Technical Brief
Global Promotion of Maternal and Child Health Handbook
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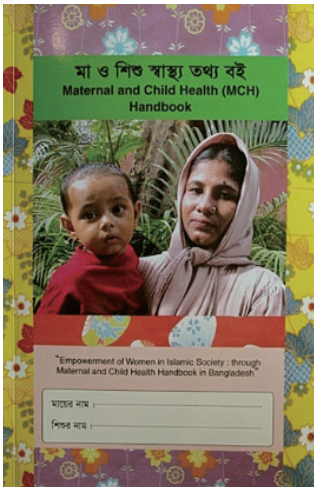
BANGLADESH: Piloting MCH Handbook for increasing women's knowledge on maternal and child health

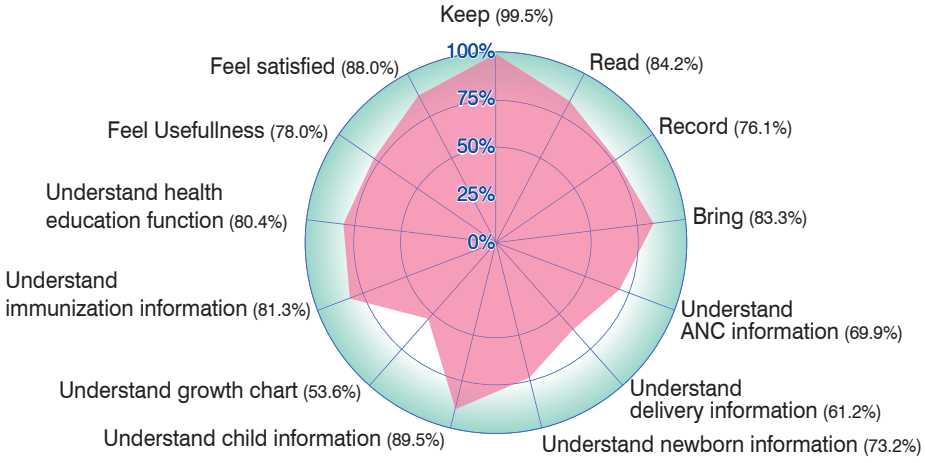


Maternal and Child Health Handbook (pilot version), Bangladesh, 2007

Background

In Bangladesh, the government along with NGOs has made considerable efforts to provide health and family planning services, which resulted in the progress in several indicators. However, maternal mortality ratio (MMR) used to be still considered unacceptably high, with approx. 20 thousand Bangladeshi mothers dying each year due to the causes related to pregnancy and child birth, as of 2001.

Home-based records existing at the time such as treatment cards, vaccination cards (for child and for mother), antenatal and postnatal cards, and growth monitoring chart had generated less impact on reduction in MMR. Due to probable limitations of these program-based and fragmented home-based records, the Maternal and Child Health (MCH) Handbook, an integrated home-based record, was piloted and its impact was assessed. The MCH Handbook was designed to be a two-way communication tool between health workers, mothers, and their families to: (i) increase mothers' and their family members' knowledge on maternal and child health care; (ii) engage family members in keeping track of health records, birth planning, pregnancy complications and delivery; and (iii) prevent child illnesses.



▲ **Figure 1. MCH Handbook utilization assessment results**

Piloting the MCH Handbook in Bangladesh

Having been inspired by a US-Japan collaborative joint study and successful implementation of MCH Handbooks in several developing countries (e.g. Indonesia and Thailand), a pilot intervention of the MCH Handbook was conducted during the period from 2002 to 2003 in Bangladesh. The MCH Handbook was developed through a series of key steps to foster engagement of different stakeholders (e.g. doctors, midwives, family welfare visitors, nurses, government's policy makers, representatives of development agencies and NGOs, and researchers). The process began by organizing several discussion sessions to determine the structure and contents of the MCH Handbook. The inputs and feedbacks from each discussion session helped develop the first draft of the MCH Handbook. By further analyzing the contents of the first draft and consulting with the stakeholders, the second draft was developed. The second draft was then discussed at the international collaboration division seminar held in Osaka University, Japan, prior to publishing the final version of the MCH Handbook. In the process of scrutinizing the contents of the MCH Handbook through a series of these steps, key stakeholders were adequately engaged. Engagement of the stakeholders such as pregnant women, mothers, family welfare visitors, and expatriate technical experts were crucial to deepening the understanding about the need for a home-based record for pregnant women and children's vital health information.

