

Snapshot of Obstetric Anaesthesia National Audit and Research Project (SONAR): Investigating analgesia adequacy and intraoperative pain during caesarean delivery: single-centre pilot and feasibility study

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Introduction

- The incidence and sequelae of intraoperative pain during caesarean delivery (CD) varies widely and depends on patient, clinician, anaesthetic, obstetric, and institutional level factors.
- Published data on the incidence of pain during CD are predominantly from single centre retrospective studies, with incidence rates ranging from 1.7%¹ to 19.7%² with evidence from a systematic review putting the figure at 14.6%³.
- Patient reported outcome measures are the gold standard for measuring postpartum recovery, but no such data exists for CD.
- This study aims to establish the incidence, risk factors and sequelae of pain during CD under neuraxial anaesthesia (NA); and to use patient reported outcome measures to evaluate the physical and psychological impact on those who experienced intraoperative pain.**

Methods

- This is a prospective, single centre observational cohort study conducted at a tertiary teaching hospital. It will assess the feasibility of a planned multicentre national study and present descriptive and outcome data from the pilot cohort.
- Ethical approval was granted by the UK National Research Ethics Service (REC 24/EM/0084).
- Inclusion criteria: Scheduled or unscheduled CD, >17 years old, gestational age >31 weeks, neuraxial anaesthesia as primary mode of anaesthesia
- Exclusion criteria: Patient refusal, general anaesthesia as planned mode of delivery, neonatal or fetal demise.

