

MISOPROSTOL FOR POSTPARTUM HEMORRHAGE IN ZANZIBAR



DANIDA

POLICY & EVALUATION BRIEF

Background

In Zanzibar, the leading causes of maternal death are hemorrhage (28%) and pregnancy-induced hypertension (17%). Complications from unsafe abortion and miscarriage as well as obstructed labor are also important causes of maternal mortality. Active Management of the Third Stage of Labor (AMTSL) is recommended at all deliveries to prevent postpartum hemorrhage (PPH). Administration of magnesium sulfate is recommended in cases of eclampsia.

To assist the Zanzibar Ministry of Health and Social Welfare (MOHSW) in scaling up these two best practices, Venture Strategies Innovations (VSI) and Danida embarked on training 425 mid-level providers on management of PPH and eclampsia. Regular supportive supervision visits and record reviews were conducted by MOHSW and VSI personnel at nine facilities in the ten months following these trainings. Pre-intervention data was compiled from the same facilities for the 12-months preceding the intervention.

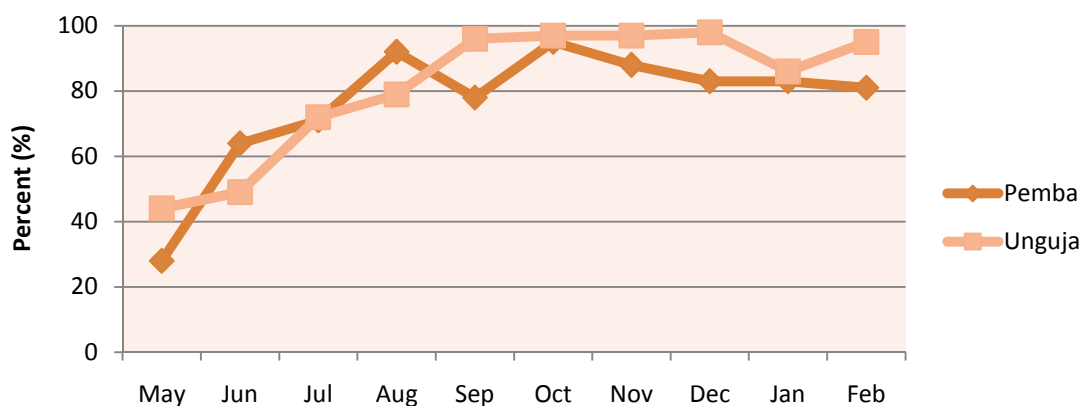
Results

Use of misoprostol for PPH rapidly increased over the 10-month period surveyed (Figure 1). In the ten months since the training there have been approximately 12,500 protected births with misoprostol prophylaxis and an additional 253 women who received treatment for PPH. Outcomes of PPH cases improved significantly:

- The need for blood transfusions was significantly reduced, from 30 (19.2%) in the pre-intervention period to 7 (2.4%) in the post-intervention period.
- Significantly fewer PPH-related referrals and maternal deaths were witnessed; both declined from 7.7% pre-intervention to 3.1% post-intervention (p -value < 0.05).

Reported cases of PPH increased significantly post-intervention, from 0.8 to 1.7%, (p -value < 0.0001), but remained much lower than the global average. This was expected, given the training aimed to increase provider awareness and improve the accuracy of diagnosis and record keeping.

Figure 1: Percentage of protected births with misoprostol prophylaxis
May 2008 - February 2009



Recommendations

Maternal mortality remains unacceptably high and the MOHSW is committed to reducing maternal mortality from 377 to 130 maternal deaths per 100,000 live-births by the year 2015 in accordance with the Millennium Development Goals. To this end we put forth the following recommendations:

