

# DEXAMETHASONE IN DIABETIC SURGICAL PATIENTS: AN EDUCATIONAL INTERVENTION TO ENHANCE ADHERENCE TO PONV GUIDELINES.



## Authors

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## Introduction

- Postoperative nausea and vomiting (PONV) affects ~27.7% of surgical patients and contributes to prolonged PACU stays and increased costs.
- Fourth Consensus PONV Guidelines recommend **4 mg IV dexamethasone** as first-line prophylaxis.
- Despite strong evidence, anesthesia providers often avoid dexamethasone in **diabetic patients** due to concerns about hyperglycemia and surgical site infection (SSI).
- This project evaluated whether **targeted education** could improve guideline adherence.

## Project Aim

Following a targeted educational intervention, anesthesia providers will:

- Report **reduced concern** about hyperglycemia and SSI
- Report **increased likelihood** of administering IV dexamethasone for PONV in diabetic surgical patients

## Methods

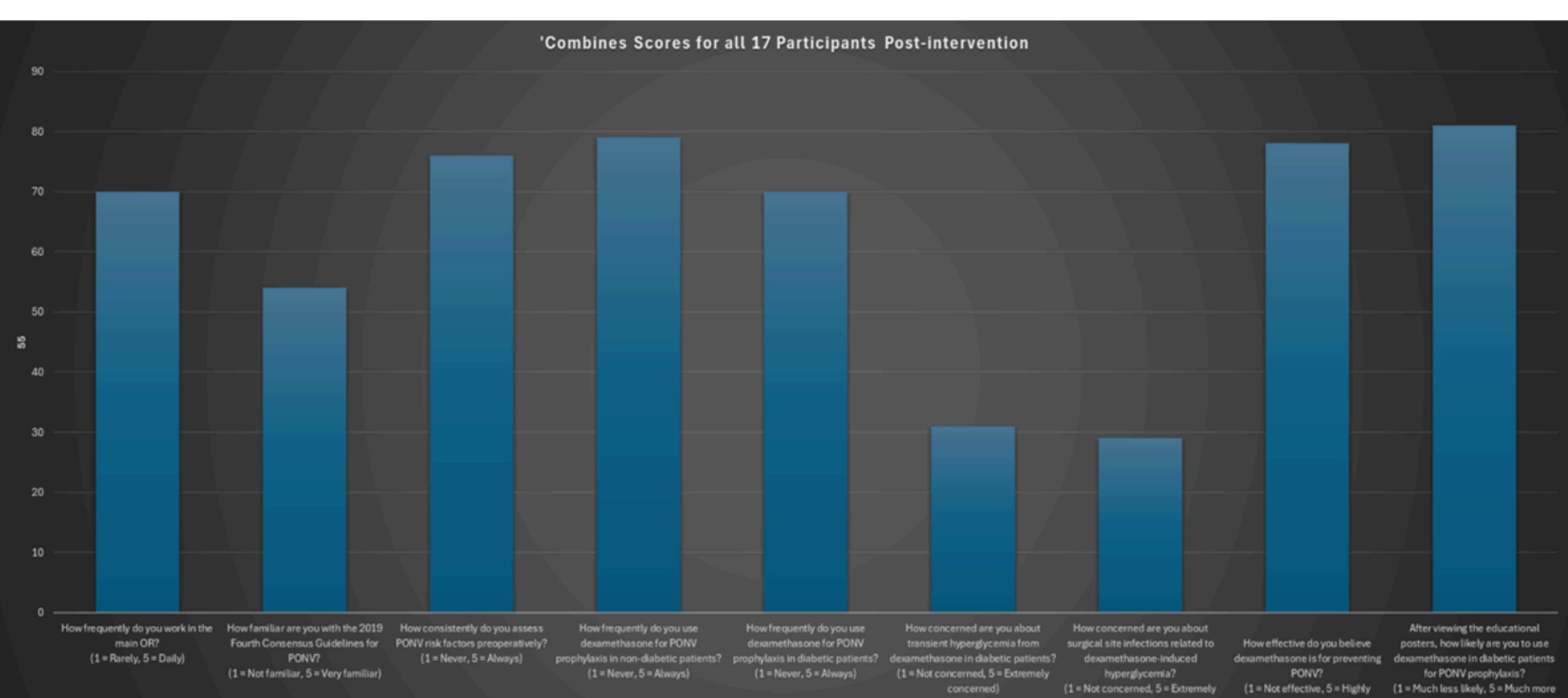
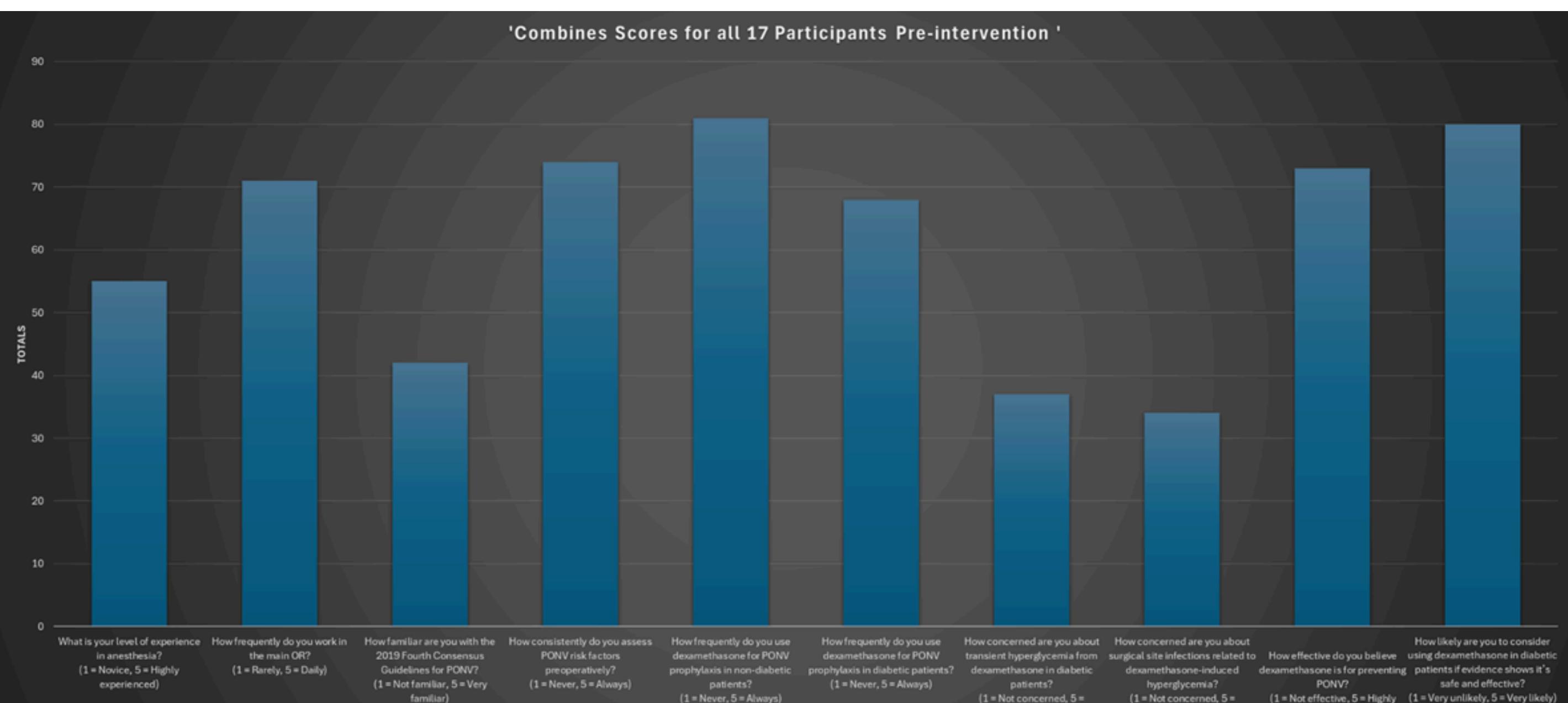
- Educational intervention implemented at a tertiary hospital in Central Florida
- Evidence-based infographic posters placed in high-traffic OR locations
- Anonymous **pre- and post-intervention surveys**
- Participants: **17 anesthesia providers**
- Outcomes measured: provider concern and self-reported likelihood of dexamethasone use

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## Results

- 16.2% ↓ concern about perioperative hyperglycemia**
- 14.7% ↓ concern about surgical site infection**
- 1.18% ↑ likelihood of dexamethasone use**
- Findings indicate a measurable shift toward evidence-based practice



## Discussion

- Education shifted provider perceptions, particularly regarding transient hyperglycemia and SSI risk
- Hesitancy appeared driven by **habit and outdated beliefs**, not current evidence
- Passive education (posters) supported repeated exposure without workflow disruption
- Strengths: low cost, easy implementation, high visibility
- Limitations: small sample size, short duration, self-reported outcomes
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## Conclusion

- This project demonstrates that a low-cost, workflow-integrated educational intervention can reduce anesthesia providers' concerns regarding dexamethasone use in diabetic surgical patients and support greater alignment with current evidence-based PONV guidelines.
- By addressing misconceptions surrounding transient hyperglycemia and surgical site infection risk, targeted education may help promote more consistent, guideline based use of dexamethasone for PONV prophylaxis in the perioperative setting.

## References

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