Using Improv to Develop Communication Skills for Medical Students
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Introduction
Strong communication skills are essential for clinicians, and clear and confident self-presentation is important for medical students. Techniques of improvisational theater have been adapted for use in many classroom settings, and its use specifically in the health sciences to improve communication skills has been reported by several investigators.1-3 We describe here a short workshop series designed to apply this model to the context of a student-led organization to improve communication skills.

Methods
• Workshop series was constructed to improve communication skills, requested by the Women in Medicine (WIM) student interest group
• After IRB approval, subjects were recruited via email announcements and advertising by WIM, and four 2-hour sessions were scheduled
• Before participation, participants anonymously completed surveys: Self-Perceived Communication Competence Scale (SPCC) and Nonverbal Immediacy Scale-Self Report (NIS-S)4,5
• Each session was followed by a series of 3 or 4 short “warmup” exercises, progressing to more complex improvisational structures or “games” (Fig 1)
• Sessions focused on communication skills in an iterative way – games in session 4 were more complex than those in session 1, to emphasize:
  – attention and mindfulness → memory
  – non-verbal communication → status
  – deep listening → emotion
  – Students shared what they liked, disliked and learned at the end of each game, and a short debrief was conducted at the end of each session
• Workshop series was formally evaluated via a focus group and by the administration of validated self-assessments of communication skills

Figure 1: An example game
“Pecking order”
A group game for 3-5 participants
Each player silently picks a number between 1 and the number of players in the scene, keeping their number secret (duplicates allowed)
A suggestion is taken from the audience, setting the number of players in the scene, keeping their status with respect to their scene partners
A group game for 3-5 participants

Results
• Pre- and post-intervention scores for Self-Perceived Communication Competence Scale (SPCC) and Nonverbal Immediacy Scale-Self Report (NIS-S)4,5 were calculated from 9 / 14 participants who attended at least 1 session
• A modest increase in scores were seen after attending one or more sessions of the workshop (Fig 2), with no correlation between change in scores and number of sessions attended

Figure 2: Changes in Communication Scores

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Pre-workshop Mean</th>
<th>Post-workshop Mean</th>
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<tbody>
<tr>
<td>SPCC</td>
<td>76.02</td>
<td>79.72</td>
</tr>
<tr>
<td>NIS-S</td>
<td>96.44</td>
<td>99.89</td>
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</tbody>
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Focus group data (9 responders) showed broad agreement about (Fig 3):
1) Importance of non-verbal communication
2) Workshop environment being “safe”
3) Increased confidence with concepts
4) Insight into the communication strategies, both of themselves and their peers
Many students attended only 1 or 2 sessions
Responses from the focus group showed that participants took away interesting, informative insights from attended sessions

Conclusions
• Medical students’ self-assessed communication skills modestly improved after participation in one or more improv workshop sessions
• Medical student interest groups are interested in additional modalities to improve their communication skills
• Quantitative evaluation of the effects of the workshop series was limited by the lack of a control group and the small sample size

References

Future Directions
• Repeat workshop series with control groups
• Employ external observation of communication skills
• Evaluate students throughout their undergraduate and graduate medical education, measuring how participation impacts communication skills over time

Figure 3: Notable focus group responses
“Tend to live in my own head a lot, and that was something that improv really helped. I think it helps a lot of those sort-of ‘stuck’ thoughts get out.”
“Felt like it was a safe environment. I appreciated everyone’s spontaneity and willingness to get into the scenes because we are in a very stressed environment. In class, I see a lot of hesitancy to answer questions and put yourself out there, so it was nice to see that kind of openness rewarded in the sessions.”
“Participating felt more natural and comfortable as I attended more sessions. I noticed a change between first and second session where I felt much more comfortable jumping into a scene without worrying about screwing something up.”
“Was interesting to watch others play, particularly how interactions would be explicitly modeled on stage. When playing ‘No, but’, you could see people get further apart, while when playing ‘yes, and’ you could see players getting closer together. Games functioned almost like a ‘lab’ setting – change one variable and see how an interaction would change with it.”