

Use of Interactive Theater and Role Play to Develop Medical Students' Skills in Breaking Bad News

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Abstract Creative arts have been increasingly implemented in medical education. This study investigated the use of interactive theater and role play with professional actors in teaching breaking bad news to medical students. The objectives were to explore the contexts, approaches, experiences, and reactions in giving and receiving bad news. Second-year medical students participated in a required educational session that utilized interactive theater which helps students learn about the issues of breaking bad news to a patient with cancer. Following the interactive theater piece, professional actors provided students role play experiences in small groups with breaking bad news. Anonymous evaluation surveys were given out to all second-year medical students at the conclusion of the breaking bad news session. Surveys contained quantitative and qualitative responses. Three years of evaluations were analyzed. A total of 451 (88 %) students completed the evaluations. Comments were thematically analyzed. Ninety-four percent agreed that the theater piece prompted reflection on patient-provider communications, and 89 % agreed that it stimulated discussion on complex issues with breaking bad

news. The two most common themes in student comments concerned the importance of realism in the theater piece, and the value of experiencing multiple perspectives. Use of professional actors during the role play exercises enhances the realism and pushed the students out of their own “comfort zones” in ways that may more closely approximate real life clinical situations. Interactive theater can be a potentially powerful tool to teach breaking bad news during medical school.

Keywords Death and dying · Communication skills · Instructional design · Small group learning · Ethics/attitudes · Interactive theater

Introduction

The use of different types of theater has become increasingly popular in medical education. The form that theatrical performances take in this context is varied—from one-person monologues [1] to staged performances of well-known plays [2], to role-play and exercises with simulated patients [1, 3]. Within medical education there have also been attempts to give these efforts a robust theoretical underpinning to help to inform further initiatives and studies in the field [1, 4, 5].

Interactive theater has been used to train small group instructors to facilitate contentious discussions on race, religion, and gender [5] and to train faculty and residents to enhance patient acceptance of medical student participation in patient care [6]. This approach involves “freezing” the actors in character after a short sketch and encouraging the audience to ask the characters about their thoughts, feelings, and motivations. In some versions, a moderator then addresses the audience directly and solicits possible alternative endings for the scene—i.e., solutions to the problematic situations raised in the piece—in order to “re-run” the action depicted [5]. The

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use of theater has been shown to be a viable method of providing information to health professionals [7]. Interactive theater differs from other types of theater in that it demands participation from the audience as an integral part of the play [5, 6].

The current study investigates the use of interactive theater, coupled with role play exercises involving professional actors, in exploring breaking bad news and end-of-life issues with a second-year medical school course. Educational effectiveness is generally enhanced through the use of multiple educational methodologies such as those described herein [8].

Methods

Between 2009 and 2011, in collaboration with the artistic director of a theater troupe affiliated with a university teaching resource center, a required second-year learning activity was designed and conducted that included an interactive theater performance and small group activities involving role play exercises. The educational objectives of the activity were to explore settings, approaches, experiences, and reactions in giving and receiving bad news; to understand how personal backgrounds and life events can influence the ways in which bad news and end-of-life issues are discussed and heard; and to provide students an opportunity to begin to create a personal approach to discussing difficult subjects in the context of health care.

The actors performed “Joanne’s Story,” a 20-min sketch about the life story of a woman from the moment she learns she has colon cancer to her eventually being told that her recurrent tumor is inoperable and “nothing further can be done.” This sketch was initially developed for educational purposes at our cancer center and was then adapted specifically for medical student education. Another 30- to 40-min period was then dedicated to a facilitated discussion with the audience and characters about themes raised in the play, which included issues of power, gender, doctor-patient dynamics, silence, empathy, clinical detachment, and support. Each performance and discussion session included approximately 85 medical students (half of the second-year class), along with 20 faculty and staff. The production was held “in the round,” i.e., the audience surrounded the players and set pieces. This setting provided different perspectives on the action and each actor.

Following the performance and discussion, students and faculty broke up into their regular small groups, accompanied by one of the sketch cast members. In small groups, students worked with the actors in role plays of four different scenarios, listed in Table 1. In most cases, one to two students volunteered to participate in one of the four scenarios while the other eight to 10 students of the small group watched and provided comments and suggestions. Prior to the session, the artistic director and actors met with the medical school course

Table 1 Breaking bad news role play scenarios

Scenario	Description
1	Informing a patient of a new diagnosis of colon cancer
2	Notifying the spouse that the husband/wife did not survive a motor vehicle accident
3	Explaining to the parent of young child a new diagnosis of type I diabetes mellitus
4	Informing a patient with viral cardiomyopathy that their condition is severe and irreversible

directors, both of whom are physicians, to review the educational objectives and the scenarios for clinical details and veracity. In addition, students were provided required reading materials to build an educational framework around breaking bad news prior to the sessions [9].

