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IPE and Innovation

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FROM THE EDITOR

Interprofessional Practice and Education and Innovation

Michael J. Oldani, PhD, MS and Erica Chou, MD

Innovation as a concept and practice has circulated widely over the last several decades across entrepreneurial and business sectors and, most recently, academia. In the health care marketplace, innovation-related "incubators" and "hubs" have sprouted up as ways to create the next generation of clinical entrepreneurs and increase students' exposure to new technologies.[1] Universities and medical schools have responded by creating bench-to-bedside translational medicine institutes, innovation centers, and entrepreneurial think tanks. At the same time, over the last 20 years, the interprofessional practice and education (IPE) movement has gained enormous traction in health education as a core philosophy and set of competencies that are required for virtually all accredited allied and professional health and social care programs.[2] This shift has led to the development of medical education research centers[3] and institutes for IPE on myriad campuses.[4,5] The institutional growth of IPE, however, has not necessarily aligned with the growth of new technologies and health innovations in the health care marketplace. In fact, the IPE literature has called for innovation in training that bridges the gap between education and practice as learners begin to interact with patients and clinicians in the marketplace.[6,7]

This special issue, "IPE and Innovation," took shape by the authors stepping back and thinking about this intersection and finding effective and fruitful examples of how IPE affects learners and their professionalization and socialization during training. This issue is less about IPE assessment and measurement of outcomes and more about humanistic, qualitative, and sociocultural examples of novel IPE today. Our experiences working together to build IPE programming for hundreds of students in multiple professions has also contributed to our collaborative philosophy that sometimes less is more when it comes to innovative IPE. Innovations can be low tech and simple and must start with basic questions: How can we create IPE programming and co-curricular experiences that compel a pharmacy student to ask a medical student an important question about patient care? How can we make students comfortable with handling conflict between themselves and others on a care team (knowing that students tend to shy away from any kind of conflict during IPE programming)? How can we create safe (eg, trauma-informed) spaces for effective IPE collaborations? Can we create lower-stakes patient interaction experiences that are perhaps more ethnographic than clinical? How do we create student-driven and meaningful IPE experiences that learners are increasingly calling for?

This issue brings together a diverse set of examples that integrate IPE with medical improv, focused ethnography, art criticism, and global clinical rotations. These examples and others enhance our understanding of what IPE can be for students and clinicians moving forward as they work to ultimately improve patient outcomes. Several contributions are collaborations with students, who continue to innovate and advance IPE by addressing contemporary societal issues, such as health equity, diversity, and antiracism, as well as refugee health and social care.

All learners (and here we are thinking of all life-long learners in the health and social care professions) remain the key drivers of effective and innovative IPE. For example, the second author (E.C.) has created opportunities for students to critique and plan IPE events through a "teaching test kitchen" model. Providing learners with opportunities to review and have a stake in IPE programming has proven highly productive. We found through our collaborative IPE work together that students quickly initiated—and advocated to reboot—programming to reflect issues related to the COVID-19 pandemic and health equity. We have also brought student learners to the table by designating IPE student reps who connect back with their cohorts. For example, physician assistant students at the institution of the first author (M.O.) decided to initiate a nontraditional IPE experience by ethnographically observing how mental health court teams create a client-centered approach to caring for mentally ill offenders while keeping them out of jail.[8] These students are using the hours spent on observation to complete their requirements for an interprofessional education graduate certificate.

Of course, faculty and clinicians play a key role in supporting and facilitating IPE programming and infrastructure, and capturing their creativity and ideas is critically important. After 3 years of virtual IPE programming, we have learned some of the benefits of moving to Zoom (or other platforms). We have been able to secure more facilitator hours because of the ease of hopping on Zoom wherever one happens to be. We have also been able to secure important experts for our IPE programming to conduct online sessions with mini-lectures on trauma-informed care because of the ease of virtual platforms. After a busy day of trauma surgery, it's easier to log onto a laptop and speak to 300-plus students than to get in a car, fight traffic, and make it to a live event. We also have met the demands of faculty who needed to learn to use these virtual platforms and other technologies of collaboration (eg, Allo, Padlet, and Zoom Whiteboard) through faculty training. These somewhat simple innovations came out of necessity and proved highly effective and efficient and have staying power.

IPE also presents challenges—Zoom fatigue, constant logistical planning, meeting accreditation standards across multiple programs, bringing learners together for collaboration during clinical rotations, and so on. Nevertheless, what remains exciting about IPE is that, as a movement, it continues to advance and reinvent itself through innovation.[9]

We hope readers of this special issue will be motivated by the examples provided to incorporate, alter, and advance their own versions of IPE in both educational and clinical domains. The more we advocate for IPE and prepare students for collaborative work, the quicker we can close the gap and align the marketplace with the culture and practices of interprofessionalism that are part of training. Making these changes within the workplace is gathering generational momentum. IPE remains an unfinished project with an open-endedness that fuels creativity, innovation, and meaningful lifelong learning.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

How to Use Improv to Help Interprofessional Students Respond to Status and Hierarchy in Clinical Practice

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Abstract

Hierarchy and status and power differentials in current health care practice persist, despite recognition of their ethical issues and movement toward collaborative practice. As interprofessional education continues to emphasize shifting from individual siloed practice to team-based approaches to improving patient safety and outcomes, addressing status and power is key to mutual respect and trust cultivation. What has become known as *medical improv* applies techniques of theater improvisation to health professions education and practice. This article shares how an improv exercise called Status Cards prompts participants to recognize their responses to status and how this awareness can be applied to improve their interactions in real encounters with patients, colleagues, and others in health care contexts.

Status as an Actor[1]

Hierarchy and status and power differentials exist in health care professions and are based on the concept that the relative competence, expertise, and knowledge of groups of professionals determine the degree of power they can exert over patient service and care delivery.[2] Interprofessional collaborative practice (IPCP), defined by the World Health Organization as occurring "when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings,"[3] not only represents a team-based approach but also is intended to share power in delivery of patient-centered care.[4,5] This shift requires interprofessional education (IPE) that focuses on interprofessional communication, values and ethics, roles and responsibilities, and teams and teamwork, as delineated by the Interprofessional Education Collaborative (IPEC).[6] However, the pervasive hierarchy in health care culture remains a barrier to effective IPE and IPCP. For example, the professional identity of a physician is that of a leader and decision maker, whereas other professionals—including nurses, therapists, pharmacists, dietitians, and social workers—often see themselves as team members.[7] For health care professions students, professional identity formation is influenced by socialization during training.[7,8,9] For this

reason, interprofessional socialization wherein hierarchy, status, and power are deliberately addressed is essential in IPE.

One method we use to address status in IPE is medical improvisation. Medical improv is the application of improvisational theater principles and techniques to the health care setting.[10] Medical improv exercises rely on the experiential learning of participants, including during the debriefing on their experience, which allows them to unpack their emotions, reactions, and behaviors. When used in education, improv exercises are tied to learning objectives—such as empathic listening, naming emotions, and spontaneity—with the debriefing providing an opportunity for participants to reflect on and discuss applications of the exercises.[10] For the successful use of improv exercises in health care education, it is important for instructors to create a supportive learning environment wherein learners feel comfortable trying something new, as many will not have encountered this type of teaching strategy in their training.[11]

Status Cards as an Improv Game

To address status in health care, the authors each utilized in their respective communication and IPE courses and workshops an improv exercise called Status Cards,[12] which was taught to us by Belinda Fu, MD, an instructor for the Medical Improv Train-the-Trainer Workshop hosted by the Center for Bioethics and Medical Humanities of Northwestern University Feinberg School of Medicine.[13] Improv actors use this exercise to practice embodying "high-status" or "low-status" characters in a scene.[12] We used this exercise at our respective institutions with over 30 different groups of students from diverse professions—including genetic counseling, medicine, nursing, occupational therapy, pharmacy, emergency medicine, physical therapy, social work, and veterinary medicine—between 2015 and 2021.

During this exercise, 8 to 10 students from different health care professions were randomly given a playing card ranging in value from "2" to "King," where the "2" and "King" cards were equated with low status and high status, respectively, and the cards in between represented the range of statuses. The deck was prepopulated so that it contained two "2" and two "King" cards, which prevented any one person from being the lowest or highest status. Without looking at their own cards, students then displayed their cards on their foreheads for others to see.

Students were told to imagine they were at a party and to mingle with the other students. They were given instructions to interact with others based on the status of the other students' displayed cards. As the students were blinded to their own cards, they were told to embody what they believed their own status to be based on how others were treating them. Importantly, students were told to act and behave authentically and honestly and not as a caricature of a high-status or low-status person. After about 10 minutes, students were asked to line up in order of high to low status based on their perceived status. Once in line, they were allowed to see their own card. We then debriefed the students. To ensure a safe space for debriefing, students' responses were not identified or recorded. The information presented below is a highlight of the observations we made during the exercises and the discussions we held during the debriefings regarding students' takeaways from the activity.

Observations and Debriefing

Observations. For the most part, students engaged readily in the activity after some initial moments of awkwardness as they figured out how to start mingling. The beginning

of the exercise—when students did not know their own status—appeared to be the most challenging, as how students behaved depended on how others interacted with them. For this reason, the first conversations often started out with all parties acting impartially and equally. As the interaction progressed, students started losing their "veil of ignorance,"[14] the state of being unaware of their personal circumstances, as they figured out their status based on how others were speaking and behaving. The tone and content of the conversations between a high- and low-status pair changed when, for example, the person with the high-status card asked the person with the low-status card to get them a drink or to run an errand; some students with high-status cards even walked away in the middle of the conversation to go talk to another high-status person.

Although the instructions were for students to behave honestly and authentically, many students embodied caricatures of high and low status. For instance, some students represented their high status by standing in a "power stance" with their hands on their hips, talking loudly, or laughing boisterously. Students with low status cards stood with hunched posture, mumbled, or fidgeted their hands while they talked. A more subtle and interesting demonstration of status and the shifting of status was observed among students with middle-range status cards, whose posture became a little straighter, whose eye contact became more direct, and who took more of a lead in the conversation as they moved from an interaction with a person with a high-status card to a person with a low-status card.

Interestingly, by the end of the exercise, 2 separate groups of people consistently formed—one comprising students with low-status cards and the other students with high-status cards. Camaraderie developed among the students with low-status cards based on their shared experiences during the exercise. Sometimes a third group of students formed consisting of those with middle-range status cards, although more often these students reported trying to join one group or the other, even though they did not feel like they belonged in either group.

Debriefing. In general, students found it easy to guess their own status based on how they were being treated, especially those on the ends of the status spectrum. For example, as noted previously, students with high status cards would order those with low status cards to do things for them. That was usually sufficient to tip students off that they held low status cards. On the flip side, students with high status cards reported figuring out their status when people complimented them, asked for their advice, or, in a few instances, moved aside to allow them to pass when they walked by. When asked why they separated into 2 groups comprising those with low-status cards and high-status cards, students with high-status cards said they just naturally gravitated toward one another, whereas students with low-status cards said they actively sought each other out not only to get away from the high-status people but also to be with others who understood them.

Students had varied reactions to and opinions about the exercise. Some students shared that the exercise was challenging because they usually treat everyone the same regardless of status but that they felt the exercise compelled them to interact with people differently. A few students reported using their high status to do good, such as by seeking out people with lower-status cards to mentor them and guide them through the party. However, most students with high-status cards embodied that status in a negative way, even though those who did so later revealed feeling uncomfortable with their behaviors and how they treated others, especially those who reported identifying as

lower status in real life. On the other hand, students who identified as higher status in real life expressed frustration with taking on a lower-status position, as they felt they could not stand up for themselves. Most students with low-status cards reported feeling marginalized and unimportant, although, as noted above, they found solidarity and built more connections with one another during the exercise. Students who were given cards that were incongruent with their perceived usual status expressed a keen awareness of how their actions aligned with and represented the status they were portraying compared to students who felt able to act naturally. Interestingly—and importantly for IPE—students expressed that, during the exercise, they stopped thinking about their professions and the health care hierarchy, which allowed them to interact on an equal playing field where the only status that existed was the one artificially assigned to them. This situation is unlike most IPE, in which students are identified by and represent their specific profession.

Discussion

The goal of the Status Cards exercise is for students to acknowledge that status exists, that people recognize status, and that status can be fluid. A person's status can change depending on where they are, whom they are with, and the situation they are in. In health care, professionals cannot easily change their role on the team, but they can change how they portray their status. Status is a trait that can be deployed to support the team, patients, and families. Health care professionals need to have the ability to play high or low status roles based on the situation for the good of the team. For example, playing low status, kneeling on the ground to be eye level, and speaking softly may provide more comfort to a child and their terrified parent than standing in a higher-status position looking down on them. On the other hand, for a patient who is skeptical of the health care system and perhaps of a higher status, playing high status by interacting with clinicians who exhibit similarly high status—such as by making eye contact and speaking in a more forceful manner—may instill more confidence. If that same patient refuses to acknowledge a different team member in the room, then it could be helpful for the clinician to downplay their own status by stepping back or looking away and letting the team member take the lead in the conversation. Framing status as adaptable helps students to recognize that power can be shared and transferred among team members depending on the scenario.

An effective follow-up exercise is to repeat Status Cards with the variation in which students know their own card (and others do not) and are asked to practice portraying their status in a helpful way for the good of the team. During the debriefing, students identify helpful verbal and nonverbal demonstrations of status.

