



MONGOLIA: MCH Handbook's contribution to increasing communication between health workers and mothers



Maternal and Child Health Handbook (pilot version), Mongolia, 2009

Lack of communication between health workers and mothers

In 2008, UNICEF identified several key challenges in the Mongolian health system: i.e. (i) poor quality of primary health care services; (ii) health workers' limited clinical skills; (iii) lack of basic medical equipment and supplies; and (iv) inadequate health communication between health workers and clients. For instance, absence of general guidelines for maternal and child health care resulted in the situation where health workers are not familiar with what to do during antenatal care visits and on newborn health checkups. Moreover, pregnant women and mothers expressed their dissatisfaction about communication with health workers. Majority of them thought counselling from health workers' insufficient. Half of those who felt they cannot freely communicate with doctors. Seventy six percent of mothers felt they cannot freely express themselves to any types of health workers.

Effort to create health communication tool

In view of the aforementioned situation, pilot intervention of the Maternal and Child Health (MCH) Handbook, as a potentially effective communication tool, was implemented in

Mongolia. The MCH Handbook was distributed to pregnant women as a hypothetically effective tool for sharing standardized information and guidance during antenatal care visits and newborn health checkups. A cluster randomized control trial was conducted in Bulgan province, one of rural provinces of Mongolia, to assess the effectiveness of the MCH Handbook in: (i) increasing women's antenatal check-up attendance; and (ii) enhancing health-seeking behaviors. The MCH Handbook was distributed to pregnant women of the intervention group at the time of their first antenatal care visits. Nine months later, the total number of antenatal care visits and key health-related behaviors among women of the intervention group were compared with those of the control group, i.e. pregnant women who did not receive the MCH Handbook. Overall, characteristics of pregnant women and their infants were similar between intervention and control groups, except travelling time to the nearest health center and wealth index.

Impact of the MCH Handbook use on maternal and child health

Major results of data analyses are presented in Table 1. Receiving six antenatal care services is defined as the minimum requirement in the national standard of antenatal care in Mongolia. It was found that the MCH Handbook's intervention is likely to have increased the proportion of pregnant women having six antenatal care visits or more, by 11.1%. Mean number of antenatal care visits made by pregnant women in the intervention group (6.9 times) was significantly higher than that in the control group (6.4 times). Thus, MCH Handbook distribution had strong influence on frequency of antenatal care visits. Use of the MCH Handbook helped identify maternal morbidities during pregnancy. Pregnancy complications were significantly more likely to be diagnosed in the intervention group (12.3%) than the control group (5.7%). In addition, it was found that the proportion of mothers who



A woman in study field (D. Bold)

practiced early breastfeeding (within one hour after birth) in the intervention group (94.1%) was higher than that in the control group (87.5%), though statistical significance was not detected. It seems that the MCH Handbook promoted health-seeking behaviors. Furthermore, the proportion of family members' smoking in the intervention group (50.1%) was significantly lower than that in the control group (60.9%).

The details on the results of a series of other analyses can be referred to Mori et al (2015) (see further readings #1).

Conclusion

The study found that distributing the MCH Handbook to pregnant women alone without additional or supplementary intervention improve health seeking behavior of pregnant women, mothers and their family members. This implies that at-home MCH Handbook reading is likely to have triggered positive behavior changes among them. Thus, distribution and use of the MCH Handbook, as a communication tool, should have delivered key health-related message during pregnancy, postnatal and childhood stages.

Thus, the MCH Handbook could serve as the effective interface between health workers and pregnant women/mothers. The MCH Handbook is expected to fill the current communication gap.

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Further readings

1. Mori R, et al. The Maternal and Child Health (MCH) Handbook in Mongolia: a cluster-randomized, controlled trial. *PLoS One* 2015; **10**(4): e0119772.
2. Brown HC, et al. *Giving women their own case notes to carry during pregnancy*. London: The Cochrane Library, 2015.
3. UNICEF. *Innovative Approaches to Maternal and Newborn Health Compendium of Case Studies Maternal, Newborn and Child Health Working Paper*. New York: UNICEF, 2013.

▼ Table 1. Outcomes for mothers, infants and healthy behavior

Outcomes	Unit	Intervention (n=253)	Control (n=248)	Effect of measure
Antenatal care visits	Mean (SD)	6.881 (1.301)	6.373 (1.776)	MD 0.508 (0.216–0.800), P < 0.001
≥ 6	n (%)	206 (81.7%)	175 (70.6%)	RR 1.158 (0.876–1.532), P = 0.30, RD 11.2% (-9.9%–32.3%), P = 0.30
Maternal morbidity during pregnancy	n (%)	31 (12.3%)	14 (5.7%)	P = 0.012
Drinking during pregnancy	n (%)	20 (7.9%)	35 (14.1%)	RR 1.07 (0.97–1.18), P = 0.166, RD 6.1% (-2.4%–15.0%), P = 0.161
Maternal smoking	n (%)	5 (2.0%)	7 (2.8%)	RR 1.01 (0.98–1.04), P = 0.572, RD 0.9% (-2.1%–3.8%), P = 0.571
Smoking of family members	n (%)	129 (51.0%)	151 (60.9%)	RR 0.841 (0.71–0.99), P = 0.039, RD -9.7% (-19.4%– -0.1%), P = 0.048
Breast feeding initiation				
Within 1 hr after birth	n (%)	238 (94.1%)	217 (87.5%)	RR 1.07 (0.97–1.18), P = 0.186, RD 6.2% (-2.8%–15.3%), P = 0.176
Between 1 and 24 hrs	n (%)	10 (4.0%)	25 (10.1%)	
After 24 hrs	n (%)	3 (1.2%)	2 (0.8%)	
Not initiated	n (%)	1 (0.4%)	2 (0.8%)	

MD: Mean difference; RR: Risk ratio; RD: Risk difference (CI 95%); P: P-value