Mothers matter: reducing preventable maternal deaths in Kenya via optimal postpartum hemorrhage prevention and treatment

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In November 2019, world leaders convened in Nairobi for the ICPD25 Summit, pledging their support to end preventable maternal death. Despite the progress that has been made over the last few years (1), we are significantly behind achieving the goal of reducing the global maternal mortality ratio to less than 70 in 100 000 live births by 2030 (SDG 3.1). Kenya has set an ambitious goal to achieve zero preventable maternal deaths. At this year's Kenya Obstetrical and Gynecological Society (KOGS) scientific meeting in Nyeri, experts discussed the crucial gaps in drug accessibility, education, policies and guidelines that need to be filled to make this a reality.

In Kenya, postpartum hemorrhage (PPH) accounts for 25% of maternal deaths. In 2017, the Kenyan Ministry of Health identified sub-standard care in 9 out of 10 maternal deaths owing to PPH (2). Uterine atony causes approximately 75% of PPH cases, therefore, the majority of these deaths could have been avoided with prophylactic uterotonics and appropriate management. The World Health Organization (WHO) recommendations for the prevention and treatment of PPH, along with the WHO Model Essential Medicines List, have been updated to include heat-stable carbetocin for the prevention of PPH and tranexamic acid for its treatment (3). Adoption of these recommendations represents an important step forward in the care of expectant Kenyan mothers.

Several uterotonic drugs are available for PPH prophylaxis, of which oxytocin is considered the gold-standard. In Kenya, however, 29–35% of oxytocin samples tested were of poor-quality (4). In addition, universal oxytocin availability in Kenya is a challenge owing to cold-chain storage and logistics. To address these limitations, Ferring Pharmaceuticals developed a heat-stable formulation of carbetocin, an oxytocin analogue, for PPH prevention. It was shown to remain stable for four years if stored below 30°C and 75% relative humidity (approved storage conditions), or during controlled storage conditions at 50°C for three months (5). Ferring made a commitment to supply the product at an affordable sustainable price to the public sector in low and lower-middle income countries (6).

The efficacy and safety of heat-stable carbetocin was demonstrated in the CHAMPION trial, a non-inferiority trial in 29,645 women in 10 countries comparing heat-stable carbetocin with oxytocin administered immediately after vaginal birth. The frequency of blood loss ≥500 ml or the use of additional uterotonics was 14.5% and 14.4% in the carbetocin and oxytocin trial arms, respectively (relative risk: 1.01; 95% confidence interval: 0.95–1.06), demonstrating non-inferiority (7). With regards to treatment of PPH, tranexamic acid is available in our armamentarium. The WHO now strongly recommends use of tranexamic acid within three hours of birth in all cases of PPH, regardless of the cause (8).

Kenya has made progress in reducing maternal mortality, but there is still a long way to go. Life-saving medicines, such as heat-stable carbetocin and tranexamic acid, must be accessible and affordable, and healthcare professionals need an up-to-date understanding of the options available. Urgent action is needed to adopt the new PPH prevention and treatment recommendations in national and local health policies, programmes, and at facilities in order to enable achieving SDG 3.1 and the socio-economic pillar of Kenya's Vision 2030.

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