Conclusion

Hierarchy and status and power differentials of health professionals are a part of the hidden curriculum and essential to IPE and IPCP. Medical improv exercises, such as Status Cards, can be used to help health profession students, residents, and clinicians explore this topic. As status can be a sensitive topic and participants may feel vulnerable, having trained facilitators who are able to create a psychologically safe space run the activity and debriefing is important. Participants also need to engage in the activity with an open mind, especially as they are reflecting on their own portrayal of and response to status. In sum, the Status Cards activity is a different and innovative way to teach interprofessional learners to recognize and leverage status in the health care environment for the benefit of their patients and other team members.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Interprofessional Art Rounds

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Abstract

Art Rounds is an interprofessional workshop that uses art to develop nursing and medical students' observation skills and empathy. The workshop's joint emphasis on interprofessional education (IPE) and visual thinking strategies (VTS) is intended to improve patient outcomes, strengthen interprofessional collaboration, and maintain a climate of mutual respect and shared values. Interprofessional teams of 4 to 5 students practice faculty-guided VTS on artworks. Students then apply VTS and IPE competencies in observing, interviewing, and assessing evidence during 2 encounters with standardized patients (SPs). Students also write a chart note that includes differential diagnoses with supportive evidence for each of the 2 SPs. Art Rounds focuses on students' observation of details and interpretation of images and SPs' physical appearance; evaluation strategies include grading rubrics for the chart notes and a student-completed evaluation survey.

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Integrating Arts Into Interprofessional Education

The World Health Organization (WHO) and Institute of Medicine (IOM, now the National Academy of Medicine) explicitly recommend interprofessional health care teams as a strategy to enhance communication and care coordination and to improve health services and patient health outcomes.[1,2] The mission of the Interprofessional Education Collaborative (IPEC) is to ensure that new and current health care professionals are proficient in the competencies essential for interprofessional, collaborative practice.[3] Some health professions programs in dentistry, medicine, nursing, pharmacy, and public health mandate IPE in their curricula and incorporate IPEC core competencies in their training model.[3,4]

Clinical observation and empathetic communication are crucial and fundamental skills for all health care clinicians, regardless of discipline. Oversights in history taking, physical assessment, and communication can lead to delayed or inaccurate diagnoses, unnecessary medical testing, higher medical costs, misunderstanding of patient needs, or disparities and severe adverse outcomes for patients.[5] To improve skills in these

areas, visual art education has been used. Contemplation of artworks not only improves observational skills but also forces viewers to "hear and see" from another's perspective. Visual art education thus can be a tool to enhance mutual understanding among members of an interprofessional team as well as among clinicians and patients For example, Wikström found that visual arts dialogues helped nursing students develop sensitivity to others that is central to nursing situations.[6] Visual arts training has also been shown to improve observation skills and to cultivate empathy.[7,8]

This article describes an interprofessional education (IPE) workshop, Art Rounds, which is the first component of a longitudinal IPE curriculum for learners in preclinical health care. The curriculum takes a learner-centered approach, whereby instructors provide a social environment for interactive and adaptive learning,[9] facilitating and guiding students through a learning process that centers on Art Round activities that simulate real-world work done in the health care industry. This learning involves team projects with hands-on application activities in the domains of observation, communication, history taking, and patient care. The overarching goal of this 1-year curriculum is to stimulate dialogue and discussion, develop tolerance for ambiguity, and improve physical observation skills and history taking among health care learners from different disciplines.

Course Design

First-year medical and first-semester undergraduate nursing students are assigned to multidisciplinary student teams for the workshop before it even begins. As a preworkshop assignment, all students receive a link to view a video titled "Learning Together to Practice Collaboratively: Key Principles for Interprofessional Education" to introduce the concept of interprofessional education."[10] Additional preparation work includes instructing students to read the IPEC IPE core competencies, a link to which was provided.[3] Students then participate in a 3-part IPE activity focused on observation, communication, and assessment.

Observation. In part 1, the IPE student teams are led through observation exercises using visual artworks in which they learn about visual thinking strategies (VTS)[11,12] in a 2-hour session. Facilitators are guided by the questions: What do you see? What do you see that makes you think that? What more do you see? The goal is to teach the students to observe, gather assessment information or supporting evidence, and then provide a conclusion for their observation. The art professor first facilitates students' application of the VTS strategy to "diagnose" a set of artworks in their interprofessional teams. Then medical clinical faculty facilitates applying VTS to another set of artworks. For each artwork, students are given 2 to 3 minutes to observe and discuss the artwork with their teammates, and later they report back to the group. The figure below is an example of an artwork used in the workshop.

Figure. *Wind From the Sea*, 1947, by Andrew Wyeth

Courtesy of the National Gallery of Art, Washington, DC.

Media

Tempera on hardboard, 47 cm × 70 cm.

Communication. To improve their communication as well as observation skills, in part 2, students participate in an out-of-class activity based on Rob Walker's book, *The Art of Noticing: 131 Ways to Spark Creativity, Find Inspiration, and Discover Joy in the Everyday*.[12] The book offers exercises that assist the reader in thinking more clearly, listening better, and observing without bias. Students are asked to choose 1 of 3 exercises on the "art of noticing" (see Table 1), complete the exercise using VTS, and write up their exercise results explaining how VTS were applied. Students then share their experience of completing the exercise with other members of their student team as preparation for part 3 of Art Rounds (simulation session).

Table 1. Art of Noticing Activities

Activity	Instructions/directions
Test yourself	• Look at a part of a room in your home. Look away and list everything you saw. • When done, look back at that part of the room and create a different list of what you missed.
Listen selflessly	• Practice genuinely listening to a person without interrupting, judging, or inserting your opinion. • Write a reflection about how it went. Were you able to do it? Did it take more than once to be able to do it? Did you have to elicit a strategy to maintain the listening? Other thoughts?
Weirdest thing in the room	• When you are in someone's home, office, or business, determine the most inexplicable and unlikely object that you can see. Then ask, "What is the story with that?" Write a reflection about how it felt to hear the story.

Assessment. In a 4-hour simulation session, IPE student teams apply VTS to solve simulated patient cases. Standardized patients (SPs) trained to present a clinical problem to student teams demonstrate certain nonverbal behaviors, such as pacing,

hand wringing, and not making eye contact (see Table 2). Before starting the history taking process, each student team has 5 minutes to discuss how to interview the SP based on 3 minutes' observation in the patient room. The student teams then have 12 to 15 minutes to establish rapport with the patient, obtain a detailed history relevant to the chief complaint, and obtain a pertinent review of systems. After the interview, the student teams receive 5 minutes of feedback from the SP on how the team made them feel during the interview and on team dynamics.

Table 2. Standardized Patient Encounter

Scenario	SP behaviors	Points to be elicited during interview by student team[a]
Mr MS is a 44-year-old male patient who presents to the outpatient office to be evaluated for 4 days of urethral discharge. He is a single sales representative that lives here but travels frequently for work. Had unprotected sex 8 days ago.	• Lack of eye contact • Looking off and shaking head back and forth • Pacing the floor • Wringing hands	• Burns in private area (chief complaint) • Casual sex 8 days ago • Prior to this encounter, only 1 partner in the past 3 years; relationship ended 2 months ago. • SP believes Mr MS might have a sexually transmitted infection since he had similar symptoms when treated for gonorrhea 5 years ago. • Urethral discharge and burning for 4 days
Ms KT is a 49-year-old female who is coming into her PCP with a chief complaint of 3 months of general aches all over her body (especially the back), fatigue, and just not feeling well. This is her fourth visit in 3 months. She is in a stressful relationship with her husband. He is physically abusive at times. She has a son who lives with them. Her husband often goes out drinking with his friends after work and, at times, comes home intoxicated. Her husband never harms their son, maybe because she always tried to send their son away when he's in bad mood.	• Lack of eye contact • Looks down • Sighs • Flat facial expression • Bruise on face and elbow • Rubs arm	• General aches all over body, fatigue (chief complaint) • Pain medication (ibuprofen, acetaminophen, tramadol, hydrocodone, naproxen) not working • Pain intensity around 5-6 on 10-point scale most days. • Energy level low—tired all the time. • No new stressors "same old stressors" • If students ask about bruises on face or arm, SP says unwillingly and uncomfortably, "I'm kind of clumsy and bumped myself all the time."

Abbreviations: PCP, primary care physician; SP, standardized patient.
[a] If student is empathetic, the patient continues to open up. If the student is unempathetic, the patient will give short, ambiguous answers.

Student teams also write a medical care note that includes at least 3 differential diagnoses for the SP listed in order of likelihood (most to least). For each diagnosis, the student team provides an explanation and supporting evidence based on their observation of and interview with the SP. Faculty grade the note on a simple 1 to 4 scale. Each team is expected to identify the priority differential diagnoses for each SP (intimate partner violence and sexually transmitted infection) to get the 2 priority diagnosis points. Student teams can gain 2 additional points by listing the supporting data they obtained that justify the differential diagnoses.

Workshop Evaluation

During the academic year 2020-2021, the workshop evaluation was based on a total of 192 preclinical students from medicine, nursing, and pharmacy who worked in teams of 4 to 5 students.

Assessment exercise. The benchmark is that 70% of the teams will score at least 75% or that 3 of 4 criteria will be met. A total of 16 student teams (76%) scored at least 3 out of 4, thus meeting the benchmark.

Self-report of IPE competency objectives. On a workshop evaluation questionnaire, students rated their level of agreement with meeting workshop and IPE competency objectives using a 5-point Likert scale, with 1 being strongly disagree and 5 being strongly agree. Table 3 displays median scores for the 9 questions.

Table 3. Postsession Evaluation

Postsession evaluation questions	Median score
1. I am able to better accept ambiguity as a result of this workshop.	4
2. I will be better at visual observation as a result of this workshop.	4
3. I am able to inform care decisions by integrating the knowledge and experience of other professions appropriate to the clinical situation.	4
4. I am able to listen actively and encourage ideas and opinions of other team members.	4.5
5. I am able to engage other health professionals in shared problem-solving appropriate to the specific care situation.	4.5
6. I will reflect on individual and team performance for individual, as well as team, performance improvement.	4
7. The presentation on visual thinking strategies is relevant to health assessment.	4
8. The artwork presented helped in the understanding of the visual thinking strategy process.	4
9. I will be able to apply visual thinking strategy to my patient care.	4

On the evaluation, the students were also given the opportunity to comment on the artwork and presentation, any experience they have with art, and the workshop in general. The majority of comments were positive, and many students stated that their observational skills had improved. In addition, it appears that students appreciated the artworks and VTS exercise. ("The artwork allowed us to be better observers," "I liked that the pieces were medically relevant. The artwork was very nice and had many hidden details that aide in health assessment.") However, some had difficulty relating it to patient care. ("I don't believe viewing art was at all helpful in being more observational with patients.") They also highly valued the standardized patient experience. ("Simply give more patient scenarios like day 2 simulation patients.") The IPE aspect of the activity is also captured in student comments, such as "It was nice and informative to work with students of other disciplines" and "This was a very fun activity and I enjoyed collaborating with the medical students."

Conclusion

Health professions educational curricula set forth the expectations of empathetic communication, comprehensive observation, ethical collaboration, and clinical skills development with the goal of ensuring competency in history taking in a patient encounter. We believe that when students from different fields are provided with opportunities to learn together and from each other, they will be better prepared to collaborate in the future and to address highly complex health care issues found in workplaces. Students participating in a multisession Art Rounds were able to develop a foundational level of these skills. Art Rounds provided multiple opportunities for the same student teams to work together, engage in dialogue, and learn about patient care. By combining artwork and standardized patient encounters, students learn how to observe details and interpret images and physical appearance based on available evidence. We anticipate that additional IPE activities included in the longitudinal curriculum will further develop and solidify these skills. Our future plan is to build on Art Rounds by including additional medicine-related artworks and using a more lifelike service-learning IPE model.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Undoing Institutional and Racial Trauma Through Interprofessional, Trauma-Informed Education

Carmen Black, MD, Andrea Shamaskin-Garroway, PhD, E. Mimi Arquilla, DO, Elizabeth Roessler, MMSC, PA-C, and Kirsten M. Wilkins, MD

Abstract

Trauma-informed care is a transdisciplinary framework that existed well before 2020, but it is now more imperative to teach it and incorporate it into medical education. This paper describes a novel interprofessional curriculum and its focus on trauma-informed care—notably, including institutional and racial trauma—that was implemented by Yale University for medical, physician associate, and advanced practice registered nursing students.

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Need for Trauma-Informed Care

Trauma is ubiquitous, with nearly 90% of people living in the United States experiencing a traumatic event in their lifetime.[1] A traumatic event is anything experienced as harmful or life-threatening and has lasting adverse effects on functioning and well-being.[2] In 1998, Felitti[3] published a landmark study on how adverse childhood experiences affect adult health. Recently, the nation has experienced unprecedented trauma from 2 simultaneous pandemics: COVID-19 and what Manning describes as the "acute decompensation of ... chronic racism."[4] Mental health symptoms and substance use rates are soaring[5] as we witness hardship in our own lives and in patients, coworkers, and health care systems.

