

Outcomes following full dilatation Caesarean section at a large district general hospital

Hui Lim, Helen Collier

Lancashire Women and Newborn Centre, East Lancashire Hospitals NHS Trust, United Kingdom

Background

There has been a rising trend in the global incidence of full dilatation Caesarean sections. Caesarean sections performed in the second stage are operatively challenging, contributing to greater maternal and fetal morbidity, alongside the associated medicolegal issues.¹

Objectives

Our objective was to review the indications for full dilatation Caesarean sections and evaluate maternal and neonatal outcomes following such deliveries in our unit.

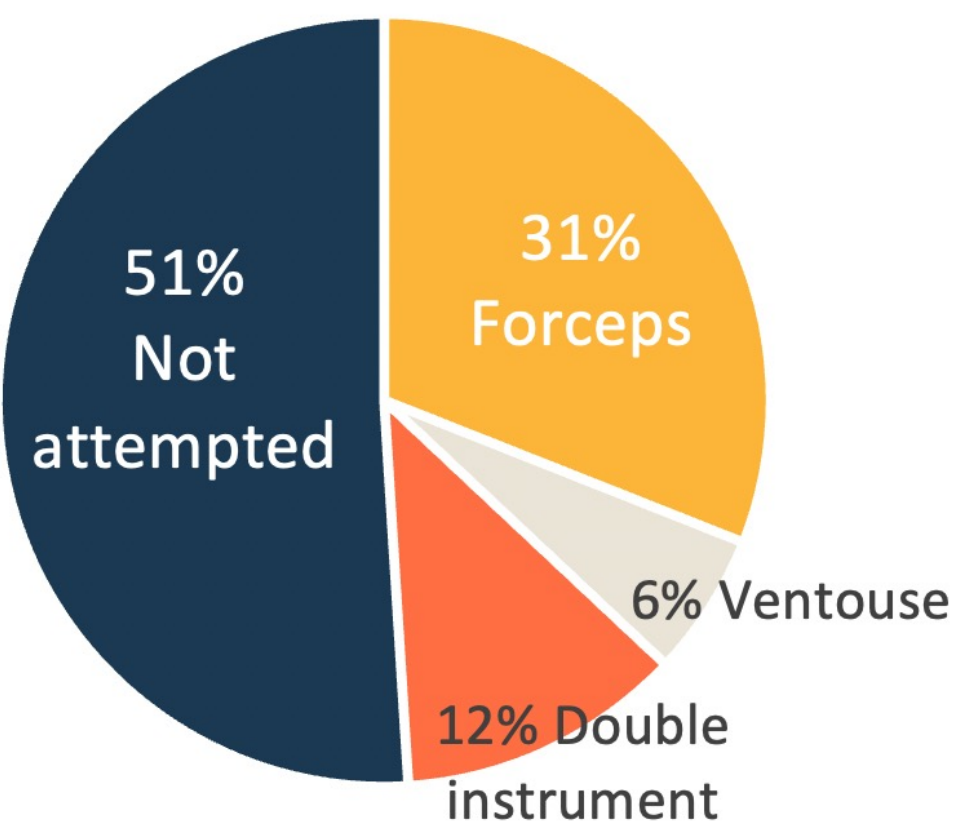
Methods

- Retrospective review
- All women who underwent Caesarean sections at full cervical dilatation from 1 Jan 2020 to 31 Dec 2020 at the Lancashire Women and Newborn Centre
- Data on patient demographics, circumstances surrounding delivery, maternal outcomes and neonatal outcomes were collected from electronic patient records, discharge letters and blood results.

