

Sensory Vagal Afferents

Implementation of an Antiemetic Prophylaxis Clinical Practice Guideline for Postoperative Nausea and Vomiting



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Background/Significance **PONV** is Still a Significant Burden to Patients and Hospitals **Incidence of PONV** Distressing experience associated with patient dissatisfaction Most common adverse event in post-op Clinical complications: aspiration, hematoma, incisional hernia/suture dehiscence, dehydration, etd Of high-risk Of general surgical patients **Complex Pathophysiology of PONV** Vestibular Nucleus Substance P **Multifactorial Risk Factors of PONV** Vomiting Center Sights, smells, Chemoreceptor Muscarinic Receptor ENK Receptor H₁ Receptor 5HT₃ Receptor Risk factors for 5HT₄ Receptor PONV in adults

Problems

Independent risk factors for PONV

Used in Apfel's simplified risk

stratification tool

D₂ Receptor

- PONV is a distressing and common complication in surgical patients after general anesthesia.
- PONV incidence remains high without proper prophylaxis.

Different neural pathways of PONV

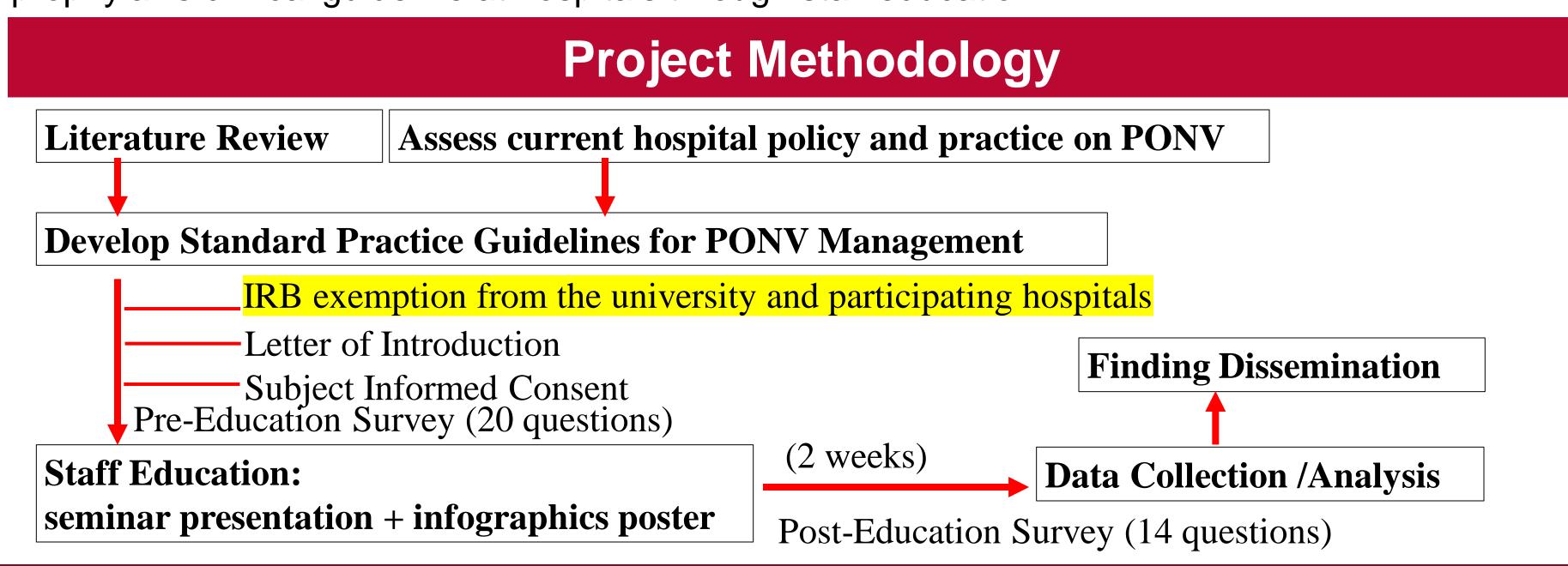
Cellular receptors involved in PONV

Antiemetics available to manage PONV

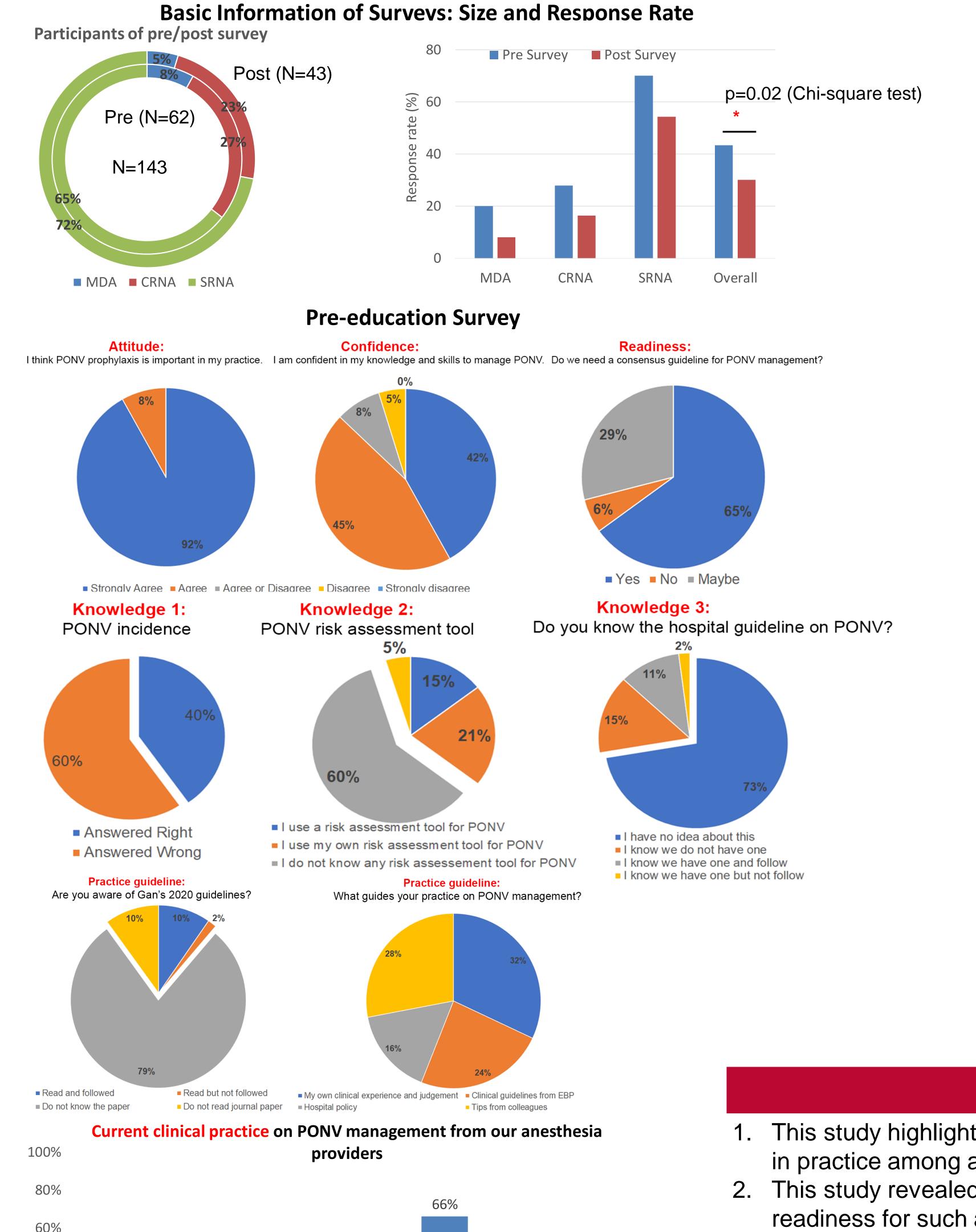
- A consensus guideline for PONV prophylaxis is lacking at an institutional level.
- Compliance with the practice guidelines is poor in the clinical setting.

