



Barriers to birth registration in Indonesia

Birth registration is the first legal recognition of a child and a fundamental human right.¹ Worldwide, nearly 230 million children younger than 5 years do not have a birth certificate, rendering them invisible to the state.² Indonesia is one of the countries plagued by this so-called scandal of invisibility,³ with more than 24 million Indonesian children remaining undocumented.⁴ This number is concerning, given existing evidence linking a lack of birth registration to increased school drop-out, child trafficking and labour, and reduced access to health, social services, and education.^{2,4} Furthermore, effective civil registration and vital statistics (CRVS) systems are vital to inform and monitor health policy and programming and will be central to tracking progress towards the Sustainable Development Goals.⁵

Empirical research on birth registration is lacking in many countries, including Indonesia. This study examines the correlates of birth registration in three of Indonesia's most impoverished and under-served jurisdictions: East Nusa Tenggara (NTT), West Nusa Tenggara (NTB), and West Java (JB).

Our analysis drew on baseline data (collected between May, 2013, and August, 2013) from the Legal Identity Program, a serial cross-sectional study described in detail elsewhere.⁴ Heads of household (aged >16 years, preferentially female) were identified using systematic random sampling. Participants completed a household survey and provided information about three randomly selected children (aged <18 years) from their household. As published elsewhere,^{4,6} the survey elicited a wide range of information including data on birth certificate ownership and barriers to birth registration.

We used descriptive statistics, bivariate, and multivariable logistic

regression using generalised estimating equations with a working correlation matrix (to account for clustering within households) to identify the associations between potential covariates identified a priori from the scientific literature and children's birth certificate ownership. We used principal component analysis on various asset ownership indicators to create a socioeconomic status variable.⁷ As in our previous research,⁶ we used a backwards selection approach to arrive at the final multivariable model.

1024 heads of households were interviewed, providing data for 1978 children: 853 from NTB, 805 from NTT, and 320 from JB. Fewer than half (911 [46%]) of children reportedly had a birth certificate, and only 665 (73%) of these participants were able to show the document. Sample characteristics are presented in the appendix and reasons for not having a birth certificate, by province, are given in the table.

The following factors were associated with a child's birth certificate ownership: marriage certificate ownership of the parents, higher household socioeconomic status, and older age. Prohibitive costs prevented 547 (51%) participants from obtaining their child's or children's birth certificates (table).⁴ Despite a

2013 legal amendment to eliminate fees for all CRVS documents, the implementation of these laws has been inconsistent across regions, and many parents continue to pay hidden fees.

Acquisition of the prerequisite documents, including parents' marriage certificates (found to increase a child's odds of birth certificate ownership by 90%), contributes to the financial burden of applying for a birth certificate. A marriage certificate from birth parents is among the six documents required, and is costly and complicated to obtain. Many religious marriages remain unregistered by the state. In regions such as NTT, these costs are compounded by cultural expectations for expensive religious weddings, which often prevent couples from entering into both religious and civil marriage. Without a marriage certificate, a child is issued a birth certificate specific to children born out of wedlock; this document is stigmatising, further deterring unmarried couples from registering their children.⁴

Navigating Indonesia's complex CRVS system was an impediment for 130 (12%) respondents, and potentially required them to interact with several governmental agencies, including the courts, to obtain marriage legalisation, the civil

See Online for appendix

	Total (n=1067)	JB (n=145)	NTT (n=556)	NTB (n=366)
Cost	547 (51%)	88 (61%)	242 (44%)	217 (59%)
Distance	201 (19%)	5 (3%)	137 (25%)	59 (16%)
Process is complicated	130 (12%)	9 (6%)	44 (8%)	77 (21%)
Do not know how to arrange for one	160 (15%)	15 (10%)	90 (16%)	55 (15%)
Too busy/have not had time to arrange for one	105 (10%)	15 (10%)	60 (11%)	30 (8%)
Do not have required documents (eg, marriage certificate, baptism certificate, family card)	69 (6%)	5 (3%)	62 (11%)	2 (1%)
Not responsible for the child	7 (1%)	0	5 (1%)	2 (1%)
Birth certificate is being processed	63 (6%)	14 (10%)	24 (4%)	25 (7%)
Do not need a birth certificate	35 (3%)	1 (1%)	27 (5%)	7 (2%)
Do not think birth certificates are important	33 (3%)	5 (3%)	20 (4%)	8 (2%)
Waiting until child is school-aged	11 (1%)	0	10 (2%)	1 (<1%)
Other	19 (2%)	4 (3%)	14 (3%)	1 (<1%)

Data are n (%). Participants were able to give more than one reason if applicable. *As reported by heads of households.

Table: Reasons why birth certificates were not obtained for 1067 children across East Nusa Tenggara (NTT), West Nusa Tenggara (NTB), and West Java (JB), Indonesia*

registration office or department of religious affairs (for Muslims) for a marriage certificate, and the civil registration office for birth certificate issuance. Processing times can take up to several days at each office. Many citizens pay middlemen (eg, village officials) to navigate the system for them, increasing overall cost and further reducing birth certificate access. Interventions that offer free, low-cost support to assist impoverished families with navigation of the complex system could improve birth certificate access.