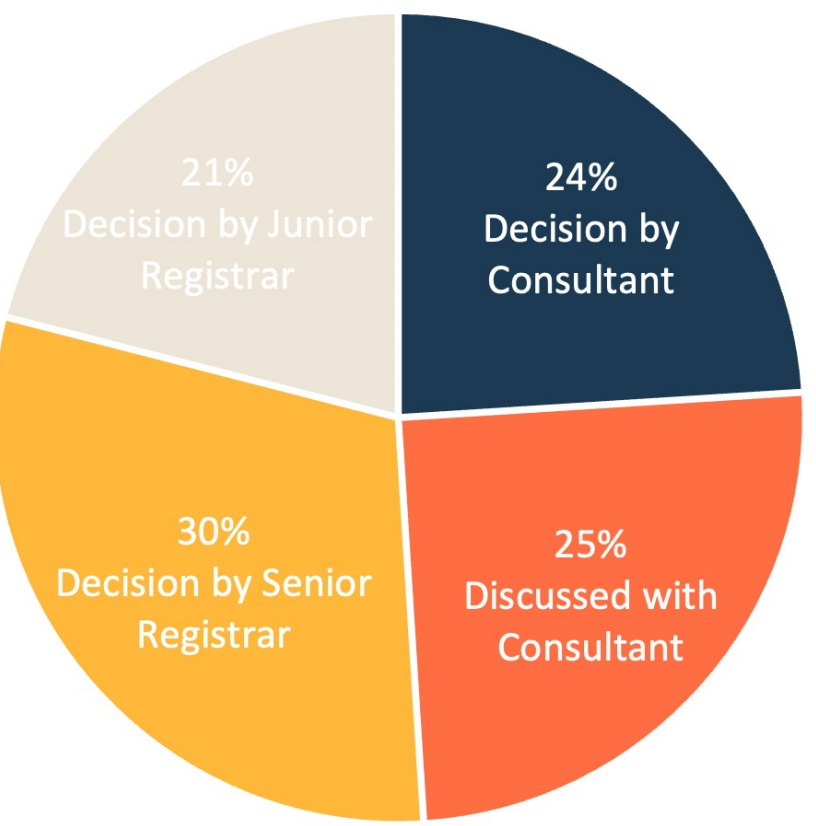
Results

- A total of 80 Caesarean sections were performed at full dilatation in 2020, accounting for 7.5% (80/1062) of all emergency Caesarean sections.
- The average age of patients was 29 years and the average BMI was 26.8.
- 65% (52) of patients were nulliparous, 6% (5) had previous Caesarean sections and 29% (23) had previous vaginal deliveries. Therefore, 71% (57) had no previous vaginal deliveries.
- Labour was induced in 53% (42) and spontaneous in the remaining 47% (38).
- 63% (50) of the Caesarean sections were for presumed fetal compromise, 23% (18) were for delay in second stage and 15% (12) were for both presumed fetal compromise and delay in second stage.

