

Effects of Decentralised Health Care Financing on Maternal & Child Health Care

An Empirical Analysis in Indonesia

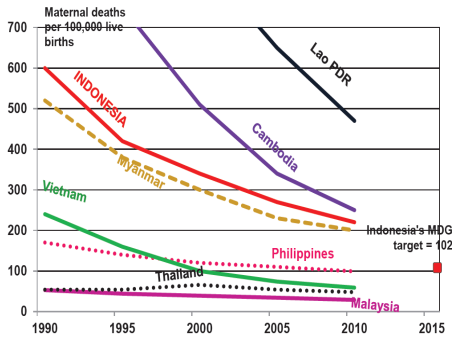
Renate Hartwig
(Erasmus University Rotterdam (EUR), University of Passau)

Joint with:
Robert Sparrow (ANU), Sri Budiayati, Athia Yumma, Nila Warda,
Asep Suryahadi (SMERU), Arjun Bedi (EUR)

August 20, 2014

The Problem

- Indonesia's progress on maternal health (MDG 5) has slowed in recent years.
 - Mortality remained stubbornly above 200/100,000 live births, despite efforts to improve maternal health services.
 - Poorer countries in the region show greater progress.

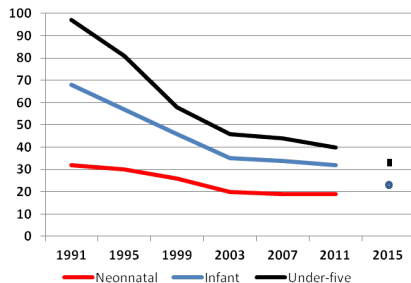


The Problem (cont.)

- Most of the births occur at home and without the assistance of a trained attendant.
- Concern for women developing complications during pregnancy and delivery which requires appropriate and accessible care.
- Studies estimate that about 20-30% of maternal deaths can be prevented by appropriate care during pregnancy.

The Problem (cont.)

- Indonesia is doing much better in reducing infant- and child mortality (MDG 4).



The Problem (cont.)

- Most of Indonesia's child deaths now take place during the neonatal period, i.e. the first month of life.
 - The probability of a child dying in the first month is 19/1,000. Later reduces to 10/1,000.
 - Mortality due to infection and illness has declined.
- Neonatal mortality rates among children not receiving antenatal care are 5 times higher than among children benefiting from these services.

The Response

- A number of interventions have been tried in developing countries to encourage the utilization of maternity services.
 - Vouchers: Generally positive effects on institutional deliveries but not successful in improving antenatal care (see e.g. Achmed & Khan, 2011 (Bangladesh); Obare et al., 2013 (Kenya), van de Poel et al., 2014 (Cambodia))
 - CCT: Modest to large effects on deliveries (see e.g. Powell-Jackson & Hanson, 2012 (Nepal); Lin & Salehi, 2013 (Afghanistan)).
 - Insurance: Mixed effects (see e.g. Mensah et al., 2012 (Ghana); Long et al., 2010, 2012 (China)).

This Study

- We examine the effect of local health care financing initiatives (*Jamkesda*) on access and use of maternal health care services.
- Contribution:
We explore differences in design and their effects on health care services.
- Finding:
The results show little effects on maternal health care access and use.
Design-features, i.e. whether or not antenatal and delivery services are covered by the initiatives have little effects in this context.

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Outline

- Background
 - The *Jamkesda*
 - Policy Context
 - Evolution
- Data
- Methodology
- Results
- Discussion
- Conclusion

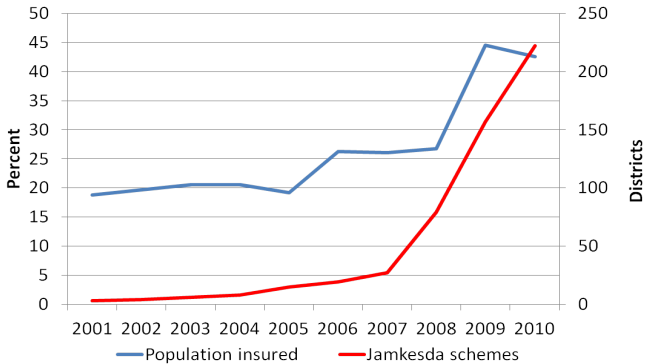
The *Jamkesda*

- Since 2001, public spending and service delivery (incl. health) has been largely decentralised to the districts.
- Districts are operating local health financing initiatives.

Jaminan Kesehatan Daerah - Jamkesda

- Emerged as response to incomplete coverage of the national schemes.
- Motivated by local politics and popular tool in elections.

