

By the Students, for the Students: Operation Conversation Enhances Preclinical Students' Confidence in Challenging Communication Skills

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ABSTRACT

Background: Effective communication improves outcomes, yet communication skills training remains underrepresented in preclinical medical education. Operation Conversation, a student-designed and mentored program focused on difficult conversations, was integrated into the core curriculum to address this gap.

Methods: Preclinical medical students participated in small-group experiential learning sessions using personally selected, simulated scenarios. Each session included facilitator observation and feedback. Anonymous qualitative comments and quantitative feedback were collected to assess learner satisfaction and changes in self-confidence.

Results: Eighty-one percent of participants reported being “extremely satisfied” with the program and said they would recommend it to peers. Self-confidence increased across all program objectives, and participants said the exercises were realistic and timely.

Conclusions: This student-championed program builds communication confidence through experiential learning and feedback. Learners valued the program and appreciated its relevance. Future work will examine participants' longitudinal communication performance through standardized assessments.

BACKGROUND

Despite educational mandates and substantial evidence supporting its importance in patient outcomes, communication skills training (CST) remains undervalued and underrepresented in undergraduate medical education, particularly at the preclinical level.¹ Although observation and feedback make CST most effective, clinicians report rarely receiving feedback during their training.^{2,3} Learners also struggle to transfer skills to real-world clinical prac-

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tice and often feel unprepared for complex communication challenges.⁴

These challenges exist at our institution as well. In recent years, prior Medical College of Wisconsin (MCW) students recognized that CST was a low priority during their preclinical training. They surveyed 42 preclinical and clinical students to elicit topics and/or populations for which they felt unprepared when starting clinical rotations. The topics and populations identified were consistent with those reported internationally,⁴ including obesity, sexual health, chronic pain, mental health, substance use disorders, goals of care, and delivering serious news.

MCW launched a new medical school curriculum (MCWFusion) in 2023, which includes 18 months of preclinical work,

early integrated clinical experiences, and the start of clinical rotations halfway through the second year. Given that students inevitably encounter challenging conversation topics, populations, and communication tasks during these early clinical experiences, CST must be prioritized early; however, competing curricular demands and resource limitations make this challenging.

To address these gaps, former MCW students developed Operation Conversation (OC), a student-run, longitudinal, mentored CST program for preclinical medical students to prepare them for “difficult conversations—those involving diverse or potentially stigmatized populations and clinical scenarios that are sensitive, uncomfortable, or evoke strong emotion. OC first launched as an optional elective in 2021, and current OC student leaders have worked to integrate it into MCW's core Fusion curriculum. Here, we describe OC's first year of implementation in MCWFusion and a preliminary evaluation of its educational impact.

METHODS

Objectives

OC's objectives are that learners will: (1) practice challenging communication skills in simulated settings with facilitator observation; (2) reflect on their role in patient-doctor communication; and (3) give and receive feedback about communication skills.

Educational Design

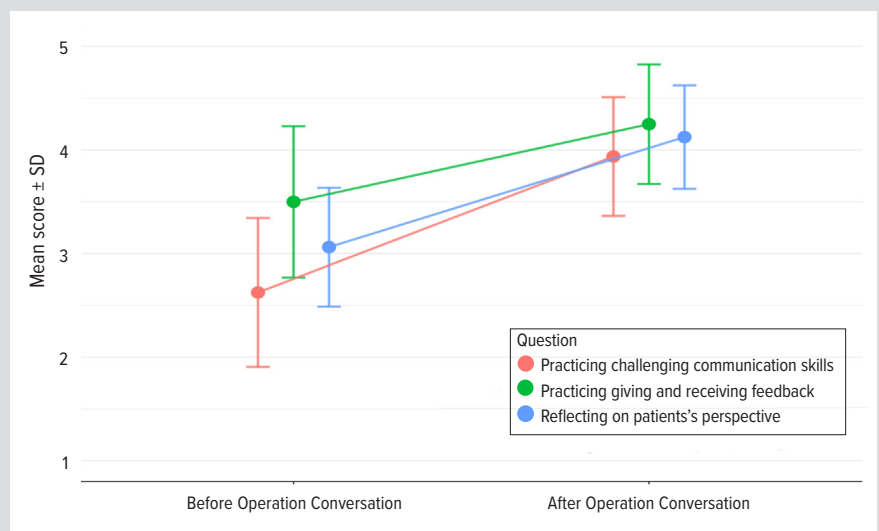
OC uses a self-directed approach in which learners select from simulated practice opportunities to support highly personalized learning. The prior needs assessment informed the development of 13 possible simulations, including discussing sexual health, mental health, delivering serious news, discussing goals of care, and counseling for behavior change. Several sources informed program content,^{5,6} and scenarios were developed with input from local physician experts representing several disciplines. Multiple evidence-based strategies for CST and adult learning were incorporated into OC's design, including clearly delineating skills, active small-group learning, repeated practice, observation, and detailed feedback.^{3,7} Peer role-play was used for skills practice because of its advantages in cost, psychological safety, and comparable efficacy with other simulation-based methods.⁸ Learners were asked to critically evaluate their performance using a standardized, validated communication assessment tool, which also ensured best-practice, behaviorally anchored feedback.^{9,10} Consistent small groups were maintained across workshops as much as possible, and scenario difficulty increased over the course of the program.

OC was offered as a selective "choice learning activity" for full-time, second-year medical students during the first month of the academic year. Student enrollment was capped at 30 because of facilitator recruitment constraints. Volunteer clinician facilitators (house staff, advanced practice providers, and faculty) were recruited via departmental emails and word of mouth.

