UTEROTONIC USE IMMEDIATELY FOLLOWING BIRTH

New Methodology for Estimating National Coverage

Background

It is widely accepted that the most effective intervention for preventing postpartum hemorrhage (PPH) is the administration of a uterotonic to a woman immediately following delivery. This critical practice should be carried out either as part of active management of the third stage of labor (AMTSL) for women who deliver in a facility, or as a single intervention for women who deliver at home. Three uterotonic drugs are generally accepted as effective uterotonics: oxytocin, misoprostol, or ergometrine, with oxytocin being the drug of choice according to WHO recommendations from 2012.

Mother who received a uterotonic immediately following birth
(Shafiqul Alam Kiron/MCHIP)

Despite this accepted standard of care in PPH prevention, few countries currently have data on the percentage of births that receive a uterotonic. In 2012, the *WHO Recommendations for the Prevention and Treatment of PPH* included guidance that "monitoring the use of uterotonics after birth for the prevention of PPH is recommended." In an effort to assist countries to meet that recommendation, USAID's Maternal and Child Health Integrated Program (MCHIP) has piloted a rapid estimation exercise for the measurement of uterotonic use immediately following birth (UUIFB). The methodology allows countries to identify coverage gaps and track progress in PPH reduction, thereby strengthening efforts to decrease maternal mortality.

Methodology

In consultation with PPH measurement experts, including representatives from the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), London School of Hygiene and Tropical Medicine, and others, MCHIP developed an estimation methodology based on (1) the distribution of birth locations within a country, (2) the likelihood of uterotonic use in each birth location, and (3) other adjusting factors such as the availability and biological potency of uterotonics.

Preparation: An in-country facilitator gathers information on the three elements described above. This involves a desk review of available country-level data and any relevant national policies or guidelines, as well as a questionnaire sent to key stakeholders to better assess current practices.

Estimation: A panel of experts is convened to review and validate the available data, and to provide estimates where there are no data.

STEP 1. *Distribution of birth locations*: Available survey data are used to understand the distribution of births in public facilities, private facilities, or at home, and who attends the woman in each location.

STEP 2. *Uterotonic use in each birth location*: Data such as quality of care surveys are used to assess uterotonic use in each birth location. Where data are not available, participants debate the likely level of practice.

STEP 3. *Adjustment of estimates based on various factors*: Additional available information—such as frequency of stock-outs or quality of oxytocin supply—is used to adjust coverage estimates to reflect the real picture of service provision.

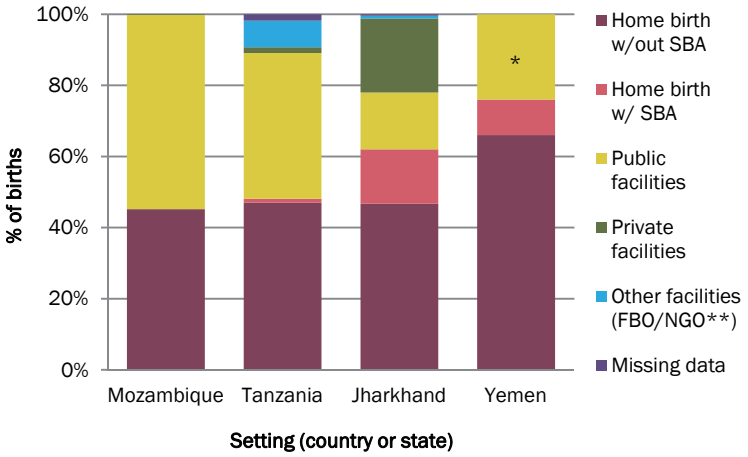
The panel of experts uses these inputs to generate an estimate of national coverage of UUIFB across all births—both at the facility and community level. Recommendations are made to address coverage gaps.

Results

The methodology was piloted in 2013 in Mozambique, Tanzania, Jharkhand State (India), and Yemen. The charts and table on this page summarize the findings from the four settings.

