

MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Psychological Safety as an Educational Value in Interprofessional Health Education

Erica Chou, MD, Thomas Grawey, DO, and Jane B. Paige, PhD

Abstract

The Interprofessional Education Collaborative competency on values and ethics is defined as “work[ing] with individuals of other professions to maintain a climate of mutual respect and shared values.” Essential to mastery of this competency is acknowledging biases, many of which are rooted in historically entrenched assumptions about the value of medical supremacy in health care, popular cultural representations of health professionals, and students’ lived experiences. This article describes an interprofessional education activity in which students from several health professions discuss stereotypes and misconceptions about their own professions and other health professions and professionals. Psychological safety in the learning environment is key, so this article also canvasses how authors revised the activity to promote and facilitate open communication.

Preparing for Collaborative Practice

Interprofessional education (IPE) occurs when students from different professions “learn with, from and about one another” to enable effective collaboration.¹ Collaborative practice requires communication in a responsive and responsible manner, maintaining a climate of mutual respect and shared values, understanding of professionals’ roles and responsibilities, and performing effectively in health care teams,² all of which have the potential to be negatively influenced by stereotypes or social perceptions.³ Health care professions students enter prelicensure educational pathways with preconceived ideas and expectations about their own and other health professions, many of which are rooted in the historical context of health care, popular culture, the **social positioning of professions**, and students’ own lived experiences.^{4,5} Inaccurate perceptions may persist unchallenged partly because of a lack of opportunities to interact with students from other professions during the education journey.^{6,7} Thus, allowing time for students to converse about stereotypes and misconceptions of different health care professionals is an essential component of IPE; however, those same biases are barriers to **effective IPE**.⁷ During their education and training, students are forming their professional identity, and conflict can arise if that identity is threatened or even questioned by others’ perceptions. These barriers need to be overcome to create a psychologically safe learning and work environment.^{8,9}

As an interprofessional team, the authors developed an IPE session for medical and nursing students to discuss stereotypes and misconceptions with the hope that, by bringing these unconscious biases to the surface, students would develop more comfort and trust in working with one another. However, there were some significant problems with the session, which we observed—and that were reported by students and facilitators—concerning students feeling unsafe to have an open and honest conversation about this sensitive topic. This feedback led us to revise the session by applying the principles of psychological safety.

Revealing Biases

Our IPE planning team developed a 2-hour IPE session for about 100 medical and 100 nursing students that addressed the Interprofessional Education Collaborative (IPEC)² values and ethics competency. One of the IPE activities allowed time for students to explore their biases. For prework, students answered 2 questions: *What is the biggest misconception about your profession from other professions and patients/clients?* and *What do you want others to know about your profession?* The IPE planning team summarized main themes from the prework and shared them with the students during the IPE session. This activity was followed by a live polling activity wherein medical students individually responded to the question, *What is the first word you think of when you hear “nurse”?* and nursing students responded to the question, *What is the first word you think of when you hear “physician”?* Students’ responses were displayed in real time as word clouds. Students were then divided into small groups of 6 to 8, each group with a roughly equal split of medical and nursing students, and asked to reflect on and discuss the responses from the prework and word clouds. Faculty facilitators asked the following questions to prompt discussion: *Discuss your reactions to the word clouds and misconception responses from the prework. Are these responses surprising? Why do you think some of these stereotypes exist? How does knowing this information influence how you interact with other health care professionals? How does knowing this information change how you interact with patients?*

Feedback and Evaluation

Utilizing best educational practices for instructional improvement,¹⁰ the IPE team collected feedback from students and facilitators, which revealed that, for many groups, the discussions were stilted and uncomfortable. Facilitators reported that students seemed reluctant to speak and that there was awkward silence. Several students also expressed that, while the topic was important, they did not feel comfortable speaking openly. Some felt that the word cloud activity was counterproductive because it revealed some negative opinions about professions, which made some students feel defensive and less willing to engage in discussion. These responses were consistent with known consequences of an unsafe environment.^{11,12}

Psychological Safety

Psychological safety stems from the work by Amy Edmondson¹¹ and refers to a working or learning environment that is safe for expressing vulnerability, sharing perspectives, and taking risks without fear of retribution or humiliation.¹³ Psychological safety has an important role in health care organizations to ensure high-quality care and patient safety,¹⁴ as well as in learning environments for students to feel safe being uncomfortable,¹⁵ which is necessary when discussing topics like stereotypes. In one pilot study, students described feeling psychologically safe when they were not being assessed and could focus on learning without worrying about their performance; when they felt understood and cared for as a person and not judged by others for their

actions, comments, and questions; and when there was an absence of social positioning and competition,¹² this last being especially important in IPE, given the traditionally **hierarchical structure of health care.**

