Cost awareness of common neuraxial anesthesia medications and materials among obstetric anesthesia providers: A cross-sectional survey-based pilot study

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INTRODUCTION

- Rising pressure for cost-effective healthcare delivery
- Obstetric anesthesia = high volume + resource intensive
- Clinicians often have poor cost awareness across specialties
- Small per-case savings → large institutional impact

Problem:

- Costs of OB anesthesia medications and disposable materials are opaque
- It is unclear which item costs are most misperceived

OBJECTIVES

(1) Quantify cost perception
(2) Identify high-impact gaps
(3) Generate provider-driven solutions

METHODS

Study Design

- Cross-sectional anonymous survey
- Obstetric anesthesiologists + fellows (n = 23)
- Single quaternary hospital with 7,000 deliveries/year

Survey design

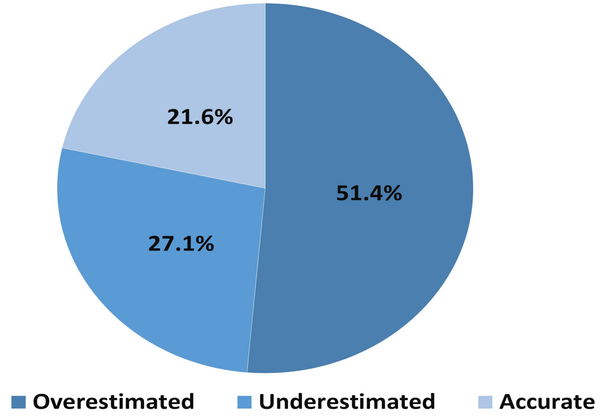
- 46 commonly used items in obstetric anesthesia (medications + supplies)
  - Spinal and epidural kit contents, medications, materials
- Cost perception:
  - Higher than expected (underestimated)
  - About expected
  - Lower than expected (overestimated)
- Frequency of use:
  - All the time / Sometimes / Never

Scan for photos and prices of all surveyed items

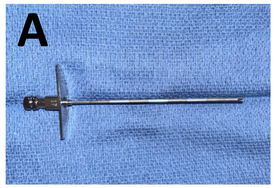
Data handling and analysis:

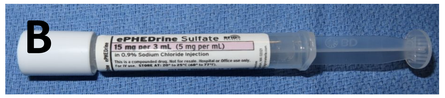
- Item-level aggregation
- % underestimated vs overestimated rankings per item
- Descriptive statistics

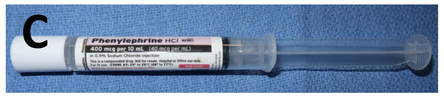
RESULTS: Costs of Survey Items



Top Underestimated Items:







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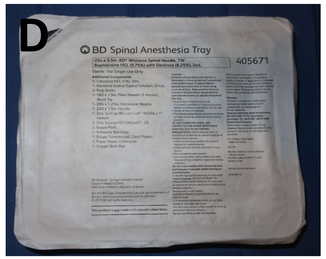

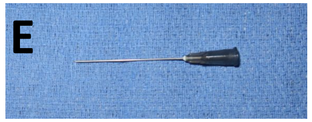

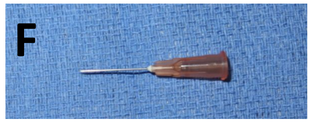

A. 17G Weiss Epidural Needle–$22.91

B. Specialty compounded ephedrine-$13.76

C. Specialty compounded phenylephrine-$9.39

D. BD® Spinal Anesthesia Tray-$20.56

E. 22G x 1.5” injection needle-$0.01

F. 25G x ⅝” injection needle-$0.01

Provider-Driven Suggestions

CLINICAL

- **Substitute** povidone-iodine for chlorhexidine
- **“Lean” kit** with only frequently used items v. **“expanded” kit** for complex cases
- **Eliminating** rarely used kit contents to reduce waste
- Stock items at **unit level** rather than single-use kits
- Possible **reuse** of kit components

EDUCATIONAL

- Regular **departmental sessions** presenting item costs
- Accessible **electronic dashboards** for real-time price lookup

CONCLUSIONS

MAIN FINDINGS

- Experienced OB anesthesiologists had substantially variable cost awareness
- Taking the survey generated interest and ideas in cost-effective solutions

NEXT STEPS

Iterative testing of provider-driven suggestions

1. Develop transparent pricing dashboards
2. Host educational sessions
3. Create ”lean” procedural kits

Clinical Impact:

- Low-risk changes → meaningful cost savings
- No compromise to patient safety