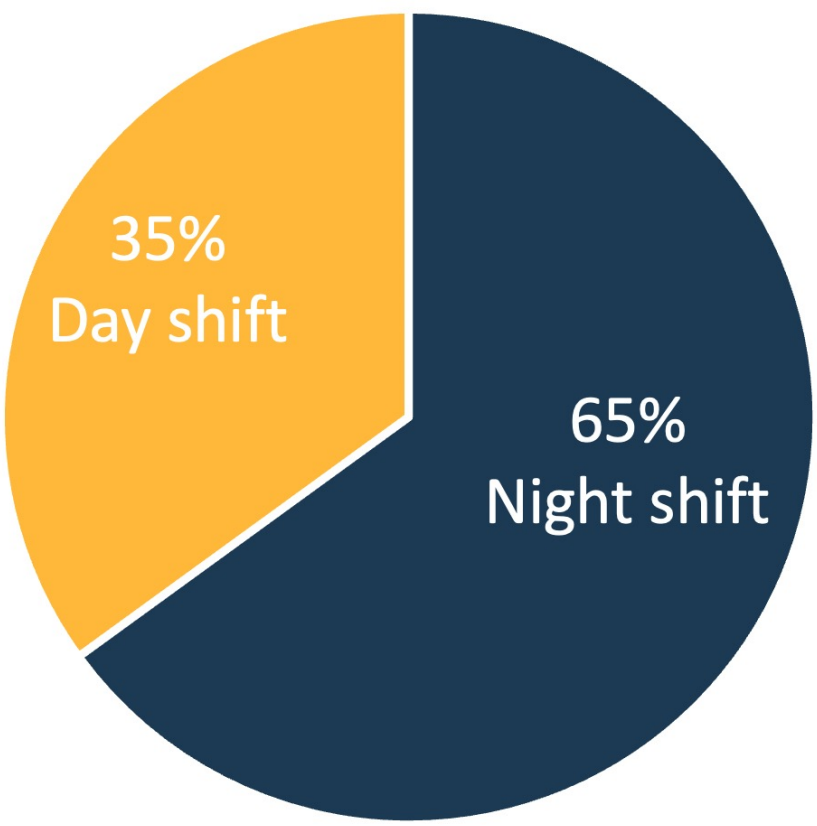
Attempted instrumental delivery



Senior involvement in CS decision



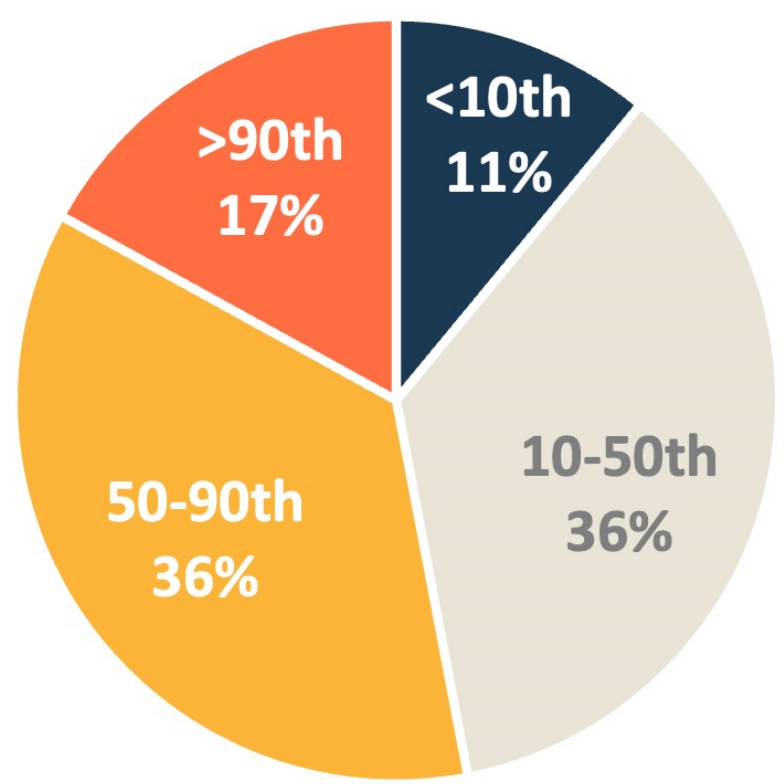
Time of CS



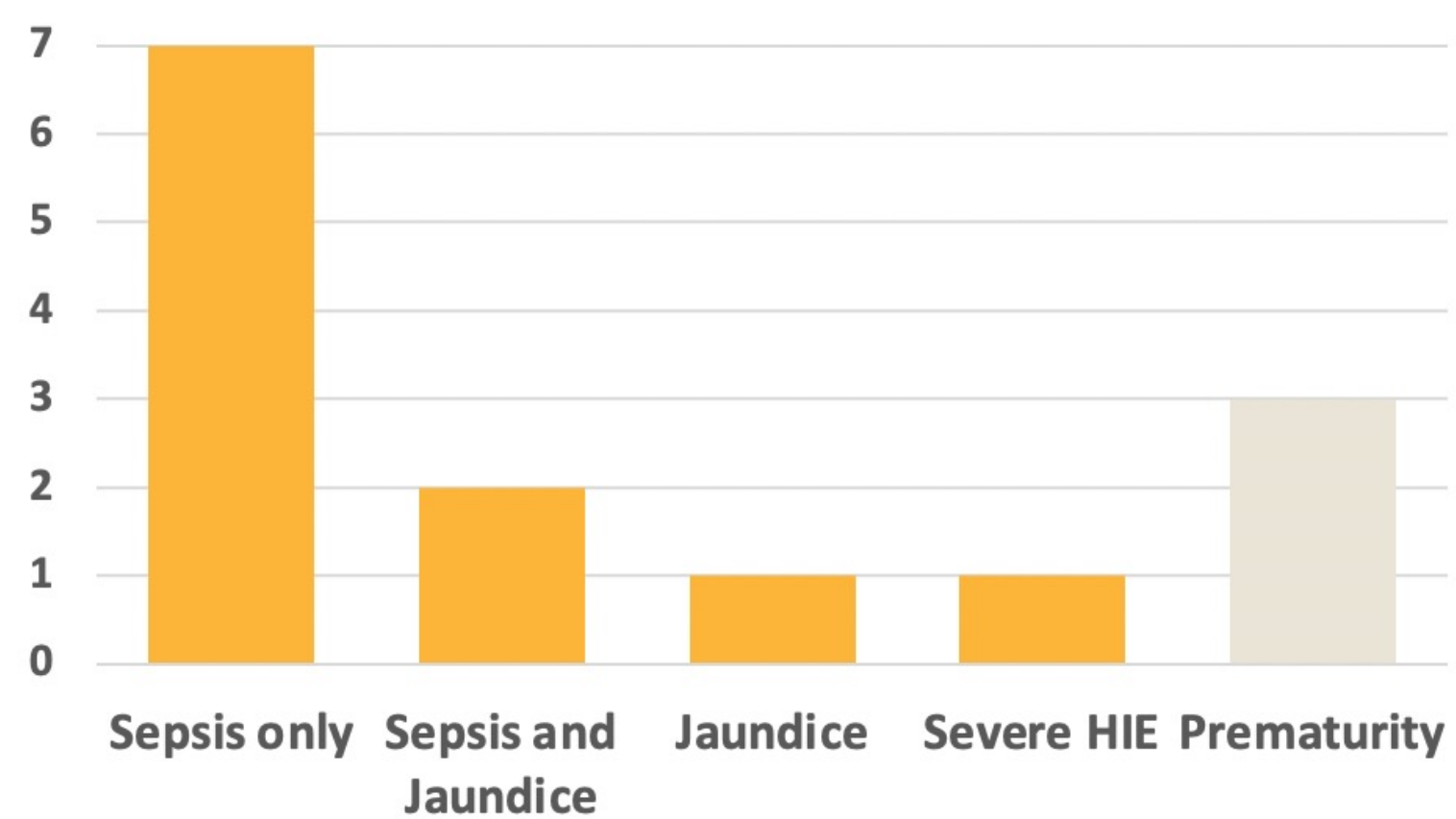
Results | Neonatal Outcomes

- The average birth weight was 3495g and the average gestation of babies at delivery was 39.8 weeks.
- 18% (14) of babies were admitted to the neonatal unit, with sepsis (11%) being the most common cause. 1 had severe hypoxic ischaemic encephalopathy (HIE).
- 50% (40) of babies had arterial cord pH of 7.2 or less, and 33% (26) had venous cord pH of 7.2 or less.

