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# Uterotonic drug use: a snapshot of obstetric anaesthetic practice in the UK

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## Introduction

- Postpartum haemorrhage (PPH) is the third leading cause of direct maternal death in the UK.
- Uterine atony is a common aetiology and a range of uterotonic drugs are used to prevent and treat bleeding.
- Wide variation in the administration of uterotonic drugs has been reported.
- Aim: a ***snapshot survey of current UK practice*** in light of the recent ***international consensus guidelines*** for uterotonic drug administration.

## Methods

- A national survey approved by the Obstetric Anaesthetist's Association was sent electronically to all consultant anaesthetist members, across the UK, in February 2020.
- Responses were collected over a 3-month period (Feb to May 2020) using the electronic survey system.
- Data collected focussed on:
  - First-line uterotonic preference at vaginal delivery (VD)
  - First line uterotonic preference at low and high risk of PPH caesarean delivery (CD)
  - Second line uterotonic in CD.
  - Administration of oxytocin in VD and CD
  - Institutional delivery data

## Results

- A total of 1,275 members were contacted, 208 completed the survey, with an overall response rate of 16% (Fig 1). Half of respondents work in an institution with more than 5,000 deliveries/year (Table 1)

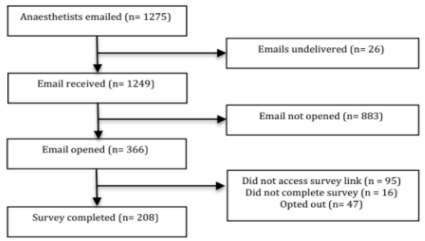



Figure 1: detailed description response rate

| *Deliveries per year* | *Number of institutions* |
|---|---|
| *>5,000* | 102 (49%) |
| *2,500 to 4,999* | 82 (39%) |
| *< 2,500* | 24 (12%) |

Table 1: institutional annual obstetric deliveries, n = 208

**1,275** surveys sent

**208** completed

**16%** survey response rate

**49%** respondents work in a large obstetric centre

**Syntometrine** is the most common first line uterotonic at VD.
**Oxytocin** is the most common first line uterotonic at CD (low and high risk of PPH)

| | *Vaginal delivery* | *Caesarean delivery* | |
|---|---|---|---|
| | | *Low risk* | *High risk* |
| *Syntometrine* | 123 (55%) | 0 | 0 |
| *Oxytocin* | 97 (44%) | 189 (85%) | 201 (85%) |
| *Carbetocin* | 3 (1%) | 33 (15%) | 36 (15%) |

**Table 2: Use of first-line uterotonic agents as per mode of delivery**

**35** different dose strategies to deliver oxytocin.

Ranging from
**1 - 55 iu**
total dose

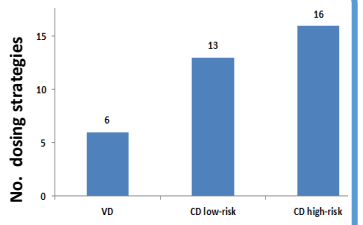



**Figure 2: doses and modes of administration of oxytocin in VD and CD (low/high risk)**

**28%** of respondents use oxytocin as the preferred second-line uterotonic in CD.

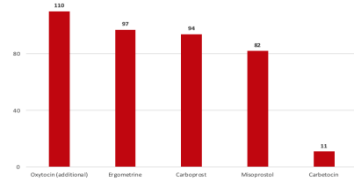


**Figure 3: First line preference for second uterotonic in CD**

## Discussion

- ***Widespread variation*** in oxytocin dosing and second line preference for uterotonic choice continues to exist in the UK.
- Carbetocin is increasing as a first line uterotonic in the UK at caesarean delivery, with less variation in the dose given compared to oxytocin.
- Main limitations: low overall response rate; only anaesthetic consultants were surveyed.

## References

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