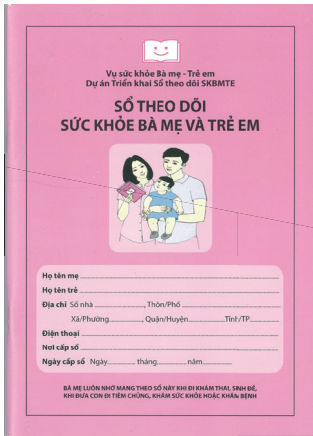




VIETNAM: Behavior changes on antenatal care through MCH Handbook



Maternal and Child Health Handbook, Vietnam, 2014

Why Maternal and Child Health Handbook in Vietnam?

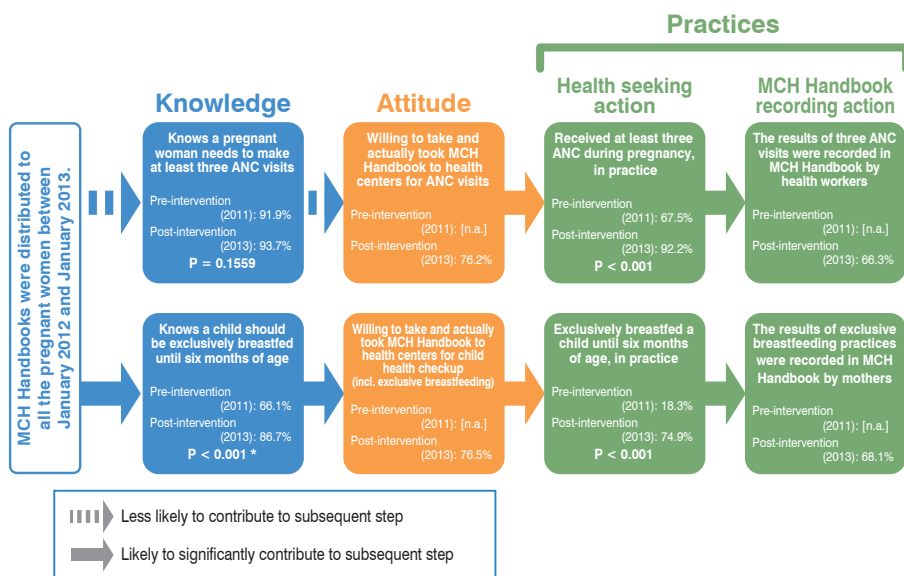
During the MDGs period, Vietnam made a successful achievement in reducing maternal mortality ratio by 78% from 233 in 1990 to 49 per 100,000 livebirths in 2013 and, under-five mortality rate by 53% from 51 in 1990 to 24 per 1,000 livebirths in 2013. Yet, these reductions were achieved in a less equal manner in the country. Under-five mortality rate in Central Highland Region (39.8) is 2.9 times and 1.7 times as high as respectively South Eastern Region (13.5) and national average (24). Similarly, maternal mortality ratio in North West Region (169) is 2.5 times as high as national average (67). The disparities in mortality rates are attributed to inadequate antenatal checkups and poorer child care practices in the provinces where MCH services are less accessible.

To address these challenges, the Vietnamese Ministry of Health (MOH) and Japan International Cooperation Agency (JICA) jointly field-piloted the Maternal and Child Health (MCH) Handbook

for its possible nationwide scaling-up, in four provinces with diverse profiles (Dien Bien, Hoa Binh, Thanh Hoa and An Giang) from 2011 to 2014. This issue of Technical Brief reports the impact of the MCH Handbook on mothers' behavior changes in antenatal care visits and exclusive breastfeeding up to six months of age.

Comparison between baseline and end-line

Mothers' behavior changes were estimated by comparing baseline and end-line. Both baseline ($n_1=800$) and end-line data ($n_2=810$) were collected in respectively 2011 and 2013, so as to ensure provincial representativity. The questions about knowledge, attitude and practices (KAP) related to antenatal care visits and exclusive breastfeeding practices were asked mothers in the structured interviews. Moreover, the MCH Handbooks that had been distributed to mothers were reviewed. Table 1 presents the characteristics of mothers interviewed in baseline and end-line surveys. Note that baseline and end-line data were collected in two independent cross-sectional surveys as the non-panel data. Overall, socioeconomic and socio-demographic status of the mothers interviewed were homogeneous between baseline and end-line.



▲ Figure 1. Hypothetical KAP process of antenatal care visits and exclusive breastfeeding

Figure 1 presents the hypothetical KAP process of antenatal care visits and exclusive breastfeeding practices. Prior to MCH Handbook intervention, 91.9% of pregnant women in the four provinces had been already equipped with knowledge about need for three antenatal care checkups. There was only a slight increase in the proportion of pregnant women with the knowledge after the intervention (93.7%, $P=0.1559$). Thus, health workers at health facilities must have been skilled enough to advise pregnant women to make at least three antenatal care checkups at their initial visits, even prior to MCH Handbook intervention.



