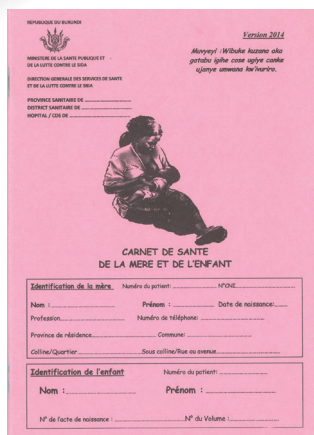




## BURUNDI: Delivery certificate imbedded in MCH Handbook



Maternal and Child Health Handbook, Burundi, 2014

### Background

Burundi is an inland Central African country with a population of 9.85 million and land area of 27,836 km<sup>2</sup>. A 12-year sociopolitical crisis had significantly delayed the country's socioeconomic development. Maternal Mortality Ratio and Infant Mortality Rate were respectively 500 per 100,000 live births and 59 per 1,000 live births as of 2010. Development of the Burundian Maternal and Child Health (MCH) Handbook was launched in 2013. When participating in the 8<sup>th</sup> International Conference on MCH Handbook (Nairobi 2012), Burundian officials were inspired by various countries' good practices of developing and implementing MCH Handbooks. First, the Burundian Ministry of Public Health and Fight against HIV/AIDS (MoPH) organized the National Technical Committee for the MCH Handbook composed with the members of the national vertical programs of the MoPH (i.e. reproductive health, child immunization, and nutrition), the Ministry of Home Affairs, and development partners (e.g. JICA, WHO, UNICEF, EU and BTC). The Committee reviewed and assessed existing four types of MCH-related home-based records: (i) ANC card; (ii) maternal tetanus vaccination card; (iii) child vaccination card; and (iv) integrated child health care handbook. There reportedly remained three issues: (i) absence of child birth data at home; (ii) health facilities' inability to offer delivery certificates to mothers; and (iii) low post-natal care coverage (30.0%). To address these the priority MCH-related issues, the MCH Handbook was introduced.

### Delivery certificate in the MCH Handbook

One of the major advantages of the Burundian MCH Handbook is to have a page for delivery certificate in it. Delivery certificate serves as an objective justification for birth registration process which requires basic data such as date of birth, birth weight, name of mother, birthplace, and name of birth attendants. Either health workers

or birth attendants are expected to complete the page of the delivery certificate in the MCH Handbook. It was found in several previous studies that mothers who obtain their children's delivery certificates are more likely to receive postnatal care services.

To estimate the effectiveness of the MCH Handbook in increasing availability of delivery information at home, a survey was conducted targeting all the twenty-three health facilities in Gitega district, Burundi.

### Results of the survey

During the period from December 2013 to June 2014, MCH Handbook was distributed to 8,786 pregnant women. Moreover, 101 health workers responsible for MCH services (six physicians and 95 nurses) were trained on the MCH Handbook operation. Pre- and post-implementation data were collected through structured interviews with randomly selected mothers of infants. Of a total of 384 selected mothers, 370 and 344 provided valid responses at the pre- and post-implementation of the MCH Handbook, respectively.

Between pre- and post-implementation stages, there were significant changes in all the variables (Table 1). The proportion of mothers having received the delivery certificate in any type of home-based records increased from 4.6% to 66.2% ( $P < 0.001$ ). The proportion of mothers having antenatal care (ANC) records and/or delivery certificate in home-based records increased from 1.4% to 95.1% ( $P < 0.001$ ) through introduction of MCH Handbook. More specifically, the proportion of mothers having delivery mode (i.e. normal delivery or complicated delivery) information in home-based records increased from 0% to 29.7% ( $P < 0.001$ ). The proportion of mothers having a record of accurate birth weight data increased from 0% to 71.8% ( $P < 0.001$ ), while the proportion of mothers having inaccurate recall data of birth weight



significantly was reduced from 13.5% to 0.9% ( $P < 0.001$ ). Moreover, the proportion of mothers being advised on postnatal care (PNC) by nurses increased from 35.9% to 64.2% ( $P < 0.001$ ). This might have contributed to the increase in annual PNC coverage from 43.9% in 2013 to 54.2% in 2014 in Gitega district.

### From piloting to nationwide scaling-up

A page for delivery certificate in the MCH Handbook helps ensure that mothers receive their children's birth data in their hands. This is likely to encourage mothers to smoothly proceed to their children's birth registration at local administration offices.

In developing countries, overall complexity of birth registration process commonly is challenges. Burundi is not an exception. Parents who fail to receive their children's delivery certificate at the health facility are required to take three steps for birth registration: (i) to request a village chief to issue a birth testimony being supported by three witnesses; (ii) to report child's birth at a local administration office using the testimony issued by the village chief; and (iii) to have the child's birth registered at the local administration office. Note that parents who have received delivery certificate can skip the aforementioned step (i). After this study, the MoPH and the Ministry of Home Affairs jointly decided to scale up the MCH Handbook nationwide, and laid down a joint decree on its application to the simpler birth registration process.

## Conclusion

The MCH Handbook helps pregnant women and mothers keep records of a continuum of maternal and child health service utilizations. The MCH Handbook should be referred to, not only for effective maternal and child health care, but also for maternal mortality surveillance and responses. Furthermore, the MCH Handbook is likely to assist health workers in providing mothers with appropriate advice on postnatal care. Postnatal care service utilization is expected to increase accordingly.

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### Further readings

1. Kaneko K, et al. *Implementation of new birth records in a district of Burundi: an intervention study of health systems improvement. Abstracts of the Third Global Symposium on Health Systems Research*, Cape Town: WHO, 2014.

▼ Table 1. Changes in key variables between pre- and post-implementation of the MCH Handbook in Gitega district

Variables	Pre Intervention (n=370) n (%)		Post intervention (n=344) n (%)		Chi-square test P-value
Proportion of mothers having received the delivery certificate in any type of home-based records					
Not received	353	(95.4%)	116	(33.7%)	< 0.001
Received but not available at home	11	(3.0%)	18	(5.2%)	
Received and available at home	6	(1.6%)	210	(61.0%)	
Proportion of mothers having ANC records and/or birth data by type of home-based records					
None	365	(98.6%)	16	(4.7%)	< 0.001
Had in unofficial paper/booklet	2	(0.5%)	0	(0%)	
Had in ANC card	3	(0.8%)	1	(0.3%)	
Had in MCH Handbook	N.A.		327	(95.1%)	
Proportion of mothers having data of delivery mode by type of home-based records					
None	370	(100%)	242	(70.3%)	< 0.001
Had in ANC card	0	(0%)	0	(0%)	
Had in MCH Handbook in MCH Handbook	N.A.		102	(29.7%)	
Proportion of mothers having birth weight data at home					
None	132	(35.7%)	88	(25.6%)	< 0.001
Had recall-based inaccurate data	50	(13.5%)	3	(0.9%)	
Had recall-based accurate data	188	(50.8%)	6	(1.7%)	
Had MCH Handbook-based accurate data	N.A.		247	(71.8%)	
Proportion of mothers receiving guidance on PNC by a nurse after delivery					
Not received	237	(64.1%)	123	(35.8%)	< 0.001
Received	133	(35.9%)	221	(64.2%)	