Purpose Statement

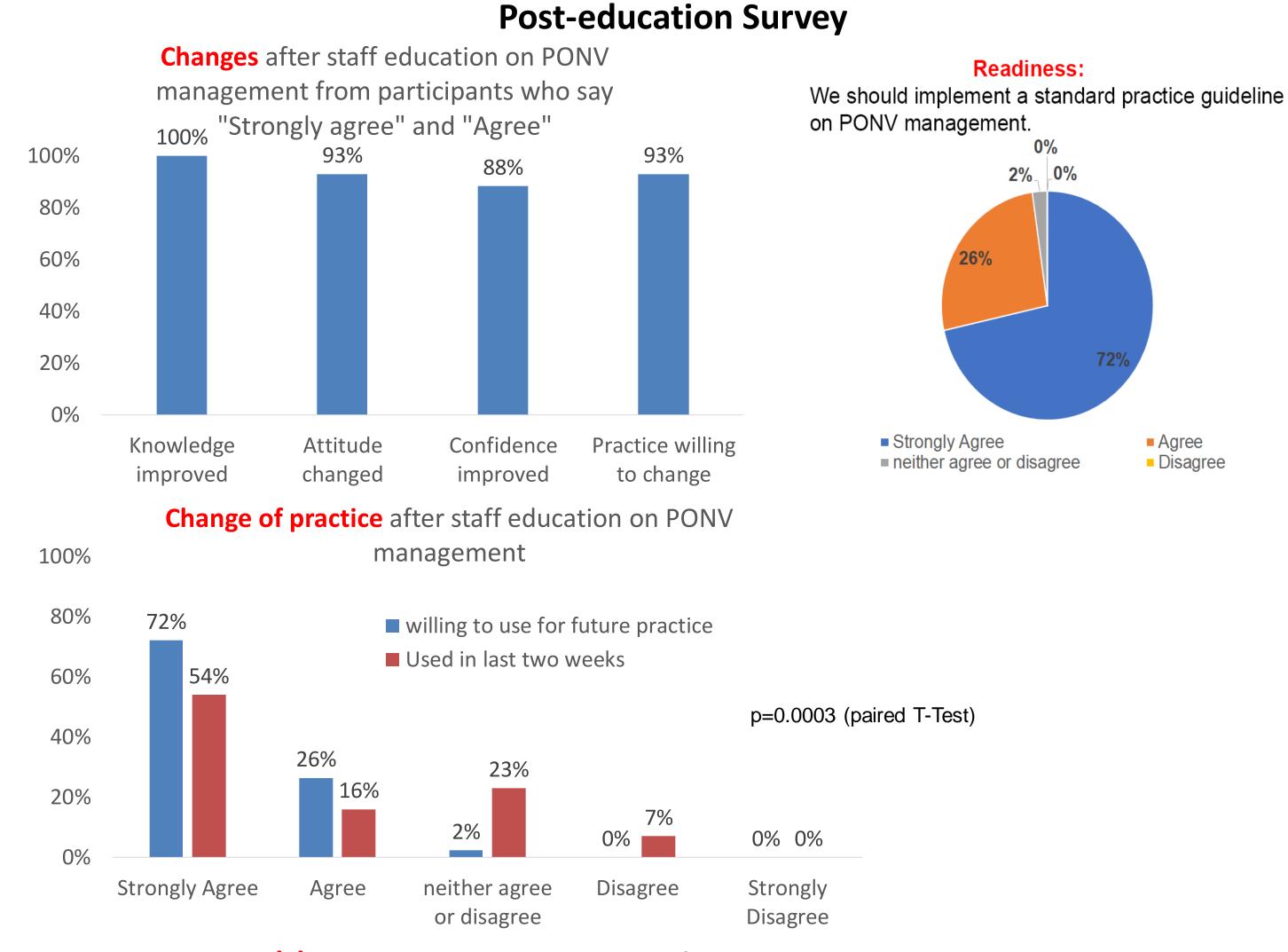
This project aims to locate the best evidence of PONV management, develop a standard PONV prophylaxis clinical guideline for anesthesia practitioners, and implement the consensus PONV prophylaxis clinical guideline at hospitals through staff education.

