A Virtual Simulation of Agitated Patient Management: The potential to support entrustability in **Child and Adolescent Psychiatry residency**

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BACKGROUND

Competence by Design (CBD) is the Royal College of Physicians and Surgeons of Canada's major change initiative to reform the training of medical specialists in Canada. The Royal College organizes each specialty program of distinct stages of training, where each stage has Entrustable Professional Activities (EPAs) residents must complete. A partnership between the Centre for Addiction and Mental Health (CAMH) and The Hospital for Sick Children (SickKids) allowed the opportunity to develop and implement a virtual simulation for Child and Adolescent Psychiatry (CAP) residents to develop their crisis intervention skills as per the transition to discipline EPA's 2.2.: Formal instruction in: 2.2.1: De-escalation techniques, including management of agitated patients and 2.3.: Training or certification in nonviolent crisis intervention.

Simulation has been shown to be an appropriate modality to demonstrate entrustability for EPAs.^{1, 2} The goal of this simulation was to provide PGY5 and PGY6 Child and Adolescent Psychiatry (CAP) sub-specialty residents at The University of Toronto with a multi-staged, virtual simulation with a Simulated Participant (trained actor) that addresses common techniques for managing agitated patients across hospital sites. While simulation training for agitated patient management is typically delivered in-person, due to COVID-19 restrictions and limits to in-person learning, the simulation was delivered virtually.

DESCRIPTION

Child and Adolescent Psychiatry residents participated in a half-day training, beginning with didactic teaching on situational assessment, de-escalation, pharmacology and restraints, followed by virtual simulations to practice learned skills. The simulation was broken down into four 5-7 minute stages, with 15 minute debriefs after each stage with feedback from the Simulated Patient. The simulation followed the same patient profile, each stage highlighting a different point in the patient's acute agitation.





CONCLUSIONS

Pre-tests and post-tests were conducted, indicating that there was a 35% average increase in confidence across all domains of de-escalation and acute agitation management measured. All CAP residents reported that simulation and the use of a Simulated Participant enhanced their learning experience and reported intent to change practice as they go into their clinical rotation. All CAP residents also reported that the training was relevant, that they felt engaged throughout, and comfortable and safe in participating. Results indicate that virtual delivery of a simulated de-escalation is a promising option for residents to demonstrate entrustability in deescalating and managing acute agitation in a patient. Potential next steps could include:

- More research to illustrate the impact of medical simulation on patient outcomes
- Use of debriefing in crucial conversations & feedback
- Establishing benchmarks and milestones as per CanMEDS' CBD and EPA learning objectives using simulation
- Incorporating simulation at multiple levels of medical education/ staff education.

REFERENCES

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- 1. Herrigel DJ, Donovan C, Goodman E, et al. Simulation as a Platform for Development of Entrustable Professional Activities: A Modular, Longitudinal Approach. Cureus. 2020;12(10):e11098. doi:10.7759/cureus.11098
- 2. Pandya A, Patocka C, Huffman J. Simulation for assessment of Entrustable Professional Activities in an emergency medicine residency program. Canadian journal of emergency medicine. 2021;24, 84–87. doi:10.1007/s43678-021-00209-5

High fidelity SP (Simulated Participant) presentation that provided opportunity for very helpful feedback from colleagues and staff

SP (Simulated Participant) was very good and made the scenario feel more realistic, despite the limits of Zoom









