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Beyond the Incision: Optimizing Pain Management in Post-Cesarean Mothers

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Introduction

Pain management is an integral part of the role of a healthcare practitioner. Cesarean sections rank amongst the most frequently performed surgeries globally, yet were identified as the ninth most painful surgery in a 2013 cohort study. Postoperative pain impacts patients in various ways and poor management can be a precursor to further complications including deep venous thromboembolism, delayed recovery, clinical depression, and chronic pain syndrome which in turn decreases patient satisfaction. Effective pain management must consider multiple factors including individualized treatment plans based on patient history, minimizing side effects, and ensuring adequate pain control to allow for minimal interference with daily activities especially in the setting of a newborn.

Objective

The objective is to evaluate the management of postoperative cesarean section pain in a large teaching hospital in Surrey and use the data to identify potential areas for improvement to enhance pain management practices and patient satisfaction within the department.

Conclusion

Factors to consider

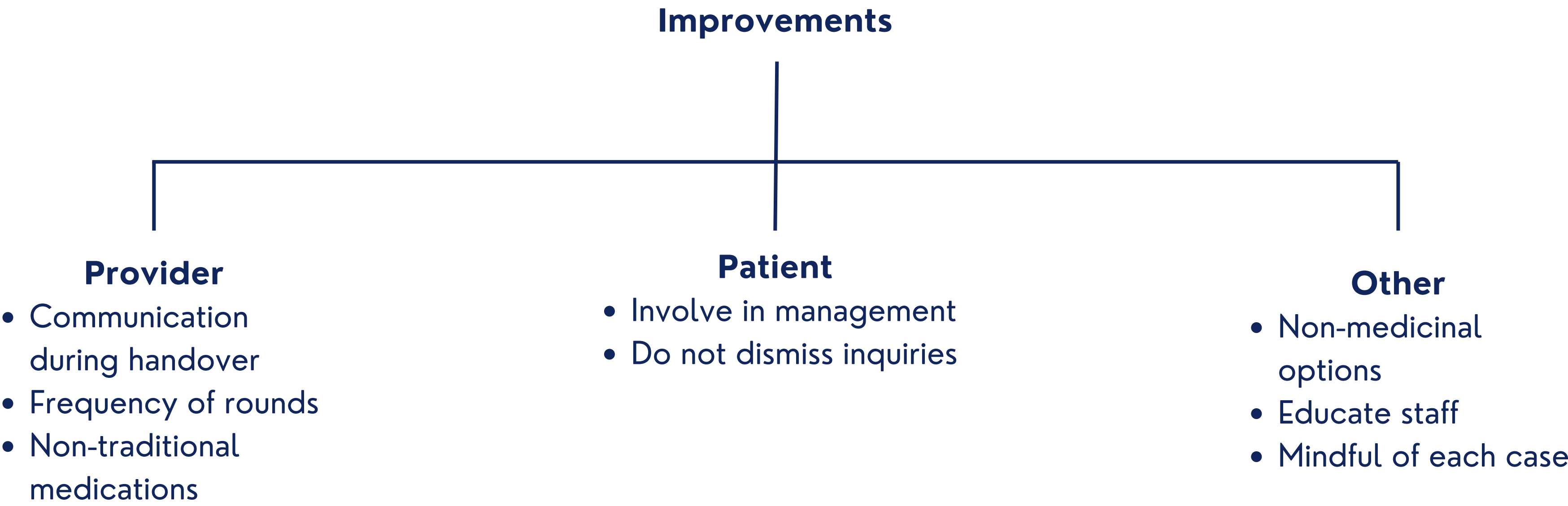
- Side effects and their severity
- Patients who desired more pain relief

Complexities of post-cesarean management

- Subjectivity of pain
- Cannot give certain medications to certain populations
- Breastfeeding
- Desire to interact with baby

Current research

- Enhanced recovery after surgery (ERAS) protocol: pre-operative acetaminophen and celecoxib
- Pre-operative gabapentin



Methodology

Study design: Cross-sectional, observational study conducted in the postnatal ward using a modified version of Pain-Out questionnaire