Evolution over Time



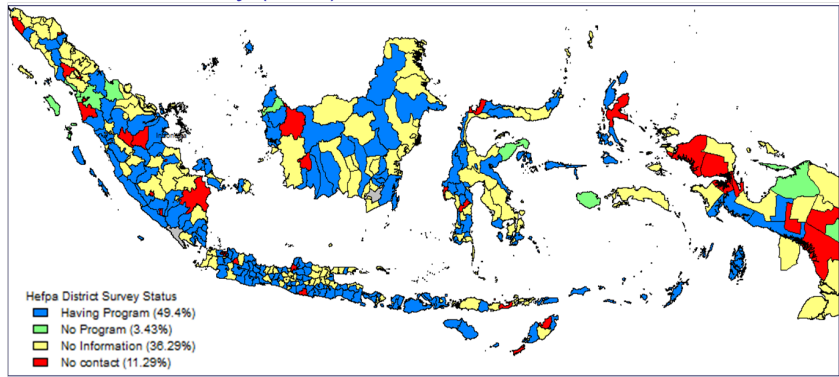
Overview

- 4 data sources
 - Demographic and Health Survey (2002, 2007, 2012)
 - Health care information at the individual level
 - Susenas (2001-2011)
 - Insurance coverage at district level
 - Podes (2000, 2006, 2011)
 - Infrastructure characteristics at district level
 - District survey (2011/12)
 - Details on health financing schemes

The District Survey

- Survey conducted by SMERU by phone from Dec 2011 to May 2012
- Respondent: Head of District Health Office (DHO) or team responsible for the local health care financing programme.
- Process:
 - Draft questionnaire
 - Field testing and revising questionnaire
 - First phone round: introduction and socialization
 - Send questionnaires by mail, phone and fax
 - Second phone round: complete questionnaires, clarification
 - Follow up field work: verification and qualitative work
- Response rate: 60% (262 of 497 districts)

The District Survey (cont.)



The District Survey (cont.)

- Survey reveals great variation in design

	Districts(%)
<i>Legal Endorsement</i>	
District regulation (parliament)	20
Mayor/district head regulation	72
No specific regulation	8
<i>Management</i>	
DHO	51
Technical unit under DHO	10
Special implementing unit	10
Insurance company (<i>Askes</i>)	29

The District Survey (cont.)

- Survey reveals great variation in design

	Districts(%)
<i>Target Beneficiaries</i>	
Whole community	3
Non-insured poor	66
Non-insured poor and non-poor	28
Non-insured poor and public servants	3
<i>Beneficiary Identification</i>	
Member card	26
Member card or evidence of poverty	41
No mechanism	33

The District Survey (cont.)

- Survey reveals great variation in design

	Districts(%)
Services	
Prenatal check-up	41
Deliveries	36
<i>Outpatient care at hospital</i>	85
<i>Inpatient care at hospital</i>	85
Providers	
Village health centre	87
District hospital	81
Private hospital	23

Fixed Effects Analysis

- Track districts over time
- Introduction of *Jamkesda* varies by district
- Exploit variation in design and over time
- Control for trends and time-varying characteristics
 - Demographics and socio-economic characteristics
 - Insurance coverage and infrastructure in district
- Test robustness of results with alternative specification and Susenas data

Specification

$$Y_{ikt} = \alpha + \beta Jamkesda_{kt-1} \times S'_{kt} \sigma + D'_{kt} \gamma + X'_{ikt} \theta + \delta_t + \mu_k + \varepsilon_{ikt} \quad (1)$$

Y_{ikt} : Outcome

$Jamkesda_{kt-1}$: Jamkesda

S'_{kt} : Design

D'_{kt} : Infrastructure

X'_{ikt} : Demographics and Socio-economic background

δ_t : Time trend

μ_k : District effect

ε_{ikt} : Error term

Evolution of Maternal Care Indicators over Time

	2002	2007	2012
No. of antenatal care visits	6.36	6.66	7.45
Delivery at home (=1)	69%	59%	43%
Birth assisted by trained professional (=1)	51%	50%	65%
Caesarean (=1)	3%	6%	12%

Effect of the *Jamkesda*

	(1)	(2)	(3)
No. of antenatal care visits	0.744***	0.753*	0.849*
Delivery at home (=1)	-0.180***	-0.076	0.080
Birth assisted by trained professional (=1)	0.106***	0.023	0.069
Caesarean (=1)	0.073***	0.058*	0.054*
<i>Controls</i>	None		
Demographics		Yes	Yes
District characteristics			Yes

Effect of the Design Features

- Prenatal care coverage positive but not significant effect on antenatal visits.
- Prenatal care coverage reduces the likelihood of caesarean sections.
- Delivery assistance positive but not significant effect on assisted birth and caesarean deliveries.
- The positive effect of the *Jamkesda* on antenatal care on average is absorbed by negative effect of the village health centres as provider.

What is Explaining these Results?

- Little information on district health expenditures and allocation to specific services.
- Low quality of the local health centres.
- Lack of knowledge of the entitlement.
 - Afraid to be required to pay
 - Ashamed of using midwife services without paying anything
- Tradition and lack of trust in midwife.

Conclusion

- Little impact of the *Jamkesda* on average
 - Positive effect of *Jamkesda* on antenatal care on average
 - Positive effect absorbed by low quality provider
 - No significant effect on deliveries

Conclusion (cont.)

- Unguided, unregulated decentralisation not effective?
 - Human resources and capacity?
 - Scale and resources?
 - Accountability?
 - Quality?
- Outlook:
Complementary qualitative work to understand drivers for success, i.e. why does it work in some districts but not in others?