Teaching Methods

The modified OC program for MCWFusion consisted of 2 weekly, 90-minute virtual sessions during the August "spiral weeks," the period between foundational science courses during which students attend scholarly concentration sessions and meet with peer learning communities. Each small group consisted of 2 medical students and 1 facilitator. After enrollment in OC, students pre-ranked preferred content areas and difficulty levels. OC program leaders assigned corresponding scenarios to participants via personalized Box folders before each workshop, which were not disclosed to participants until the workshop began.

Figure. Student Confidence in Program Goals and Learning Objectives Before and After Operation Conversation



During each session, learners accessed their assigned role-play scripts and a brief (8-minute) "Quick Slides" module containing relevant medical information and essential communication skills for their assigned clinical challenge. Facilitators received the "Quick Slides," both patient and physician roles and scripts, and a facilitator guide that included "case challenges" and guidance on areas for feedback. No additional facilitator training was provided. After reviewing materials, all participants moved to their preassigned breakout rooms for an unscripted, 12-minute role-play exercise while facilitators observed without interruption.

Immediately after each role-play, participants and their facilitator completed a validated, standardized communication rubric^{9,10} to assess the student physician's communication skills. Learners then reflected on their performance and received verbal feedback from their conversation partner and facilitator. Roles were then reversed. After each session, participants received individualized feedback and rubric scores via email for ongoing self-improvement.

Evaluation Methods

Following program completion of both OC sessions, student participants received an optional 6-question Qualtrics evaluation consisting of 5-point Likert scale items about satisfaction, perceived value, and self-confidence before and after the program, as well as an open-ended question about overall experience. We used a retrospective pre-/post-program approach¹¹ to measure change in learners' self-efficacy related to difficult communication skills, perspective-taking, and giving and receiving feedback. A 2-sample paired *t* test was used to compare pre-intervention and post-intervention confidence scores. Data were analyzed in R, version 4.5.1 (R Foundation for Statistical Computing) and summarized as quantitative mean scores with accompanying *P* values and confidence intervals.

RESULTS

Twenty-four of 30 second-year medical students completed both Operation Conversation sessions in August 2024. Final program evaluations were completed by 16 of the 24 participants (response rate, 66.7%).

For learner reactions, 13 of 16 (81.2%) participants reported being “extremely satisfied” with the OC program, and the remaining three (18.8%) reported being “somewhat satisfied.” Similarly, 13 of 16 (81.2%) participants said they were “extremely likely” to recommend OC to their peers, and three (18.8%) said they were “somewhat likely” to recommend it.

For self-efficacy, compared with baseline, participant self-confidence increased across all queried learning objectives, including practicing challenging communication skills (average increase, 1.3; 95% CI, 1.1-1.6; $P < .0001$), reflecting on the patient’s perspective and the clinician’s role in patient-clinician communication (average increase, 1.1; 95% CI, 0.7- 1.4; $P < .0001$), and giving and receiving feedback (average increase, 0.8; 95% CI, 0.4-1.1; $P = .0001$) (Figure).

Open-ended comments were overwhelmingly positive. Most participants reported enjoying their experience, and some expressed interest in repeating OC to further improve their communication skills. The program’s facilitators also informally noted that the role-play scenarios closely resembled real-world interactions that students are bound to encounter during their clinical training. Participants echoed this sentiment, agreeing that the scenarios felt realistic and appropriately challenging for their level of training.

DISCUSSION

Preliminary analysis of Operation Conversation’s integration into MCW’s new Fusion curriculum is promising and has garnered increasing support from institutional leadership. Participants’ self-reported confidence improved significantly across all learning objectives, and the program was highly rated. Most students viewed OC as value enough to recommend to peers, and some expressed a desire to participate again. These early data suggest that preclinical students benefit from engaging in advanced communication tasks early in their training. Building communication confidence during the preclinical years is essential as students transition into clerkships, where they will face high-stakes patient encounters and system pressures.

We believe OC’s effectiveness is due in part to its educational design, which aligns with 2 established adult learning principles: the need-to-know and orientation-to-learning.⁷ The program explicitly connects CST to students’ imminent clinical responsibilities, enhancing engagement and perceived value. Additionally, OC’s role-play scenarios provide contextually relevant practice that both participants and facilitators confirmed reflected real clinical situations. Finally, OC is strengthened by its peer-driven structure,

which participants anecdotally reported created a psychologically safe environment in which they felt empowered to take risks without fear of negative consequences.

Limitations

This study has limitations. The small sample size and potential for selection bias—namely, that students who choose to participate may already recognize a need to improve their communication skills—limit generalizability. Additionally, although statistically significant, the practical significance of a 1-point gain on a 5-point Likert scale warrants cautious interpretation.

Next, we plan to assess students’ communication skills during formal objective structured clinical examinations before and after OC participation and to compare participant and nonparticipant performance. These data, collected across multiple cohorts, will increase sample size and improve reliability, offering further insight into the program’s educational impact.

CONCLUSIONS

It is crucial that medical graduates develop strong communication skills and the capacity for reflective practice. Operation Conversation provides preclinical medical students with structured, realistic opportunities to practice challenging communication tasks early in their training. Program participants demonstrated significant gains in self-efficacy, rated the experience highly, and expressed strong willingness to recommend it to peers. OC’s intentional design, alignment with adult learning principles, and psychologically safe learning environment appear to support student growth in essential communication competencies. These findings suggest that OC is a feasible, valued, and educationally meaningful addition to the preclinical curriculum and may help better prepare students for the complex patient interactions they will encounter as they enter clinical training.

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