An interview with a mother in a village in Dien Bien province

Therefore, contribution of MCH Handbook intervention to the increase in knowledge of antenatal care needs is likely to have been limited. On the other hand, the proportion of pregnant women who received three or more antenatal care visits significantly increased from 67.5% (pre-intervention) to 92.2% (post-intervention) ($P < 0.001$). This implies that the MCH handbook is likely to have effectively reminded and encouraged pregnant women to ensure three or more antenatal care visits during pregnancy, by making their antenatal care seeking attitude more proactive. Yet, recording of results of antenatal care checkups in the MCH Handbook remained limited (66.3%).

The proportion of mothers who correctly know exclusive breastfeeding necessary for the initial six months after birth significantly increased from 66.1% in pre-intervention to 86.7% in post-intervention ($P < 0.001$). This increase is likely to be attributable to MCH Handbook intervention. Seventy six percent of pregnant women were willing to bring and practically brought the MCH Handbook to health facilities when utilizing child health checkups services (incl. consultation and guidance on exclusive breastfeeding). These changes in both knowledge and attitude are likely to have contributed to the significant increase in the proportion of mothers who exclusively breastfed their children until six months of age from 18.3% in pre-intervention to 74.9% in post-

intervention ($P < 0.001$). Yet, it was observed that only 68.1% of MCH Handbooks had at least one check-boxes on exclusive breastfeeding ticked by mothers.

Conclusion

The results of comparison between baseline and end-line data imply that the MCH Handbook contributed to the increase in pregnant women's practices of three or more antenatal care visits and in both knowledge about and practice of exclusive breastfeeding. While there is room for improvement in the level of data recording, this comparative study confirmed that the MCH Handbook plays a catalytic role in ensuring a continuum of maternal, newborn and child care.

Hirotsugu Aiga
Japan International Cooperation Agency, Tokyo

Further readings

1. Aiga H, et al. Knowledge, attitude and practices: assessing maternal and child health care handbook intervention in Vietnam. *BMC Public Health* 2016, **16**: 129.
2. VietHealth. *End-line survey for assessing the intervention of Project for Implementing Maternal and Child Health Handbook for Scaling-Up Nationwide*. Hanoi: JICA; 2013.

▼ Table 1. Characteristics of pre-intervention pregnant women/mothers and post-intervention mothers

	Pre-intervention in 2011		Post-intervention in 2013				
	Pregnant women (N=800)	Mothers of children <3 years of age (N=800)	Dien Bien (n=200)	Hoa Binh (n=200)	Thanh Hoa (n=210)	An Giang (n=200)	Total (N=810)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Age							
15-34 years of age	735 (92%)	628 (78%)	185 (93%)	190 (95%)	177 (84%)	178 (89%)	730 (90%)
>34 years of age	65 (8%)	172 (22%)	15 (8%)	10 (5%)	33 (16%)	22 (11%)	80 (10%)
Ethnicity							
Kinh	475 (59%)	500 (63%)	61 (31%)	39 (20%)	201 (96%)	200 (100%)	501 (62%)
Ethnic minority	325 (41%)	300 (37%)	139 (70%)	161 (81%)	9 (4%)	0 (0%)	309 (38%)
Vietnamese-speaking ability							
Fluent	760 (95%)	765 (96%)	190 (95%)	198 (99%)	210 (100%)	200 (100%)	798 (99%)
Not fluent/unable to speak	40 (5%)	35 (4%)	10 (5%)	2 (1%)	0 (0%)	0 (0%)	12 (1%)
Education							
No school education	59 (7%)	25 (3%)	14 (7%)	1 (1%)	0 (0%)	4 (2%)	19 (2%)
Primary school	144 (18%)	134 (17%)	32 (16%)	12 (6%)	3 (1%)	42 (21%)	89 (11%)
Secondary school	322 (40%)	297 (37%)	58 (29%)	65 (33%)	57 (27%)	80 (40%)	260 (32%)
High school	174 (22%)	254 (32%)	65 (33%)	91 (46%)	84 (40%)	52 (26%)	292 (36%)
Vocational school or higher	101 (13%)	90 (11%)	31 (16%)	31 (16%)	65 (31%)	22 (11%)	149 (18%)
Economic status							
Non-poor	619 (77%)	684 (86%)	170 (85%)	71 (71%)	89 (89%)	183 (92%)	513 (86%)
Poor/near-poor	181 (23%)	116 (14%)	30 (15%)	29 (29%)	11 (11%)	17 (9%)	87 (15%)