

## **Multisession Education Improves Nurses' Knowledge and Confidence for Malignant Hyperthermia Crisis**

Primary Investigator: Hazzel H. Gomez MSN BSN RN CAPA CPAN

The UT Southwestern Medical Center, Dallas, Texas

Co- Investigator: Barbara J. Crim MBA BSN BA RN CNOR

**Introduction:** Malignant hyperthermia (MH) is a rare genetic skeletal muscle disorder that when a patient is exposed to volatile inhalation agents and/or succinylcholine, can cause a potentially lethal condition. It is important to educate PACU nurses to foster confidence and preparedness when working with these patients. Prompt recognition and treatment is paramount for a patient to survive a MH crisis. Previous staff education has proven effective in enhancing nursing knowledge and led to positive patient outcomes.

**Identification of the problem:** PACU nurses have expressed their concern to learn more about MH and become more familiar with the unit's MH cart contents.

**QI Question / Purpose of Study:** The purpose of this poster is to report the knowledge and confidence of nurses' preparedness with MH after a series of education sessions.

**Methods:** Learning opportunities were provided in-person to PACU nurses multiple times from 2016-2018. There were total of four education opportunities that were successfully provided to staff by experts which included lectures, test of knowledge, scavenger hunt of the MH cart and familiarizing with Malignant Hyperthermia Association of the United States (MHAUS) website. A post education survey was sent to staff at the end of all the opportunities to measure its success in increasing their knowledge, preparedness and confidence.

**Outcomes/Results:** The learning opportunities were overall successful. Most of the PACU nurses attended all of the education sessions. The average posttest grade was 95.4%. One hundred percent of the survey respondents reported better understanding of MH and confidence in recognizing its signs and symptoms if MH crisis occurs.

**Discussion:** The results of the posttest and post education survey revealed increased in knowledge, confidence and preparedness of PACU nurses. In-person education proved to be an effective intervention.

**Conclusion:** This provides compelling evidence that multiple learning opportunities improved nursing knowledge and confidence for MH crisis.

**Implications for perianesthesia nurses and future research:** Malignant hyperthermia staff education offered multiple times in multiple ways is feasible and effective to improve knowledge, confidence, and preparedness of PACU nurses.