Trauma-informed care (TIC) is a framework that existed before these concurrent pandemics but is now more important than ever to health professional education. TIC "realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization."[2] In this paper, we describe a novel interprofessional curriculum and its focus on TIC—notably, including institutional and racial trauma—that was implemented

by the Yale Schools of Medicine and Nursing for medical, physician associate (PA), and advanced practice registered nursing (APRN) students. **The Yale Interprofessional**

Longitudinal Clinical Experience

TIC is transdisciplinary, with programs and resources implemented in school settings, mental health care, and community organizations. Literature supports the value of trauma-informed health care,[6,7,8] with various curricula incorporated in residency[9] and other educational settings,[10] and the American Medical Association House of Delegates recently adopted a policy recognizing TIC.[11] Within medicine, interprofessional collaboration is a critical component of providing TIC[12] that supports continuity of care and promotes key principles of safety, trustworthiness, and transparency for patients.[2]

Many trainings on TIC focus on patient-centered communication and care and the health effects of trauma, with only 53% of 17 curricula identified in one scoping review addressing interprofessional collaboration.[10] Nonetheless, interprofessional training helps learners develop their professional identity while gaining understanding of others' roles in the health care team.[13] Furthermore, managing complex patient needs requires interprofessional collaboration to provide biopsychosocial, team-based care.[14] With the growing awareness of trauma's prevalence and impact, a coordinated approach to team care is essential to navigate our increasingly complex health care system. In 2020, interdisciplinary Yale educators identified a clear need for more interprofessional training to help learners develop the collaborative skills needed to provide comprehensive, trauma-informed health care.

The Interprofessional Longitudinal Clinical Experience (ILCE) at Yale, a required component of the curriculum for medical, PA, and APRN students, prepares early health professional students to function effectively in the team-based clinical environment. The 7-month course brings students together for 2 to 3 hours a week in small-group clinical experiences, simulation sessions, and large-group didactic experiences. Student feedback is sought after each didactic session and at the end of the course. The content of the ILCE curriculum is organized into a large, comprehensive handbook for course facilitators; an overview of the syllabus of the ILCE curriculum can be found in the Table. Based on student feedback and in recognition of the importance of TIC for interprofessional learners, the ILCE faculty elected to add a large-group didactic session on this topic in the academic year 2020-2021.

Table. Yale Interprofessional Longitudinal Clinical Experience Curriculum Summary

Method	Fall semester	Spring semester
Clinical experiences	6 sessions	7 sessions
Team simulations	1 session	1 session
Didactic topics	• Race in the clinical encounter • Oral presentation skills • Taking a substance use history	• Trauma-informed care • Listening to heart, lung, and bowel sounds • Diagnostic reasoning

ILCE Trauma-Informed Care Curriculum

ILCE course leaders sought out internal and external faculty with expertise in TIC to guide curriculum development and deliver the content to students. We aimed not only to teach students basic concepts but also to provide them with sample language and

behavior that would allow them to practice TIC with patients in all their clinical experiences. Three interprofessional faculty members originally delivered the 2-hour session via presession readings, a lecture, and the interactive use of images and videos. As the session took place via Zoom, students were encouraged to participate by using the chat function to identify TIC practices in the shared images and videos.

We framed the overall session as moving from "What is wrong with this person?" to "What has happened to this person?"[15] The lecture began by providing the Substance Abuse and Mental Health Services Administration's definition of trauma,[2] basic epidemiological statistics about the prevalence of trauma, and an introduction to childhood trauma by reviewing the 1998 Felitti study on adverse childhood events.[3] Learners were then taught how to identify signs of trauma that might occur in various routine physical examinations,[16] such as persons avoiding certain procedures or becoming visibly anxious during a portion of a physical exam. Learners were then instructed to assume that the patient had a trauma history and ask about any impacts of past traumas through open-ended questions.

In the last part of the introductory ILCE session on TIC, learners watched a video of a shoulder exam without any audio so that participants were drawn uniquely to the large amounts of touching that a health care practitioner often performs without the patient being able to anticipate what is coming next or why. Learners appropriately identified how jarring certain aspects of physical exams can be to survivors of sexual or physical abuse. Learners were then taken through a series of trauma-sensitive practices to perform before, during, and after the physical exam—such as knocking, draping, using verbal cues to let patients know where they must physically touch them during the exam and why, intentionally checking in with patients throughout the exam, and using simple clinical language that avoids potentially problematic language, such as using "butt" to refer to a patient's buttocks or saying "Don't let me move you" during strength testing in the musculoskeletal exam.

Student feedback from the 2020-2021 academic year curriculum was gathered as free-text responses to questions asking learners to evaluate what they felt (1) worked well in the session, (2) could be improved upon for the next year, and (3) would be incorporated in their independent learning and clinical practice. Of the 70 respondents, 36% were PA students (n = 25), 20% were MD students (n = 14), and 44% were APRN students (n = 31). Learners noted that the lecture provided important insight into and a platform for a topic that has otherwise not been explicitly discussed in their education. Learners also found the presentation engaging and felt that the interactive aspects, although limited by Zoom, still allowed for open dialogue with presenters. Feedback indicated that learners wanted more case examples demonstrating the functional application of these tools, especially in relation to their preclinical exposures. Furthermore, given the national outcry against the murders of unarmed Black Americans and racialized health inequity manifested by the COVID-19 pandemic, learners voiced a desire to know more about systemic and racial trauma, which was absent from the original ILCE introductory lecture on TIC. Thus, revisions were made for the following 2021-2022 academic year, and expertise was acquired to teach about institutional and racial trauma.

ILCE Explores Institutional and Racial Trauma

Faculty leading the Social Justice and Health Equity Curriculum for the Yale Department of Psychiatry were sought out to expand the ILCE's Trauma-Informed Care Curriculum and teach learners how to avoid and dismantle institutional and racial trauma in real-

time clinical practice. The introductory session began with an introduction to adverse childhood experiences, which intentionally noted the limited generalizability of the original studies performed in a disproportionately White American population. Students were then taught how racism and societal prejudice increase the likelihood of racially minoritized children enduring childhood trauma and discrimination, which in turn lead to increased lifelong physical and mental illness in adulthood and, ultimately, to premature death.[17] Given the unfortunate prevalence of police violence against unarmed Black Americans, studies were also presented that quantified the mental health harms that police trauma inflicts upon racially minoritized populations.[18,19]

Learners were also presented with the viewpoint that medical racism and racialized health care disparities are forms of health care iatrogenesis, whereby avoidable bias embedded within health care clinicians' behaviors and institutions itself causes harm to minoritized patients that would not have otherwise occurred.[20] Furthermore, learners were taught (1) that metal detectors and armed security are disproportionately prevalent at health care institutions serving urban, racially minoritized populations, despite there being no evidence that hospital policing truly reduces hospital violence and (2) that hospital policing may be a form of institutional trauma by perpetuating police and security brutality against racially minoritized persons and anyone experiencing a behavioral emergency.[21,22] Lastly, in response to the prior year's feedback for more case-based learning, a fictional case was presented about complex trauma that showed the intersectionality of childhood, sexual, police, racial, and institutional trauma.

Student feedback from the 2021-2022 TIC session was solicited in the form of free-text prompts. Prompts included the following questions: (1) What worked well in this session, (2) What would you suggest for improvement, and (3) How will you continue to learn about or practice trauma-informed care? A total of 30 respondents (15 PA students and 15 MD students) wrote a total of 79 free-text evaluation responses. Due to a conflict in curriculum scheduling, APRN students were unfortunately unable to attend the session.

Student feedback on what worked well during this session was phenomenally positive. Of the 28 students who responded to this question (some made multiple observations), 18 praised panelists for diversity of identity, expertise, and presentation style; 7 expressed that they felt they had acquired practical skills in conducting a trauma-informed medical encounter and physical exam; and 6 expressed that the videos and case examples were helpful. The following are specific comments included in the feedback.

- "This panel was amazing.... As a survivor of sexual violence myself, I appreciate that Yale School of Medicine recognizes the importance of teaching this topic to every student."
- "I appreciated this session very much as it addressed a lot of topics that are not normally discussed in typical medical courses."
- "The case study at the end really illustrated an example of how far our society still has to go with respect to creating a society that does not traumatize vulnerable populations over and over and over again."
- "The portion about the importance of communication with patients, especially when performing a physical exam, were of great benefit and likely something that providers often forget over time."

- "There was a good variety of exercises that elicited student participation from feedback on videos and provider behavior to storytelling and instructional language introduction."
- "The practical and concrete tips, ie, about appropriate touch and language substitutions, helped me think about some things that could be triggering that I would not have otherwise thought about. I also liked the inclusion of video modalities."

The 26 comments regarding ways to improve the session included specific requests for further content about the traumas faced by the lesbian, gay, bisexual, transgender, and queer community; having more breakout rooms and interactive sessions; and including real case scenarios in addition to the fictional one. Of the 25 comments regarding how students would incorporate newly acquired skills into their practice (some comments had multiple parts coded as separate topics), 12 acknowledged a need to stay engaged with health equity literature and training, 9 expressed a desire to seek further mentorship from diverse colleagues and faculty, 7 expressed being more open to exploring personal biases and inequities within their clinical environment, and 7 identified a need for language self-monitoring and asking patients more explicitly about their comfort during physical examinations.

Conclusion

In conclusion, it is important to note that not all learners embraced education about institutional and racial trauma, as one student expressed concerns about presenters putting "their own spin or bias onto students." As a unified body of interdisciplinary health care educators, we wholeheartedly believe that such pushback is a sign of successfully challenging the status quo of common biases in health care.[23] These challenges will not be without some level of controversy, and we believe that comments like the one above demonstrate how much more work remains to be done in medical education to dismantle patient trauma perpetuated by health care clinicians and institutions. We are excited to share Yale's interprofessional TIC curriculum with a national audience, and we hope to continue improving the education of our learners for years to come.

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Editor's Note

The collection and reporting of student feedback for the Yale ILCE curriculum was deemed exempt from annual review by the Yale University Institutional Review Board.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Three-Stage Assessment as Reverse Innovation in Interprofessional Student Clinical Rotations

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Abstract

Social determinants of health are increasingly recognized as important factors in individual and public health outcomes and are therefore of interest to both health care systems and medical schools. However, teaching holistic assessment strategies during clinical education remains a challenge. This article reports on the experiences of American physician assistant students who completed an elective clinical rotation in South Africa. In particular, the students' training and practice with 3-stage assessment is highlighted as an example of a reverse innovation practice that could be incorporated in interprofessional health care education models in the United States.

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International Interprofessional Clinical Rotations

Students in US health professions programs have a strong interest in international clinical rotations. One survey of a hospital's general surgery residents reported that 98% of respondents expressed an interest in international rotations.[1] Another survey of 12 physician assistant (PA) programs noted that 60% of first-year students were interested in elective international rotations.[2] A number of PA programs are offering global health pathways or tracks, typically including an elective international rotation as part of the experience,[3,4] and several articles discuss how to incorporate dedicated global health tracks in PA education, including best practices for student selection and preparation.[4,5]

It is difficult to assess the benefits of international rotations, however. In a systematic literature review, Jeffrey et al found that medical students with international health experience reported greater confidence in their history-taking and physical exam skills and that participation increased students' knowledge of tropical diseases and immigrant health, improved their cross-cultural awareness, and increased their likelihood of selecting high-need primary care specialties as professionals.[6] Other authors have focused on ethical implications of short-term global health experiences on both host countries and medical students, including the challenges of rapidly establishing collaborations across cultures and medical systems for the benefit of patients.[3] One

underappreciated benefit of international rotations, however, may be the exposure of students and faculty to examples of heath care *reverse innovation*. One such example of reverse innovation concerns a clinical model for assessing social determinants of health (SDH): the 3-stage assessment.

Reverse Innovation

Reverse innovation describes the phenomenon of new ideas flowing from developing or emerging countries—commonly referred to as low- and middle-income countries (LMICs)—to developed, high-income countries (HICs).[7] Typically, these ideas address problems common to both LMICs and HICs, but the approaches generally are less resource intensive in low-income contexts and therefore also attractive to cost-conscious, high-income countries. Although this phenomenon has been common for some time in business circles, the concept has become increasingly attractive in health care settings.[8] In an analysis of 65 articles on international cooperation related to health topics, Syed et al[9] identified examples of reverse innovation across the 6 World Health Organization (WHO) building blocks of health systems: "service delivery"; "health workforce"; "health information"; "medical products, vaccines, and technologies"; "health financing"; and "leadership and governance."[10] Specific examples of reverse innovation include community-based AIDS treatment programs to increase compliance that were developed in Zambia, the use of community health workers to integrate rural communities into formal health systems in Pakistan, and low-tech best practices for premature infants in Colombia.[9,11]

Using the WHO health systems framework, Syed et al compiled a list of 10 areas in health care for which HICs may have the most to learn from LMICs.[9] Most pertinent to the experience of PA students on rotation in South Africa are the areas of rural health service delivery and creative problem solving. An example of a potential reverse innovation practice to which PA students on rotation in rural South Africa are exposed is the 3-stage assessment as a model of patient care.