Students were asked to fill out anonymous evaluation surveys of the interactive theater performance and role play exercises. The evaluations were voluntary and were distributed at the end of the session. The survey responses were structured on a 5-point Likert scale, with 1 being “strongly disagree” and 5 being “strongly agree.” On the same form, the students were also asked to respond to open-ended questions regarding the perceived strengths of each activity and suggestions for improvement. The sketch and the small group role play scenarios, and the evaluation form itself, were identical for each of the 3 years. Student narrative comments in the open-ended portion of the evaluation were reviewed by two authors independently and thematically categorized. They then met to review and reconcile differences in categories. Comments were categorized into more than one category when multiple sentiments were expressed. All aspects of the study were reviewed, and an exemption was approved, by the Medical School’s Institutional Review Board.

Results

Of the possible 510 students in the three second-year classes who participated in the learning activity, 451 completed the evaluations, a response rate of 88 %. The responses to the evaluations are listed in Table 2. Both the interactive theater piece and the role play exercises were extremely well received. Ninety-four percent of respondents agreed or strongly agreed with the statement that the interactive theater piece provided a realistic scenario of someone receiving bad news. Ninety-four percent also agreed or strongly agreed that the piece helped them think about the different perspectives involved in the way patients and health care providers communicate. Ninety percent agreed or strongly agreed that the interactive theater stimulated discussion on the complex issues involved in breaking bad news.

Table 2 Breaking bad news theater sessions. Evaluation report 2009–2011

	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	SD	N
Interactive theater piece was effective in...								
1. Providing a realistic scenario of someone receiving bad news	0	1	5	41	53	4.45	0.67	449
2. Helping me to think about the variety of different perspectives involved in the way patients and health care providers communicate	0	1	5	42	52	4.45	0.65	450
3. Stimulating discussion on the complex issues involved in breaking bad news	0	1	9	42	48	4.36	0.72	450
4. Overall, the <i>interactive theater</i> piece was a valuable medical education experience	0	1	8	32	59	4.48	0.72	450
The role play exercise was effective in...								
1. Helping me to think about my own approaches to breaking bad news	0	1	3	33	63	4.58	0.60	451
2. Exposing me to other people's approaches in breaking bad news	0	1	2	38	59	4.55	0.59	451
3. Helping me to feel confident in being able to break bad news	1	8	28	40	23	3.78	0.91	451
4. Overall, the <i>role play</i> exercise was a valuable medical education experience	0	2	2	35	61	4.55	0.63	451

A total of 253 student comments were reviewed and categorized. Both reviewers independently identified the same themes from the comments. The two most common themes expressed were the importance of the realism of the activity and the value of seeing things from multiple perspectives during the interactive theater performance. Students felt the quality of the acting significantly enhanced their learning experience and commented that they found the discussion with actors valuable and that the activity stimulated them to think about how they would break bad news. Numerous students commented that the interactive theater approach was “unique,” “novel,” “thought-provoking,” and “eye-opening,” and that the play was “very realistic:”

We got a more realistic version of the situation than we (as non-actors) could produce in role playing—it felt real.

Respondents also commented, “I appreciated viewing the different perspectives;” “it helped me to think about the realities of breaking bad news rather than just thinking about it theoretically;” “the actors did a phenomenal job at bringing out the various emotions involved.” One student commented that the play “felt very realistic and allowed me the space to think about the situation from the patient’s perspective in a way that is harder to achieve when you are directly involved.” Two additional points were raised repeatedly: the piece was valuable in allowing the audience to follow a patient through the entire course of her disease; and in providing the opportunity to ask questions of the actors while they stayed in character:

Level of acting was amazing—how we were able to ask questions of the actors before they broke character—let us into their perspectives.

Regarding critiques of the theater piece, a few respondents expressed that they thought the question-and-answer session with the actors in character was not helpful since the characters “weren’t real.” Several respondents also suggested that a “gold standard” example of physicians doing a good job delivering bad news should be included in the play.

Responses to the small group role play with the cast members were similarly positive (Table 2). Ninety-six percent of the respondents agreed or strongly agreed that the role play exercises helped them to think about their own approaches to breaking bad news. Ninety-seven percent agreed or strongly agreed that the exercises exposed them to different approaches with breaking bad news. Interestingly, a smaller percentage of 63 % agreed or strongly agreed that the role play exercises helped them to feel more confident in breaking bad news.

