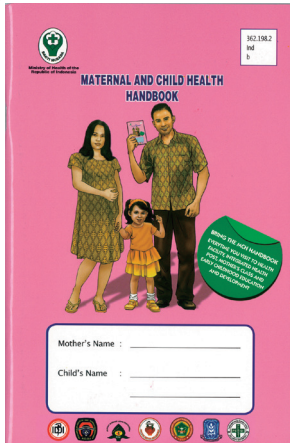




INDONESIA: Roles of MCH Handbook in service uptake based on Indonesia National Health Survey



Maternal and Child Health Handbook, Indonesia, 2016

Background

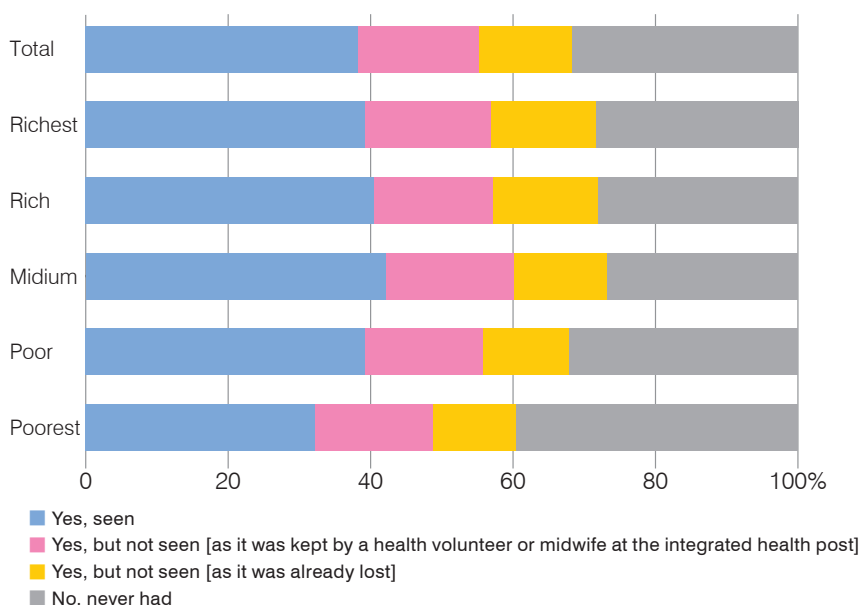
There are approximately 22 million children under five years of age in Indonesia (of a total population of 240 million). Both infant mortality rate (27 per 1000 live births as of 2010) and maternal mortality ratio (220 per 100,000 live births as of 2010) improved during the previous decades, through a series of interventions related to maternal, newborn, and child health (MNCH). However, there remained a gap in coverage of MNCH services. This indicated a need for further expansion of MNCH services that cover from prenatal stage through delivery, postnatal, childhood stages, for the purpose of achieving the country's UN Millennium Development Goals (MDGs).

In the ministerial decree in 2004, the Maternal and Child Health (MCH) Handbook was officially approved as the only national home-based record for MNCH in Indonesia. In the subsequent ministerial decree in 2008, the MCH Handbook was officially recognized as the standard

tool which supports and ensures provision of minimum health services at regional level in view of decentralization of health service delivery. Major health professional associations, non-governmental organizations and development partners in the country have been supporting the MCH Handbook's use in delivering a range of MNCH services. Similarly to MCH Handbooks in other countries, the MCH Handbook is composed of: (i) data recording pages; and (ii) health information education and communication (IEC) pages. IEC pages serve as the tool for increasing mothers' awareness of MNCH service utilization requirement. The MCH Handbook is distributed to pregnant women at the time of the first antenatal care visit, brought to health service appointments, and referred to during subsequent health checkups. Health workers record the data of results of health checkups and medical interventions in the MCH Handbook during mothers' and their children's visits to health facilities, assist them in understanding its contents, and encourage them to share information with their families. As well as other countries, Indonesia used to implement several different types of home-based records in parallel. Yet, later, the MCH Handbook has been gradually becoming the most predominant home-based record due to a series of ministerial decrees.