3-Stage Assessment

PA clinical-year students from Concordia University Wisconsin, with which the first author (M.T.) is affiliated, first went to South Africa in 2016. The rotation is set at a district hospital in Middelburg, Mpumalanga, and largely serves a rural area as part of the government health system. As a teaching hospital affiliated with the University of Pretoria School of Medicine, it is well positioned to train PA students alongside South African medical and clinical associate students. This international elective rotation always occurs in the second half of the clinical year, allowing students to acquire necessary foundational skills prior to traveling. Beginning in 2019, the district hospital preceptors required all 4 PA students to complete a strengths, weaknesses, opportunities, and threats (SWOT) analysis upon completing the clinical rotation. The SWOT analysis was presented to students' clinical preceptors at the district hospital and then shared with the PA program in the United States. This analysis could not be repeated in 2020, as the rotation experience was cut short by the impact of the COVID pandemic, and students were not able to return in 2021 or 2022.

In their SWOT, all 4 students in 2019 independently mentioned the 3-stage assessment as the greatest strength of their month-long clinical experience. The 3-stage assessment is key to the national endeavor to deliver holistic, patient-centered care within the South African health care system. The 3 distinct sections of the assessment pertain to the clinical, personal, and contextual characteristics of a patient, thereby enabling the

clinician to create a comprehensive summary.[12] The purpose of the summary is to facilitate collaborative, interprofessional, multisectoral management of patients, in particular at times of referral and discharge.[12] During the rotation, the entire 3-stage assessment was clinician led, including the personal and contextual sections, and was a regular focus during the morning clinical meetings when care of the patients in the wards was discussed. It is this deliberate clinician focus on patients' perspectives on their illness and treatment—as well as patients' living arrangements, livelihood, and dependents—that was remarkable to the visiting PA students.

In the facility where they train, PA students are instructed on 3-stage assessment during the first day of the rotation and then expected to use it with patients during their month-long elective. Review of the 4 individual SWOT analyses at the end of the 2019 rotation identified several common themes: all 4 students noted the prominent role of holistic assessment by South African physicians as a major strength of their rotation experience, with 3 of the students mentioning "3-stage assessment" by name, and the fourth student describing all 3 components of the assessment. All 4 students noted that they had not been taught or applied an equivalent social assessment model during their prior 6 clinical rotations in the United States. And all 4 students mentioned the utility of bringing social aspects into clinical discussions via simple conversations that addressed barriers to follow-up appointments or child care considerations. Finally, all 4 students had positive overall impressions of 3-stage assessment, describing the process as "a large benefit" or "incredibly rewarding" or stating that it "will help make me a better provider when I return home to the United States." Students' reflections on 3-stage assessment from their SWOTs are displayed in the Table.

Table. Students' Reflections on 3-Stage Assessment

Student	Reflections
1.	"The biggest strength that I noticed from day one of working in Middelburg Hospital is the approach to each patient as a whole. The 3 different assessments—clinical, individual, and contextual—struck me as an effective way of treating each patient and approaching their situation. It was quite neat to me that the providers here take the time to discover how the diagnosis affects the person's daily life and how they view what has happened to them. At home, this discussion would be done by social work and the provider would never know if the patient struggles to make it to appointments or now has no one to take care of their child at home unless they were to ask. Taking the time to assess the patient from all 3 angles I feel is a large benefit to the care of patients at Middelburg Hospital."
2.	"I extremely appreciated Middelburg Hospital's approach to the patient as a whole instead of just addressing clinical issues. The 3-stage assessment was something that I had not been taught in the US and was not familiar with prior to coming to Middelburg Hospital. Addressing social, economic, and cultural aspects helped me gain a better appreciation into what the patient was experiencing and understanding what barriers they had to receiving care. Often there were simple solutions to solving the barriers that patients had regarding receiving treatment, and it was incredibly rewarding having these discussions with patients."
3.	"I have learned to take into consideration how patients' lives are influenced by medical decisions and vice versa. I have learned to make a 3-stage assessment and take into account how patients will be affected at home. I have learned to take into consideration the needs of not only the patient, but the needs of the family, the community, and … everyone involved in the care plan."
4.	"A strength I observed was the focus on a greater whole health for the patients. In our morning meetings, there was a continued emphasis on the individual and contextual assessment and plan of presented patients. This is a part of medicine I realized I need to give more focus to in my interaction with patients. Medicine is much greater than just focusing on the medical problem presented. There are countless other factors that impact the patient's health and their road to recovery. If those aspects of the person's life are not addressed, these influencing factors can delay recovery and contribute to further ailment in the patient's life. A simple conversation can address these factors and help mitigate them. Their individual and contextual assessments cannot always be resolved, but having a conversation with the patient can help make them aware and provide suggestions to help mitigate the impact. I truly believe this learning opportunity will help make me a better provider when I return home to the United States."

However, it was the deliberate implementation of this model with every patient, both initially and on an ongoing basis, that made such an impression on students and was

therefore viewed by them as unique in their health care experience. The 4 students' reflections suggest that IPE classes and events would benefit from allowing PA students to fully participate in the personal and contextual aspects of patient care instead of delegating these aspects to nursing or social work colleagues.

Conclusion

Over the past 20 years, US medical schools and PA programs have become aware of the need to approach patients more holistically, often addressing this need through curricular redesign that incorporates a greater emphasis on SDOH.[13] In clinical practice, US clinicians are often unable to complete SDOH assessments with their patients, however. Schickedanz et al found that though 84% of surveyed health care professionals supported screening for SDOH, only 41% reported confidence in their ability to conduct such screenings, and only 23% reported routinely screening for SDOH due to "lack of training," "lack of time," and "lack of resources to address any social needs identified," with these barriers felt most acutely by physician respondents.[14] Therefore, identification of promising and potentially cost-saving holistic health models used in international health systems, such as 3-stage assessment, is important for removing these barriers. If future student reflections on using the 3-stage assessment in South Africa are as strongly positive as those of the 2019 student cohort, it would suggest that US health care educators might benefit from learning about this model and seeing if it could be adapted to clinical education and practice. If so, 3-stage assessment would serve as an example of reverse innovation in health care.

Syed et al emphasize that a critical step in reverse innovation is a strong commitment to valuing innovative ideas or technologies,[9] and one way to promote this commitment is through research. The 3-stage assessment is a fundamental component of the South African medical system, and its impact on care and care coordination in South Africa is being studied.[12,15] Concordia University Wisconsin's 4 years' experience with PA clinical year rotations in South Africa suggests additional lines of research. Study on this topic could include both ongoing review of SWOT analyses of future PA students traveling to South Africa, especially their attitudes toward 3-stage assessment, as well as assessment of PA graduates' ability to implement in US practice settings the social aspects of care they were exposed to in South Africa, with a particular focus on the challenges they experience in implementation.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Psychological Safety as an Educational Value in Interprofessional Health Education

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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 Edmondson[11] 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* show[17] 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.

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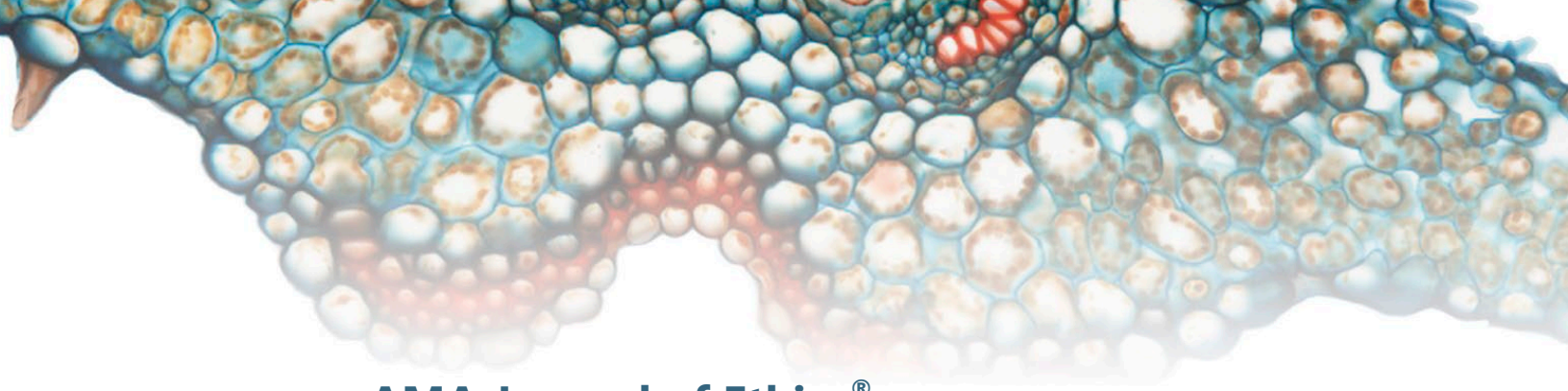

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ORIGINAL RESEARCH: PEER-REVIEWED ARTICLE

How Do Classroom-Based Interprofessional Education Interactions Influence Medical Students' Clerkship Experiences?

Mary Claire Potter, Kelly Horton, MAT, and Erica Chou, MD

Abstract

Background: Classroom-based interprofessional education (IPE) has been shown to improve medical students' understanding of IPE competencies, but less is known about how those skills apply in clinical environments. This study assesses an IPE session's influence on medical students' interactions with cross-disciplinary colleagues during their pediatrics clerkship.

Methods: Medical, nursing, and pharmacy students in pediatrics clinical rotations participated in an hour-long, virtual classroom-based small-group IPE activity in which they answered questions about a hypothetical case of a febrile neonate's course of hospitalization. Each student received answers to these questions given to students from other professions, such that answering the questions from the perspective of their own profession required the students to share and gather information from other students in their group. After the session, students completed retrospective pre- and postsession self-assessments of their achievement of IPE session objectives, which were analyzed using the Wilcoxon signed-rank test. They also participated in focused interviews that were analyzed qualitatively to explore the session's influence on their clinical experiences.

Results: Medical students' retrospective pre- and postsession self-assessment ratings differed significantly, indicating improvement in students' IPE competencies. However, interviews revealed that less than one-third of medical students applied IPE skills during their clerkship due to lack of autonomy and confidence.

Conclusions: The IPE session's influence on medical students' interprofessional collaboration was minimal and suggests that classroom-based IPE has limited impact on students' interprofessional collaboration in the clinical learning environment. This finding suggests the need for intentional, clinically integrated IPE activities.

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Background

One purpose of interprofessional education (IPE) is to prepare students to participate in interprofessional collaborative practice, which requires them to meet the 4 core IPE competencies, as set forth by the Interprofessional Education Collaborative (IPEC): (1) contributing to an environment of shared values and ethics for interprofessional practice; (2) understanding the roles and responsibilities of members of the health care team; (3) supporting a team approach to care via interprofessional communication; and (4) collaborating effectively within the health care team.[1] IPE produces measurable improvements in students' abilities to meet the IPEC competencies, as it has been shown to increase students' understanding of the importance of communication and teamwork to patient care,[2,3] their understanding of their roles and responsibilities,[2,3,4] and their ability to function within the health care team.[5] Additionally, IPE promotes positive impressions of and interactions among professions.[6]

IPE can take place in various settings, including in-person or virtual classrooms, simulation centers, clinics or hospitals, and community sites.[7,8] In medical school, formal IPE is often included in preclinical classroom instruction and activities with students from other health professions.[9] Although previous studies have highlighted the value of IPE in clinical settings,[10,11,12] many medical schools do not formally include IPE in clerkships.[13,14,15] Once students are on their clinical rotations, the belief is that they will continue to learn collaborative practice by being on health care teams and coexisting with other health care students and professionals.[16] Yet students from different professions training at the same clinical site often work and learn in their respective professional silos,[17] making it less likely that they will have opportunities to learn about, from, and with one another.[18] Previous studies have shown that classroom-based IPE is effective in improving students' self-assessed understanding of IPE principles and attitudes toward interprofessional collaboration.[9,19,20,21] However, translating theoretical IPE classroom-based knowledge into practical clinical skills remains a challenge, and measuring the real-world impact of classroom-based IPE sessions is a significant knowledge gap.[9,19,20,21]

To increase interprofessional socialization, we developed and implemented an IPE session for medical, nursing, and pharmacy students who were doing their pediatrics clinical rotations at the same children's hospital at the same time and used self-assessments and interviews to evaluate the session. The aim of this mixed-methods study was to assess the impact of a classroom-based IPE session on medical students' self-reported confidence with respect to the 4 IPEC competencies, as well as to assess their application of those competencies in working with different health care professionals during their pediatrics clerkship.

Methods

Participants. Thirty third-year medical students who participated in 1 of 3 identical IPE sessions from June 2021 to August 2021 at the beginning of their inpatient pediatrics clerkship (at the same clinical site) were included in the study, with 23 partaking in follow-up interviews. While session feedback and evaluation information were collected from nursing and pharmacy students for educational quality purposes, those data were not included in this study, as institutional review board (IRB) approval was specifically

for data from the medical students. Because the nursing and pharmacy students in each of the 3 identical sessions were usually from several different institutions, obtaining IRB approval to collect and analyze data from these participants was not feasible. As a result, this study is a focused analysis of the session's impact on third-year medical students.

