Oxytocin in developing countries remains very limited because of its storage and administration protocols (i.e. requires a skilled health provider, cold chain storage and sterile syringes and needles).

After birth is the gold standard for the prevention of PPH. The use and feasibility of uterine atony accounts for at least eighty percent of PPH.

Blood loss accompanied by signs or symptoms of hypovolemia within 24 hours defines PPH as a "cumulative blood loss greater than or equal to 1,000 mL or 5% (200 mL) of the blood volume".

According to the World Health Organization (WHO), approximately 800 women die every day due to preventable causes related to pregnancy and childbirth.

The main causes of maternal deaths worldwide include postpartum hemorrhages (PPH, 22.3%), hypertensive disorders during pregnancy (pre-eclampsia and eclampsia, 18.5%) and unsafe abortions (approximately 14.5%).

The American College of Obstetricians and Gynecologists recently revised the definition of PPH as a "cumulative blood loss greater than or equal to 1,000 mL or blood loss accompanied by signs or symptoms of hypovolemia within 24 hours after the birth process (includes intrapartum loss) regardless of route of delivery". Uterine atony accounts for at least eighty percent of PPH.

Oxytocin (IMIV, 10 IU), a hormone that naturally induces uterine contractions after birth is the gold standard for the prevention of PPH. The use and feasibility of oxytocin in developing countries remains very limited because of its storage and administration protocols (i.e. requires a skilled health provider, cold chain storage and sterile syringes and needles).

Misoprostol, a synthetic prostaglandin E1 analogue, has been proven to have sustainable advantages over oxytocin including multiple route of administration (oral, sublingual, vaginal, rectal, buccal), a reasonable cost, and a long shelf life at room temperature.

Results from all meta-analyses were not statistically significant. There was no difference between the use of oxytocin over misoprostol [-0.13 (95% CI -0.26, 0.01)] and meta-analysis shows that when used separately, both medications decreased total EBL (Fig. 2). Misoprostol at 600 mcg [-0.22 (95% CI -0.33, -0.12)] and at 400 mcg [-0.01 (95% CI -0.18, 0.15)] did not show any difference on EBL compared to oxytocin (Fig. 3). When combining oxytocin and misoprostol, there was no difference on EBL compared to misoprostol alone [-0.13 (95% CI -0.42, 0.10)]. When oxytocin was not added to misoprostol, there was also no difference on EBL compared to misoprostol alone [-0.07 (95% CI -0.22, 0.09) (Fig. 4).