Incorporating Psychological Safety

While we hoped our initial lesson design would generate open and honest discussions that would result in better understanding and appreciation of one another, the activity instead brought negative stereotypes to the forefront, causing students to feel hurt, insulted, and defensive. Without psychological safety, students felt unsafe engaging in discussion. In redesigning the activity for the next cohort of students, we sought to improve the session through incorporating the principles of building psychological safety, which include setting the stage, inviting participation, and responding productively.^{11,16}

Setting the stage. Setting the stage describes how clinician-educators frame the educational activity. Educators who set clear expectations, demonstrate vulnerability, and emphasize common goals of the activity are more likely to create a psychologically safe learning environment for the learner.¹⁴ We started the IPE activity with a clip from the *Ted Lasso* show¹⁷ about being curious and nonjudgmental to frame the activity. We then explicitly stated that the conversation would be uncomfortable for some, giving students permission to express any negative emotions they might feel, with the expectation that everyone would be treated with respect. Students were also encouraged to contribute to the discussion, as we acknowledged beforehand that every student's voice and perspective is required to adequately explore and reflect upon professional stereotypes and misconceptions. In the small groups, we asked our interprofessional facilitators to model vulnerability by sharing their own experiences as health care team members, including when they had witnessed or contributed to perpetuating misconceptions.

Inviting participation. Inviting participation encourages engagement, whereas the alternative is to stay silent. We found in the first iteration of the IPE activity that students passively received information from the IPE planning team on themes from their prework responses, which was reflected in their discussions. In the second iteration, we changed the activity so that students answered all 3 questions as part of their prework, including the question, *What is the first thing that comes to mind when you hear "nurse" (for medical students) or "physician" (for nursing students)?* This time, rather than providing students with the themes of their responses, we gave them anonymized example student responses from the prework during the session and asked them to come up with their own conclusions about both auto-stereotypes (conceptions of oneself) and hetero-stereotypes (conceptions of others) in their interprofessional groups. This change allowed the students to have more freedom to discuss what they felt was important, as opposed to the discussion being framed by the information given to them by the IPE planning team.

Responding productively. A key to psychological safety is for educators to provide positive, productive feedback to students in uncomfortable situations, thereby helping to develop a learning-centered environment by rewarding growth over performance.¹⁶ In the redesigned session, we made a point of acknowledging the challenges of the activity, expressing appreciation to students for their engagement and encouraging their self-growth through reflection on what may have prevented them from participating in the activity.

Student and facilitator feedback after the redesigned IPE session suggested that students were more responsive and engaged in the session. For example, some students shared that their discussions morphed into a focus on imposter syndrome, which allowed them to find common ground as students. Others explored feeling conflicted about their professional identity when certain characteristics, such as leadership, are lauded in their profession but viewed by others as arrogance. Although it was a different group of students who participated, their feedback showed that they had more in-depth conversations and positive takeaways from the activity.

Discussion

The role of psychological safety for optimal functioning of health care organizations and teams is well documented.^{8,11,18,19} The need for psychological safety in education has also been shown to be essential for optimal learning and growth.^{8,20,21} That need is even more pronounced when bringing together students from different health care professions, as an inherent tribalism,²² or “us vs them” mentality, manifests during IPE, despite a goal of IPE being to establish mutual understanding and respect for one another. As a result, addressing complex interpersonal dynamics layered with traditional health care hierarchy and power differentials must be at the forefront of IPE. Through intentionally applying the principles of psychological safety to the IPE activity, we moved closer to creating a safe space for students to explore the stereotypes that exist among various health care professions, with the hope of fostering a **more collaborative interprofessional environment**. To continue to improve the quality of this IPE session, we intend in future iterations to dedicate more time to exploring the concept of psychological safety so that our students can also begin to focus on creating this sort of environment in the settings where they will work in the future.

References

1. Health Professions Network Nursing and Midwifery Office, Department of Human Resources for Health. Framework for action on interprofessional education and collaborative practice. World Health Organization; 2010. Accessed October 13, 2022.
http://apps.who.int/iris/bitstream/handle/10665/70185/WHO_HRH_HP_N_10_3_eng.pdf;jsessionid=313DOA9B87A0220AD6AF5B8ABC331056?sequence=1
2. Interprofessional Education Collaborative. Core competencies for interprofessional collaborative practice: 2016 update. Interprofessional Education Collaborative; 2016. Accessed August 2, 2022.
<http://www.aacnnursing.org/Portals/42/AcademicNursing/CurriculumGuidelines/IPEC-Core-Competencies-2016.pdf>
3. Thurston MM, Chesson MM, Harris EC, Ryan GJ. Professional stereotypes of interprofessional education naive pharmacy and nursing students. *Am J Pharm Educ.* 2017;81(5):84.
4. Price SL, Sim M, Little V, et al. Pre-entry perceptions of students entering five health professions: implications for interprofessional education and collaboration. *J Interprof Care.* 2021;35(1):83-91.
5. Lockeman KS, Appelbaum NP, Dow AW, et al. The effect of an interprofessional simulation-based education program on perceptions and stereotypes of nursing and medical students: a quasi-experimental study. *Nurse Educ Today.* 2017;58:32-37.

