

Delays in decision to birth interval for emergency caesarean sections at a non-tertiary hospital: impact on maternal and fetal outcomes

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INTRODUCTION

Responding to obstetric emergencies is challenging in non-tertiary hospitals.

The 'decision to birth' interval for emergency caesarean sections is influenced by organisational factors, including the defined workforce, equipment and multidisciplinary protocols. Arrangements need to be formally in place to ensure an appropriate level of obstetric emergency service is available over the 24-hour period as per National Safety and Quality Health Service Standards.

AIMS & METHODS

To assess the 'decision to birth' interval for emergency caesarean sections (1 July 2021 to 31 June 2022), stratified by RANZCOG categories of urgency, and its impact on maternal and fetal outcomes.

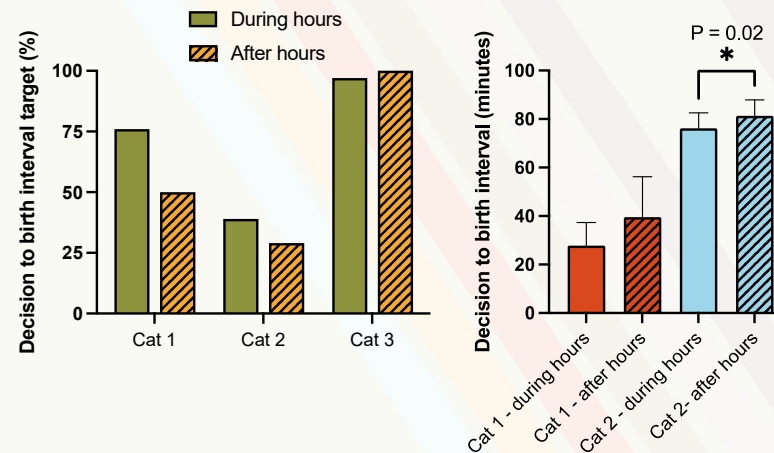
354 emergency caesarean sections
(18.10% of total live births)

Category 1
n = 27

Category 2
n = 293

Category 3
n = 34

RESULTS



OUTCOMES	Decision to birth interval target			
	Yes (%)	No (%)	P value	aOR (95% CI)
Maternal				
Postpartum haemorrhage	13.58	13.83	0.74	1.16 (0.47 - 2.89)
Wound infection	2.47	3.19	0.83	1.22 (0.19 - 7.65)
Fetal				
Resuscitation	37.04	37.23	0.87	1.05 (0.55 - 2.01)
Special care admission	22.22	19.14	0.75	0.88 (0.41 - 1.91)

DISCUSSION

- Significant delays in the 'decision to birth' interval occur when emergency caesarean sections are performed after hours without theatre or staff availability onsite.
- Maternal and fetal outcomes are not impacted by whether the recommended 'decision to birth' interval was achieved.
- One key limitation of this study is that underlying system or human factors contributing to the 'decision to birth' interval were not examined.
- Future prospective studies on stakeholder contributions and patient-reported outcomes will improve processes when emergency caesarean sections are required at non-tertiary hospitals.

REFERENCES

- Kitaw et al., 2021. Decision to delivery interval and associated factors for emergency cesarean section: a cross-sectional study. *BMC Pregnancy Childbirth*. 21:224.
- Joint Standing Committee of RCA/RCOG, 2010. Classification of urgency of caesarean section - a continuum of risk.