



BURUNDI: Use of MCH Handbook associated with birth registration and birth certificate ownership in Burundi

Background

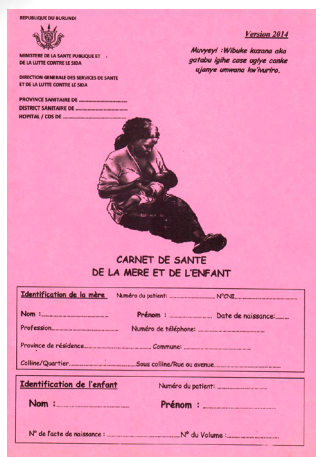
Burundi has nationally introduced an integrated home-based record for maternal and child health, namely, the Maternal and Child Health (MCH) Handbook since 2015. While the MCH Handbook is expected to support essential health service delivery for the continuum of care for maternal, newborn, and child health, the Burundian MCH Handbook is also expected to support every birth to be registered as it contains a page for notification of birth, the delivery certificate, to be filled by health workers.

Birth certificates are to be obtained from the community administrator of the commune where the mother lives. The average distance to travel to a civil registration center is 5 to 10 km; most people travel to these centers on foot, on motorcycle, or by car. In 2012, it was estimated that 1.5 million children in Burundi did not have birth certificates. The main barriers to obtaining a birth certificate included: i) lack of knowledge; ii) local customs in some areas; iii) children born to single mothers or into polygamous marriages who fell through the cracks; iv) distance to the registration office; and v) the penalty charged for late registration.

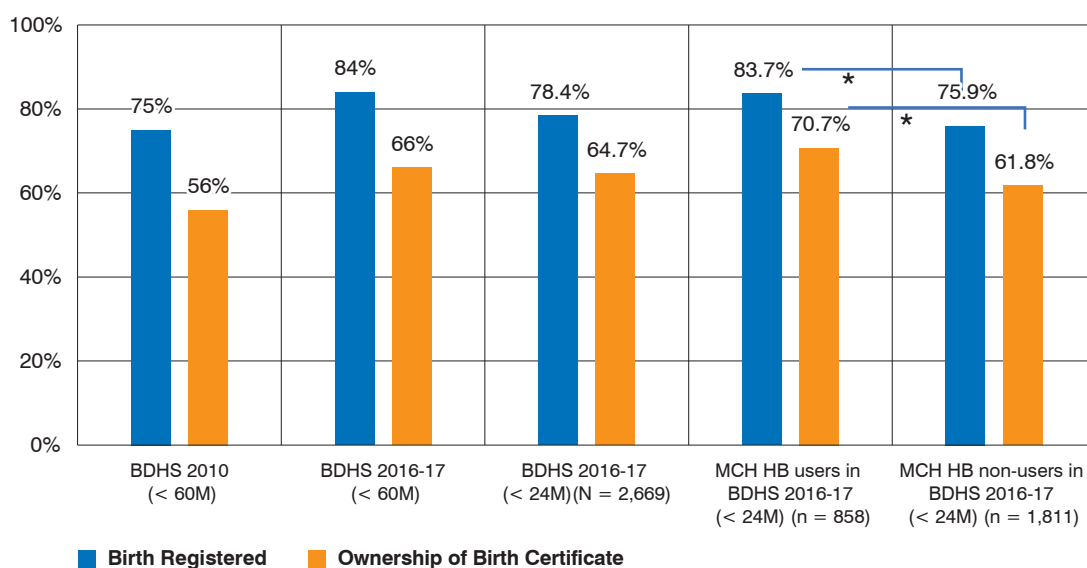
A pilot study prior to the national implementation of the MCH Handbook explored that a page for the delivery certificate in the MCH Handbook helped ensure that mothers received their children's birth data in their hands. This was likely to encourage mothers to smoothly proceed to their children's birth registration at the local administration office. Therefore, this study aimed to investigate the association between the use of the MCH Handbook and birth registration and birth certificate ownership after the national implementation of the MCH Handbook by using nationally representative data.