Assessing the MCH Handbook use in national survey

Indonesian Basic Health Survey (RISKSDAS) reports the prevalence of the MCH Handbook through analyzing nationally representative cross-sectional data at household level. The level of MCH Handbook use was assessed in the RISKSDAS 2010, by asking the question: 'Does [name of the child] have the health record called the MCH Handbook?'. Any respondents who had received the MCH Handbook and answered either 'Yes, seen [by the enumerator]' or 'Yes,



▲ Figure 1. Distribution of MCH Handbook based on economic quintiles in the RISKSDAS 2010



Mother with the MCH Handbook at the integrated health post in East Java (K. Imamura)

but not seen [as it was kept by a health volunteer or midwife at the integrated health post]' were considered the MCH Handbook users. Those who answered either 'Yes, but not seen [as it was already lost]' or 'No, never had' were considered not being the MCH Handbook users. Overall national prevalence of the MCH Handbook increased from 38.4% in 2007 to 55.2% in 2010 (Figure 1). Provincial prevalence ranged from 23.1% (West Irian Jaya) as the lowest to 81.6% (Yogyakarta) as the highest.

Association between MCH Handbook use and MNCH service utilizations

This cross-sectional data were further analyzed to examine the associations between the MCH Handbook use and respective health service utilizations. A significantly higher MNCH service utilization rate was confirmed among MCH Handbook users than among its non-users after controlling potential confounding factors: (i) mother's age; (ii) mother's education; (iii) household wealth quintiles; (iv) urban-rural residence; (v) the number of children in the household; (vi) experience in receiving explanation on danger signs during pregnancy by health personnel; (vii) child's age; and (viii) an interaction term between the MCH Handbook use and rural residency (Table 1). A greater number of deliveries were assisted by skilled birth attendants among MCH Handbook users than among its non-users (adjusted OR: 1.94; CI 95%: 1.73–2.18). Birth weight of a greater number of newborns are measured within the

initial 48 hours after the birth (adjusted OR: 2.82; CI 95%: 2.46–3.23). MCH Handbook users were more likely to receive a continuum of care from ≥ 4 antenatal care through to newborn care (measurement of birth weight) (adjusted OR: 1.67; CI 95%: 1.44–1.93). Child immunization completion rate among MCH Handbook users was 2.9 times as high as its non-users (adjusted OR: 2.90; CI 95%: 2.46–3.41). Children were protected by 12 doses including tetanus injection during pregnancy: (adjusted OR: 2.06; CI 95%: 1.76–2.41), when the MCH Handbook was used.

Conclusion

Similarly to a previous study, the RISKSDAS, a national cross-sectional survey, enabled association between MCH Handbook use and MNCH service utilizations to be assessed. Comparative advantage of analyzing the RISKSDAS data is that it provides us with both nationally and provincially representative data of MCH Handbook use and MNCH service utilizations. The MCH Handbook can further facilitate integration of MNCH services by ensuring that mothers and children are central to the country's health system.

Keiko Osaki¹, Soewarta Kosen²

¹ Japan International Cooperation Agency, Tokyo

² Ministry of Health, Jakarta

▼ **Table 1. Adjusted OR and CI 95% of selected MNCH co-coverage with MCH Handbook use in the RISKSDAS 2010**

| MNCH service utilization rate | Adjusted OR (CI 95%) |
|--|----------------------|
| Health personnel assisted birth | 1.94 (1.73–2.18) |
| Obtaining birth weight measurement within the initial 48 hours | 2.82 (2.46–3.23) |
| A continuum of pregnancy, delivery, and newborn care | 1.67 (1.44–1.93) |
| Completion of child immunisations | 2.90 (2.46–3.41) |
| Completion of child immunisations and TT during pregnancy | 2.06 (1.76–2.41) |

Further readings

- Osaki K, et al. Factors affecting the utilisation of maternal, newborn, and child health services in Indonesia: the role of the Maternal and Child Health Handbook. *Public Health* 2015; **129**(5): 582-6.
- MOH. *Report of Indonesian Basic Health Survey*. Jakarta: MOH, 2013 (in Indonesian).
- Osaki K, et al. The role of home-based records in the establishment of a continuum of care for mothers, newborns, and children in Indonesia. *Glob Health Action* 2013; **6**:1-12.