"Hot Seat" Simulation to Teach Conflict Management Skills to Residents

Karen P. Barr, MD
Maria R. Reyes, MD
Sara Kim, PhD

ABSTRACT

Background Conflict management is an important leadership skill for residents to develop, yet it is a challenging skill to practice.

Objective We developed and evaluated a workshop that teaches conflict resolution skills to physical medicine and rehabilitation residents in a group setting with real-time faculty coaching and peer feedback.

Methods A 4-step model for handling work-related conflicts was taught, and then residents practiced their skills during a realistic simulated conflict with a trained actor. A faculty coach supported the participant, and peers gave feedback and suggestions in real time as the scripted conflict unfolded. Immediate post-session survey results were analyzed.

Results Workshops were conducted in 2015, 2017, and 2019. A total of 36 residents participated and completed evaluations out of a possible 40 residents in the cohort (90% participation rate). Post-session surveys showed that 100% of participants agreed the session content was relevant to their training and they would use the skills in the future. Ninety-seven percent (35 of 36) felt prepared to manage conflict following the session.

Conclusions This experiential workshop helped cultivate an appreciation of the importance of conflict management skills in residents' professional development and confidence in their ability to apply a conflict management framework to real-world situations.

Introduction

The ability to manage conflict so that effective communication occurs is a key competency in graduate medical education.[1] It has been recommended that these types of skills be treated as "verbal procedures" that residents must be able to demonstrate by the end of their training.[2] Conflict management training has been shown to improve the work environment, decrease stress, increase confidence in managing conflict, and gain appreciation for the positive aspects of addressing conflict.[3] However, methods to teach conflict management skills to residents have been under-researched, with only a few published descriptions of lectures and case discussions.[1,4,5]

One method to teach conflict resolution is the Shannon-Kim 4-Step Conflict Dialogue Model taught via "hot seat" simulation training.[6] This technique improves performance, compared to an untrained control group on key conflict management skills.[6] It includes active skills practicing in a group setting, while receiving real-time faculty coaching and peer feedback.

DOI: http://dx.doi.org/10.4300/JGME-D-19-00594.1

Editor's Note: The online version of this article contains details of the curriculum and the survey used in the study.

The purpose of this study was to evaluate whether it is feasible to incorporate this teaching method into a residency program's conference schedule, and whether residents perceive this training as acceptable and relevant to their professional development.

Methods

A workshop to teach conflict management to physical medicine and rehabilitation (PM&R) residents was developed (TABLE 1) and presented in 2015, 2017, and 2019. This is an urban, university-based program with 8 to 10 residents per year. In 2015 and 2019, postgraduate year 4 (PGY-4) residents participated in the workshop. Because of additional curricular time in 2017, PGY-2, PGY-3, and PGY-4 residents participated.

The 2-hour workshop began with a lecture about conflict management as a leadership skill essential for team function and to prevent medical errors. A 4-step model to address conflict was presented (TABLE 2).[6,7] A scripted conflict from the residents' perspective was presented. The group discussed the issues presented in the scenario and the cost to team functionality if the conflict went unaddressed. Three scenarios were developed by the authors based on their personal knowledge of common workplace conflicts. Scenarios were written to be multidimensional, highlight power differentials, and be slightly emotionally charged. A

TABLE 1
Workshop Preparation and Presentation

Before Workshop		
Activity	**Content**	**Prep Time**
Scenario development	▪ Description of conflict from actor's role perspective ▪ Description of conflict from resident's role perspective ▪ Facilitator road map to guide scenario	2–3 hours
Actor and facilitator training	▪ Key teaching points identified ▪ Emotional tone set (anger, moral superiority, etc) ▪ Practice of scenario for pacing, authenticity; scenario revision as needed	2–3 hours
During Workshop		
Activity	**Content**	**Duration**
Lecture	▪ Review of conflict in health care ▪ Foundational skills for conflict management ▪ Review of 4-step Shannon-Kim Conflict Dialogue method ▪ Description of "hot seat" simulation model and participant ground rules	30 min
Group brainstorming	▪ Read scenario (resident perspective) ▪ Identify key issues of conflict ▪ Identify what is at stake if conflict not resolved ▪ Clarify and prioritize what to address ▪ Use dialogue method model to prepare for the conflict discussion	20 min
Simulated conflict	▪ Resident in the "hot seat" practices using model with actor in simulated conflict (5–10 min per resident) ▪ Resident can "time out" to seek advice, and "rewind" to practice another technique or rephrase ▪ Peers observe and give suggestions and feedback during "time outs" ▪ Facilitator coaches as needed	60 min
Sharing of lessons learned/wrap-up	▪ Resident and faculty reflect on session and share with group	10 min

different scenario was presented each year (further details of the curriculum are provided as online supplemental material). The room was arranged with the residents in a circle, with the "hot seat," facilitator, and trained actor set slightly apart from the group. Residents took turns spending 5 to 10 minutes in the hot seat practicing their conflict management skills with the actor, practicing the 4-step model as a guide. The resident in the hot seat and the faculty facilitator could "rewind" the scenario to try different approaches, and "time out" to seek assistance and feedback from the group as needed. When not in the hot seat, residents observed the conflict unfold and gave feedback and suggestions as requested.

