

An audit of the incidence of neonatal resuscitation in babies of mothers who were administered opioids during labour

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Introduction:

There is evidence that the administration of parenteral opioids in labour provide some pain relief in labour [1]. However, this comes with potential risks to the newborn [2].

Method:

Ethics exemption was obtained. All women who delivered a live infant at Mount Isa Base Hospital (MIBH) in the 2-month period of the audit were included (n = 68).

Infants were considered to have required resuscitation if they required any intervention after birth including suction, PEEP, IPPV, cardiac compressions or intubation and ventilation. Mother’s who received opioids during labour were administered either 10mg intramuscular morphine or 100mg intramuscular Pethidine.

Results:

Figure 1: Resuscitation required in neonates born to mothers at Mount Isa Base Hospital over a 2 month period.

Total number of neonates requiring resuscitation = 13

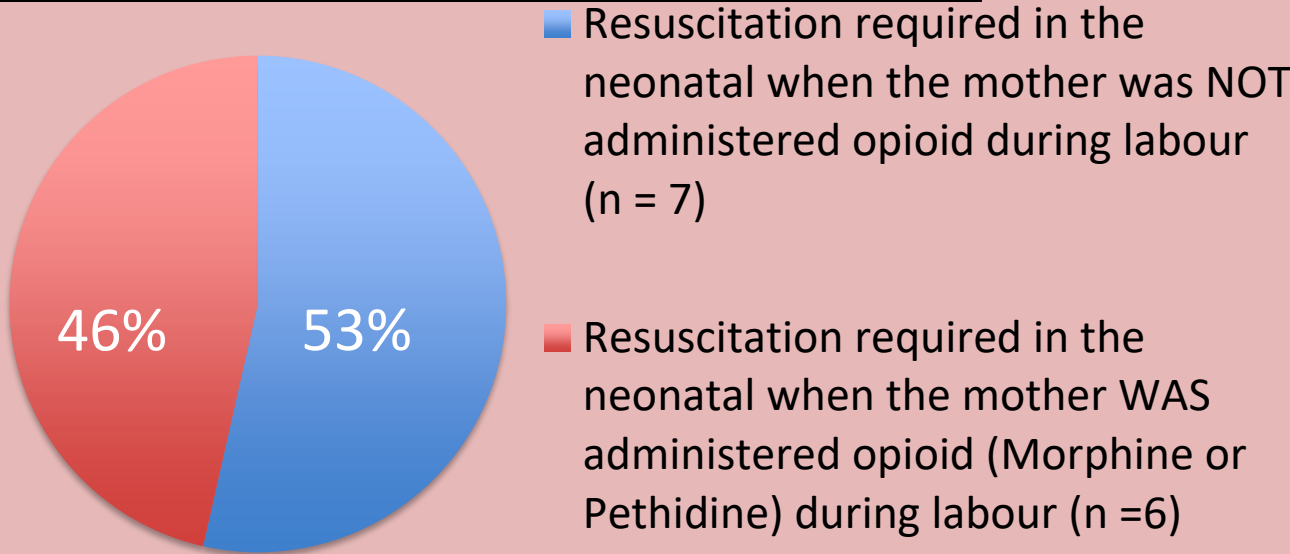
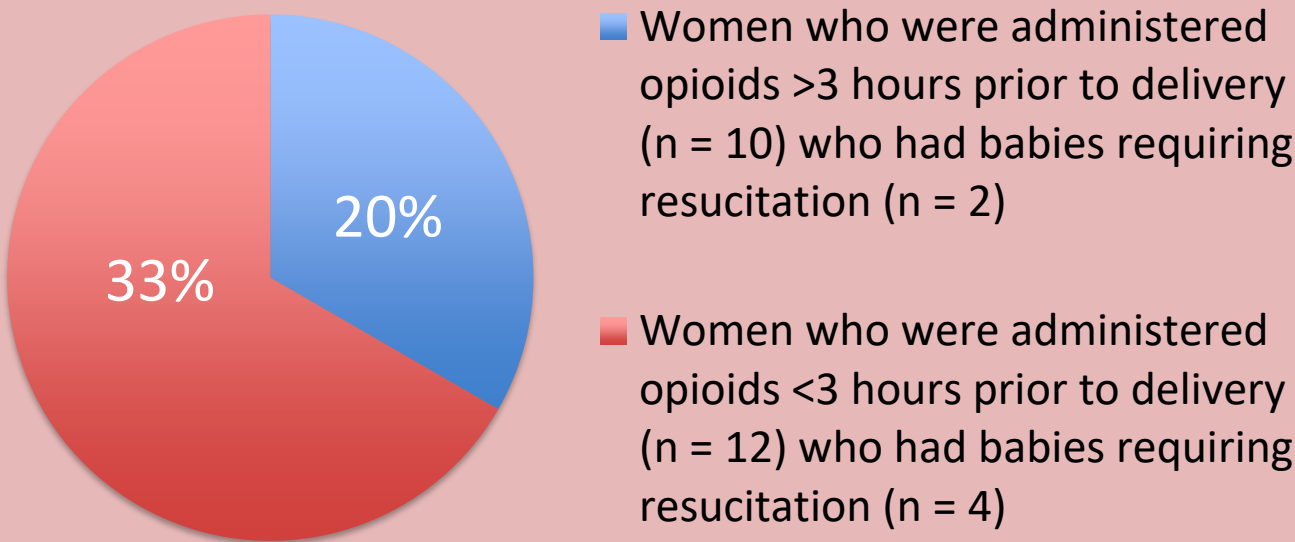


Figure 2: Timing of Administration of opioids during labour and requirement of resuscitation in neonate.



Discussion:

This audit suggests that administering opioids in labour can lead to an increased risk of the requirement for neonatal resuscitation in the newborn. It is also important to consider the half-life of opioids and the timing of administration in relation to delivery.

It is important to note that the birthing centre at Mount Isa Base Hospital is for low-risk births only and hence the majority of patients are healthy women. There are also a relatively small number of births at Mount Isa Base Hospital. Performing this audit at a large tertiary hospital with a larger cohort size would help to further define the aim of this audit.

References:

- [1] Anderson D. A review of systemic opioids commonly used for labor pain relief. Journal of Midwifery & Women's Health 2011;56(3):222-39.
- [2] QLD Health Guidelines: Opioids in Labour.