Birth Weight Centiles

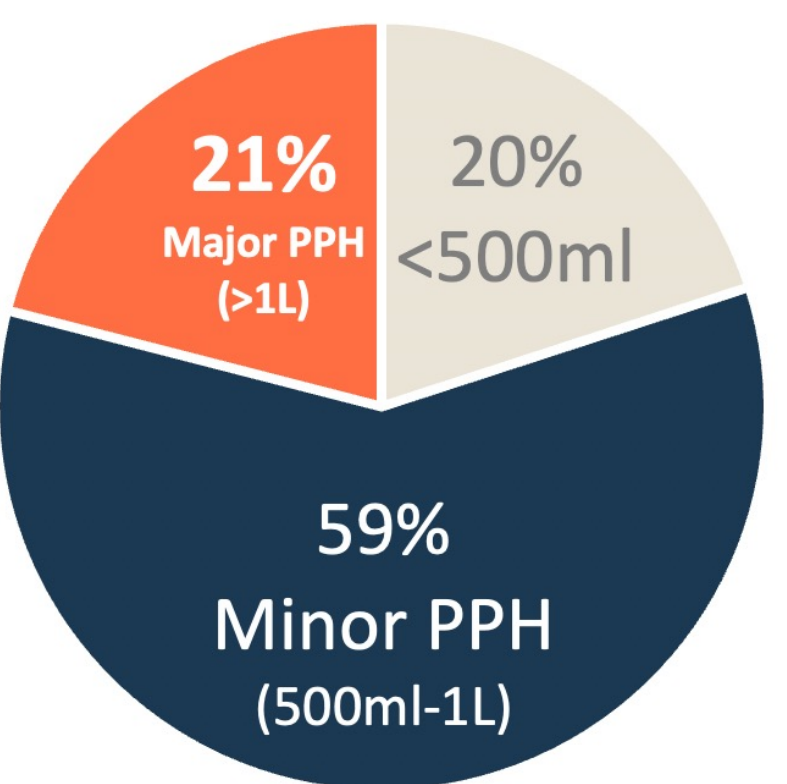


Neonatal Unit Admissions

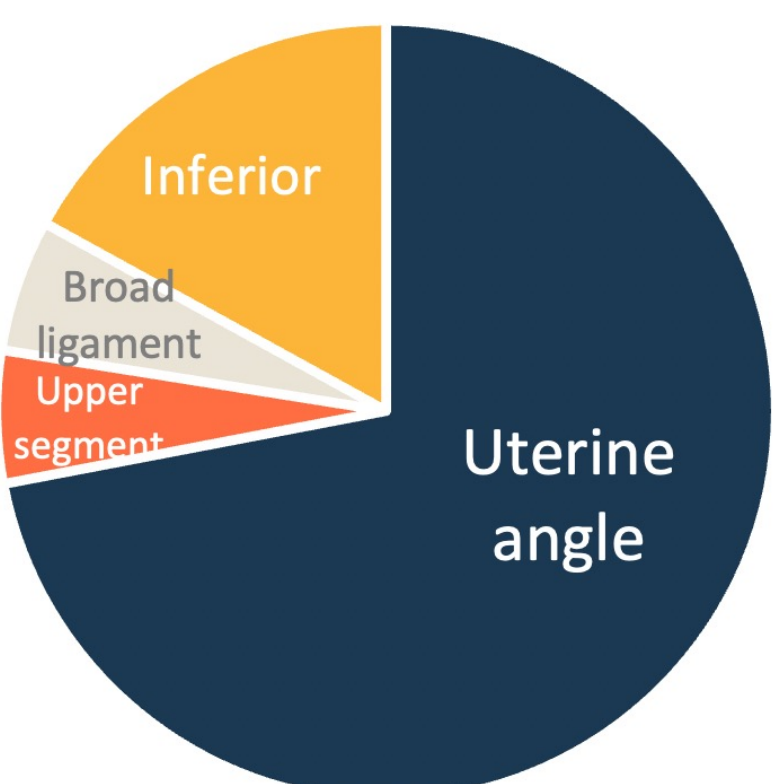


Results | Maternal Outcomes

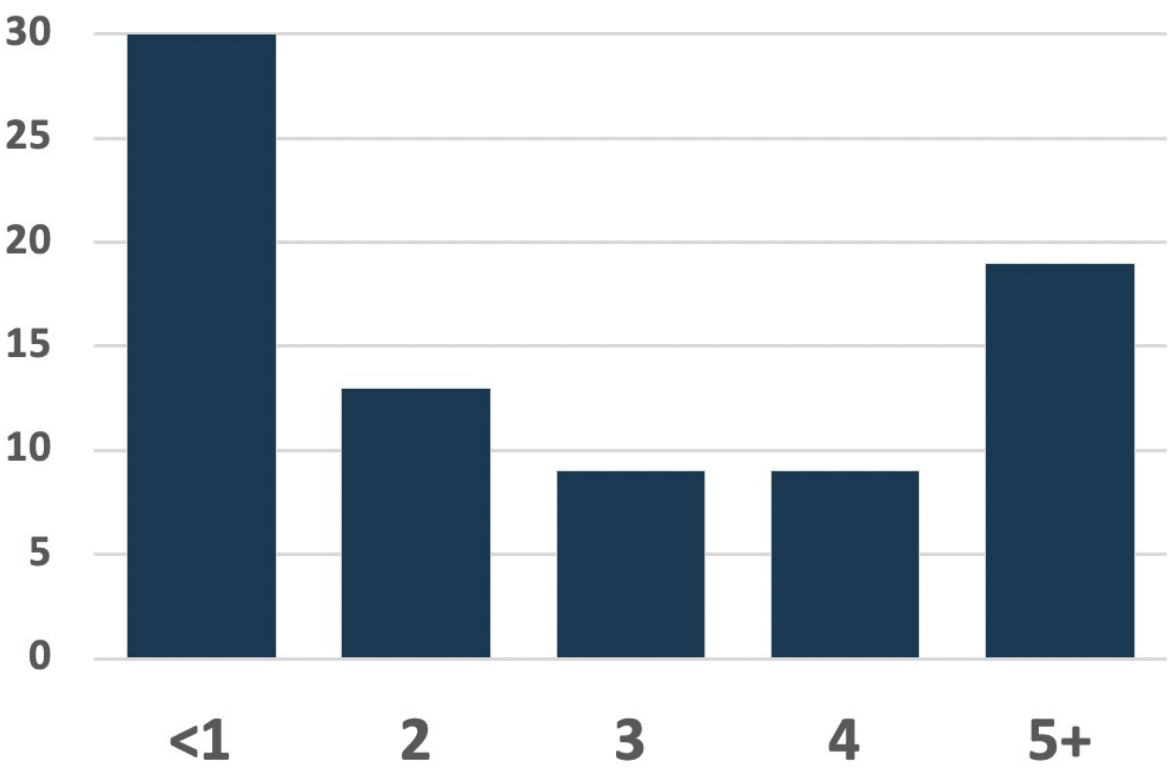
Estimated blood loss (average 793ml) and Incidence of postpartum haemorrhage (PPH)



23% sustained uterine extensions (n=18)
Site of extension/surgical trauma



Length of postnatal hospital stay
(Number of patients/number of nights)



Conclusion

Caesarean section at full dilatation is associated with significant morbidity for both mother and baby. Further work can be done to compare these cases with successful trials of instrumental delivery in order to assess differences in outcomes and to identify factors leading to success. The lower rate of full dilatation Caesarean sections during day compared to night shifts may potentially reflect a need for improved training and supervision and should be explored in further detail.

References

1. Davis G, Fleming T, Ford K, Mouawad MR, Ludlow J. Caesarean section at full cervical dilatation. Aust N Z J Obstet Gynaecol. 2015 Dec;55(6):565-71. doi: 10.1111/ajog.12374.