

Improving Confidence Level of Perianesthesia Nurses Using Malignant Hyperthermia Cart Hands-On Training

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Introduction: Malignant hyperthermia (MH) is a rare inherited skeletal muscle disorder that has been reported to occur 1 in 5,000 to 100,000 anesthetics. Malignant Hyperthermia Association of the United States (MHAUS) recommends annual education that includes not only rapid recognition of MH signs and symptoms, but the team to locate the closest MH cart and have hands-on experience to improve their confidence level and familiarity.

Identification of the Problem: Perianesthesia nurses identified low confidence level in responding to MH crisis and unfamiliarity to the MH cart contents as evidenced by the pre-training assessment.

QI Question/Purpose of the Study: This project examines the impact of MH cart hands-on training on the confidence level of perianesthesia nurses in responding to MH crisis.

Methods: Pre and post- training assessments were sent to 63 perianesthesia nurses to determine their confidence level on a scale of 1-5, with 0 being not confident and 5 being very confident. Series of MH cart training was conducted at various days and times to allow for maximum attendance.

Outcomes/Results: The mean pre-training confidence level of 3.27 (SD=1.22) increased to 4.67 (SD=0.53) after the training ($P=1.328$). Several respondents verbalized value in knowing the contents of the MH cart, where they are located in the cart and their indication. 98% of them considered themselves familiar with the location of the closest MH cart after the training session. All of the respondents acknowledged that the course materials were essential for their success in responding to MH crisis.

Discussion: Post training assessment showed significant knowledge gain from the training and marked improvement in confidence levels. It is evident that the training equipped nurses with tools and understanding needed to respond to MH crisis.

Conclusion: MH cart hands-on training improved confidence level of perianesthesia nurses in responding to MH crisis.

Implications for perianesthesia nurses and future research: This provides compelling evidence that hands-on training of MH cart increases confidence level of perianesthesia nurses. Other perianesthesia units can model our method in bringing confidence level of perianesthesia nurses to optimal.