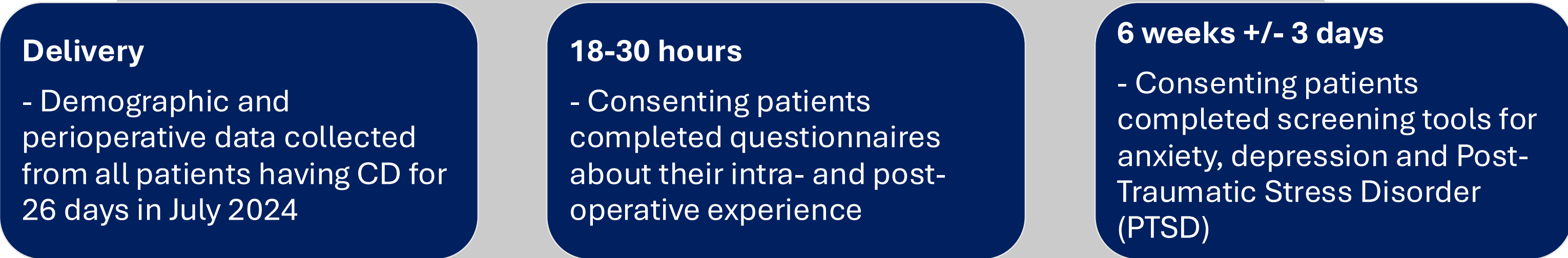


Figure 1: Data collection at delivery, 18-30 hours and 6 weeks post delivery

Results

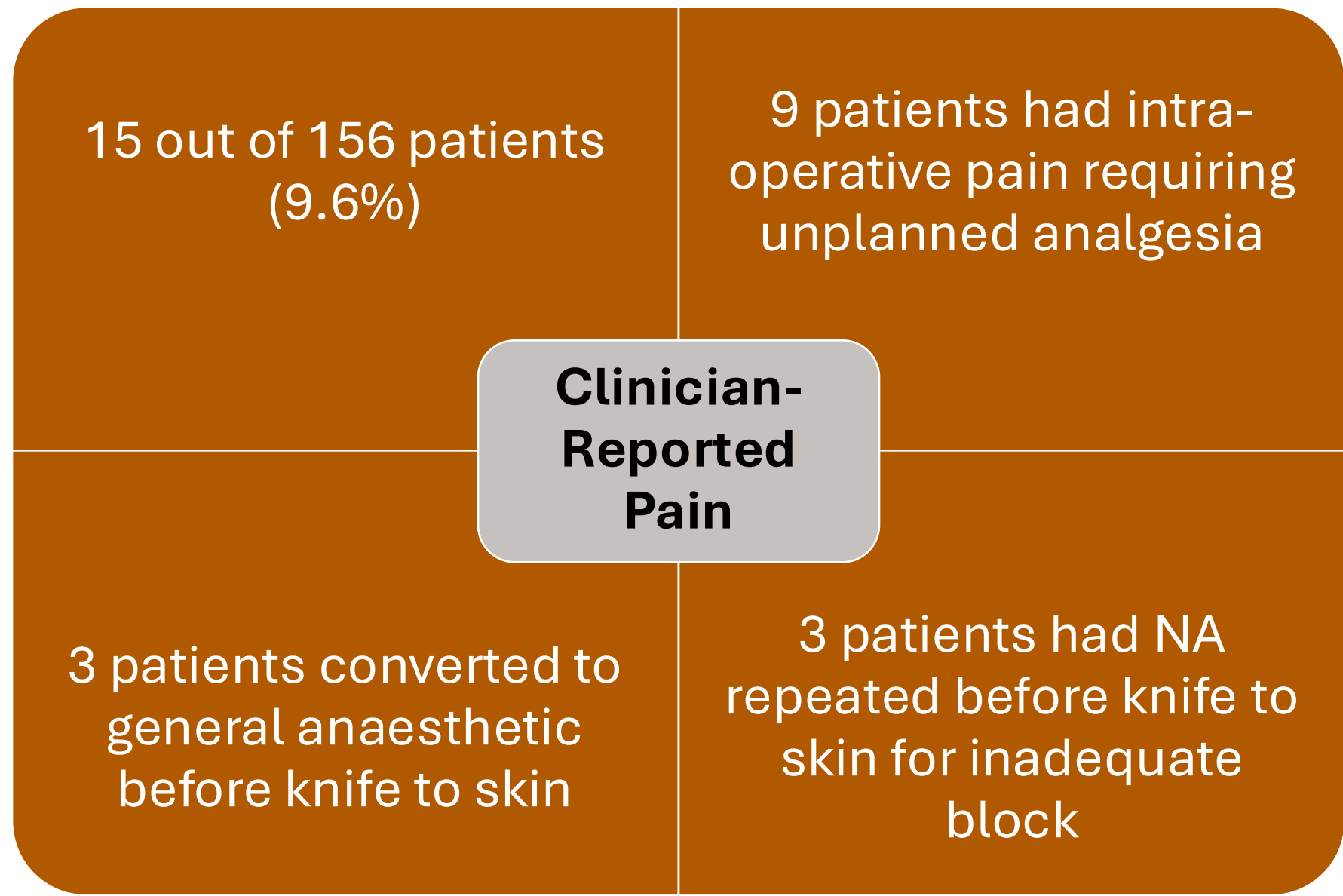


Figure 2: Clinician-Reported pain



Figure 3: Flow diagram for patient recruitment

Results: Patient-reported (18-30 hours)