Procedure. We created an hour-long, virtual classroom-based small-group IPE activity, which required students to collaborate in order to successfully work through a hypothetical clinical case of a febrile neonate's hospital course. The IPE activity was conducted 3 times with different small groups, consisting of 4 to 5 students, who were a mixture of medical, nursing, and pharmacy students, as well as a faculty facilitator from one of those professions whose role was to observe the students' interactions. Students were each given a version of the case from the perspective of their respective professions, which exemplified the roles and responsibilities of their profession in caring for this patient. Each version of the case study contained different questions that students were required to answer. The answers to these questions were included in the information given to the students from other professions, such that, in order to answer these questions, students needed to share and gather information from the other students in their group. This arrangement effectively required students to communicate and collaborate interprofessionally. Once the students had completed the session, the facilitator held a debriefing on their experiences, exploring what went well and the challenges of the activity within the context of the 4 IPE competencies.

Immediately following the IPE session, students completed a retrospective pre- and postsession self-assessment on the following session objectives that coincide with the IPEC competencies: (1) communicate information with health care team members in a way that is mutually understandable, (2) engage health professionals in shared problem solving, (3) recognize how the skills and knowledge of other health professionals complement and overlap with each other, and (4) reflect on how individual and team performance could be improved. Before and after the session, students rated their ability on each of these skills from low (1) to high (5) on a 5-point Likert scale, which provided a quantitative assessment of students' self-assessed learning following IPE sessions.[22]

At the end of the 4-week inpatient pediatrics clerkship, medical students were invited to participate in brief interviews to further assess their experience of the IPE session and how it affected their interprofessional interactions during the clerkship. Interviews were conducted with 2 to 3 students at a time by the same member of the research team to maintain consistency. Questions that were asked included (1) What were the key takeaways that you learned during the session? (2) What was your perception of interprofessional collaboration prior to participating in the session? (3) How did the IPE session affect your understanding of roles and responsibilities on the health care team? (4) Did the IPE session change your ability to collaborate or your confidence in collaborating with other health care professionals? If so, how? (5) What aspects of the IPE session were helpful, and what aspects of the IPE session could be improved? Interviews were recorded using an audio recorder. Interview recordings were then transcribed verbatim, and recordings were subsequently deleted to protect students' anonymity.

Data analysis. Retrospective pre- and postsession self-assessment data for the 3 sessions were pooled and analyzed using the Wilcoxon signed-rank test. Interviews were

transcribed, codified, and analyzed by the first author (M.C.P.) using qualitative content analysis. Keywords, phrases, and ideas identified in students' interview responses were color coded in interview transcripts. Interview transcripts were analyzed individually to highlight the keywords, phrases, and ideas that were repeatedly emphasized by students. Thus, the analysis facilitated the identification of common themes from students' interview responses.

Results

Retrospective pre- and postsession self-assessment. The distributions of students' pooled pre- and postsession self-assessment responses from the 3 sessions are displayed in the Figure. Retrospective pre- and postsession self-assessment ratings differed significantly, indicating students' increased confidence in their interprofessional communication skills (objective 1), team-based problem-solving skills (objective 2), understanding of roles and responsibilities (objective 3), and ability to reflect on performance for improvement (objective 4) ($p < 0.01$ for all objectives).

Figure. Distributions of Pooled Pre- and Postsession Self-Assessment Ratings on 4 Objectives

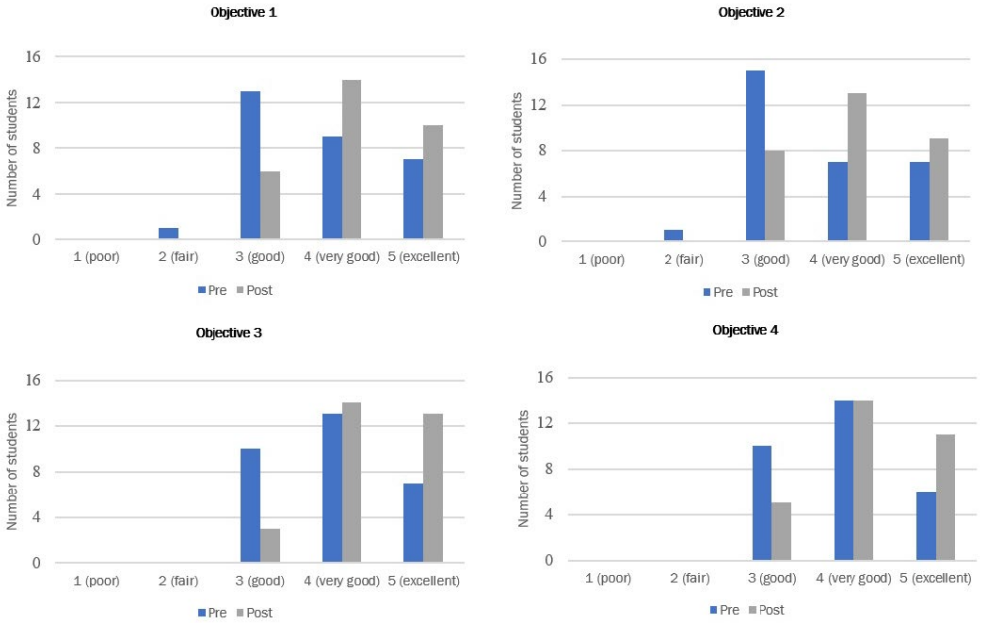

Table 1 displays the mean pre- and postsession self-assessment ratings pooled over the 3 sessions.

Table 1. Mean Self-ratings on Retrospective Pre- and Postsession Self-assessment Survey

Objective	Retrospective presession mean (N = 30)	Postsession mean (N = 30)	Percent increase
1	3.73	4.13	10.72
2	3.67	4.03	9.98
3	3.90	4.33	11.10
4	3.87	4.20	8.61

Postclerkship follow-up interviews. Keywords, phrases, and ideas were identified in interview responses of 23 students and summarized in 6 key themes, several of which focus on students' experience during the session (see Table 2). Specifically, 91.30% of students reported that the case-based format was beneficial, as it was engaging, encouraged collaboration, and provided a clinical context to IPE. However, 30.43% of students felt that the IPE sessions repeated content from previous IPE sessions, and 30.43% of students also said that their experience during the session was dependent on the level of engagement from other students. In addition, 91.30% of students reported that the virtual platform negatively impacted their experience because it was difficult to replicate clinical communication virtually, and several students reported that an in-person session would have been more effective. Students also reported improvements in their mastery of IPE core compentencies, specifically in their knowledge of roles and responsibilities (69.57%) and practice of interprofessional communication (56.52%).

Table 2. Key Themes From 23 Student Interviews and Supporting Quotations

Theme	Frequency	Example quotation
Case-based format enhanced learning	21	"I think that looking at a case together and working through it was super beneficial because that's how it's going to work in real life."
Session improved understanding of roles and responsibilities on the health care team	16	"The session showed what other professions do on a daily basis and who we can rely on for certain information."
Session strengthened interprofessional communication skills	13	"I think it was a good exercise to become more comfortable with communicating and interacting with other providers. It was definitely helpful to review communication skills to remember how to do that before clinical."
Activity repeated information from previous IPE sessions and clinical experiences	7	"I hit a saturation point with IPE at the end of last year [second year of medical school]. It's super valid to be like 'let's all learn from each other [other professions],' but we'd done a lot of this already."
Virtual setup of activity was a barrier to learning	21	"Zoom made things hard, sometimes the Google form was kind of hard to work through, and there were some miscommunications which made it more difficult … but I think that would have happened less in person. The technical obstacles made it not as valuable as it could have been."
Experience was dependent on other members of small group	7	"The toughest part of it was the fact that it was on Zoom because getting people to be engaged can just be so hard. I think it was very dependent on your group, but there were people in my group that didn't say anything."

Abbreviation: IPE, interprofessional education.

Only 7 of the 23 students who were interviewed said they applied these skills during their clerkship, however. Some students said they were unable to apply these interprofessional collaboration skills during the rotation due to lack of autonomy early in their clinical training, lack of confidence as new members of the health care team, and adjustment to the clinical learning environment.

Discussion

Effective IPE is critical at all stages of medical education to prepare students to be collaborative members of the health care team. The classroom-based IPE session we developed for medical students during their pediatrics clerkship built upon foundational IPE sessions they received during their preclinical years. Overall, the sessions seemed to be effective in improving students' self-assessed ability to meet specific IPEC competencies but had less impact on students' application of the competencies during their clerkship.

In the postsession surveys, students more highly rated their postsession ability to meet session objectives, especially the IPEC core competencies of interprofessional communication and understanding of roles and responsibilities. When asked about these learning improvements during follow-up interviews, students highlighted the case-based format of the IPE session as a major strength that enhanced their learning. Students further reported that the format encouraged collaboration among students from different professions, making the session more engaging, which was especially beneficial given the inherent challenges of maintaining student engagement on virtual learning platforms.[23,24,25]

Despite students' self-reported learning improvements following the IPE sessions, follow-up interviews also highlighted several reasons why less than one-third of medical students who participated in the interviews felt that the IPE session influenced their interprofessional interactions during their pediatrics clerkship. First, many students reported that the virtual platform was not ideal and that in-person sessions would have better facilitated socialization, perhaps by prompting increased recognition when students saw each other again in the hospital. Second, several students felt that the session repeated the preclinical IPE curriculum, as it was still a classroom-based activity, although it occurred during the clerkship. This finding suggests that IPE in the clinical learning environment needs to have a clinically authentic context and be integrated into patient care.

Given that this study included third-year medical students who were just beginning their clinical education, the timing of IPE sessions may have also contributed to their lack of impact. Students voiced feeling a lack of autonomy and confidence in reaching out to other professionals without direction from interns and residents. They also reported being too overwhelmed by their own new role and responsibilities to be able to figure out how to work with other professionals on the health care team. One student summarized this sentiment by saying, "Once I'm in a position to keep my head above water, it [interprofessional communication] will happen more naturally." The additional cognitive load from the IPE session may have made it too much for students to internalize and apply the competencies so early on in their clinical training. It would be interesting to see if students who participated in the IPE session later in their clincial training have a different impression of its applicability and of their own abilities to incorporate interprofessional collaboration skills more readily.

Limitations of Study

This study has several limitations that can be improved upon in future studies. First, the sample size was determined based on the number of students who participated in the IPE sessions rather than the number needed for achieving adequate statistical power. Additionally, this study focused on the experiences of third-year medical students only. Previous studies have found that nursing and pharmacy students benefit from IPE

sessions through increased understanding of their own and other professionals' roles and responsibilities and improved attitudes toward interprofessional collaboration.[26,27] Therefore, nursing and pharmacy students' experiences with clinically integrated classroom-based IPE sessions, such as the one highlighted in this study, should be included in future studies for comparison. Finally, this study primarily relied on self-reported measures. While self-assessment is a critical component of medical education,[28,29] the results may not always align with objective assessments.[30] Including objective measurements, such as direct observation, in an assessment is important to better understand interprofessional interactions.

Conclusion

Overall, this study builds on existing literature that supports the value of classroom-based IPE sessions in improving students' self-assessed understanding of interprofessional collaboration. This study also highlights the limited impact that a classroom-based IPE session has on medical students' interactions with other health care professionals, despite the session bringing together different health care professions students, some of whom are working in the same clinical setting. Location (in person vs virtual), timing, and integration of IPE into clinical care are all important factors in the impact of IPE on interprofessional collaboration.

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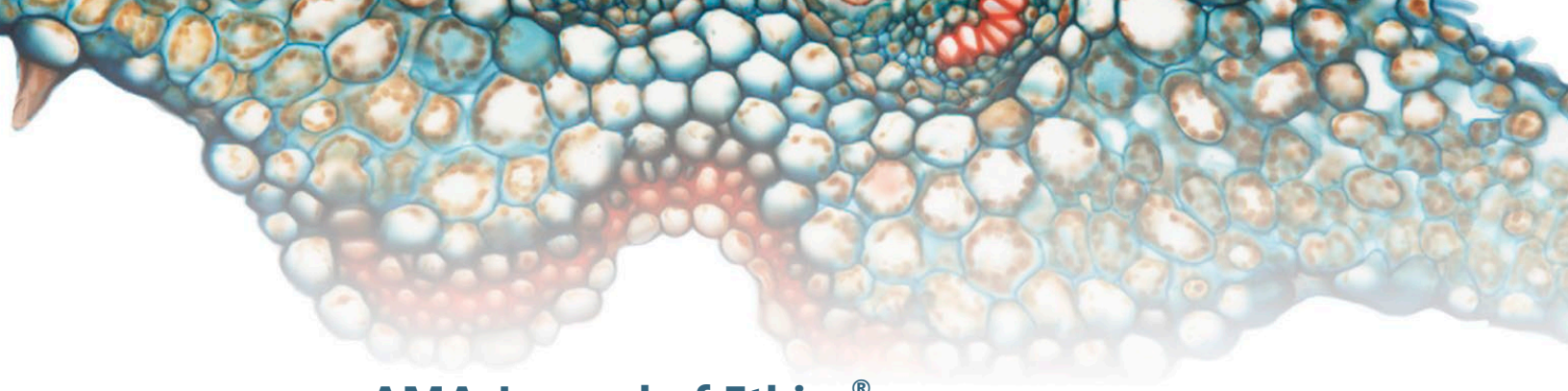

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ORIGINAL RESEARCH: PEER-REVIEWED ARTICLE

Interprofessional Learning and Psychiatric Expertise in Mental Health Courts

Paul Brodwin, PhD

Abstract

Background: Interprofessional collaboration is crucial to reduce overincarceration of people with severe mental illness. Learning how to collaborate occurs in 2 complementary ways. One model emphasizes cognitive tasks: becoming familiar with the values and knowledge of other disciplines. Another model emphasizes practical interactive skills: calibrating one's preexisting expertise to the demands of the local workplace. This qualitative study assesses the 2 models in the case of psychiatrists in a multidisciplinary mental health court who learned to divert people with psychiatric disease from jail and hence advance the court's mission.