These uterotonic estimation exercises allowed for a transparent, consultative forum for experts to reach a consensus about UUIFB coverage in their respective countries. The methodology combined available data with expert opinion to reach a useful figure that could guide programs and enable focused monitoring. Because the process was inclusive and transparent, participants generally regarded the estimates as accurate and valid.

Figure 1: (STEP 1) Distribution of birth locations



* In Yemen, public and private facility data are combined; both public and private facility births are represented under "Public facilities" in Figure 1.
** FBO/NGO = Faith-based organizations/Non-governmental organizations.

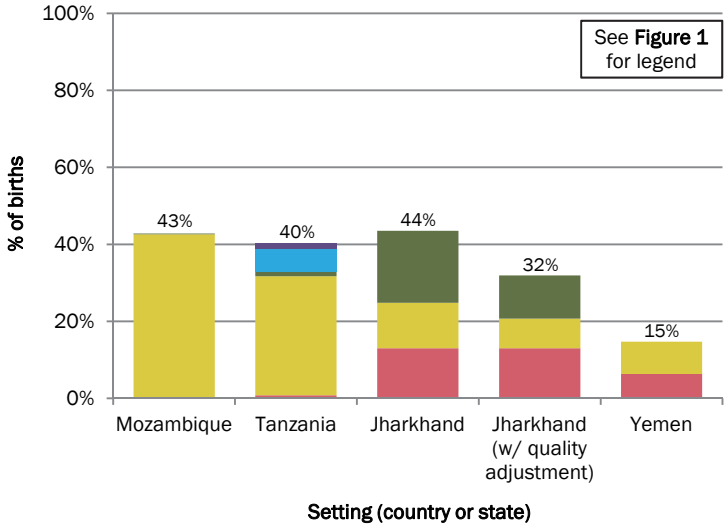
	(STEP 2)					(STEP 3)				
	Uterotonic use by place of birth					Stock-out of uterotonic by place of birth				Drug quality adjustment (Oxytocin out of specification)
	Home birth w/out SBA	Home birth w/ SBA	Public facilities	Private facilities	Other facilities	Home birth w/ SBA	Public facilities	Private facilities	Other facilities	
Mozambique	0%	---	80%	100%	---	---	2.5%	0%	---	N/A
Tanzania	0%	70%	71-99%**	81.5%	81.5%	N/A	2%	2%	2%	N/A
Jharkhand	0%	85%	90%	90%	N/A	0%	7-33%	0%	N/A	40%***
Yemen	0%	70%	70%*	---*	---	10%	50%*	---*	---	N/A

N/A = data not available; --- = data not applicable
* In Yemen, public and private facility data are combined; both public and private facility data are represented under "Public facilities" in this table.
** In Tanzania, UUIFB estimations were disaggregated by health center/dispensary level (71%), district/regional hospitals (81.5%), and central hospitals (99%).
*** In Jharkhand State, drug quality adjustments were only made in birth locations where oxytocin (not misoprostol) is used.

Conclusions

The goal of this exercise was to have policy makers, health care managers, and other stakeholders develop estimates for UUIFB coverage in their countries that they could then use as a reference point for strengthening PPH prevention programs. Unique in its scope, this exercise took into account home births, whereas previous studies only looked at facility AMTSL practices. The process highlighted gaps in coverage at the community level and the need for more targeted programs to address these shortfalls. It also drew attention to issues of uterotonic availability and quality, as well as the policies and practices that inhibit high coverage. Finally, this exercise underscored the need to improve data gathering and data quality for UUIFB, both at the facility and community level. More reliable and regular data regarding uterotonic use will help monitor program progress and identify persistent gaps in coverage.

Figure 2: National UUIFB coverage estimate, by birth locations



MCHIP, with the support of USAID, continues to work with countries to improve programs, seek innovative solutions to persistent problems, and monitor progress toward universal UUIFB coverage. Governments should be supported to conduct this exercise and use these UUIFB estimates to improve programmatic coverage of this fundamental maternal health intervention.

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