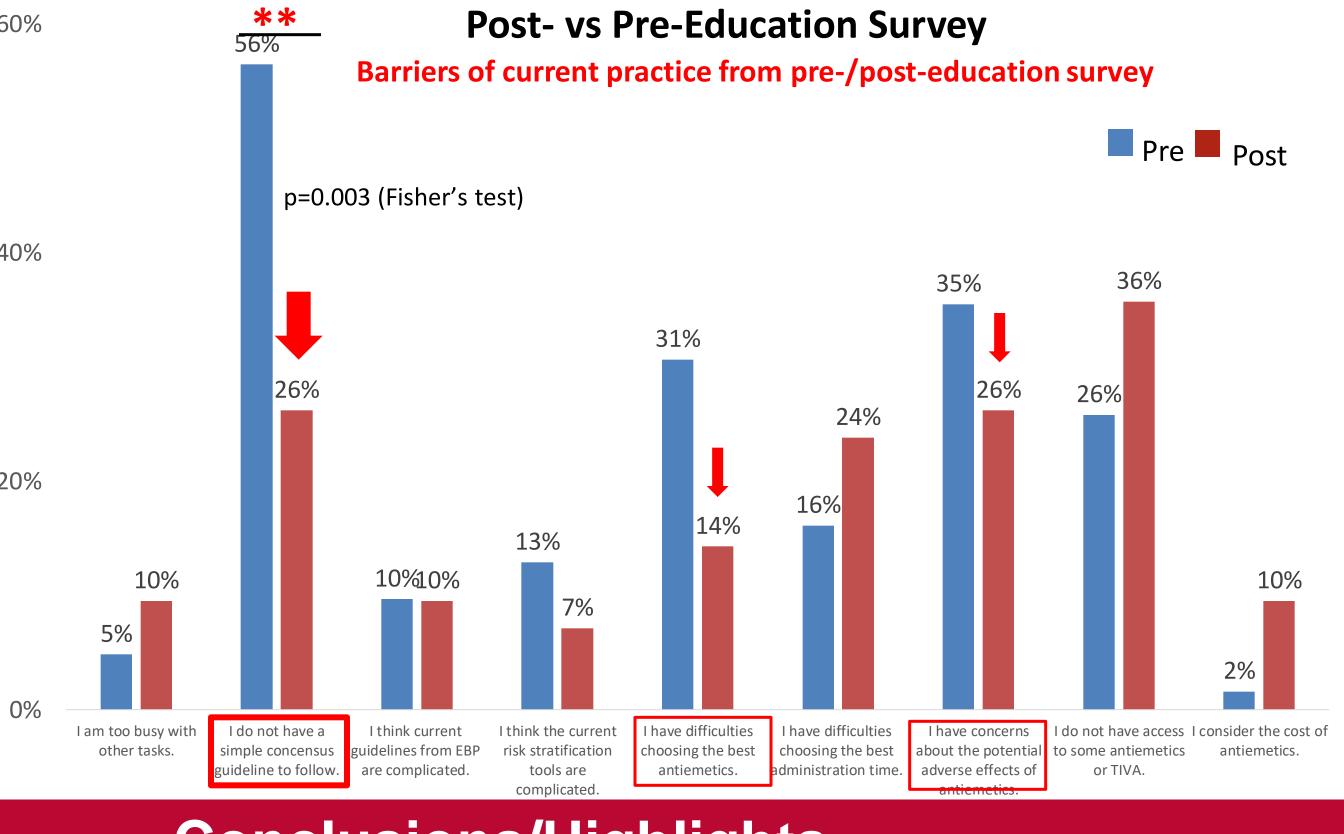


Results



(TIVA) to high-risk





Conclusions/Highlights

- This study highlighted a lack of knowledge on PONV management and unawareness of guidelines in practice among anesthesia providers.
- This study revealed a need for a consensus practice guideline for PONV management and high readiness for such a guideline among anesthesia providers.
- This study identified potential barriers to implement such a guideline for PONV management.
- This study demonstrated that staff education greatly improved the providers' knowledge, attitude, confidence, and readiness levels and effectively reduced the barriers in clinical practice.

Implications for Practice

This study paved a solid foundation to implement a consensus practice guideline for PONV management in the clinical setting. (References available upon request)

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