotalk Teach seems to change what faculty think about while they are teaching. Compared with those at the beginning of Retreat 1, the metacognitions after Retreat 2 from our first year show faculty making more observations about the interactions between fellows and patients, rather than focusing mostly on the fellows. In addition, the metacognitions after Retreat 2 show faculty actively constructing take-home teaching messages to conclude the encounters, rather than simply articulating vague hopes that the fellows felt okay about the encounters. We view these as important changes in teaching practices, and will analyze—using content-based coding of audiotaped teaching encounters—whether these changes in internal thoughts and intentions translate into different teaching behaviors.

We found that the faculty who enrolled in the first Oncotalk Teach program were acutely aware of their own difficulties in finding effective ways to teach communication. They were enthusiastic about the new paradigm and have employed it extensively in their own teaching. After Retreat 2, 95% of participants reported that they would recommend the program to a colleague.

LIMITATIONS

Oncotalk Teach focuses on teaching skills, and assumes that participants already possess robust communication skills. The paradigm we have described for teaching will likely need additional refinement on the basis of participant feedback and empirical outcomes. Whereas our project will measure the teaching-skill acquisition of faculty, future studies could also examine the communication-skill acquisition of fellows (although many other factors probably influence this). However, the major point of this report is to stimulate thinking about faculty development with regard to critical clinical skills for which few other learning opportunities exist.[32,33] Although we acknowledge that this program is more expensive than other lecture-based programs, we think that progress will require educational innovations with evidence-based outcomes.

RETURN TO THE CASE

Dr B asks the fellow, "Tell me what the patient said that made you feel that you should be hanging crepe." After some exploration with the fellow, Dr B asks, "Next time you see this patient, what do you want to accomplish?" (Teaching strategy: Dr B asks the fellow to set a communication learning goal). The fellow says he wanted the patient to appreciate how serious his disease was but felt that the patient was in denial. Dr B suggests that the fellow's goal was to ensure that the patient had an accurate understanding of his prognosis. Dr B asks the fellow whether he thinks his strategy with this patient worked. (Dr B follows the fellow's lead regarding the goal for the visit, even though a number of other learning goals are possible). The fellow responds that he felt uncomfortable confronting the patient with information about median survival, and that the patient had said little after that point in the visit. Dr B observes, "It sounds like that strategy didn't work as well as you would have liked." (Dr B gives the fellow feedback based on the learning goal). Dr B also acknowledges the difficulty of discussing prognosis, and observes that the fellow had been working on an important issue. (Dr B empathizes with the fellow by acknowledging difficulty, while underscoring the importance of the skill to professional development). Dr B asked the fellow if he had ever seen a physician ask "What have you taken away from your conversations with other doctors?" or "What are you hoping for?" The fellow, brightening up, said that he had seen these skills but never used them. Dr B strategizes with the fellow on how to inquire about the patient's understanding at the next visit, and directs the fellow to articles about discussing prognosis.[34,35] When the fellow is asked about his take-home learning point, he says, "I guess I had better make sure I know what patients understand before I assume they don't get it. That's useful." (Dr B gives the fellow a specific strategy to try, and gets the fellow to commit to trying the strategy in the future. Dr B makes a mental note that the fellow's casual description of palliative care as "doing nothing" is worth addressing in the future, but refrains in order to end the encounter with a single clear teaching point).

CONCLUSION

Communication skills are critical to an oncologist's expertise, yet few oncology faculty have been trained to teach these skills. The design of Oncotalk Teach represents an innovative approach that defines necessary competencies and skills, and provides an intensive learning environment that enables faculty to acquire them. Future outcome studies will help define how the program can be improved; ultimately, we would like to build a national cadre of faculty educators who see teaching communication skills as their contribution to the future of oncology. We hope this program inspires others to make additional innovations in the service of teaching oncologists how to be better at the difficult conversations that they will inevitably face.

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The author(s) indicated no potential conflicts of interest.

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