Private Delivery Care Across Developing Countries: Trends and Determinants

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Outline

- Background
- Research Questions
- Countries
- Methods
- Results
- Discussion/Next Steps

Background

- Continued interest in engaging private sector delivery care providers in LMICs
- Concerns surrounding quality of care supplied by private providers
- USAID: interested in whether private sector delivery care is increasing in MCH countries, and how that might affect their health outcomes.

Research Questions

- Cannot directly explore effects of private delivery care on maternal health outcomes (MMR, morbidity) in Demographic and Health Surveys (DHS)
- Taking a step back from this, other questions can be explored:
  1. Has there been an increase in private sector delivery care in USAID MCH countries over last decade?
  2. What role has private sector played in overall growth of facility delivery care?
  3. Who is using private delivery care? Any commonalities across countries/regions?

Countries

- Countries chosen from list of USAID MCH priority countries
- 16 countries had DHS data available for the fourth (1997-2003) and fifth (2003-2008) round, and were used to begin to answer first and second questions
- A subset of eight countries representing three regions were picked for further analysis of third question

Countries (Cont'd)

Countries (DHS Survey Years)	Countries (DHS Survey Years)
Africa	*Asia*
Ethiopia (2000, 2005)	**Bangladesh (1999, 2007)**
Kenya (2003, 2008)	Cambodia (2000, 2005)
Malawi (2000, 2004)	India (1998, 2005)
Mali (2001, 2006)	**Indonesia (2002, 2007)**
Rwanda (2000, 2005)	**Nepal (2001, 2006)**
Tanzania (1999, 2004)	**Philippines (2003, 2008)**
Uganda (2000, 2006)	*Latin America*
Zambia (2001, 2007)	**Bolivia (2003, 2008)**
	Haiti (2000, 2006)
Bolded countries are subset used for regression analysis	