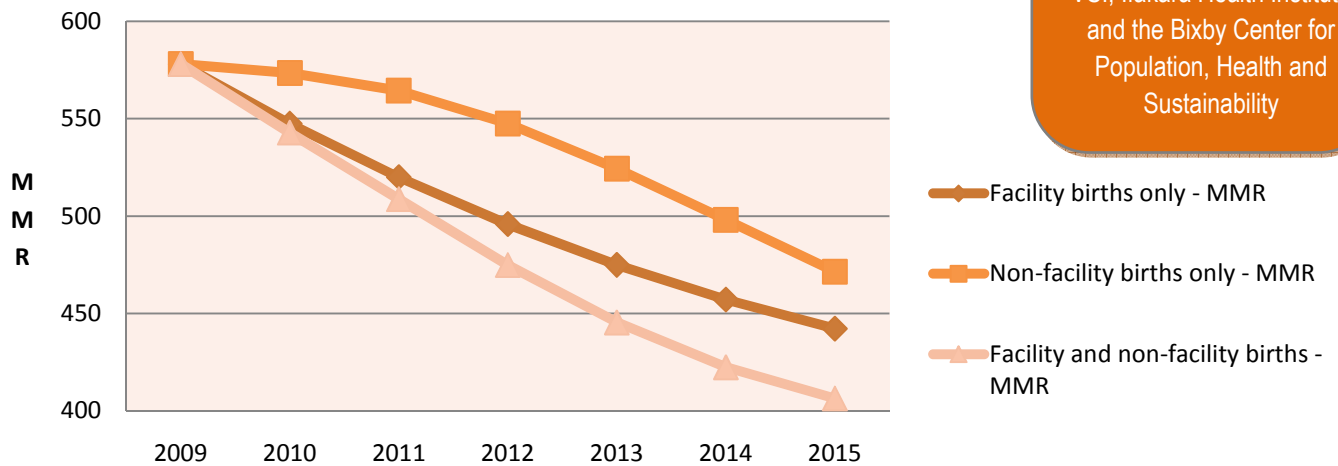
1. Scale-up trainings on management of PPH and eclampsia—Currently a third of all mid-level providers on the islands have been trained. Trainings should be extended to all providers at all levels—even orderlies.

2. Reinforce the message that oxytocin is the first-line uterotonic—In some facilities there is provider-preference for misoprostol. While ease of use and availability of misoprostol were cited as reasons why some providers more commonly used the tablets, future and refresher trainings must emphasize “oxytocin is the preferred drug of choice for AMTSL” (*Clinical Guidelines for the Use of Uterotonics in the Prevention of Postpartum Hemorrhage in Zanzibar*, p.5).

3. Make misoprostol available at the community level—Most women in Tanzania deliver outside of the facility. Zanzibar North and Pemba North have the highest regional rates of home birth (76.8 and 70.9%) and the lowest rates of skilled attendance at birth (25 and 30%) in the country. Significant reductions in maternal mortality cannot be expected unless interventions reach those women who need it the most and who deliver at home.

Figure 2 is a model of maternal mortality ratio decline for three different scenarios, and demonstrates the potential significant impact for reducing MMR if all births (home and facility) could be protected with the inclusion of misoprostol in the country program.

Figure 2: Impact of misoprostol for reducing maternal mortality ratio (MMR) in Tanzania through prevention of postpartum hemorrhage



REACHING MOTHERS:

In Zanzibar, 97% of pregnant women attend ANC. ANC distribution of misoprostol for PPH prophylaxis is currently being tested in Tanzania by VSI, Ifakara Health Institute and the Bixby Center for Population, Health and Sustainability

If universal protection of facility and home-births was achieved by 2015, Tanzania could expect a decline in maternal mortality ratio of up to 30% from this single intervention: misoprostol.

4. Prioritize access to misoprostol for postabortion care (PAC) services as an additional strategy to reduce maternal deaths—Data on treatment of incomplete abortion and miscarriage was not collected as part of this evaluation. However, there is evidence that PAC patient load can be very high in some facilities. Use of misoprostol for PAC is another internationally endorsed strategy to assist in reducing MMR even further by addressing the complications of unsafe abortion. The 2009 Committee Opinion by the American College of Obstetricians and Gynecologists states, “Misoprostol must be readily available especially for women who do not otherwise have access to postabortion care” and in April 2009 the World Health Organization added misoprostol for the treatment of incomplete abortion and miscarriage to its model list of essential medicines.