Demographic Health Surveys used for monitoring of MCH Handbook implementation

The Burundian Demographic and Health Surveys (BDHSs) have provided basic health data and coverage of essential health services to guide health policy in Burundi. The Burundian Ministry of Health added indicators to the BDHS 2016-17 to monitor that the MCH Handbook was used for recording antenatal care, birth weight, and child immunization, and also for registering birth. Data were obtained for 2,669 mothers with children



Maternal and Child Health Handbook, Burundi, 2014



* P < 0.01 BDHS: Burundian Demographic Health Survey

▲ Figure. Proportions of birth registration and ownership of birth certificate in BDHS 2010 and BDHS 2016-17 according to child age < 60M and < 24M by MCH Handbook users and non-users



Pregnant women waiting for antenatal care with MCH Handbook

aged < 24 months from the BDHS 2016-17. The user of the MCH Handbook was defined as a mother who received the MCH Handbook at antenatal care and had a record of the child's birth weight on it as well. Multivariable logistic regression was used to examine associations between the status of the MCH Handbook use and birth registration or birth certificate ownership adjusted for child's factors (i.e., sex of child, age of child in month, and birth order), mother's factors (i.e., age of mother in year, marital status, health insurance status, education background, and place of delivery), and household factors (i.e., socioeconomic status, place of residence, and region of residence).

MCH Handbook use and birth registration

Among children up to 24 months, 78.4% of their births were registered and 64.7% owned their birth certificates, respectively. Around one-third of respondents (32.1%, n = 858) were identified as users of the MCH Handbook. The MCH Handbook users compared with the non-users had a younger child, was married, had formal schooling, delivered at a health center or a hospital, and was from wealthier or wealthiest quintiles. The MCH Handbook users were observed not differently from the non-users in terms of the sex of the child, birth order, maternal age, insurance covered, place of residence (i.e., urban; rural), and region of residence (i.e., north; east and central; south; west). Among the MCH Handbook users, 83.7% (n = 718), and 70.7% (n = 607) registered their births and owned birth certificates, respectively (p < 0.01) (Figure). The analysis after adjustment of these related factors had shown the use of the MCH Handbook had significantly higher adjusted odds ratios of birth registration (1.6, 95% CI: 1.3–2.0) and birth certificate ownership (1.4, 95% CI: 1.2–1.7), compared to the non-use (Table).

Remaining gaps in birth registration

The MCH Handbook use was independently associated with a child's birth registration and birth certificate ownership. The MCH Handbook was likely to help fill the knowledge and process gaps in local customs to have the child his/her birth registered. On the other hand, place of delivery, wealth status and marital status were also identified as the determinants of accessibility to birth registration and birth certificate ownership in our analysis. Strategies to improve birth registration for children born at home, and accessibility to birth registration across socio-economic status must be reconsidered to protect children's rights with equity.

Conclusion

The use of the MCH Handbook, the first booklet prepared for the child from before he/she was born, was associated with the child's birth registration and birth certificate ownership in Burundi. Burundi has greatly improved its civil registration and vital statistic system in recent years. Some notable achievements include the successful implementation of the free health care policy for children under 5 years old, especially with the use of the MCH Handbook or the birth certificate provided to the parent/caregivers strengthening the effective use of the MCH Handbook to promote birth registration is still required.

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▼ Table. Adjusted odds ratio of the MCH Handbook use and other factors for birth registration and birth certificate ownership, Burundi Demographic and Health Survey 2016-17 (n = 2669)^a

Factors	Birth registered		Had birth certificate	
	Crude OR (95% CI)	Adjusted OR (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)
Status of the MCHHB use				
Non-use ^b	Reference	Reference	Reference	Reference
Use ^c	1.6 (1.3–2.0)	1.6 (1.3–2.0)	1.5 (1.3–1.8)	1.4 (1.2–1.7)

MCH Handbook, the Maternal and Child Health Handbook; OR, odds ratio; CI, confidence intervals.

^a Adjusted models include child's factors (i.e., sex of child, age of child in months, and birth order), mother's factors (i.e., age of mother in years, marital status, health insurance status, education background, place of delivery, and household's factors (i.e., socioeconomic status, place of residence, and region of residence).

^b MCH Handbook non-use includes mothers who did not receive the MCH Handbook at antenatal care or who received the MCH Handbook, but the child's birth weight was not recorded.

^c MCHHB use includes mothers who received the MCH Handbook at antenatal care and who had also the child's birth weight record.

Further readings:

1. Ministère à la Présidence chargé de la Bonne Gouvernance et du Plan [Burundi] (MPBGP) et al. 2018. *Enquête Démographique et de Santé au Burundi 2016-2017: Rapport de synthèse*. Rockville, Maryland, USA: ISTEEDU, MSPLS, et ICF.
2. Center of Excellence for CRVS systems. *Country Profile: Republic of Burundi*. <https://crvssystems.ca/country-profile/republic-burundi> (accessed 20231025).
3. Kaneko K et al. Effectiveness of the Maternal and Child Health handbook in Burundi for increasing notification of birth at health facilities and postnatal care uptake. *Glob Health Action*. 2017;**10**(1):1297604.