Overall, 91 and 96 % agreed or strongly agreed that the interactive theater piece and role play exercises were valuable medical education experiences, respectively (Table 2). Numerous students also commented on the value of this experience:

One of best experiences of med school so far!
This is the best learning method aside from delivering bad news and observing it done by (actual) doctors and real patients. Excellent learning tool, thank you!

Discussion

Interactive theater finds its roots in “forum theater,” a dramatic practice originally developed by the Brazilian playwright and social theorist, Augusto Boal, who proposed a theater in which the traditional boundaries between actors and audience, play and society are broken down such that the audience takes responsibility for ultimately determining the course of the play [10]. The purpose of this theater was to address issues of societal inequity and injustice and to use theater to stimulate the audience to search for solutions [10].

In designing a learning activity to increase students’ awareness and understanding of challenges of breaking bad news, the medical school program felt that the audience-as-participant aspect of interactive theater could deepen and enrich the students’ understanding of the complex interactions that occur during the act of breaking and receiving bad news, as well as the importance of context and relationships in these situations. The survey responses appear to back this up. Numerous comments cited the importance of showing different perspectives, subtleties of emotions, as well as the responses that occur in everyday life. As one student said, “It is so hard to imagine without experience.” One respondent cited the value of seeing different “perspectives we can’t readily access and interact with in the real world.” Another cited the acting troupe’s “great job of using theatrical techniques to simulate the chaos of the medical setting and how it can drown you out when you receive bad news.” By calling on the audience to engage in dialogue with the characters, interactive theater allows for the deconstruction of the communication, interactions, and power dynamics, as well as the characters’ assumptions and motivations involved in the action [5]. This approach ultimately makes the audience an active participant in reflecting on, and searching for, effective approaches and solutions.

Interestingly, the statement, “the role play exercise on breaking bad news was effective in helping me to feel confident in being able to break bad news,” scored the lowest level of agreement (63 %) of any of the items surveyed. Without a “pre-activity” assessment, it is impossible to tell whether the percentage of students feeling confident in being able to break bad news changed as a result of the role playing exercise. Nonetheless, given the striking difference between the percentages of affirmative responses in this item in comparison to the others, one may speculate that the exercise was not effective in instilling confidence in a significant proportion of the respondents. On the other hand, another interpretation of the data may be that the interactive theater piece and role play exercises with the professional actors gave the students—most of whom probably have never been in a situation in which health care-related bad news was delivered—an idea of how complex and challenging this

crucial professional duty actually is to perform. One student’s comment highlights this point:

I thought I was going to be better at breaking bad news. While I learned a lot with this experience, I’m much more nervous for 3rd year and beyond when I have to break bad news.

Although perhaps humbling, this exposure may provide a more realistic basis upon which the students may build their skills at breaking bad news and may do so in a supportive, simulated environment.

The use of professional actors in the role play exercises increased the realism of the depicted scenarios as compared to usual student-based role playing, and because the actors were strangers to the group, their presence, as well as the unpredictability of their responses, pushed the students out of their own “comfort zones” in ways that more closely approximated actual clinical situations. Furthermore, as suggested by the quotation above, the productive use of disruption in prompting and enhancing self-reflection is a critically important technique in this type of education [11]. Concepts as varied as Piaget’s “cognitive disequilibrium,” [12] Dewey’s “forked road situations,” [13] and Mezirow’s “disquieting dilemmas” [14] all have this type of disruption in common: when confronted by new and unfamiliar perspectives, identities, experiences, and ideas, one is forced to reflect on one’s own values, attitudes, and assumptions, thereby broadening one’s own worldview.

The study has some limitations. Although there were a large number of respondents in the study, the data analyzed represented student evaluations of the learning activities, as well as the reported effectiveness of the exercise on the level of comfort to break bad news. No evidence was gathered to document the *actual* impact of these activities on the students’ abilities to break bad news. Furthermore, any lasting effects of these activities were not assessed. The impact of a single educational intervention on the development of a critical professional life-long skill, even an intervention as complex as that reported in this study, is questionable; nonetheless, clearly demonstrable ways to assess the long-term impact of this activity (e.g., through standardized patient scenarios or evaluations of actual clinical performance of this skill) await further study.

