

Major Obstetric Haemorrhage (MOH)

Findings from years 2021 and 2022



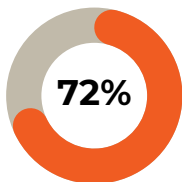
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A Major Obstetric Haemorrhage is defined as a pregnant or recently pregnant woman experiencing an estimated blood loss of $\geq 2,500\text{ml}$ and/or receiving a blood transfusion of five or more units of blood.



The incidence of MOH was **3.56** and **3.38** per 1,000 maternities in **2021** and **2022** respectively.
47% increase since 2011.

Almost three quarters (**72%**) of **MOH events** occurred in the **post-partum period**



The mean reported blood loss was **3,000mls**



BMI



Women with a **high BMI** and women with **multiple pregnancy** had a higher risk of MOH

- **27%** of women required **≥ 5 units of blood transfusion**
- **62%** were treated for **coagulopathy**
- **95%** received a **prophylactic uterotonic agent** at birth.



Quantitative measurement of blood loss was reported in **almost all MOH cases** (98% in theatre and 96% in the labour ward).

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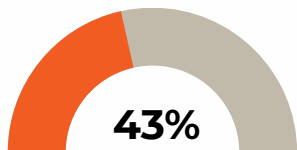
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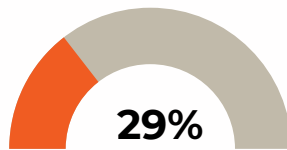
Causes and care of Major Obstetric Haemorrhage

Associated with vaginal delivery



The most common cause of MOH was **retained placenta/membranes (43%)** followed by **uterine atony (32%)**.

Associated with caesarean section



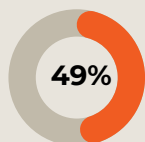
The most common causes of MOH were **uterine atony (29%)**, **placenta praevia (15%)** and **bleeding from uterine incision (14%)**.



Emergency C-section at full dilation occurred in **16%** of MOH cases, 77% with consultant present.



Senior staff were present at **98%** of MOH events, with fewer consultants available out of hours (79%) vs. daytime (91%).



Almost half (**49%**) of women experiencing a MOH were **admitted to a high dependency unit** and **28%** were cared for in an **ICU**.

A maternity early warning system (**IMEWS**) was used in **89% of cases**.

Invasive monitoring: central venous pressure line 14% & arterial line 49%.

An **MOH protocol was available in 96%** of cases and an **obstetric haemorrhage proforma** was used in **63%** of MOH cases. In most cases where a proforma was not used, the woman was managed in theatre.



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Pharmaceutical arrest of bleeding



At **least one uterotonic agent** was administered to arrest bleeding in 97% of MOH cases.



Syntocinon was used more often in vaginal births than C-sections, either by injection or infusion.

Tranexamic acid



Significant **increase** in its use in 2021-2022 (85%) compared to the 11% in 2011-2013.

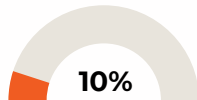
Misoprostal

There was a **reduction** in its use in 2021-2022 (44%) compared to the 55% in 2011-2013.

Haemostatic surgical procedures



82% of women experiencing MOH had **1 or more haemostatic surgical procedure**.



Ten percent of women required a **peripartum hysterectomy**. **Intra-uterine balloon tamponade** was the most common haemostatic surgical procedure (33%).

Quality of Care

- Appropriate, **well managed care** was reported in **87% of cases**.
- **Formal debriefing** was provided for **89% women** experiencing MOH.
- **Lack of debriefing for staff** following a MOH event is a lost learning opportunity.

Quality of Documentation

- Documentation of timing and blood loss at time of pharmaceutical and surgical interventions in the management of MOH is **suboptimal**.