

Medical Malfunction! A combined simulation approach to improve resident awareness and performance

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Introduction

Clinical training for healthcare professionals traditionally relies on learning through experiences with patients, even for high-risk invasive procedures and life-threatening situations. To bridge the gap between classroom teaching and real-world clinical experiences, our program launched a new patient safety simulation program combining “Mishap” room and high-value clinical case scenarios in a risk-free environment for the incoming physician trainees.

Goal

- To enable the accelerated development of expertise in both individual and team skills by applying classroom knowledge on the simulated scenarios.
- Addresses the ACGME Milestones specifically in the recognition of system error and advocacy for system improvement.

Methodology and Process

- All of our Internal Medicine interns are required to attend the simulation.
- A 2.5-hour simulation with 30 minutes of introduction followed by two practical sessions each lasting one hour.
- The two sessions were conducted simultaneously with separate groups.
- Session one: the “Mishap” room with a high-fidelity mannequin set up for participants to identify the errors and patient safety hazards. A group of 4-5 participants entered the room each time for 5 minutes. This session ended with a 30-minute post simulation debriefing session moderated by a faculty attending.
- Session two: there were 4 clinical case scenarios (2 outpatient and 2 inpatient) reflecting major and common medical errors or near miss events. Participants were divided into 4 groups and each group was assigned one case to lead the discussion moderated by a faculty attending and co-facilitator/senior resident.



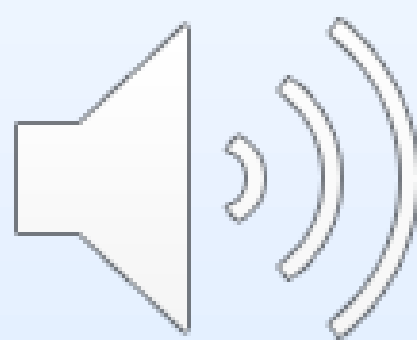
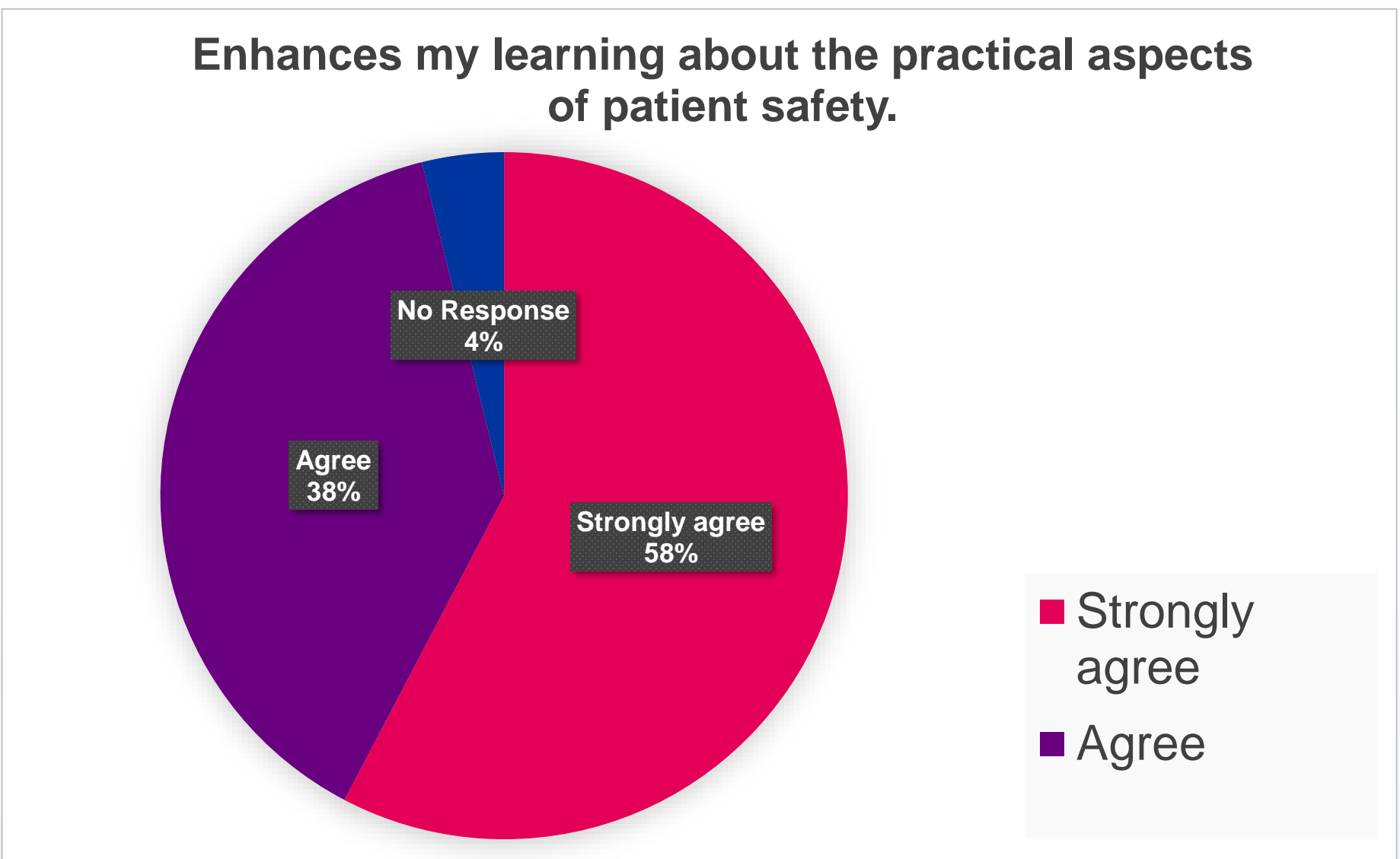
Results

