Title of the project   **Household Survey of Maternal, Neonatal, and Child Health in Malang and Pasuruan in 2010**
Conducted by   Center for Health Research, University of Indonesia
Collaboration with   Health Services Program/USAID
Date   2010

Indonesia still faces major problems in maternal and child health. Despite the reported improvements in the recent Indonesian Demographic and Health Survey or IDHS, with 228 maternal deaths per 100,000 live births and 34 infant deaths per 1000 live births, and only a small decrease in the neonatal mortality rate, Indonesia's maternal and infant mortality rate are still among the higher in the South East Asian region. The most common direct causes of maternal death (post partum hemorrhage, eclampsy, and infection) should be manageable if deliveries were attended by skilled health providers[1]. Without proper neonatal care by health providers, the danger signs of the death causes during neonatal period (mainly asphyxia, infection, and low birth weight), especially within the first week, are not apparent for lay persons. Meanwhile, neonatal mortality dominates the infant mortality rate. The many preventive programs done by the government have yet shown optimal results.

Many donors have assisted the government through program focused on either improvement of skills for health providers, improvement of health facilities, community mobilization, and capability in program planning and budgeting, advocacy, or program monitoring/evaluation. Unfortunately, not many of these programs work in comprehensively in all related aspects.

The USAID-funded "Health Services Program" (HSP) is one of the programs working on multiple aspects of maternal and child health, which aims to improve the health of women and children in priority districts in Indonesia and to strengthen the association between elected officials, health providers, and the communities they serve. The program is designed to reduce maternal, neonatal, and child mortality and to improve health facilities which deliver basic human services. HSP also assists districts in improving their planning, budgeting and management of programs using evidence-based data. These initiatives are tailored to the needs of individuals and communities. The program will carry out an Integrated Assistance Package (IAP) as a vehicle for building district capacity to use evidence to advocate for health, improve service delivery, and effectively change the community's behaviors and demand for services.

The HSP program evaluation was done by baseline survey in 2005, rapid survey in 2007, rapid survey in 2008 and end line survey in 2009. The program was extended to 2010 for Malang District and Pasuruan District to 2010, where an additional rapid survey was conducted in 2010. A similar stratification and cluster sampling strategy was used for each survey. In each survey, sample size was calculated in order to measure the HSP main program indicators in HSP area as well as in comparison area. In the 2010 survey in Malang and Pasuruan, the sample size was 240 households in each district. The eligible subjects were mothers with children under 3 years old. This report describes the program achievements between 2005 and 2010 in Malang District and Pasuruan District, as measured by 11 indicators.

Achievement of the HSP main program indicators in HSP program areas is shown in table 1. In Malang there were improvements or indicators stayed the same in nine of the program areasa

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[1] Lawn Joy et al, "Chapter 26: Newborn Survival"; *Diseases Control Priorities in Developing Countries*, 2006, Oxford University Press

since the 2005 baseline and six of those were statistically significant (delivery by a health provider, early initiation of breastfeeding, neonatal contact in the first seven days, children under three with diarrhea, hand washing three of five critical times, and 3 DPT vaccinations before the first birthday). There were two indicators that had a decrease but neither of them was significant.

In Pasuruan, the comparison was over a short period of time from 2009 to 2010 and most indicators were not significantly different. Seven indicators either improved or stayed the same but only the average number of antenatal visits was statistically significant. Four indicators decreased of which early initiation of breastfeeding and contact with the Posyandu in this month were significant.

Indicators	Baseline 2005	2008	2009	2010
Use modern contraceptive (%)				
Malang	71.0	73.7	76.4	65.2
Pasuruan	n/a	n/a	80.9	87.1
Delivery by health provider (%)				
Malang	86.8	84.9	91.7	95.0
Pasuruan	n/a	n/a	89.3	89.7
Early initiation of breastfeeding (%)				
within 1 hour				
Malang	9.5	34.2	41.1	24.1
Pasuruan	n/a	n/a	43.2	33.6
Neonatal contact in 7 days after birth (%)				
Malang	64.1	81.8	90.1	92.3
Pasuruan	n/a	n/a	80.0	76.5
Contact with Posyandu in this month (%)				
Malang	84.1	67.9	73.3	85.1
Pasuruan	n/a	n/a	84.9	73.1
Children under 3 years which had diarrhoea (%)				
in last 2 weeks				
Malang	21.4	11.8	11.7	13.9
Pasuruan	n/a	n/a	28.4	19.6
Children under 3 years who had diarrhoea				
in last 2 weeks & took ORT or sought treatment (%)				
Malang	85.0	64.8	57.5	84.5
Pasuruan	n/a	n/a	80.8	77.9
Reported washing hands with soap at least (%)				
3 of 5 critical times				
Malang	4.6	14.2	4.9	14.1
Pasuruan	n/a	n/a	6.3	0.3
Average number of antenatal contact (%)				
Malang	7.9	7.1	8.3	8.6
Pasuruan	n/a	n/a	8.1	9.3
Children age 12-36 months who have KMS &				
showed 3 DPTs before 1st birthday (%)				
Malang	58.7	80.9	85.0	87.9
Pasuruan	n/a	n/a	78.1	81.5
Children age 12-36 months with vitamin A				
in last 6 months (%)				
Malang	74.7	60.2	68.6	70.6
Pasuruan	n/a	n/a	71.6	70.5