



Management of Medicines for Emergency Obstetric Conditions in Rwanda

The Government of Rwanda has made advances implementing interventions to reduce maternal and newborn mortality. The success of these interventions is dependent on the constant availability of quality medicines and commodities.

Rwanda has made great progress in reducing the maternal mortality ratio, achieving a drop from 550 maternal deaths per 100,000 live births in 2005, to 340 deaths in 2010¹, however it remains the 34th highest MMR in the world. Regional estimates show that the leading causes of maternal death are post-partum hemorrhage, hypertension from pre-eclampsia and eclampsia, and sepsis, accounting for 34%, 19%, and 9%, respectively.

Purpose and Objectives

USAID funded a rapid assessment, which was initiated by the Strengthening Pharmaceutical Systems Program and continued under their Systems for Improved Access to Pharmaceutical and Services (SIAPS) Program who worked with the Ministry of Health, Rwanda to determine the availability and management of pharmaceuticals and commodities for emergency obstetric conditions.

Methods

The rapid assessment was conducted in a sample of 61 health facilities from 10 districts of Rwanda: 10 district pharmacies, 10 district hospitals, 40 health centers (HCs) and the central medical stores (Medicines Procurement and Distribution Division [MPDD]). In the facilities sampled, the data collectors conducted interviews with storekeepers and personnel in charge of the delivery suite and observed practices and used a tracer medicine list to assess availability.

Results

Some of the key findings from the assessment include the following—

Disparity between the national essential medicines list (NEML) and standard guidelines on obstetric and newborn care (SONU)

According to the NEML (2010), oxytocin is for use only at the hospital level and not at HCs, but ergometrine, a more unstable medicine, is listed for use at all levels. The SONU (2012), however, recommends using oxytocin or ergometrine to prevent postpartum hemorrhage at all facility levels and misoprostol at community level, which is currently the practice in only four pilot districts. Such disparities could cause problems in availability and are so currently being addressed in the revision of the NEML, to be finalized in 2013.

No standard procedure to estimate needs at the district level

The annual estimation of needs for the procurement of essential medicines is carried out at two levels: the district pharmacies and hospitals estimate their needs at the end



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¹ Countdown to 2015. 2012. Building a future for women and children, the 2012 report. Geneva: World Health Organization.

of the year and send them to the MPDD to be compiled. At the same time, MPDD conducts its national needs estimation and if that does not match the sum of the districts, MPDD adjusts it. Because no standard guidance exists on how to estimate district-level needs, each district estimates in its own way, which may cause over or under estimates at the national level.

Challenges in maintaining cold chain storage conditions

The MPDD procured a brand of oxytocin that does not require cold storage, which facilitates the storage logistics; however ergometrine requires cold storage, and data collectors found it stored out of the refrigerator in 25% of health centers, 40% of hospitals, and 40% of district pharmacies. In addition the lack of standard processes for internal ordering and tracking of products in the facilities makes it impossible to know if the ergometrine in the delivery room is out of the refrigerator for less than 4 weeks, which is the maximum storage time over 8°C without potency reduction.

Availability of maternal health medicines at HCs

Oxytocin was widely available in all health facilities, but ergometrine and medicines for pre-eclampsia and eclampsia, such as magnesium sulfate, calcium gluconate, and hydralazine, were not widely available at the HC level and not even in all hospitals.

Good inventory management and stock-outs limited

In general, the record-keeping in the health facility stores was up to date, as assessed by comparing the stock cards with the physical stock; however, more problems were noted in the district pharmacies than in the HCs and hospitals. In addition, although all levels had stock-outs during the previous 6 months, most were not for extended periods; the maximum time out of stock was 23 days for nifedipine tablets (one of the tracer medicines) at the district pharmacy level.

Conclusion

The availability of quality pharmaceuticals for the prevention and treatment of maternal conditions is a prerequisite for implementing interventions to reduce maternal and neonatal mortality. Key next steps, defined by the Ministry of Health, include the following—

- The maternal and child health department should continue to work with the pharmacy task force (PTF) to ensure that the NEML is revised to align with the SONU guidelines.
- The maternal and child health department should work with the MPDD, the PTF, and the logistics management office to ensure accurate product quantification and appropriate analysis of availability and consumption information.
- The PTF should develop and implement standard operating procedures and job aids for essential medicines management, including specific storage conditions for uterotonics and internal facility processes for ordering and monitoring stock levels in departments.
- The PTF should validate and disseminate supervision guides for district pharmacists to conduct facility-level supervision.



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