The facilitator served as a coach to the resident in the hot seat. In addition, facilitators needed to create a comfortable environment, engage observers, and pace the session to allow many residents to practice and reach closure within allotted time. A facilitator road map was created to highlight how the steps of the model are used to work through the simulated conflict to assist the facilitator.

Anonymous paper surveys were collected immediately after the session (provided as online supplemental material). This evaluation was developed by the 2 clinician-educator authors without further testing. It consisted of 10 Likert-type, closed-ended questions and 5 open-ended questions. The percentage of residents who chose each response was calculated, and narrative comments were analyzed by the authors to search for themes.

This project was deemed exempt from review by the University of Washington Human Subjects Review Board.

Results

The workshop was conducted in 2015, 2017, and 2019, and a total of 36 residents out of a cohort of 40 (90%) participated in the training. All residents who participated completed surveys. All the participants strongly or somewhat agreed that the topic session was relevant to residency training, thought that they

TABLE 2
Conflict Dialogue Model Steps and Resident Confidence in Skills[a]

Conflict Dialogue Model Steps	Individual Skill Components	Very Confident, n (%)	Somewhat Confident, n (%)	Neutral, n (%)	Not Confident, n (%)
1	Prepare effectively if time allows	17 (47)	18 (50)	1 (3)	0 (0)
2	Explore the point of view of the other person	20 (55)	16 (45)	0 (0)	0 (0)
3	Tell my story/perspective in a respectful and non-emotional manner	17 (47)	18 (50)	1 (3)	0 (0)
4	Negotiate next steps toward resolution	19 (53)	17 (47)	0 (0)	0 (0)
Throughout conflict	Recognize the impact of discord	17 (47)	2 (6)	0 (0)	Recognize the impact of discord
Throughout conflict	Respectfully handle difficult dialogue in a way that affirms the professional relationship	18 (50)	17 (47)	1 (3)	0 (0)

[a] N = 36; Participants included 6 PGY-2s, 8 PGY-3s, and 22 PGY-4s.

were able to manage the conflict in the scenario, and that it taught them a skill they would use in the future. Ninety-seven percent (35 of 36) felt prepared to manage conflict following the session. Overall, residents reported confidence in their ability to implement each step of the model (TABLE 2).

Responses to the scenarios were positive. When given the choice between constructive, neutral, or poor outcome, all participants except one chose the statement, "In the simulated conflict, a constructive outcome of the scenario was achieved (ie, better than avoiding the conflict)." Many positive comments were written on the evaluation, such as "was so real," "surprisingly effective," and "information was presented in an efficient and tangible manner." There were no negative comments.

Actors were obtained through the medical school's standardized patient program (cost of approximately $100.) Facilitators were trained by practicing the scenario with the actor and receiving coaching from coauthors prior to the session.

Discussion

In this study, an interactive simulation workshop with real-time faculty coaching for learning conflict management skills was well accepted by PM&R residents. They perceived the need for this training and reported improved confidence in dealing with conflict situations.

The need for conflict management training is consistent with other studies that have noted the high amount of conflict in health care settings.[8–10] Studies of leadership and communication skills training demonstrated that practice and coaching is required to improve skills.[7,11,12] However, this training can be time and resource intensive. Simulation training of leadership skills has been proposed as one solution.[13] This format allows multiple residents to practice sequentially and receive coaching in a reasonable time frame. This method also allows for the breaking down of skills and practicing discrete components. The opportunity while in the hot seat to "time out" the conflict and seek advice from their peers or the facilitator, and to "rewind" and try again, is not a viable option when handling a real-life conflict so it is well suited for simulation. This method of deliberate practice of discrete elements with frequent interruptions has been well received in other simulation training,[14] but to our knowledge, it has not been studied in resident conflict management teaching. The opportunity to observe and reflect in a psychologically safe environment on a peer's conflict management attempts as well as their own is also unique to this model.[15]

Limitations of the study include that the workshop occurred at a single site within a single specialty. The resident-reported outcome does not measure whether the training changed resident behavior in actual work-related conflicts. In addition, the survey was developed by the authors and not tested for validity evidence; therefore, respondents may have interpreted questions differently than intended.

In the future, this approach could be implemented and studied with other specialties. Standardized testing with a simulated conflict to see if skills were improved and evaluating whether it improves skills in real-life conflicts would also be valuable. Comparing different types of conflict management training would allow a better understanding of the best approach to this common but understudied area.

