

Background

- Malignant Hyperthermia (MH) is a rare, high-risk complication of anesthetic drugs. Limited interaction with this emergency leads to a potential knowledge deficit for this patient population and clinical skills
- Simulations constitutes of a variety of teaching methods and educational strategies to practice emergent situations and decision-making skills in a safe learning environment
- Performing effective debriefing after the simulation uses reflective learning and integration of knowledge to close performance gaps

Objectives

- By the end of the simulation scenario, the Registered Nurse will:
 - Identify patients who may be at risk for MH
 - Recognize agents that may trigger MH
 - Identify clinical symptoms and manifestations of MH
 - Demonstrate knowledge for PACU interventions mobilize staff and equipment identifying where the MH Box is located and what item it contains
 - Demonstrate how to reconstitute Ryanodex

References

- Malignant Hyperthermia Association of the U.S (2024). Retrieved from [Home – MHAUS](#)
- Harper, M. G., Gilbert, G. E., Gilbert, M., Markey, L., & Anderson, K. (2018). Simulation use in acute care hospitals in the United States. *Journal for Nurses in Professional Development*, 34(5), 242-249.

Process of Implementation



A MH clinical scenario was developed in collaboration with the Simulation Center and Pharmacy. Information was gathered from previous education & current policies & procedures

2 sessions were conducted, 4-5 RN participated in each session, along with 1 clinical expert
A pre-brief was conducted on room surveillance & instructions
The simulation topic was not disclosed



The patient's situation, assessment findings, scenario objectives, & interventions were discussed & reviewed
Notes on discussion/questions were collected
The scenario & debrief were summarized & presented to clinical nurses unable to attend



Statement of Successful Practice

- During the debrief, there were opportunities for self-reflection and questions
- In the beginning of the debrief many of the participants expressed they felt flustered, unprepared, and anxious. At the end of the debrief many of the participations felt more engaged, enlightened, and proud of their teamwork during the simulation
- Regulations/guidelines, technical skills, and equipment locations were identified as areas for improvement
- Clinical Nurses demonstrated competency in collaboration benchmarks, role clarity, and workflow changes
- Each simulation was recorded and summarized in a high-performance observation summary. Each performance review was shared with the leadership team

Conclusion

- Simulation training provides a realistic-safe environment for clinical nurses to apply their knowledge and enhance their skills. It also serves as an opportunity for nurse leaders to review critical actions, resources, and potential needs to optimize critical and emergent situations