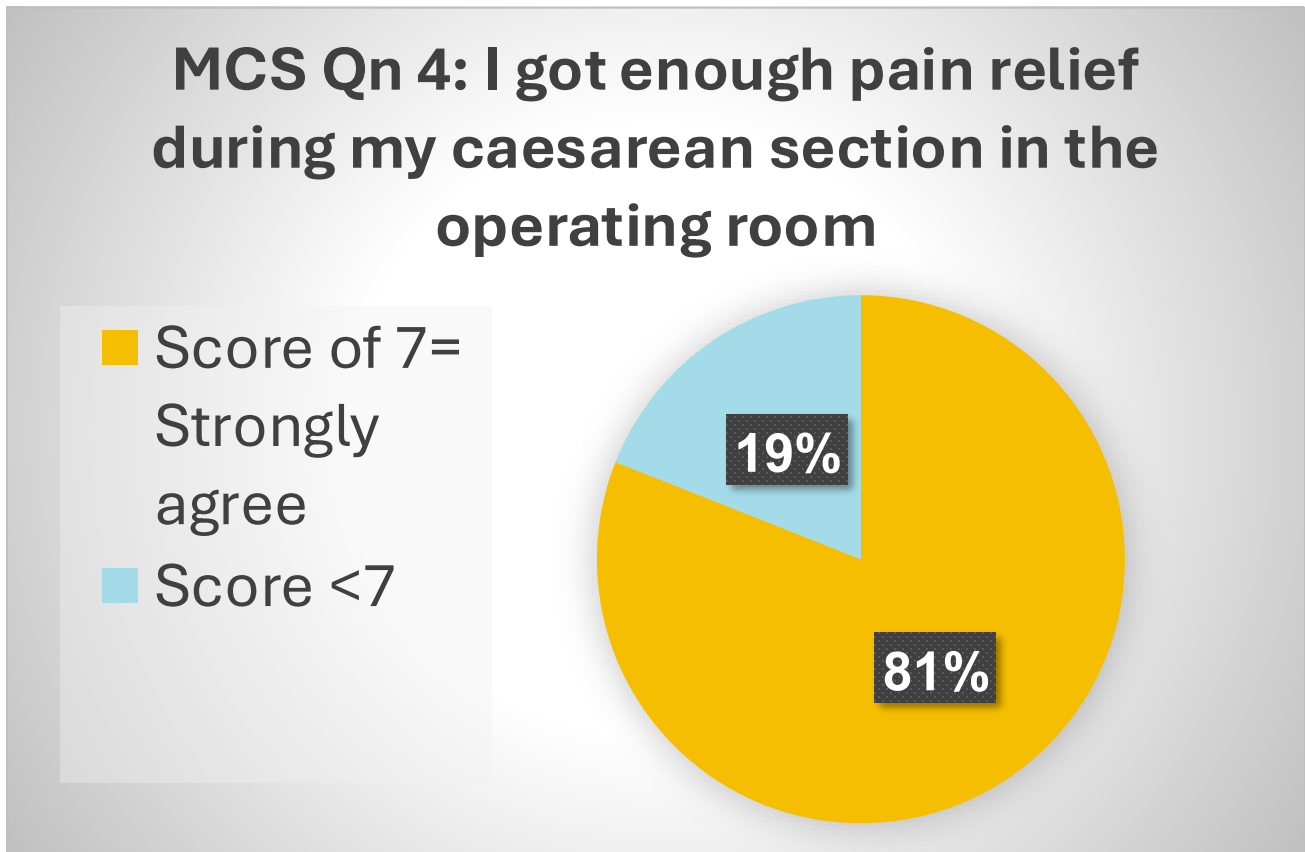


Figure 4: Responses to Maternal Comfort Score (MCS) Question 4.

Group	MCSQ4 <7 (n=19)	MCSQ4= 7 (n=81)	
Clinician documented intra-operative pain: n (%)			
Yes	1 (5.3)	3 (3.7)	
No	18 (94.7%)	78 (96.3)	
MCS Question 1: “I was pain-free in the operating room” (Likert score 1-7 where 1 is strongly disagree and 7 is strongly agree):			
Median (IQR)	5 (4-6.5)	7 (6-7)	p=0.00037

Table 1: Responses according to response to MCS Question 4.