Methods: Ethnographic research was conducted over 4 years with the staff of a US mental health court. Interviews with 3 psychiatrists and observations of 87 staff meetings and probation review hearings were recorded on handwritten notes. Notes were transcribed, entered into a qualitative database management program (NVivo 12), and coded using the grounded theory approach. A master codebook was developed to identify crosscutting themes.

Results: Psychiatrists did not need deep familiarity with the values or skills of legal professionals to divert people with psychiatric disease from incarceration. They successfully inserted their expertise through 3 strategies—teaching about pharmaceutics, suggesting concrete interventions based on details of diagnosis and behavior, and shifting the collective assessment of defendants from a punitive to a therapeutic framework—that depended on their acquiring new interactive skills. However, they failed in their efforts to refine the eligibility criteria for admitting new defendants to the court; their expertise was underutilized because of the makeup of this interprofessional team.

Conclusion: Reducing the overincarceration of people with severe mental illness depends on interprofessional collaboration. This study shows that discerning opportunities for (and blockages to) applying one's preexisting

expertise and learning the perspective of other disciplines are key complementary ingredients of interprofessional learning in this setting. Research in other treatment courts is needed to assess the generalizability of this single case study.

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Background

The percentage of people with severe mental illness in US jails and prisons is between 3 and 6 times higher than in the general population.[1,2,3] Mental health courts offer a solution to this problem; they aim to divert people with severe psychiatric illness away from unnecessary incarceration to mental health treatment.[4] Toward this end, the courts emphasize collaboration not only between the public defender and state prosecutor, but also between the legal staff as a whole and mental health professionals. Although the details differ in each jurisdiction, a common procedure involves participants voluntarily pleading guilty (typically for nonviolent misdemeanors) and agreeing to probation and community supervision. The probation agreement mandates comprehensive mental health treatment (medications, addiction counseling, individual therapy, case management, and the like). In the court examined in this study, defendants come back for probation review hearings every 2 weeks and are reassessed. If they repeatedly violate their probation, it could be revoked and they could be remanded to jail to serve out their original sentence. If they participate in treatment, they are released from supervision after 12 to 24 months[5] and thereby avoid the harmful sequelae of incarceration.[6]

The court staff is an interprofessional work group comprising professionals from different disciplines (law, psychiatry, clinical psychology, and social work) with the shared goal of substituting mental health care for jail time. Psychiatrists in the current study occupied a distinctive and anomalous role. They were not the providers of record for defendants, who instead received care from community-based clinics. They had no mandate to treat or even interview the defendants. They were consultants who worked in a setting that was collaborative by design. They gave advice but stood entirely outside the formal patient-physician relationship. They also had no legal decision-making power since the judge and probation officer always made the final determination about defendants' ultimate freedom or incarceration.

This article explores how psychiatrists applied their expertise to divert people with psychiatric disease from incarceration to mental health treatment, given that they had no formal authority over defendants' treatment or legal fates. Their situation provides an empirical case study of interprofessional learning, which by definition occurs "when two or more professions learn with, from and about one another to foster collaboration in practice."[7] Two distinct but complementary models account for this kind of learning.[8] The cognitivist model emphasizes an individual's understanding of how other professionals conceptualize the basic tasks of work.[9] In this model, one must first grasp the core values of other professionals and master their cognitive maps in order to collaborate successfully.[10] (This model influences, for example, interprofessional pedagogy for medical students that exposes them to busy outpatient primary care settings and then teaches them how the skills sets of physician assistants and physical therapists contribute to patient care.[11]) The social constructivist model focuses on the

collaborative aspects of learning; it emphasizes the interactive and organizational context instead of the precise knowledge held by other workers.[12] Both models help explain how psychiatrists learn to operate on the court. In other words, psychiatrists face 2 learning tasks at once. They must understand how the legal staff assesses defendants and defendants' troubles in meeting the court's requirements. They must also learn the unwritten rules about interacting with professional peers in this shared and interdisciplinary space. This article assesses which type of learning most helps psychiatrists to contribute to the interprofessional mental health court team.

This study found that, in order to advance the team's shared goals, psychiatrists did not need to learn criminal law in general (types of offenses, range of sanctions, rules of evidence, and so on). They instead needed to understand why defendants typically have difficulty in conforming to the policies of this particular court. At the same time, they had to discern openings for their distinctive skills in fast-paced deliberations that mixed legal, penal, and clinical perspectives. They needed to translate their expertise into terms that were comprehensible to the legal staff and to do so in a novel setting where they did not have much formal authority. This study of interprofessional learning documents how members of a single occupational group learned to comprehend both a narrow range of technical knowledge and the immediate social dynamics of the work team in order to insert their perspective into case deliberations and to convince others to take it seriously.

Methods

A 4-year qualitative study of a pilot mental health court in a mid-sized US city was conducted. Eighty-seven sessions were observed, each comprising (1) precourt staff meetings with the interprofessional team (judge, lawyers, probation officers, social workers, case managers, psychologists, and a psychiatrist), followed by (2) probation review hearings ("open court") for defendants currently under supervision (4 to 6 at any one time and 30 over the 4-year period). Semi-structured interviews (ie, open-ended questions and follow-up probes) were conducted with the 3 psychiatrists who served on the court. All identifying details have been changed.

Handwritten notes were used to document discussions during staff meetings and open court as well as during the interviews. Notes were transcribed to word-processing documents within 24 hours. Transcribed notes were then entered into NVivo 12 qualitative data analysis software. Data were analyzed through the inductive grounded theory approach.[13] Open coding was undertaken by examining data line by line and assigning thematic labels to data, such as the answer to a single interview question or a brief exchange during a staff meeting, constantly comparing the labels for accuracy as coding progressed. As coding continued, the initial categories were separated into more specific labels and older data were recoded. Using this iterative process, a master codebook was developed to analyze subsequent data. The current study is based on interviews with psychiatrists and thematically coded data from psychiatrists' speech in staff meetings.

Results

Before psychiatrists joined the court, the legal staff realized how much they needed psychiatrists' expertise. For example, upon learning that one defendant was becoming more agitated despite adhering to his medications, the judge commented: "We don't have a psychiatrist here to tell us, has this been his history? He was doing well for so

long.... Is he going to be this way for the foreseeable future? The psychiatrist could say if these drugs are working well together. I have no idea."

Psychiatrists easily took on the role envisioned by the judge. They taught the team about the doses, indications, and potential side effects of medications. They extrapolated from people's prescriptions to their likely response to interventions. When the public defender asked whether she should push someone to find employment, the psychiatrist pointed out that the person's continued impairment on high doses of antipsychotic medication meant that he shouldn't be expected to return to work. This sort of advice gave psychiatrists immediate legitimacy; their expertise helped the lawyers manage cases more successfully.

Serving as de facto pharmaceutics instructors was one way that psychiatrists contributed to the court's mission. They also pursued 3 other strategies to create more room for their expertise despite their limited decision-making authority. First, psychiatrists often drew a connection between diagnosis and behavior. One psychiatrist reinterpreted a defendant's apparent sullenness as a "dysthymic reaction to the world" common among people with severe substance use disorder. She suggested that the defendant take an active role in Alcoholics Anonymous meetings, and, in the subsequent open court session, the judge made precisely this recommendation. In the case of a defendant with posttraumatic stress disorder, the psychiatrist pointed out that complaints of sleep problems may signal renewed instability and that the probation officer should increase home visits and therapy sessions. Such insights come easily to psychiatrists, so their interprofessional learning turned on applying these insights to the immediate practical needs of this interprofessional group.

Psychiatrists' second strategy went one step further by shifting the entire conversation about defendants from a punitive to a therapeutic register. Psychiatrists' ability to reframe other staff members' attributions of defendants' behavior was the most powerful application of their expertise. An exemplary case involved a defendant charged with strong-arm robbery and diagnosed with undifferentiated schizophrenia. (The diagnoses cited in court came from the paperwork provided by case management agencies and/or the Department of Corrections.) After the defendant missed several court sessions and was the subject of police reports of public drunkenness, the legal staff was ready to give up.

State prosecutor: He's not really engaging in the program. The police texted me: "He was drunk and he lied about his name. We arrested him on a Violation of Probation."

Judge: He wasn't home for his probation agent.... I'm not happy about him. He's not in the right frame of mind to do this court. There's no real willingness to change.

Probation officer: He doesn't have any intention to cooperate with anything.

The cascade of negative attributions pointed in one direction: revoking the defendant's probation and returning him to jail. At this juncture, the psychiatrist spoke up.

Psychiatrist: He has active substance use. He's not going to be available to participate in the court. He hears voices in his head, and the drinking turns down the volume, so he's going to keep drinking. Did he have assessment for Drug Court?

Probation officer: Yes, and they rejected him because of mental illness. Even though his mental health was stable for a long time, until he got into his alcohol.

Psychiatrist: There you go. He has the ability to be compliant for a long time, if he keeps away from drinking. Can you guys mandate him into a residential drug and alcohol treatment program?

The legal staff had built up a portrait of the defendant as uncooperative, unwilling to change, and a liar. The psychiatrist did not frontally oppose this characterization (as uncooperative and deceitful), but he attributed the defendant's behavior to an underlying substance use disorder, which he framed as a treatable disease. That is, the defendant was not cooperating because he lacked the capacity to do so. He'd broken the requirement of sobriety, but only because he was self-medicating, and hence he deserved to remain in the program. The psychiatrist had convincingly reframed the problem, and the judge eventually decided not to revoke the defendant's probation. It was an adroit and tangible contribution to the court's ultimate mission of diverting people from jail.

As their third strategy, psychiatrists argued for tighter and more consistent eligibility criteria (for admission to the mental health court and all of its programs, including treatment and probation), but their efforts usually failed. They were often asked to comment on particular candidates for admission, but, due to their limited role on the court staff, they could not conduct personal assessments. The psychiatrists instead offered only generic advice. They said that people who have psychotic symptoms and adhere to their medications are good candidates for mental health treatment but those with illnesses unrelated to the criminal complaint are not suitable. As one psychiatrist observed: "The resources of this court are scarce. So we should make sure they're used on people who really need them, who are fitted to them."

This psychiatrist was taking a stand on a thorny topic that preoccupied this court from the start. The demand for psychiatric treatment in the criminal legal system far outstrips the supply,[14] so who deserves a place in this small mental health court? The question recalls debates in bioethics about rationing and triage in situations of scarce treatment resources. Psychiatrists, however, were not invited onto the court team to address ethical questions. Moreover, they had no real influence on intake procedures in general or on the decisions to admit particular defendants to the court. Only when speaking privately to me during interviews held off-site did they discuss the issue in depth. One psychiatrist complained that there was no rational paradigm in place to select the target population. From his perspective, the public defender's office uses the court simply as a way to connect its clients to needed services. But, he continued, the court occupies a specialized niche in the judicial and mental health systems. It works well for one kind of defendant but not for other kinds. He believes that because lawyers do not properly risk-stratify the candidates, the court as a whole is much less effective than it could be. (He did not cite any evidence for this belief but based it instead on his decades-long experience as a clinician at the county psychiatric hospital.)

This psychiatrist never had the opportunity to present his views to the team. The work was too fast-paced, and the rules about eligibility (to the court as a whole, including community supervision and treatment) were established long before psychiatrists joined the group. Moreover, psychiatrists were slotted into the role of advice giver in particular cases and not treated as a source of critical insight into the court's overall operation. Therefore, no one thought to ask for their ideas.

Discussion

Psychiatrists' interprofessional learning entailed mastering the basic procedures of this treatment court and understanding why defendants might fail its requirements. They also had to discern precisely what the legal staff needed to know about people's clinical condition and then translate their expertise into understandable terms and immediate interventions.

The tasks were not conceptually challenging. They did, however, require a savvy awareness of the way that legal staff—on the basis of their own professional vision—built up negative attributions about defendants' behavior. Psychiatrists learned how to speak up at just the right moment and in ways that others found credible and helpful, and in so doing reframed these attributions. The integration of psychiatrists into this interprofessional group fits the classic notion of legitimate peripheral participation. That is, they engaged with central work processes "but only to a limited degree and with limited responsibility for the ultimate product."[15] The psychiatrists resembled apprentices; they were newcomers to an established occupational group and thus inserted into the low end of the workplace hierarchy. Without any formal instructions, they had to absorb the goals and routines of the group and learn to make contributions from the sidelines.

The analogy to apprenticeship, however, is not perfect. The psychiatrists drew on skills entirely outside the domain of legal professionals. For this reason, they could redirect the trajectory of a defendant's case in ways that would never have occurred to the judge or lawyers and that advanced the collective mission of diverting people from jail. In general, however, the psychiatrists never made the transition from peripheral to central actors in this reform project. Unlike apprentices, their competence was established at the start and it never developed, at least in the eyes of the legal team. Hence the judge and lawyers never sought out psychiatrists' advice on any issues other than the symptoms and capacities of individual defendants, even when systems-level advice might have improved the court's operation.