Comparative advantages of the MCH Handbook

An operational research was conducted to estimate the impact of the MCH Handbook pilot intervention on pregnant women's and mothers' knowledge on maternal and child health in rural communities of Gazipur district in 2007-2009. A total of 200 pregnant women and mothers participated in the

study. The study found that the MCH Handbook was successful in facilitating two-way communication between health workers, pregnant women, mothers and their family members. Over time, the MCH Handbook contributed to equipping pregnant women and mothers with adequate knowledge about antenatal care (70%), delivery (61%), newborn care (73%), child care (90%), growth monitoring chart (54%), and child immunization (81%).

Although an officially announced adult literacy rate used to stay low (e.g. 48% as of 2001), 84% of mothers in rural communities responded that they were able to read and comprehend the contents of the MCH Handbook. This could have been attributed to: (i) successful increase in literacy rate among young reproductive-age women in the government's girl's education initiative; and (ii) better designed and more acceptable messages in the MCH Handbook. Seventy-six percent of pregnant women and mothers were capable enough to further record their observation results and views in the MCH Handbook either by themselves or with assistance from family members. Moreover, 83% of them took the MCH Handbook with them to health facilities, when having health checkups and consultations for their children. Eighty-eight percent of them agreed that the MCH Handbook served as the user-friendly self-monitoring tool for maternal and child health. The MCH Handbook also functioned as a means for sharing (61%) general health care information for mothers and their children with their family members. Furthermore, 80% of them recognized that the MCH Handbook functioned as the useful educational material that could empower mothers so as to take actions necessary for maternal and child health.

Satisfaction for the MCH Handbook

One pregnant woman stated that *"With existing cards, we are not able to know any health information, but if an upcoming handbook can provide us with some basic health information, it would be better for our pregnancy care."*

Conclusion

According to the results of the pilot interventions and their follow-up research, it is evident that the implementation of the MCH Handbook is technically sound and operationally feasible for improvement of health and well-being of mothers and children in rural Bangladesh. Moreover, the MCH Handbook has comparative advantage over the currently existing home-based records for maternal and child health, in ensuring the quality and continuity of maternal and child health care. When comparing the printing costs between the MCH Handbook and other home-based records, the MCH Handbook was more economical. Note that printing cost of the MCH Handbook (USD $ 0.30 per copy) is lower than total printing costs (USD $ 0.50) of all four home-based cards (e.g. treatment card, vaccination cards, antenatal card and growth monitoring chart). The MCH handbook can play a vital role in promoting, ensuring better health and continuum of care throughout pregnancy and postnatal periods in developing or resource-constrained settings.

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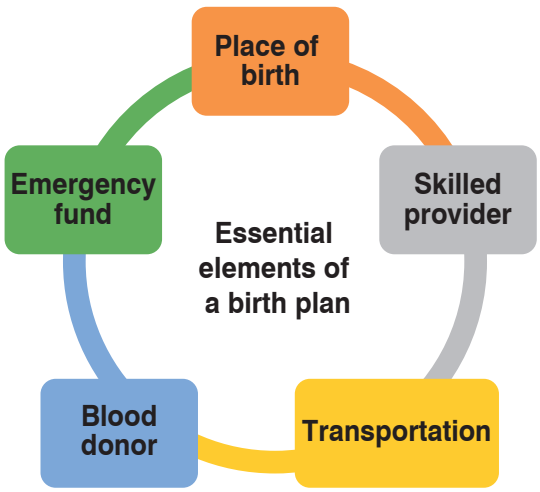

▲ **Figure 2. Birth planning diagram in the MCH Handbook**

Further readings

1. Bhuiyan S, et al. Study on the Development and Assessment of Maternal and Child Health (MCH) Handbook in Bangladesh. *J Public Health Develop 2006*; **4**:45-60.
2. Bhuiyan S. Development, Field Testing and Potential Benefits of a Maternal and Child Health (MCH) Handbook in Bangladesh. *J Int Health* 2009; **24**: 73-6.
3. Bhuiyan S. A Handbook: The Global Impact of Maternal and Child Health. *UN Special Magazine* 2015; **749**: 14-5.