Research on the Horizon



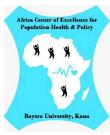
Hadiza Shehu Galadanci (MBBS, MSc (UCL), FWACS, FRCOG, FICS)

Professor of Obstetrics and Gynaecologist
Aminu Kano Teaching Hospital
Director Africa Center of Excellence for Population health and Policy
Bayero University Kano
Nigeria









Outline of Presentation

01	The global burden of postpartum haemorrhage	04	Trial design
02	The WHO first response bundle for reducing the burden of postpartum haemorrhage	05	Progress to date and next steps
03	Challenges in managing postpartum haemorrhage →	06	Emotive Partners

Disclosures

Nigerian PI of the E-MOTIVE program funded by the Bill & Melinda Gates Foundation

1. The global burden of postpartum haemorrhage

Postpartum haemorrhage (PPH) is the leading cause of maternal death worldwide.

Every 2 minutes a mother dies giving birth.

Globally, nearly <u>one quarter of all</u> <u>maternal deaths</u> are associated with PPH. In most low-income countries, it is the main cause of maternal mortality.

EVERY DAY WOMEN ARE DYING FROM EXCESSIVE BLEEDING AFTER CHILDBIRTH

GLOBAL PROBLEM

Excessive bleeding after childbirth, known as postpartum haemorrhage (PPH), is the leading direct cause of maternal mortality worldwide.²



14,000,000

women develop PPH each year³

480,000

mothers died from PPH between 2003-09² 99%

of deaths occur in low and lower-middle income countries³

EXTENDED IMPACT

If a woman survives PPH, it can result in the need for serious medical interventions including:⁴



Surgery and hysterectomy



Blood transfusions to address severe anaemia When a mother dies it can have a devastating impact on her family:5,6



Three out of four healthy babies die within 6 months of the mother dying



Daughters have to adopt the role of the mother and may miss out on an education



The loss of income leads to a deepening cycle of poverty for the family



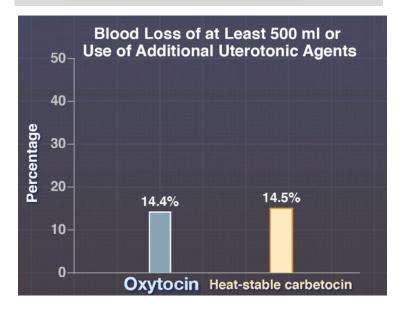
1. The global burden of postpartum haemorrhage

- □ PPH is common despite effective prevention
- Women suffering PPH of 500 ml or more the risk of death or severe morbidity such as admission to intensive care unit was 100 times higher compared to women that did not suffer PPH (1.49%; 45/3,018 women versus 0.015%; 4/26,521)

Heat-Stable Carbetocin versus Oxytocin to Prevent Haemorrhage after Vaginal Birth

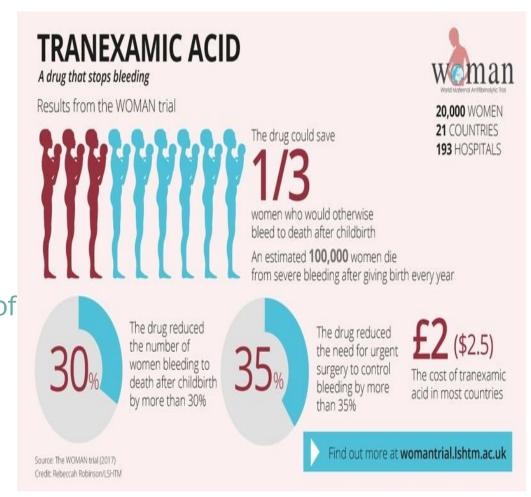
C H A M P I O N

Carbetocin HAeMorrhage PreventION trial



2. The WHO first response bundle for reducing the burden of postpartum haemorrhage

- □ Oxytocic drugs are the mainstay of prevention and treatment
- Safe and effective
 manoeuvres to treat PPH
 such as uterine massage,
 examination for the source of
 PPH and initial fluid
 resuscitation with isotonic
 crystalloids are also
 recommended



2. The WHO first response bundle for reducing the burden of postpartum haemorrhage

■WHO produced a first response bundle after a technical consultation supported by BMGF

