

Validation and initial description of the prospective Obstetric Airway Management Registry (ObAMR)

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Introduction



ASOS showed that **maternal mortality** after caesarean delivery is **50 times greater in Africa**. In **South Africa**, more than 50% of obstetric perioperative mortality is attributed to **hypoxic and respiratory events**. We sought to **identify trends and problems** within our context, and test an **online data collection tool**.

Methods



- 1 Demographics
- 2 Obstetric history
- 3 Indications
- 4 Preoperative assessment
- 5 Airway management

To **quantify the reliability** of captured cases, we compared the registry to **theatre logbooks**. Furthermore, we used summary statistics to describe our **obstetric anaesthesia population**.

Results & Discussion

The first **200 records** were submitted between September 2018 and January 2019. Compared to theatre logbooks, **80% of cases were captured**. **Major indications for GA** included severe foetal distress/bradycardia (21%), failed spinal (19%), and coagulopathy (17%). **Neuraxial anaesthesia** was the original strategy in 24%. A **third of patients (33%)** had developed **hypertensive disease** in pregnancy, with **6% suffering from imminent/confirmed eclampsia** and **40% in labour** at time of operation.



High incidence of predicted difficulty



Low VL usage rate (30%), despite availability

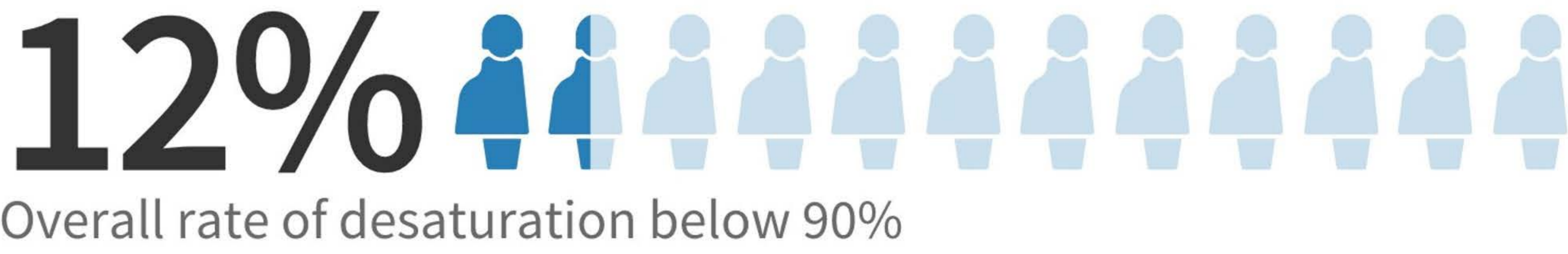


Only 2 failed airways, rescued with SGA



No front of neck access required

On **airway assessment**, Mallampati grade was 3 or 4 in 29%, and mouth opening, thyromental distance and mandibular protrusion limited in 10%, 8% and 8% respectively. First-pass **intubation success was 87%**. Cormack-Lehane grade IIb and III views were encountered in 6% and 2% respectively, with **no grade IV views**. Videolaryngoscopes were available in 98%, but **only used in 28%**. There were **two cases (1%) of failed intubation with supraglottic airway rescue**, and **no emergency surgical airways**. Range (median; IQR) of saturation nadir was 15 to 100% (98; 95-99), with **12% of patients** experiencing **desaturation below 90%**.



Conclusion

80%
Obstetric GA's captured

Staff recorded **80%** of obstetric GAs in the **registry**. **Conversion to GA** from failed or prolonged spinal anaesthesia was rife, with a high incidence **difficult intubation predictors** and **concomitant desaturation**.

Additional content



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<https://openairway.org/wamm2019-obamr-valid/>

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