

Capstone for Impact Submission 2021

Project Title: Your Voice is an Instrument: a novel approach to communication skills education

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Summary:

The development of communication skills is crucial for medical students' preparation for clinical rotations and practice. However, conventional models including bookwork, lectures, and small groups may not be the most effective methods for teaching such skills. Novel frameworks for teaching communication skills can be found outside of medical disciplines, particularly the performing arts.

The first part of this project consisted of a needs assessment survey distributed to all University of Michigan medical students. It was designed to evaluate needs surrounding communication skills education. This included assessment of past training, in medical school or otherwise, topics in which communication skills can be coached such as admitting medical error or breaking bad news, and open-ended responses to aspects of communication skills education that respondents found most and least effective.

The second part of this project consisted of an elective designed to improve students' communication and interpersonal skills using the acting methodology and education tool, vocal technique. Vocal technique is a practice-based teaching model that approaches the voice as a tool and an instrument. It teaches exercises that isolate components of communication (ex: posture, breathing, and inflection). Vocal technique then uses performance and group feedback to integrate those components of communication into practice in order to improve communication skills and awareness. I have offered versions of this workshop as part of Wellness Week, to all LEAD participants, and a three-workshop course offered as a Doctoring Elective in spring 2018 to M1s.

Finally, I began to gather data to assess the efficacy of the workshops. This has been in the form of a survey using Likert-scale and open-ended responses. I presented early data from this at the annual Director of Clinical Skills (DOCS) conference via poster presentation.

Methodology:

In February 2020 I sent a needs assessment survey to all University of Michigan medical students that assessed the need for novel communication skills education. It investigated such questions as what context a communication skills workshop may be most

useful (eg breaking bad news, admitting medical error, residency interviewing, patient presentations), prior experience/training with communication skills education, how communication skills education best fits into pre-clinical versus clinical time, and what aspects of communication skills education are judged least and most effective by respondents.

Secondly, drawing on my own experiences in acting and vocal technique, I developed a three-session elective for pre-clinical and clinical students. I have offered versions of this workshop as part of Wellness Week, to all LEAD participants, and as a Doctoring Elective in spring 2018 to M1s. The course consists of three sessions. The first introduces components of the voice including breath, posture, pace, and volume via powerpoint. Then participants learn exercises that isolate these components increasing awareness and control of them. In groups of six to twelve, participants integrate skills learned from the exercises into the performance of a brief monologue. Within these smaller groups, participants offer constructive feedback after performances. The second and third sessions begin with the exercises isolating components of the voice and then continue with performance and critique of monologues using newly acquired tools and vocabulary.

Course objectives included:

- Develop an awareness of the physical components of voice including breath, posture, pace, volume, and intonation
- Teach and practice techniques that use physical components of voice to improve communication and interpersonal skills
- Use performance to exercise and reinforce communication skills
- Improve communication skills via realtime, specific feedback from peers
- Investigate how communication can foster honesty and empathy

I have collected limited pre and post-course survey data intended to evaluate the efficacy of the course. This was collected in the form of Likert-scale questionnaires distributed before and after workshops.

Results:

260 of 720 total medical students responded to the needs assessment for a response rate of 36.1%. Notable findings include 22% of respondents indicating they have received no communication skills training at any point, and 34% of respondents indicating they have received no communication skills in medical school. 89% of respondents felt that medical school should offer such training. Themes were identified from the open-ended responses describing aspects of communication skills training that respondents felt most and least effective.

From the limited survey data collected before and after workshops with IRB approval, feedback has been largely positive. Participants from the Doctoring Elective and Wellness Week workshops, rated the workshops an average of 9.4 on a 10 point Likert scale with 10

being “Extremely helpful” and 1 “Not at all helpful.” Narrative comments were broadly positive and identified the course as effective in increasing “awareness of what my voice conveys,” offering “tools to improve how I communicate” and a “safe space to get advice on becoming a better public speaker.” Several students indicated that the workshops would prove valuable during clinical rotations.