Received: 5 May 2019

Revised: 16 September 2019

Accepted: 8 November 2019

DOI: 10.1002/ijgo.13028

CLINICAL ARTICLE

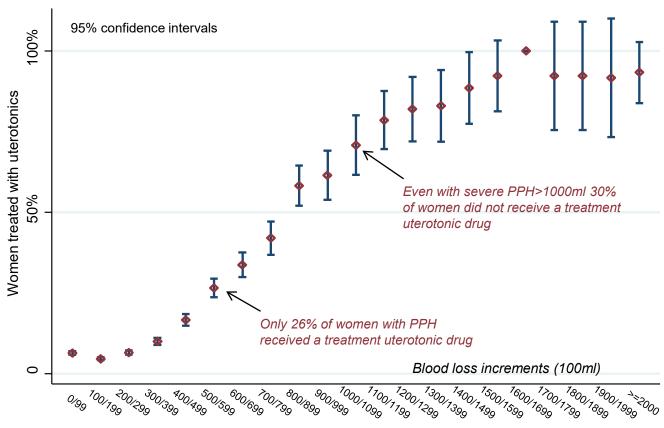
Obstetrics



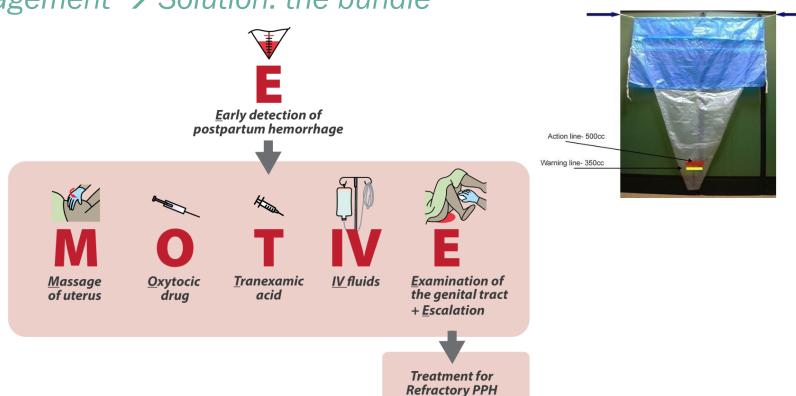
Postpartum hemorrhage care bundles to improve adherence to guidelines: A WHO technical consultation[☆]

```
Fernando Althabe<sup>1,2</sup> | Michelle N.S. Therrien<sup>3,4</sup> | Veronica Pingray<sup>1,*</sup> | Jorge Hermida<sup>5</sup> | Ahmet M. Gülmezoglu<sup>2</sup> | Deborah Armbruster<sup>6</sup> | Neelima Singh<sup>7</sup> | Moytrayee Guha<sup>8</sup> | Lorraine F. Garg<sup>8</sup> | Joao P. Souza<sup>2,9</sup> | Jeffrey M. Smith<sup>10</sup> | Beverly Winikoff<sup>11</sup> | Kusum Thapa<sup>12</sup> | Emmanuelle Hébert<sup>13</sup> | Jerker Liljestrand<sup>14</sup> | Soo Downe<sup>15</sup> | Ezequiel Garcia Elorrio<sup>16</sup> | Sabaratnam Arulkumaran<sup>17</sup> | Emmanuel K. Byaruhanga<sup>18</sup> | David M. Lissauer<sup>19</sup> | Monica Ogutu<sup>20</sup> | Alexandre Dumont<sup>21</sup> | Maria F. Escobar<sup>22</sup> | Carlos Fuchtner<sup>23</sup> | Pisake Lumbiganon<sup>24</sup> | Thomas F. Burke<sup>8,25,‡</sup> | Suellen Miller<sup>3,26,‡</sup>
```

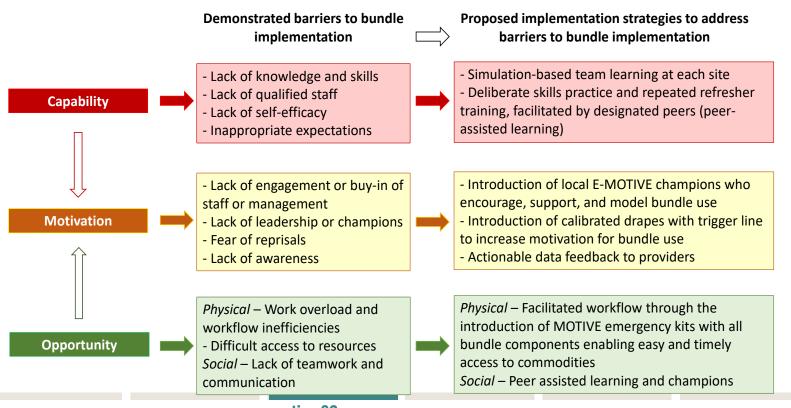
1. PPH is often not detected early; thus life-saving treatment is not promptly initiated \rightarrow Solution: <u>Early</u> detection and treatment of PPH



2. Delayed or inconsistent use of interventions for PPH management → Solution: the bundle



3. Despite guideline dissemination, many care providers do not provide effective care → Solution: Implementation strategy targeting Capabilities, Opportunities and Motivations for Behavior change (COM-B)



