

Medication errors during neonatal emergencies: attitudes of clinicians in Australia & New Zealand

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Background

Neonatal emergencies are prone to medication errors due to complexities at each step of the process.

Aim

To survey Australasian neonatal nursing and medical staff about experience with medication errors, point of care medication resources and confidence with aspects of medication use during emergencies.

Methods

A cross sectional survey was circulated to neonatal units affiliated with the Australian and New Zealand Neonatal Network for distribution to all medical and nursing staff within their health service. The data collected included demographics of the participants, experience of medication errors, confidence regarding medication use, and of medication aides and resources to assist with safe administration. The results were compared by years of experience (<5 years, 5-10 years, >10 years) and by profession (nurse, doctor).

Results

The participant demographic data is shown in Figure 1.

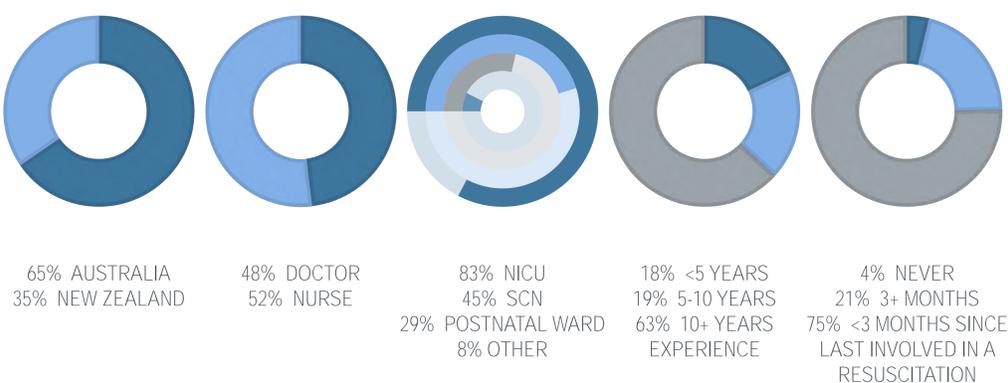


Figure 1: Participants demographics. Responses, %.

More than half of respondents (n=133) reported being personally involved in a medication error in the last 12 months, and these related to variety of reasons including delayed administration (33%), incorrect documentation (18%), and incorrect dose (17%) (Figure 2).

Free text responses highlighted issues relating to adrenaline (epinephrine) administration, difficulty with infusion pumps and cognitive burden that medication use and calculations place on staff involved in resuscitations.

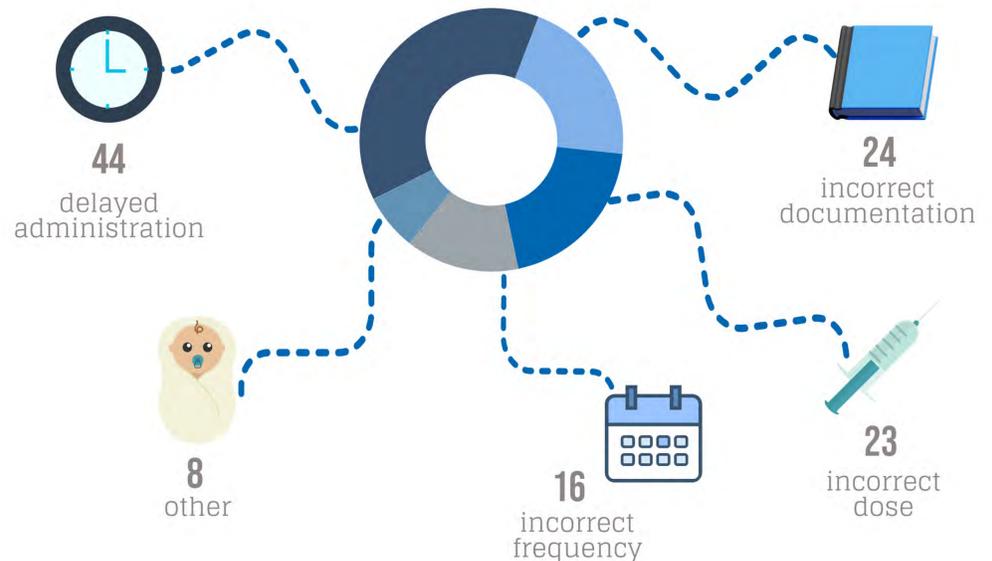


Figure 2: Survey responses of medication errors in the last 12 months. Responses, n.

Clinicians across both disciplines were most confident checking medication doses (94%, n=119) (Figure 3).

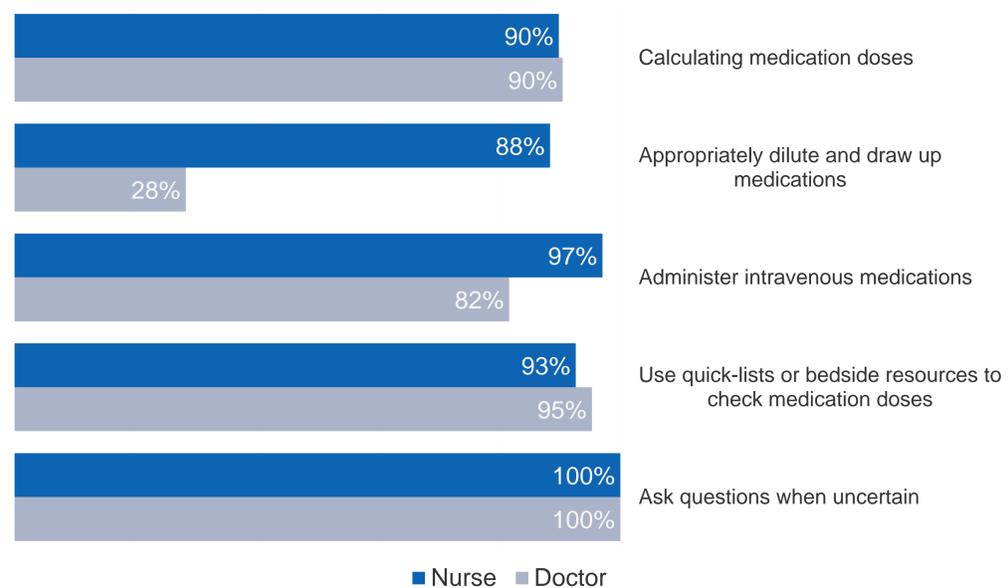


Figure 3: Survey responses of self-reported confidence. Responses, %.

Our results show evidence of a positive safety culture across the neonatal speciality with 100% of respondents feeling confident to ask questions when uncertain (Figure 3).

Discussion

Medication errors in neonatal emergencies are common. These findings will be used to guide error and cognitive burden reduction strategies in settings where neonates require emergency care or resuscitation.