Conclusion:

Numerous studies have recognized the importance of communication skills in the practice of clinical medicine including better patient outcomes, increased patient satisfaction, lower litigation rates.¹²³ The costs of poor communication skills fall not only on the provider, but on the patient. A review of the current state of communication skills among physicians in a 2019 Journal of American Geriatrics Society article found that “physicians and other clinicians routinely speak to patients and families using medical jargon, fail to recognize that the patient is not following, miss cues that patients are experiencing emotions that make absorbing information impossible, and subtly block patient questions and concerns.”⁴ This presents a troubling picture and an urgent call for robust communication skills training.

Both the LCME and ACGME guidelines for medical school and residency education, respectively, highlight communication and interpersonal skills as core competencies. Given the unique nature of communication, conventional education models including bookwork, lectures, and small groups may not be the most effective methods for teaching such skills.

A needs assessment distributed to University of Michigan medical students in February 2020 demonstrated a lacking communication skills curriculum. It found that 34% of medical students reported no communication skills education in medical school including 19% of M4s. For respondents who indicated they had received training within medical school, the training’s efficacy was rated as 5.9 out of 10. Themes associated with least effective communication skills education included lack of genuine interaction including checklist rubrics and structured simulations, lack of specific instruction and feedback, and lack of interactive instruction.

While survey data from the vocal technique workshops are limited, they present an optimistic picture with respondents rating the workshops an average of

¹ Simpson, M., Buckman, R., Stewart, M., Maguire, P., Lipkin, M., Novack, D., & Till, J. (1991). Doctor-patient communication: The Toronto Consensus statement. *BMJ*, 303(6814), 1385-1387. doi:10.1136/bmj.303.6814.1385, Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ*. 1995;152(9):1423-1433.

² Janine W.Y. Kee, Hwee Sing Khoo, Issac Lim, Mervyn Y.H. Koh, Communication Skills in Patient-Doctor Interactions: Learning from Patient Complaints, *Health Professions Education*, Volume 4, Issue 2, 2018, Pages 97-106

³ Makoul, Gregory PhD Essential Elements of Communication in Medical Encounters, *Academic Medicine*: April 2001 - Volume 76 - Issue 4 - p 390-393

⁴ Back, A. L., Fromme, E. K., & Meier, D. E. (2019). Training clinicians with communication skills needed to match medical treatments to patient values. *Journal of the American Geriatrics Society*, 67(S2). doi:10.1111/jgs.15709

9.4 out of 10 with 10 being "Extremely helpful." Additionally, the course is designed to be primarily interactive with participants empowered to offer specific feedback and instruction to each other. While the work presented is a monologue and not medical, I believe that the anxiety and uncertainty of such public presentation offers genuine feelings relatable to any public speaking context.

Looking forward, the elective should be offered with robust pre and post-survey data assessing its efficacy. I would like to expand its participants to include residents and other health professionals.

Reflection Statement:

This was an exciting project for me as it involved interests and training fostered prior to medicine. It remains a challenging project for a number of reasons. The rigor of academic medicine requires the demonstration of efficacy which can be difficult to measure for something as subjective as communication and interpersonal skills. Furthermore, as I am largely new to research, I have had to learn a lot about academic methodologies, current literature, etc. I still have a lot to learn in this regard. Other challenges of the project include the large buy-in required from participants and the intense nature of the workshops. I feel this is the key to its efficacy though. I look forward to continuing to develop this project at my residency program. Moving forward, I will look to publish the limited data discussed above in such journals as Online Med Ed Portal, including the results from the needs assessment I conducted. Looking ahead, I would like to offer the workshop to diverse medical student groups including pre-orientation groups, clinical skills groups (eg Doctoring), and perhaps an elective offered broadly. More workshops will allow me to refine the course, as well as collect data.