Conclusion

Mental health courts are just one attempt to end the disproportionate incarceration of people with severe psychiatric illness. Many related diversion programs share the same challenge: to integrate the expertise of legal, penal, law enforcement, psychiatric, and social work professionals.[16,17] Their success depends on interprofessional learning, as illustrated in this study.

The limitations of this study are inherent to ethnographic research, which is inductive, not hypothesis driven, and based on small samples that do not provide statistically significant results. A single case study is rarely generalizable, especially when the context differs across cases. For example, the psychiatrists in this mental health court were only consultants, and there was little communication between the legal staff and the actual treating clinicians who were scattered across several health care and case management agencies. Larger courts often work more closely with outside clinicians.[18,19] Case studies do help identify current gaps, unmet needs, and opportunities to improve established practices, however. This research shows not only how psychiatrists successfully contributed to the team but also how their expertise was underutilized. A potential improvement would be for the work team to schedule dedicated times, outside of the regular court sessions, for its members to reflect on themselves and their progress in aligning diverse perspectives. After all,

interprofessional learning works best through a combination of daily engagement and more distanced reflection.[20] Periodic staff meetings are needed to assess the challenges of interdisciplinary work and to search for new linkages between expertise and outcomes that would advance the group's long-term reformist goals. At the same time, communication is needed between ground-level court staff, on the one hand, and senior administrators at the county level, on the other, as administrators have the most leverage to make system-level changes in the function and mission of treatment courts.[21]

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AMA CODE SAYS

AMA *Code of Medical Ethics*' Opinions Related to Interprofessional Collaboration

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Abstract

Changes in the structure and practice of health care have led to a clinical environment heavily reliant on interprofessional collaboration. The AMA *Code of Medical Ethics* offers several opinions on the importance of the interprofessional movement in health professions education and practice.

Interprofessional Education

Interprofessional education (IPE) occurs "when two or more professions learn with, from and about one another to foster collaboration in practice."[1] Interprofessional collaboration in health care has been shown to increase collective awareness of others' knowledge and skills, contributing to improved decision making and quality of care[2]; improve patient outcomes, such as by "decreasing morbidity and mortality rates and optimizing medication dosages"; and reduce work for clinicians and increase job satisfaction.[3] As Zechariah et al note: "IPE fosters interprofessional collaboration (IPC), which is often recognized for nurturing a collaborative team approach, resulting in an improved quality of patient care, decreased length of hospital stay, reduced costs of care, and fewer medical errors."[4] Additionally, Zechariah et al report that a systematic review by Reeves et al found "improved patient outcomes, better clinical processes, and enhanced patient satisfaction when IPC is utilized."[4] Understanding other professions as well as one's own role in the health care team is critical for IPE to be successful,[5] and IPE is now recognized as an essential part of medical education to equip health care professionals with the skills to deliver safe, high-quality, optimal patient care.[4]

Interprofessional Collaboration

One way in which the American Medical Association (AMA) *Code of Medical Ethics* supports IPE is through its use of the inclusive language in referring to the health care team, indicating that the highest-quality, patient-centered care requires an interprofessional team whose members work together. The AMA *Code* most directly addresses the importance of IPE in Opinion 10.8, "Collaborative Care," which states:

> In health care, teams that collaborate effectively can enhance the quality of care for individual patients. By being prudent stewards and delivering care efficiently, teams also have the potential to expand access to care for populations of patients. Such teams are defined by their dedication to providing patient-centered care, protecting the integrity of the patient-physician relationship, sharing mutual respect and trust,

communicating effectively, sharing accountability and responsibility, and upholding common ethical values as team members.

An effective team requires the vision and direction of an effective leader. In medicine, this means having a clinical leader who will ensure that the team as a whole functions effectively and facilitates decision-making. Physicians are uniquely situated to serve as clinical leaders. By virtue of their thorough and diverse training, experience, and knowledge, physicians have a distinctive appreciation of the breadth of health issues and treatments that enables them to synthesize the diverse professional perspectives and recommendations of the team into an appropriate, coherent plan of care for the patient.[6]

Leaders within care teams are expected to model ethical leadership, promote core team values, help clarify expectations, encourage discussion of ethical and clinical concerns to foster a positive team culture, and communicate respectfully with the patient and family, treating them as members of the team.[6]

Health care teams can include a wide variety of members working in consultation. Opinion 10.5, "Allied Health Professionals," states:

Physicians often practice in concert with optometrists, nurse anesthetists, nurse midwives, and other allied health professionals. Although physicians have overall responsibility for the quality of care that patients receive, allied health professionals have training and expertise that complements physicians'. With physicians, allied health professionals share a common commitment to patient well-being.[7]

In light of this shared commitment, physicians' relationships with allied health professionals should be based on mutual respect and trust.[7]

IPE in clinical practice also includes the involvement of medical students as well as resident and fellow physicians in patient care, as outlined in Opinion 9.2.1, "Medical Student Involvement in Patient Care,"[8] and Opinion 9.2.2, "Resident and Fellow Physicians' Involvement in Patient Care."[9] Opinion 2.3.6, "Surgical Co-management," clarifies how, in surgery, "co-management refers to the practice of allotting specific responsibilities of patient care to designated clinicians … according to each individual's expertise and qualifications" and should be done "to ensure the highest quality of care."[10] And Opinion 10.7.1, "Ethics Consultations," explains the roles that ethics consultants can play in health care teams "by helping to clarify ethical issues and values, facilitating discussion, and providing expertise and educational resources … [to] promote respect for the values, needs, and interests of all participants, especially when there is disagreement or uncertainty about treatment decisions."[11]

The AMA *Code* is clear not only that physicians have a duty to provide interprofessional collaborative care but also that patients have a right to coordinated and collaborative care as well. Opinion 1.1.3, "Patient Rights," asserts that cooperation and coordination with other health care professionals is critical to providing continuity of care and that patients themselves have a right to be part of the care team that exists as "a collaborative effort between patient and physician in a mutually respectful alliance."[12] This sentiment is echoed in Opinion 1.1.4, "Patient Responsibilities," which states: "Successful medical care requires ongoing collaboration between patients and physicians. Their partnership requires both individuals to take an active role in the healing process."[13]

Conclusion

Interprofessional education and collaboration are critical to providing "safe, effective, patient centered, timely, efficient, and equitable" health care.[14] IPE in health care

requires coordination, cooperation, and communication among clinicians and other allied health professionals and includes patients in all discussions of care whenever possible. Ultimately, the goal of IPE should be to provide the best quality of care in all aspects of health promotion. As Opinion 8.11, "Health Promotion and Preventive Care," states: "Health promotion should be a collaborative, patient-centered process that promotes trust and recognizes patients' self-directed roles and responsibilities in maintaining health."[15] IPE is thus essential for providing ethical health care.

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MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

How Rohingya Language Educational Videos Help Improve Refugee Interprofessional Health Service Delivery in Milwaukee

James Lokken, PharmD, MS, MEd, Thong Lee, PharmD, Emily Mauer, PharmD, Christopher Wagner, MD, James Sanders, MD, MPH, and Michael J. Oldani, PhD, MS

Abstract

Milwaukee has become home to one of the largest US populations of Rohingya refugees, who face barriers to health care, including poor service integration impeded by the absence of a formal written language. Clinicians also face barriers to delivering adequate, culturally attuned health services, so suboptimal outcomes are common. This article describes a community-based intervention using an interprofessional, multi-organizational, and ethnographically focused approach to address Rohingya refugee health needs that incorporates Rohingya participants' making educational videos in their native language. Mutually beneficial outcomes are outlined for Rohingya, students, and clinicians.

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Introduction

Milwaukee, Wisconsin, has a strong history of immigrant resettlement dating back to the 1840s with the arrival of German immigrants.[1] Almost 180 years later, Milwaukee (and the state) continues to welcome refugees, such as Afghan refugees, and process their resettlement.[2] Before reductions in refugee resettlement allotments on a national level between 2016 and 2020,[3] more than 700 refugees resettled in Milwaukee, accounting for 70% of Wisconsin's refugee totals during the federal fiscal year 2017.[4] In any given year, Milwaukee's refugee arrivals come from a range of countries, representing various ethnic groups.[5] By the early 2000s, second- and third-wave Hmong families were the predominant group resettling in the Milwaukee area (and central Wisconsin).[6] Beginning in 2007, resettlement has been focused on refugees from Burma, to a lesser extent from Somalia and Iraq,[7] and most recently from Afghanistan.[8]

Over the last decade, a large number of Burmese (Myanmar) refugees have settled in the Milwaukee area.[9] They are not a homogenous group—most Burmese refugees in

Wisconsin are part of the ethnolinguistic group Karen, and there are sizable ethnic minorities of Chin and Rohingya.[9] Milwaukee resettled 350 Rohingya in 2019 alone,[10] and it has one of the largest populations of Rohingya in the United States, with more than 2000 Rohingya being resettled by 2019.[11] Comparably, Chicago had resettled over 1600 Rohingya as of 2019[12] and Dallas around 300 Rohingya families as of 2021.[13] Notably, these estimates do not consider secondary migration, which occurs when a refugee moves to another city within the same country after initial resettlement (Tsering S, Northrup M, oral communication, 2018). Although no reliable numbers regarding secondary migration are known to the authors, anecdotally, the Rohingya population is likely even higher in Milwaukee, given a perceived net positive gain from secondary migration.

Rohingya as an ethnic group are predominantly Muslim in terms of their religion and culture and speak "Rohingya" or "Ruáingga."[14] Their language has been transformed relatively recently into various written scripts—Arabic, Hanifi (a phonetic script based on Arabic letters), and Roman letters.[15] The most recent effort began in the 1980s and continues to date, but many older Rohingya are not literate in reading or writing a Rohingya script. Written translation usually occurs through Arabic and, in general, a third language spoken in the country of residency (eg, English).

This article describes a community-based intervention using an interprofessional, multi-organizational, and ethnographically focused approach to address Rohingya refugee health needs that incorporates Rohingya participants' making educational videos in their native language. Mutually beneficial outcomes are outlined for Rohingya, students, and clinicians.

Providing Health Care

Many members of the growing community of Rohingya, who have settled mostly on the south side of Milwaukee near the Islamic Society of Wisconsin's main campus and community center, required quality primary and specialty health care upon their arrival.[16] Despite their resiliency and eagerness to live and work in Milwaukee, mental health evaluations and trauma-informed care were needed as a result of their forced removal and myriad abuses from the Burmese government as well as their time spent in refugee camps in Bangladesh.[17] Additionally, as Rohingya settled into a more routine lifestyle in Milwaukee, chronic conditions, such as hypertension, hyperlipidemia, and diabetes, began to emerge and required evaluation and treatment.[18]

As prescriptions were written by clinicians, patients began to seek pharmaceuticals and health care information at a local chain of pharmacies that provide translation services. This pharmacy chain is unique in that it delivers health care services through pharmacists and pharmacy technicians who speak over 20 different languages. Languages spoken range from Chinese and Spanish to Arabic and Vietnamese.[19] The Rohingya language provided a challenging case of translation, especially for type II diabetes medication management, as several of the newer prescriptions require a more in-depth understanding of medication temperature requirements, dose timing, injections, and dose titration. Rohingya was an entirely new language to the local area (and the pharmacy staff); therefore, educational materials could not be quickly translated.

Interprofessional Response

In order to address the needs of refugee groups, such as Rohingya, Our City of Nations (OCON) was formed. OCON is a collaborative group of health, social, and legal care professionals, advocates, and relocation specialists who came together in 2014 in an attempt to provide what the initial working group and literature described as "culturally attuned healthcare"[20] for an increasingly diverse group of refugees in Wisconsin.[21] A series of OCON conferences have been held yearly.[22] All OCON meetings have included interprofessional breakout sessions for health care students and other graduate students (eg, medical, physician assistant, pharmacy, masters in peacebuilding), averaging over 100 students per session. Two of the coauthors (J.S. and M.O.) are active members of the OCON working group.

In 2019, various barriers and challenges to health care began to come to the attention of local health care practitioners as well as researchers.[23] One of the coauthors (J.S.) contacted both clinicians caring for refugees and pharmacy staff in Milwaukee to organize an ad hoc interprofessional working group. The group consisted of physicians, clinic managers, local community pharmacists, and a nurse practitioner. Eventually, 2 Rohingya community members were added to the team, a young man and a young woman, who were employed by the local pharmacy as paid translators. Additionally, one of the coauthors (J.L.), a clinical pharmacist, was recruited to be part of the group because of his interest in training pharmacy students to work with underserved populations as well as his collaborative work in diabetes management.[24] A series of meetings were held, attended by pharmacy students as well as working group members, pursuant to a "collaborative action"[25] framework. The group wanted to identify gaps in Rohingya care and develop a workflow to address those needs. A key document was produced that created an assembly line of "to-do" items (see Supplementary Appendix Table 1).

The local pharmacy and working group began by developing a YouTube channel to post free videos for their Rohingya patients.[26] It was determined that a series of educational videos should be completed by and for Rohingya to explain a range of issues. Many things were new to the community, including electronic prescriptions instead of paper prescriptions, as well as the aforementioned complexities of particular medication regimens. Likewise, Rohingya were new to several members of the working group, and it was determined that more knowledge about the community was needed. One of the coauthors (M.O.), a medical anthropologist, advocated for short-term immersion and interviews with Rohingya patients. Time was of the essence because prescriptions were being written and filled daily for Rohingya patients, who were experiencing confusion with a variety of processes, which was negatively impacting their treatment adherence and ultimately their health outcomes.