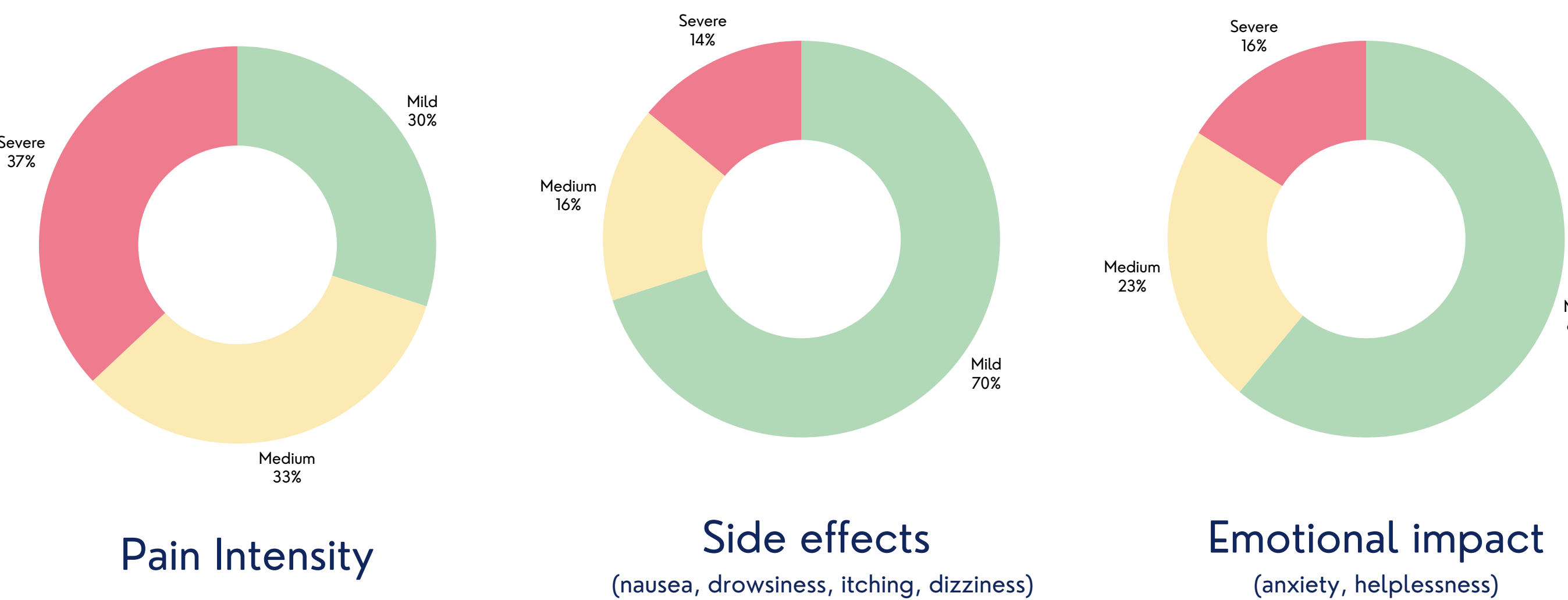
Participants: 71 patients, at least 24 hours post-cesarean

Primary Goal: Assess pain intensity, frequency of severe pain, patient satisfaction, and side effects of pain treatment

Data Collection

- Pain intensity (least/worst pain): rated on a 0-10 scale
- Pain interference: impact on activities such as sleeping, breathing, and moving
- Emotional impact: anxiety and helplessness
- Side effects: nausea, drowsiness, itching, dizziness
- Patient satisfaction: pain relief and involvement in treatment decisions
- Non-pharmacological methods: non-medicinal options used (e.g., deep breathing, walking, talking to staff, cold pack, etc.)

Results



43% of patients did not feel completely involved in their pain management decisions

27% desired more pain relief than they received



Average Patient Satisfaction Score

References

1. Sung S, et al. Cesarean Section. StatPearls [Internet]. 2024 October 5. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK546707/>
2. Yu C. UK C-Section Rates 2023 [Internet]. 2024 [cited 2024 Oct 23]. Available from: <https://www.chrissieyu.com/c-section-rates-statistics-uk-global/>
3. Cordis EU. Postoperative PAIN OUTcome [Internet]. 2017 [cited 2024 Oct 23]. Available from: <https://cordis.europa.eu/project/id/223590>
4. Pan P. Post cesarean delivery pain management. Int J Obstet Anesth. 2006 July; 15(3): 185-188. Available from: [https://www.obstetanesthesia.com/article/S0959-289X\(06\)00056-2/](https://www.obstetanesthesia.com/article/S0959-289X(06)00056-2/)
5. Felder L, et al. Enhanced Recovery after Surgery Protocol. Am J Perinatol. 2022; 39(13): 1375-1382. Available from: <https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-1799-5582>
6. Felder L, et al. Perioperative gabapentin and post cesarean pain control. Eur J Obstet Gynecol Reprod Biol. 2019 February; 233: 98-106. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S0301211518311242>
7. Campbell C, et al. Ethnic differences in pain and pain management. PMC. 2013 May 15, 2(3): 219-230. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3654683/>