Post-simulation survey conducted on the 26 participants:

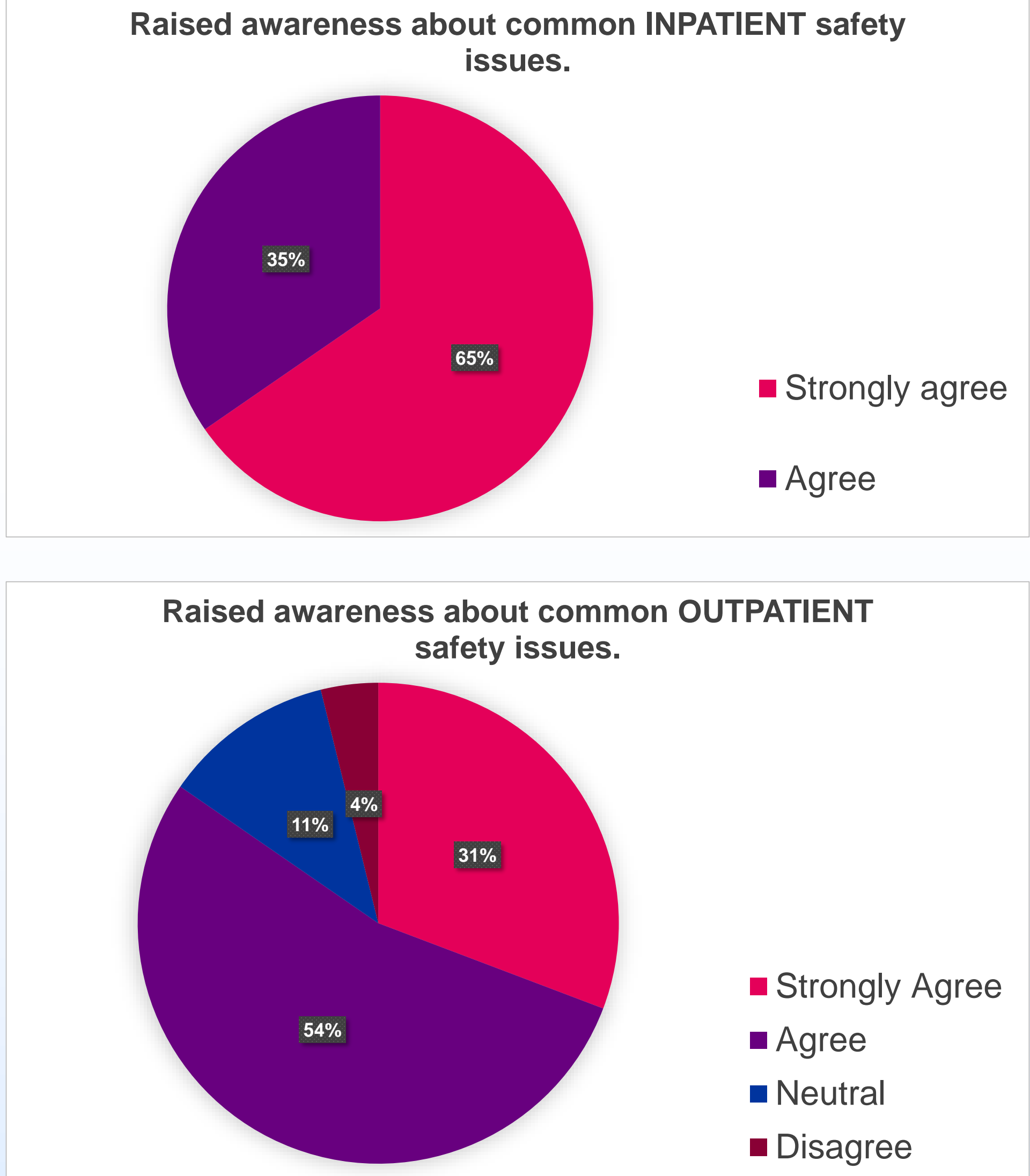
- 59% did **not** have prior training in patient safety curriculum; 93% had no prior patient safety simulation activities, indicating the need for safety simulation in this particular group is significant.
- All strongly agree/agree the simulation activities raised their awareness on common inpatient patient safety issues,
- 95% strongly agree/agree the activities raised their awareness on common outpatient patient safety issues.
- All strongly agree/agree the simulation activities enhanced their learning about the practical aspects of patient safety.

Other comments:

- More mindful of safety issues and more eager to address them.
- Feel empowered to speak up regarding safety concerns
- Increased confidence when encountering and handling a potential error,
- Will be more careful checking the lists and charts
- Will ensure good communication with other staffs and the patients
- Enjoyed both case-based discussions and simulated scenarios very much.



Simulation Center Participants



Conclusion

Teaching and learning patient safety requires demonstration of competencies such as teamwork, communication skills, and recognition of system errors. Our survey result demonstrated that this pilot simulated program can function as an effective and valuable training tool for physicians prior to encountering said scenarios in the real clinical settings.

Reference

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