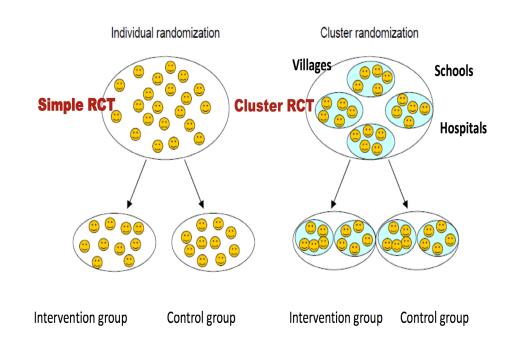
4. Lack of evidence and confidence that the proposed E-MOTIVE intervention is effective and cost-effective → Solution: A cluster randomized trial with health economic analysis (the E-MOTIVE study)



4. Trial design

Design: Multi-country,
parallel cluster randomised
trial with a baseline control
phase, along with mixedmethods and health
economic evaluations

Setting: Secondary level health facilities in Kenya, Tanzania, Nigeria, South Africa and Sri Lanka



Health facilities rather than patients are randomised

. Trial design

OUTCOMES

Primary: Composite of the following three clinical outcomes:

severe PPH defined as blood loss ≥1000 ml

-postpartum laparotomy for bleeding

-postpartum maternal death from bleeding

Key Secondary: 1) postpartum haemorrhage detection rate (defined as recording of diagnosis of PPH by birth attendant), and 2) compliance with the MOTIVE bundle

Secondary: blood transfusion, uterine tamponade, Intensive Care Unit admissions or higher-level facility transfers, and new-born deaths along with implementation and resource use outcomes

5.PROGRESS TO DATE





78 main trial sites in total

➤ Nigeria: 38

Kenya: 14 (2 sites dropped)

Tanzania: 12 (2 sites dropped)

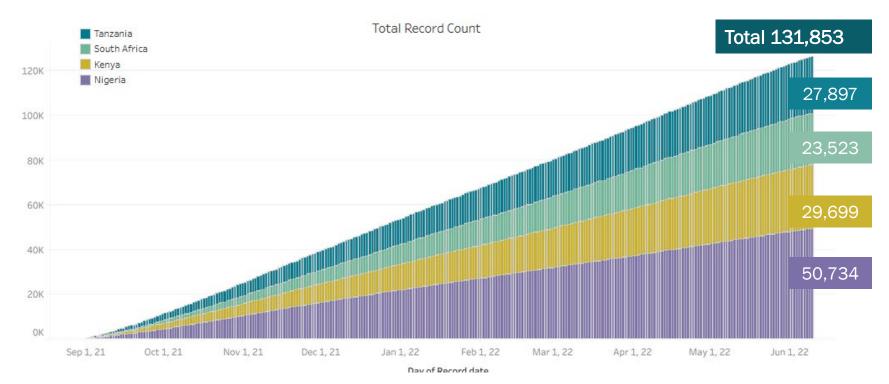
South Africa: 14

12 adaptive cycle (AC) sites (3 per country)

PPH CoP Annual Meeting

TOTAL RECORD COUNT





Number of validated records from start of SDV implementation (02/08/2021) to 08/06/2022

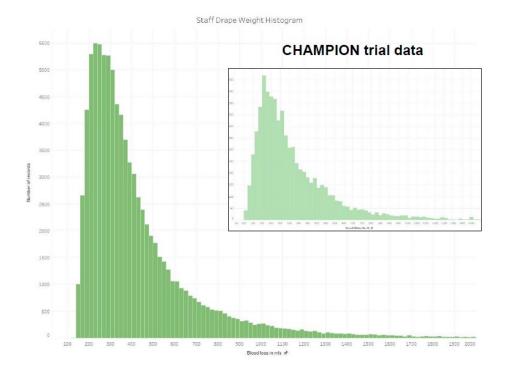
SOURCE DATA VERIFICATION



Example photo



Histogram for blood loss



ADAPTIVE CYCLE SITES OVERVIEW



Use of oxytocin in AC sites in baseline and intervention in PPH cases

	Baseline % OXY use	Intervention % OXY use
Kenya	69%	83%
Nigeria	65%	95%
South Africa	47%	80%
Tanzania	100%	100%
Total	54%	88%

Use of tranexamic acid in AC sites in baseline and intervention in PPH cases

	Baseline % TXA use	Intervention % TXA use
Kenya	36%	83%
Nigeria	4%	90%
South Africa	25%	68%
Tanzania	50%	100%
Total	24%	83%

6 The E-MOTIVE & partners





















E-MOTIVE



Email: emotive@trials.bham.ac.uk Website:

https://www.birmingham.ac.uk/emotive