Results: Patient-reported (6 weeks)

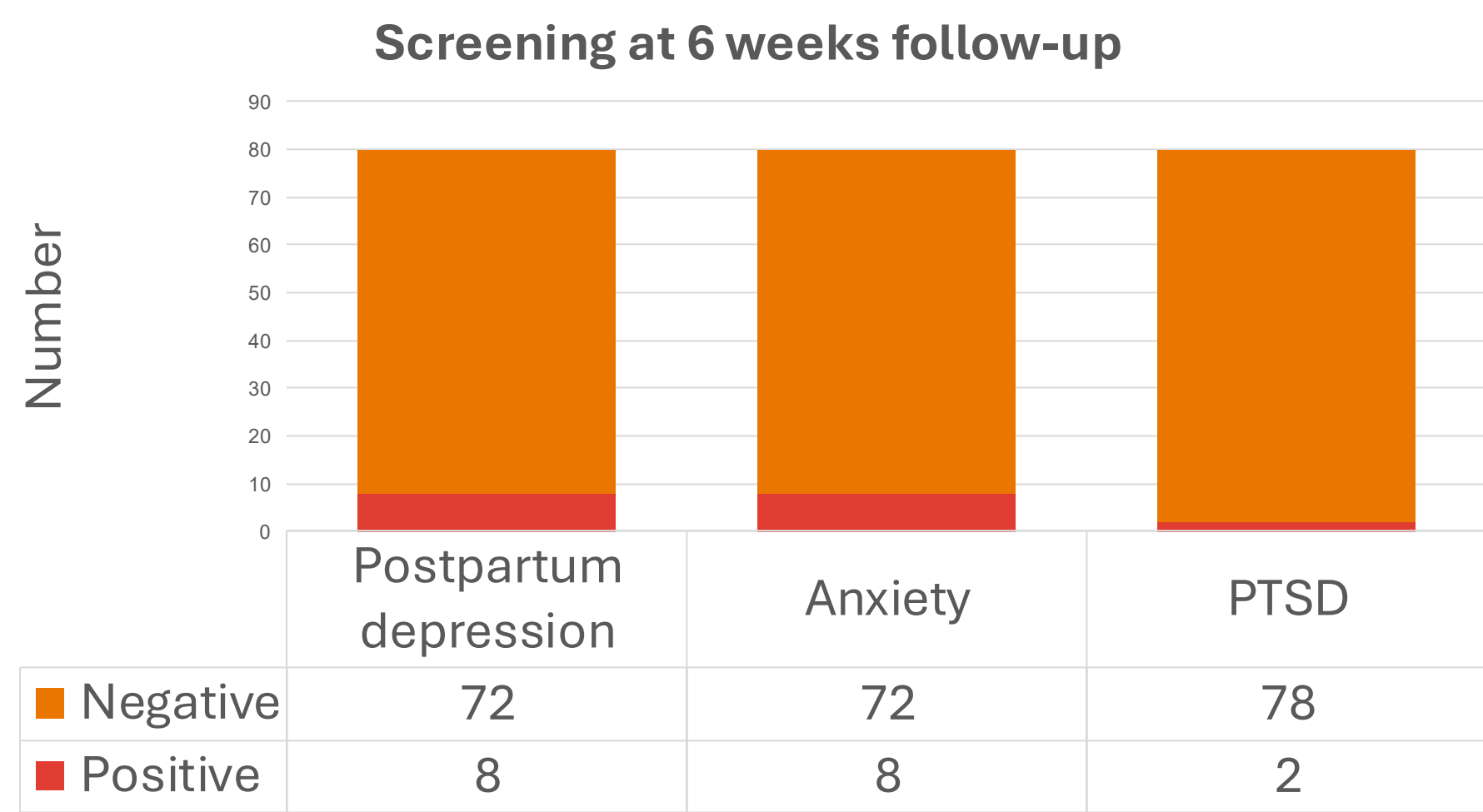


Figure 5: Screening for postpartum depression, anxiety and PTSD at 6 weeks

Discussion

- The incidence of patient-reported inadequate analgesia was higher than clinician reported neuraxial inadequacy (19% vs. 9%).
- Only 5% of patients who did not strongly agree that they had sufficient analgesia in the operating room were documented as having pain by their anaesthetist.
- This suggests a difference to what clinicians and patients perceive as intra-operative pain as well as a communication barrier between the two groups
- The study was feasible, had high consent and follow-up rates, and supports delivery of an international multicentre study.

References

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