In summary, this type of interactive theater, combined with role play exercises with professional actors, is extremely well received and enhances students’ understanding with the challenges of, and approaches to, breaking bad news. The authors propose that this use of theater is part of a larger movement that places theater in particular and the arts in general in the context of a medical education that transcends typical competency-based approaches and aspires towards developing a humanist ethos in physicians [1, 4, 15, 16]. Instead of

requiring students to learn a formulaic “how-to” list of skills and techniques to break bad news, they were encouraged to confront the complexities and contextual issues of delivering and receiving bad news from multiple perspectives and challenged them to act in active partnership with professional actors in their own learning. In the same way that Salmon and Young have argued against training in “communication skills” in favor of education for “skilled communication,” [17] the purpose of this type of theater is for students to begin to develop a personalized approach to breaking bad news that recognizes both the primary importance of human interactions and the value of individual perspectives, emotions, and backgrounds—including their own—in this most difficult of professional tasks. In this sense, this type of theater has the potential to become a critical part of the moral education of the developing physician. Using Jonathan Levy’s distinction between educating a good child in “certain absolute virtues” and a moral child who learns to act morally in unforeseen circumstances [18], we believe that interactive theater stimulates self-reflection and fosters a humanist view of clinical practice has the potential to transform physicians-in-training into moral agents who are capable of exercising Aristotle’s *phronesis* (practical wisdom), that is, who are capable of acting wisely and prudently for the good of both the individual in particular and humankind in general (VI.7) [19–23]. The authors believe this is an essential disposition when working with patients during moments of great vulnerability and loss.

References

- Shapiro J, Hunt L (2003) All the world’s a stage: the use of theatrical performance in medical education. *Med Educ* 37(10):922–927
- Lorenz KA, Steckart JM, Rosenfeld KE (2004) End-of-life education using the dramatic arts: the Wit educational initiative. *Acad Med* 79(5):481–486
- Rosenbaum ME, Kreiter C (2002) Teaching delivery of bad news using experiential sessions with standardized patients. *Teach Learn Med* 14(3):144–149
- Kohn M (2011) Performing medicine: the role of theatre in medical education. *Med Human* 37(1):3–4
- Kumagai AK, White CB, Ross PT, Purkiss JA, O’Neal CM, Steiger JA (2007) Use of interactive theater for faculty development in multicultural education. *Med Teach* 29:335–340
- Tang TS, Skye EP, Steiger JA (2009) Increasing patient acceptance of medical student participation: using interactive theatre for faculty development. *Teach Learn Med* 21(3):195–200
- Gray RE, Fitch MI, Labrecque M, Greenberg M (2003) Reactions of health professionals to a research-based theater production. *J Cancer Educ* 18(4):223–229
- Johnson L, Ousley A, Swarz J, Bingham RJ, Erickson JB, Ellis S, Moody T (2011) The art and science of cancer education and evaluation: toward facilitating improved patient outcomes. *J Cancer Educ* 26(1):27–35
- Back T (2013) Breaking bad news. Retrieved from Ethics in Medicine, University of Washington School of Medicine <http://depts.washington.edu/bioethx/topics/badnws.html>
- Boal A (1985) *Theatre of the oppressed*. Teatro del oprimido y otras poéticas políticas. English, vol. xiv, 197 p. Theatre Communications Group, New York
- Kumagai AK (2010) Invited commentary: Forks in the road: disruption and transformation in professional development. *Acad Med* 85: 1819–1820
- Piaget J (1975/1985) The equilibration of cognitive structures: the central problem of intellectual development. In: Terrance B, Thampy KJ (eds) *Equilibration des structures cognitives*. English. University of Chicago Press, Chicago
- Dewey J (1910/2005) *How we think*. Barnes & Noble, New York
- Mezirow J (1991) *Transformative dimensions of adult learning*. The Jossey-Bass higher and adult education series. Jossey-Bass, San Francisco
- Belling C (2006) The “bad news scene” as clinical drama part I: writing scenes. *Fam Med* 38(6):390–392
- Kumagai AK (2012) Perspective: acts of interpretation: a philosophical approach to using creative arts in medical education. *Acad Med* 87(8):1138–1144
- Salmon P, Young B (2011) Creativity in clinical communication: from communication skills to skilled communication. *Med Educ* 45(3):217–226
- Levy J (1997) Theatre and Moral Education. *J Aesthetic Educ* 31(3): 65–75
- Aristotle (2009) *The Nicomachean ethics*. Trans. W. D. Ross, and Lesley Brown, xliiith edn. Oxford University Press, New York, 277 p
- Montgomery K (2006) *How doctors think: clinical judgment and the practice of medicine*. Oxford University Press, New York
- Pellegrino ED, Thomasma DC (1993) *The virtues in medical practice*. Oxford University Press, New York
- Fuks A, Brawer J, Boudreau JD (2012) The foundation of physicianship. *Persp Biol Med* 55:114–126
- Kumagai AK (2013) From competencies to human interests: ways of knowing and understanding in medical education. *Acad Med*