Distance was a barrier for 201 (19%) participants, particularly those in remote or rural regions (such as NTT) who faced increased financial and opportunity costs (eg, transportation costs, lack of infrastructure). Programmes that integrate civil registration into regularly frequented services, such as community health centres (*Puskesmas*) or schools,⁶ could help mitigate distance-related barriers.² Indonesia's 8000 *Puskesmas* are highly accessed (82% of births were delivered in such facilities in 2010),^{8,9} and run successful outreach programmes that deploy mobile immunisation services to remote communities.⁹ Schools also hold promise as sites for integrating birth registration, with 92% of Indonesian children enrolled in primary education.¹⁰ Overall, the burden of birth registration needs to be shifted from individuals to policy makers to address the underlying systemic and legal issues that give rise to current barriers. A priority should be to eliminate the requirement for proof of parents' legal marriage. Finally, information and communication technology solutions might be useful to explore, such as mobile phone systems that can send birth registry data to a central database; however, such systems would require thorough assessments of the capacity of existing infrastructure, human resources, and operational procedures ahead of roll-out.

Scaling up of birth registration is crucial to Indonesia's development and promotion of the wellbeing of the nation's most vulnerable people. On a global scale, a CRVS research agenda is needed that includes the rigorous assessment of innovative CRVS models. With continued investment in its CRVS system, political commitment, and strong leadership, the Government of Indonesia has an opportunity to ensure that millions of children officially count in its system.

We declare no competing interests. The Legal Identity Program is implemented by the Center on Child Protection (PUSKAPA) at the University of Indonesia together with PEKKA (an NGO working on empowerment of female heads of households) and made possible through funding from the Australian Government's Australia Indonesia Partnership for Justice. We thank our research associates (Rahmadi Oesman, Wenny Wandasari, Harriz Jati, Rama Adi Putra, and Prisilia Riski) and local enumerators, who collected the data for the study. We also thank Craig Spencer and Matt MacFarlane for their contribution to the study design and implementation, and Nick Fishbane for his advice and assistance with the statistical analyses.

Copyright © Duff et al. Open Access article distributed under the terms of CC BY-NC-ND.

Putu Duff, Santi Kusumaningrum,
*Lindsay Stark
ls2302@columbia.edu

Department of Medicine, University of British Columbia, St Paul's Hospital, Vancouver, BC, Canada (PD); Center on Child Protection at the University of Indonesia, Gedung Nusantara II (Ex PAU Ekonomi) FISIP, Kampus UI, Depok, Indonesia (SK); and Department of Population and Family Health, Columbia University Mailman School of Public Health, New York, NY 10032, USA (LS)

- 1 UN Human Rights Office of the High Commissioner. Convention on the rights of the child, 1990. <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx> (accessed Feb 4, 2016).
- 2 UNICEF. Every child's birth right: inequities and trends in birth registration. New York: United Nations Children's Fund, 2013.
- 3 Setel PW, Macfarlane SB, Szreter S, et al, on behalf of the Monitoring of Vital Events (MoVE) writing group. A scandal of invisibility: making everyone count by counting everyone. *Lancet* 2007; **370**: 1569–77.
- 4 Australia Indonesia Partnership for Justice, Center on Child Protection. Indonesia's missing millions: AIPJ baseline study on legal identity. 2014. <http://www.cpcnetwork.org/wp-content/uploads/2015/02/AIPJ-PUSKAPA-BASELINE-STUDY-ON-LEGAL-IDENTITY-Indonesia-2013.pdf> (accessed Feb 4, 2016).
- 5 Handley K, Boerma T, Victora C, Evans TG. An inflection point for country health data. *Lancet Glob Health* 2015; **3**: e437–38.

- 6 Jackson M, Duff P, Kusumaningrum S, Stark L. Thriving beyond survival: understanding utilization of perinatal health services as predictors of birth registration: a cross-sectional study. *BMC Int Health Hum Rights* 2014; **14**: 306–15.
- 7 Vyas S, Kumaranayake L. Constructing socio-economic status indices: how to use principal components analysis. *Health Policy Plan* 2006; **21**: 459–68.
- 8 UNICEF Indonesia. Issue briefs: maternal and child health. October, 2012. http://www.unicef.org/indonesia/A5-_E_Issue_Brief_Maternal_REV.pdf (accessed Feb 4, 2016).
- 9 Trisnantoro L, Soemantri S, Singgih B, et al. Reducing child mortality in Indonesia. *Bull World Health Organ* 2010; **88**: 641–716.
- 10 Education and Policy Data Center. Indonesia: National education profile, 2014 update. http://www.epdc.org/sites/default/files/documents/EPDC_NEP_Indonesia.pdf (accessed Oct 20, 2015).