Conclusions

Using a "hot seat" simulation model with faculty coaching and peer feedback to teach residents conflict

management skills was well accepted and increased comfort and perceived skills. The 2-hour workshop required an actor as a standardized patient but few other resources.

References

1. Saltman DC, O'Dea NA, Kidd MR. Conflict management: a primer for doctors in training. *Postgrad Med J*. 2006;82(963):9–12. doi:10.1136/pgmj.2005.034306.
2. Henry SG, Holmboe ES, Frankel RM. Evidence-based competencies for improving communication skills in graduate medical education: a review with suggestions for implementation. *Med Teach*. 2013;35(5):395–403. doi:10.3109/0142159X.2013.769677.
3. Zweibel EB, Goldstein R, Manwaring JA, Marks MB. What sticks: how medical residents and academic health care faculty transfer conflict resolution training from the workshop to the workplace. *Conflict Resolution Q*. 2008;25(3):321. doi:10.1002/crq.211.
4. Wolfe AD, Hoang KB, Denniston SF. Teaching conflict resolution in medicine: lessons from business, diplomacy, and theatre. *MedEdPORTAL*. 2018;14:10672. doi:10.15766/mep_2374-8265.10672.
5. Haraway DL, Haraway WM 3rd. Analysis of the effect of conflict-management and resolution training on employee stress at a healthcare organization. *Hosp Top*. 2005;83(4):11–17. doi:10.3200/HTPS.83.4.11-18.
6. Kim S, Frans E, Bohannon I, Barr K, Buttrick E, Fehr R, et al. "Hot seat" simulation model for conflict resolution: a pilot study. *J Healthc Qual*. 2018;40(4):177–186. doi:10.1097/JHQ.0000000000000081.
7. Back AL, Arnold RM, Baile WF, Fryer-Edwards KA, Alexander SC, Barley GE, et al. Efficacy of communication skills training for giving bad news and discussing transitions to palliative care. *Arch Intern Med*. 2007;167(5):453–460. doi:10.1001/archinte.167.5.453.
8. Azoulay E, Timsit J, Sprung CL, Soares M, Rusinová K, Lafabrie A. Prevalence and factors of intensive care unit conflicts: the conflicus study. *Am J Respir Crit Care Med*. 2009;180(9):853–860. doi:10.1164/rccm.200810-1614OC.
9. Chiarchiaro J, White DB, Ernecoff NC, Buddadhumaruk P, Schuster RA, Arnold RM. Conflict management strategies in the ICU differ between palliative care specialists and intensivists. *Crit Care Med*. 2016;44(5):934–942. doi:10.1097/CCM.0000000000001583.
10. Vogel L. Canadian medical residents report pervasive harassment, crushing workloads. *CMAJ*. 2018;190(46):E1371. doi:10.1503/cmaj.109-5678.
11. Sadowski B, Cantrell S, Barelski A, O'Malley PG, Hartzell JD. Leadership training in graduate medical education: a systematic review. *J Grad Med Educ*. 2018;10(2):134–148. doi:10.4300/JGME-D-17-00194.1.
12. Rider EA, Keefer CH. Communication skills competencies: definitions and a teaching toolbox. *Med Educ*. 2006;40(7):624–629. doi:10.1111/j.1365-2929.2006.02500.x.
13. Rosenman D, Shandro J, Ilgen J, Harper A, Fernandez R. Simulation-based healthcare leadership training: a systematic review (submission #1186). 2013;8(6):583. doi:10.1097/01.SIH.0000441659.30763.48.
14. Chancey RJ, Sampayo EM, Lemke DS, Doughty CB. Learners' experiences during rapid cycle deliberate practice simulations: a qualitative analysis. *Simul Healthc*. 2019;14(1):18–28. doi:10.1097/SIH.0000000000000324.
15. Torralba KD, Jose D, Byrne J. Psychological safety, the hidden curriculum, and ambiguity in medicine [published online ahead of print January 4, 2020]. *Clin Rheumatol*. doi:10.1007/s10067-019-04889-4.

Karen P. Barr, MD, is Associate Professor and Chief of Physical Medicine and Rehabilitation, Department of Orthopaedics, West Virginia University; **Maria R. Reyes, MD,** is Clinical Associate Professor, Department of Rehabilitation Medicine, University of Washington; and **Sara Kim, PhD,** is Research Professor, Department of Surgery, University of Washington.

Funding: The authors report no external funding source for this study.

Conflict of interest: The authors declare they have no competing interests.

Corresponding author: Karen P. Barr, MD, UPMC Department of Physical Medicine and Rehabilitation, Kaufmann Medical Building, 3471 5th Avenue, Suite 201, Pittsburgh, PA 15213, 412.648.6848, kpbarr1@gmail.com

Received August 27, 2019; revisions received January 18, 2020, and April 30, 2020; accepted May 29, 2020.