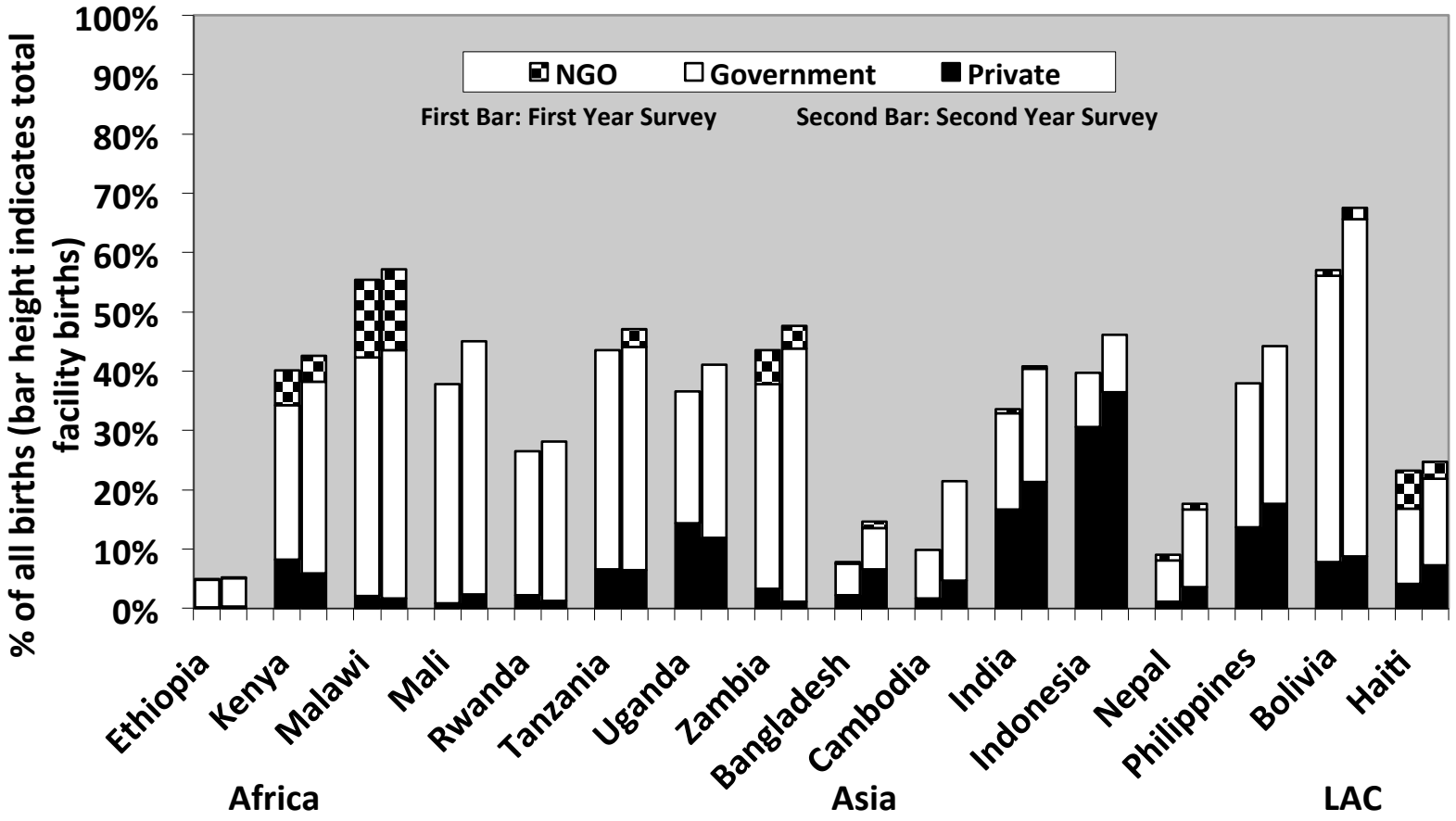
Methods

- Trends in private delivery care are reported as weighted percentages calculated from DHS child file
- Where there was ambiguity in the data regarding which category a facility fell into, DHS country managers were contacted to receive clarification

Methods (Cont'd)

- Two years of data pooled for eight subset countries, and two related probit equations (Heckman selection model) run
  - Who is more likely to deliver in a facility than at home
  - And conditional on choosing a facility, who is more likely to use a private facility than a public facility.
- Facilities of nongovernmental organizations (NGOs) are excluded in this analysis

Has Private Sector Delivery Care Increased in the Last Decade?



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What Role Does the Private Sector Play in Overall Growth of Facility Delivery Care?

- In India, Indonesia, the Philippines, and Uganda, > 10% of all births are in private facilities. Bolivia, Bangladesh, Haiti, Kenya and Tanzania, 5% to 9% of all births private
- In Bangladesh, Ethiopia, Haiti, India, Indonesia, and the Philippines, greater than half growth in facility births is due to growth in private sector deliveries

Who Uses Private Sector Delivery Care?

Control Variables:

- Socio-demographics (mother's age, education of mother and father, household size)
- Perceived/actual need (birth order, previous child death, mean ANC visits for mother, delivery complications)
- Economic and physical access (perceived distance to health facility, residence, wealth index, unmet need for family planning as a proxy for access to care)
- Dummy for survey year

Part 1: Facility vs. Home

Generally homogenous determinants of facility usage across countries, in line with body of literature on this topic.

In all or nearly all countries, more likely to choose facility birth if:

- First birth
- Had more ANC visits
- Urban dweller
- Wealthier and more educated
- Do not report distance to a health facility as a barrier to health care

In fewer countries, mostly Asian:

- Husband's education
- Maternal age
- Previous death of a child

In about half of countries, less likely to go to facility if:

- Reported an unmet need for family planning

In countries with data on delivery complications:

- Prolonged labor positively related to facility use in Philippines and Bangladesh
- Convulsions also positively associated in Bangladesh

Significance defined as 95% confidence level or better.

Part 2: Private vs. Public

No universal determinants of private delivery care across all eight countries, other than time. By region, some trends appear.

Africa:

- private sector use was related less to perceived/actual need or wealth status and more to socio-demographic characteristics
- Zambia one exception. Also is wealthiest of African countries
- Mali: appears poorest women are using private sector more than middle wealth categories

Asia and Bolivia (only qualifying LAC country):

- Perceived/actual need variables more significant as compared to countries in Africa, but still low significance with no distinct patterns across countries
- Wealth status influences private facility use more in Asia and Bolivia than in Africa. The exception is Nepal, the poorest of the Asian countries

Significance defined as 95% confidence level or better. Distance to facility as barrier & # household members only included in selection model.

Discussion

- Significant growth in private delivery care over last decade in Asia
- At least in Asia, private sector delivery care has contributed to overall growth in facility deliver care
- Considerable variation in characteristics driving use across countries, regions
- How to interpret results?
  - Seems to be increasing care among wealthier women in Asia
  - Different private delivery care behavior in different regions?

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Discussion/Next Steps

- More research needed
  - Data to examine supply side and health system factors
  - Look across more countries in each trend type
  - Extend analysis to look further down outcome chain
    - C-Sections: Mixed, Private sector delivery positively related in Bangladesh and Bolivia, negatively related in Indonesia
    - Mixed methods approach