



Modified Valsalva Maneuver

Barbara Merutka BSN, RN, CMSRN, CAPA
Staci Eguia MSN, RN, CCRN & Kimberly A. Potts MSN, RN, CNOR

Background

Supraventricular tachycardia (SVT) can present in the perioperative setting and standard conversion methods have shown underwhelming responses for success.

The 2015 Randomized Evaluation of modified Valsalva Effectiveness in Re entrant Tachycardias (REVERT) trial, showcases modified Valsalva maneuver as an alternative that offers improved conversion rates to sinus rhythm and is highly tolerated by patients.

Although successful, the REVERT trial and modified Valsalva maneuver are not vastly discussed and known in nursing practice.

Objectives

The objective of this project was to assess perioperative staff baseline knowledge of traditional vs. modified Valsalva maneuver.

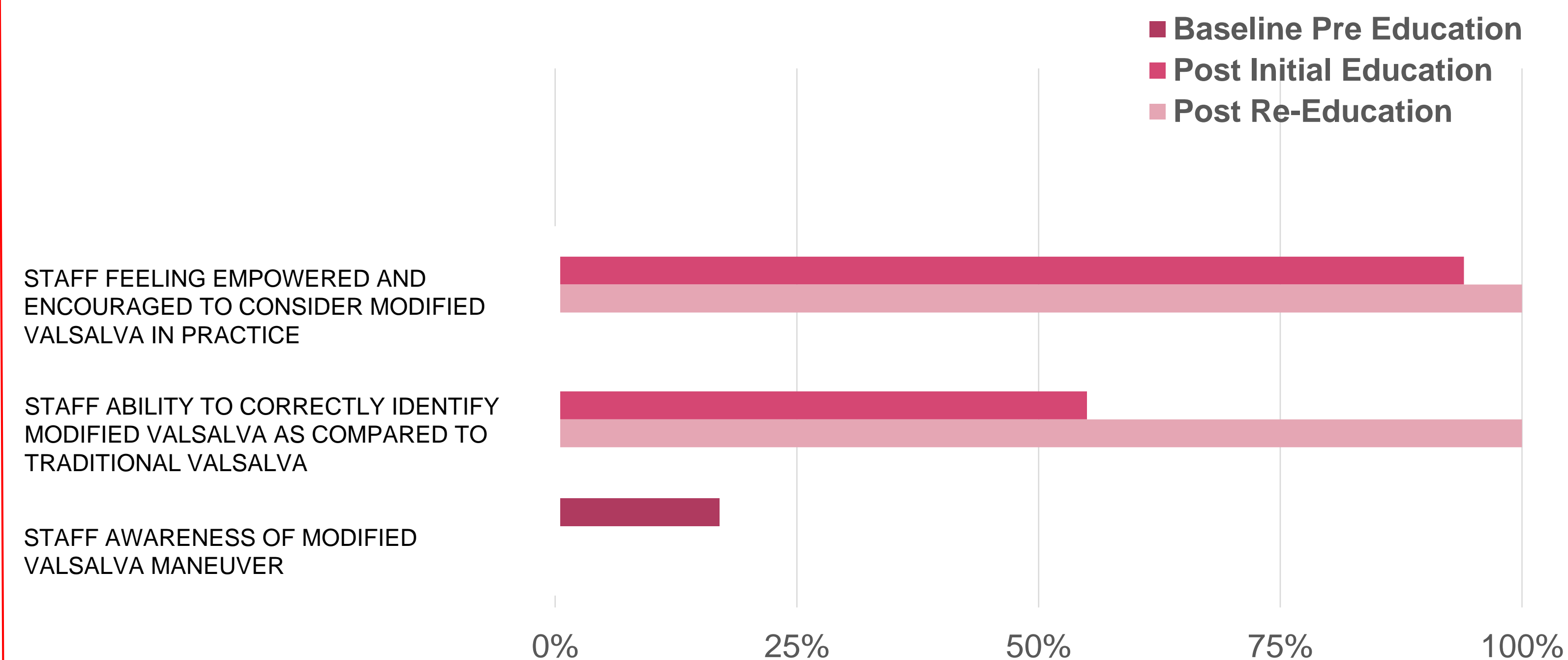
The goal was to educate perioperative staff on the REVERT trial and how the modified Valsalva maneuver differs from traditional Valsalva, while also encouraging confidence in understanding and practice utilization.

Implementation

- Review of the REVERT trial was conducted for validity and pertinence to practice.
- A needs assessment was conducted to identify knowledge deficits.
- An educational in-service was provided to registered nurses on the procedural floor.
- A post-education survey was conducted two weeks later to assess knowledge retention.
- Based on initial survey data, hands-on sessions were included in re-education.
- A final survey was conducted two weeks post re-education to assess knowledge retention and understanding.



Results



Statement of Successful Practice

- The pre survey assessment indicated 17% of staff had heard of modified Valsalva maneuver.
- Post implementation of initial education, 55% of staff were able to correctly identify the difference between traditional Valsalva and modified Valsalva and 94% of the staff felt encouraged to consider modified Valsalva maneuver in practice.
- Post implementation of reeducation, 100% of staff were able to correctly identify the difference between traditional Valsalva and modified Valsalva and 100% of the staff felt encouraged to consider modified Valsalva maneuver in practice.

Implication for Peri-Anesthesia Nursing Practice

Providing education for alternatives to traditional considerations in treating SVT increases awareness for new knowledge to clinical staff and could improve patient outcomes and satisfaction.

References

Appelboom, A., Reuben, A., Mann, C., Gagg, J., Ewings, P., Barton, A., Lobban, T., Dayer, M., Vickery, J., & Benger, J. (2015). Postural modification to the standard Valsalva manoeuvre for emergency treatment of supraventricular tachycardias (REVERT): A randomised controlled trial. *The Lancet*, 386(10005), 1747-1753. [https://doi.org/10.1016/s0140-6736\(15\)61485-4](https://doi.org/10.1016/s0140-6736(15)61485-4)

Acknowledgments

West Houston Area Location
West Houston Procedure Floor Team
Uniqua Smith PhD, MBA, RN, NE-BC