Focused Ethnography and Health Needs

In general, a window into Rohingya cultural life was needed. A previous collaborative project engaging Rohingya in face-to-face and phone interviews conducted by 2 of the coauthors (C.W. and J.S.) proved productive.[27] In particular, several interviews indicated that building trust was paramount and needed to be established quickly for any semblance of health dialogue to develop (C.W., J.S., unpublished data, 2019). We were able to leverage the ongoing and established relationship between Rohingya and the local pharmacy network. In addition, members of the working group needed to be introduced to the Rohingya community, so it was suggested that 2 of the coauthors (J.S. and J.L.) attend a Rohingya Community Health Fair (CHF) at the Islamic Society of

Milwaukee, portions of which were recorded for public education.[28] The fair was a collaborative effort between local Rohingya and members of the working group. A fourth-year pharmacy student completing a telehealth clinical rotation attended the CHF as well. This learning process was a focused ethnography with a goal of observing and both formally and informally speaking to Rohingya within their cultural milieu.[29]

The Rohingya CHF provided an opportunity for members of the working group to observe examples of health initiatives already underway and to develop more in-depth cultural awareness. Initially, Rohingya attendees seemed a bit unsure and skeptical of the event, but as the CHF progressed and positive interactions occurred, one could see the cultural barriers, both real and perceived, begin to melt away. Cultural and gender norms were also on display, as the working group members interacted with mostly traditional or extended families. Working group members observed and became aware of how relationships can work within Rohingya families when discussing health and wellness issues. For example, when working group members were engaging with some families, the husband—or an older male—would usually step forward and engage with a member of the working group directly and then return to the family group and start a discussion with his wife and other family members. Often, a younger member of the family, regardless of gender, would translate because their English-speaking abilities were more developed through their education at public schools or universities. These interactions, albeit limited, helped enhance the working group's understanding of gender roles within the context of health. For example, the group came to understand that though males seemed to be the more public-facing element of the family, there was collaboration behind the scenes wherein health discussions took place among all family members.[30] After their discussion, a male family member would return to discuss matters with the working group.

The working group also observed that Rohingya were working to understand and embrace various Western health interventions. For example, the CHF had an emphasis on healthier meals, and Rohingya women were observed learning to cook traditional meals using air fryers (instead of oil-based cooking). Entire families taste-tested these meals, and body language—along with nodding—indicated approval. Observers from the working group noted that having members of the Rohingya community prepare their traditional cuisine utilizing healthier cooking methods had significant potential for a positive impact on chronic diseases, such as hypertension, hyperlipidemia, and diabetes. Of note, air fryers and other cooking implements were donated to the Islamic Society of Milwaukee so that families who were not able to afford those items could still use the new cooking methods.

During the CHF, the local pharmacy videographer presented several rough takes of medical education videos focused on diabetes management and medications. Many Rohingya in attendance viewed the videos and provided feedback in an attempt to help the pharmacy team of translators, video editors, and pharmacists gain better insight and make adjustments to final cuts. Members of the working group noted that those watching seemed "informed by the videos" (ie, body language, pointing, and nodding), and they got the sense that "light bulbs were going on." It was clear to observers from the working group that Rohingya attendees appreciated being consulted regarding their medical education. Rohingya attendees passed along their feedback primarily through discussions with the Rohingya pharmacy interpreters, and that information was combined with observations of the working group members to develop a list of health topics to address.

The insights gained through the CHF led to the recruitment of second-year pharmacy students to help refine and develop culturally attuned educational videos. The process of video development was a continuous exchange between Rohingya translators (and video participant actors), pharmacy staff and videographers, clinicians, and students that took 3 months. The initial focus on diabetes management extended to various other health topics that Rohingya and pharmacy staff deemed necessary based on community needs (see Supplementary Appendix Table 2). In particular, the group generated videos on how to utilize inhalers for asthma or chronic obstructive pulmonary disease, on how to fill written and electronic prescriptions in the United States, and on dietary considerations and vaccines.

Community Wellness and Interprofessional Socialization

The goals of the OCON Working Group were realized: a series of impactful medical education videos that were produced by Rohingya participants in their native language. The videos continue to be viewed locally and globally, with new videos being added to the YouTube channel as needed.[26] A "hotspot"[31] of diabetes, hypertension, and hyperlipidemia had emerged in Milwaukee where there was increased prevalence and risk of chronic disease, and community leaders and clinicians responded. This kind of community-based intervention—which brings students, clinicians, and community-based organizations together to positively affect health outcomes—has been recognized as essential in the interprofessional literature.[32,33] The pandemic stalled a possible outcomes-based follow-up study focusing on diabetes metrics; however, that was not the intent of this initial collaboration. Nevertheless, with the infrastructure in place, new videos were produced in response to COVID-19 and general vaccination education needs.[34]

In retrospect, our health care students, as well as established clinicians, became part of a new wave of medical education and lifelong learning focused on humanistic collaboration. One of the coauthors (M.O.) had previously developed an interprofessional program for pharmacy, nursing, and occupational and physical therapy students to work with seniors in their homes to reduce risk of falls and improve overall wellness. Students participated in direct patient assessment as well as observation of collaborations between team members and seniors.[35,36] For students, these kinds of community-based engagements foster both professionalization and interprofessional socialization,[37] pointing them "towards society" as they respond to communities in need of care. In particular, these opportunities provide students early exposure to patient-centered care, ethnographic observations, community wellness initiatives, and diverse patient encounters. They also enhance interprofessional socialization early in their training (before clinical rotations).[38] In fact, students are demanding these kinds of environments and training,[39,40] and, as educators, we should strive to engage in partnership with communities in need.

This Rohingya-student-clinician collaboration began with phone interviews and ended with 2 overlapping results: culturally responsive medical education videos and dissemination of this information to interested audiences both locally and globally. The coauthors created drafts of Rohingya interviews cited previously that informed medical education videos, and pharmacy students published their collaborative work in an internationally distributed interprofessional newsletter.[41] These pharmacy students followed up with key partners and presented their collaborative work with Rohingya during an interprofessional education (IPE) student session at the fourth OCON conference in 2020.[42]

Discussion

Interprofessionalism as a health education movement continues to evolve and mature.[43] Educators and clinicians must seize mutually beneficial opportunities and partnerships wherein patient-centered and student-centered opportunities emerge. This intersection is described in the IPE literature as the *nexus*, which is a site that could bridge the gap between education and health care delivery to improve health outcomes.[44] As we direct health care students toward society, we must provide opportunities for them to engage in culturally immersive experiences for interprofessional growth and socialization. This nexus should occur outside the classroom and ideally before clinical rotations. During this time, students can collaborate with patients and community partners to learn rapport-building skills and gain confidence for future clinical work within diverse communities.[45]

Ethnography, in particular, can inform and enhance humanistic collaboration because it affords students (and established clinicians and educators) an opportunity to better understand the patient's perspective firsthand. This local knowledge can lay the foundation for a clinical mindset that embraces "diagnostic openness" with all patients and their caregivers.[46,47] Whether long-term, short-term, or focused, anthropological methods are person-centered and merge with the ethos and competencies of IPE.[48] Integrating ethnographic opportunities for students into interprofessional pathways and co-curricular experiences can be viewed as a relatively straightforward, yet innovative, way to deepen IPE.[49,50] This approach presents unique opportunities to build upon long-term, established relationships with existing community partners, such as the previously mentioned local pharmacy network, to further cultural translation, rapport building, and addressing the health-related needs of patients.[51] The primary goal of these kinds of experiences is to cultivate professional identities that are both empathic and interprofessional.[52]

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ART OF MEDICINE

Overcoming Pseudo-stoicism in Medicine

Jamaljé R. Bassue

Abstract
This short film considers ethical and clinical implications of the phenomenon of pseudo-stoicism, especially in medicine.

You Might Be Here Awhile
Click here to view the video.

Media
This animated short film was created using frame-by-frame digital animation and original audio within Procreate® and Adobe Premiere® Pro CC 2022 (22.0).

In its simplest sense, stoicism is defined as a habitual reaction of impassiveness to pleasure or difficulty. Pseudo-stoicism, then, implies that this impassiveness is shrouded in a veil of spuriousness.

For much of their existence, medical school curricula and postgraduate training programs have placed limited emphasis on the development of emotional intelligence and empathy in trainees. In fact, Sir William Osler, in his 1904 essay *Aequanimitas*, postulates that a physician should be emotionally neutral and that this neutrality is overall beneficial for patient care.[1] Over a century later, Osler's recommendations still guide the attitudes and behaviors of physicians and their trainees.

In a profession in which pseudo-stoicism is *de facto* mandatory, crying and other expressions of emotion or empathy are widely regarded as "inappropriate" signifiers of weakness, fragility, or even incompetence. It is an unspoken norm for trainees to blunt these expressions of emotion to bolster the appearance of intelligence or to conform to their superiors' expectations of professionalism. Many now cite "cynicism," "callousness," and "detached concern" as necessary evils in order to cope with the realities of health care.[2,3,4] From these attitudes, images of stoicism easily develop. Removing the veil of spuriousness exposes an internal struggle to consciously suffocate empathy.

This short film considers who, if anyone, benefits from this apparent norm and questions whether there is much ethical or clinical value to stifling clinicians' expressions of their

humanity. Each frame is filled with familiar themes for the clinician. Some highlight the emotional conflict associated with delivering difficult news to patients. Am I allowed to feel my emotions? The struggle to fight back tears ensues. Other frames highlight periods of self-reflection for the clinician. When the white coat comes off, does the veil come off with it, too? How does the veil affect our personal lives? Who are we outside of our professions?

In general, the longer physicians practice, the more they stifle their emotions and the more they suffer. Inurement, emotional distress, and moral damage can result.[3] Furthermore, pseudo-stoicism in both patient-facing environments and team-based environments prevents clinicians from building a habit of self-reflection and availing themselves of the opportunity for learning and self-improvement.[3] For those struggling to reconnect with their stifled empathy, this film serves as a reminder that, above all else, practitioners are humans first.

One takeaway from this film could be summarized as *Human, your suffering is not inevitable. Embrace your imperfections, embrace your vulnerabilities, and embrace emotions that come with being human.*

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Editor's Note

This is the winning artwork of the 2022 John Conley Art of Medicine Contest.

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ART OF MEDICINE

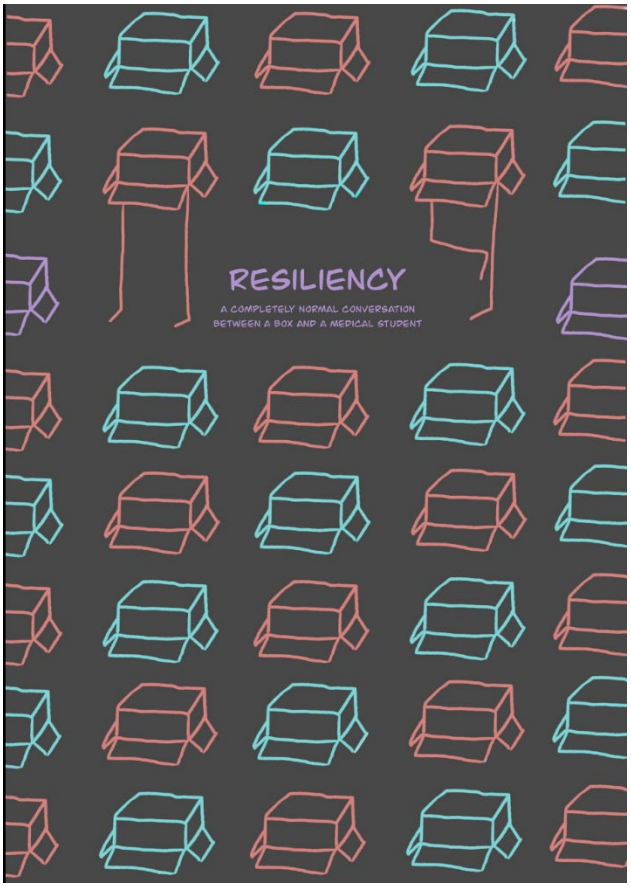
A Completely Normal Conversation With a Box

Beck Regan

Abstract

Health professional students often attend lectures equating resiliency with self-care. While self-care is vital, this graphic series suggests a dialectical tension between resiliency (as self-care) and resiliency (as group action or solidarity) and considers how actualizing and mobilizing "wellness" really is done in health professions education.

Figure. Detail from *Resiliency: A Completely Normal Conversation Between a Box and a Medical Student*



Media
Procreate®.

Caption
This comic considers how actualizing and mobilizing "wellness" really is done in health professions education. Health professional students often attend lectures equating resiliency with self-care. In many medical schools, students formally are coached in wellness but are actually still required to behave in ways that undermine their wellness.[1,2] Such norms in medical education also spill over to health professions educational norms more broadly.[3] While self-care is vital, this graphic series suggests a dialectical tension between resiliency that comes from self-care and resiliency that can be generated from group action or solidarity forged in interprofessional learning.

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