6. Ateah CA, Snow W, Wener P, et al. Stereotyping as a barrier to collaboration: does interprofessional education make a difference. *Nurse Educ Today*. 2011;31(2):208-213.
7. Visser CLF, Ket JCF, Croiset G, Kusurkar RA. Perceptions of residents, medical and nursing students about interprofessional education: a systematic review of the quantitative and qualitative literature. *BMC Med Educ*. 2017;17(1):77.
8. Appelbaum NP, Lockeman KS, Orr S, et al. Perceived influence of power distance, psychological safety, and team cohesion on team effectiveness. *J Interprof Care*. 2020;34(1):20-26.
9. Lackie K, Hayward K, Ayn C, et al. Creating psychological safety in interprofessional simulation for health professional learners: a scoping review of the barriers and enablers. *J Interprof Care*. 2023;37(2):187-202.
10. Park S, Hironaka S, Carver P, Nordstrum L. Continuous improvement in education. Carnegie Foundation for the Advancement of Teaching; 2013. Accessed October 14, 2022. https://www.carnegiefoundation.org/wp-content/uploads/2014/09/carnegie-foundation_continuous-improvement_2013.05.pdf
11. Edmondson AC. *The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth*. John Wiley & Sons; 2018.
12. Tsuei SHT, Lee D, Ho C, Regehr G, Nimmon L. Exploring the construct of psychological safety in medical education. *Acad Med J Assoc Am Med Coll*. 2019;94(11)(suppl):S28-S35.
13. O'Donovan R, McAuliffe E. A systematic review exploring the content and outcomes of interventions to improve psychological safety, speaking up and voice behaviour. *BMC Health Serv Res*. 2020;20(1):101.
14. Nembhard IM, Edmondson AC. Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *J Organ Behav*. 2006;27(7):941-966.
15. Kang SJ, Min HY. Psychological safety in nursing simulation. *Nurse Educ*. 2019;44(2):E6-E9.
16. McClintock AH, Kim S, Chung EK. Bridging the gap between educator and learner: the role of psychological safety in medical education. *Pediatrics*. 2022;149(1):e2021055028.
17. "Be curious, not judgmental." Walt Whitman. *Ted Lasso*. S01E08. 2021. Accessed March 30, 2022. <https://youtu.be/7V6x-qmhzm0>
18. Lee SE, Dahinten VS. Psychological safety as a mediator of the relationship between inclusive leadership and nurse voice behaviors and error reporting. *J Nurs Scholarsh*. 2021;53(6):737-745.
19. Leroy H, Dierynck B, Anseel F, et al. Behavioral integrity for safety, priority of safety, psychological safety, and patient safety: a team-level study. *J Appl Psychol*. 2012;97(6):1273-1281.
20. Kolbe M, Eppich W, Rudolph J, et al. Managing psychological safety in debriefings: a dynamic balancing act. *BMJ Simul Technol Enhanc Learn*. 2020;6(3):164-171.
21. Torralba KD, Jose D, Byrne J. Psychological safety, the hidden curriculum, and ambiguity in medicine. *Clin Rheumatol*. 2020;39(3):667-671.
22. Braithwaite J, Clay-Williams R, Vecellio E, et al. The basis of clinical tribalism, hierarchy and stereotyping: a laboratory-controlled teamwork experiment. *BMJ Open*. 2016;6(7):e012467.

Erica Chou, MD is an assistant professor in pediatric hospital medicine and previously directed medical school interprofessional education at the Medical College of Wisconsin in Milwaukee. She is also a director for the medical school's early clinical learning course. Her interests include medical education curriculum design and implementation.

Thomas Grawey, DO is an assistant professor of emergency medicine at the Medical College of Wisconsin in Milwaukee. He serves the university and local community as an educator and as the medical director of emergency medical services at Gateway Technical College.

Jane B. Paige, PhD is a professor and the undergraduate program director in the School of Nursing at the Milwaukee School of Engineering in Wisconsin. Dr Paige is certified as a nurse educator and as a health care simulation educator. Her research focuses on simulation-based learning and interprofessional education.

Citation

AMA J Ethics. 2023;25(5):E338-343.

DOI

10.1001/amajethics.2023.338.

Conflict of Interest Disclosure

The author(s) had no conflicts of interest to disclose.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.