

Measuring skilled attendance at birth using linked household, health facility, and health worker surveys in Ethiopia, North-East Nigeria, and Uttar Pradesh, India

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maternal & newborn health

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Women increasingly deliver with skilled birth attendants



Estimated that 56% of maternal, fetal and newborn deaths could be prevented if all births were assisted by a skilled attendant in a facility providing basic emergency care (State of the World's Mothers, 2013)

What is the measurement problem?

“What gets measured gets done”
(and we don’t measure enough)
ESTIMATES OF EFFECTIVE COVERAGE:

1. Are health facilities ready?



What proportion of births took place in a primary health facility that was ready for clean delivery care?

2. Are skilled birth attendants prepared?



What proportion of skilled birth attendants had all the basic items ready at the last birth they attended?

What was the effective coverage?

3. Do skilled birth attendants take life saving actions during births?



What proportion of skilled birth attendants administered prophylactic uterotonics to prevent post-partum haemorrhage at the last birth they attended?

What was the effective coverage?

Methods with IDEAS

- Cluster sample survey of households in 2012 in NE Nigeria, Ethiopia, and Uttar Pradesh, plus surveyed frontline health workers and primary care facilities serving the selected households
- Surveyed all households and interviewed all women aged 13-49 in selected clusters (mean cluster size: 58 households)
- Survey instruments compatible with other large-scale questionnaires:
 - Household survey: special module for women with a birth in last 12 months to collect detailed information about care and behaviours
 - Facility survey: availability and functionality of items for maternal and newborn health care, staffing, and work load
 - Health worker survey: training, cadres, actions at last birth attended

Study area – Gombe State, Nigeria

THIS SURVEY (June 2012)

40 clusters

1868 households

349 women with recent birth

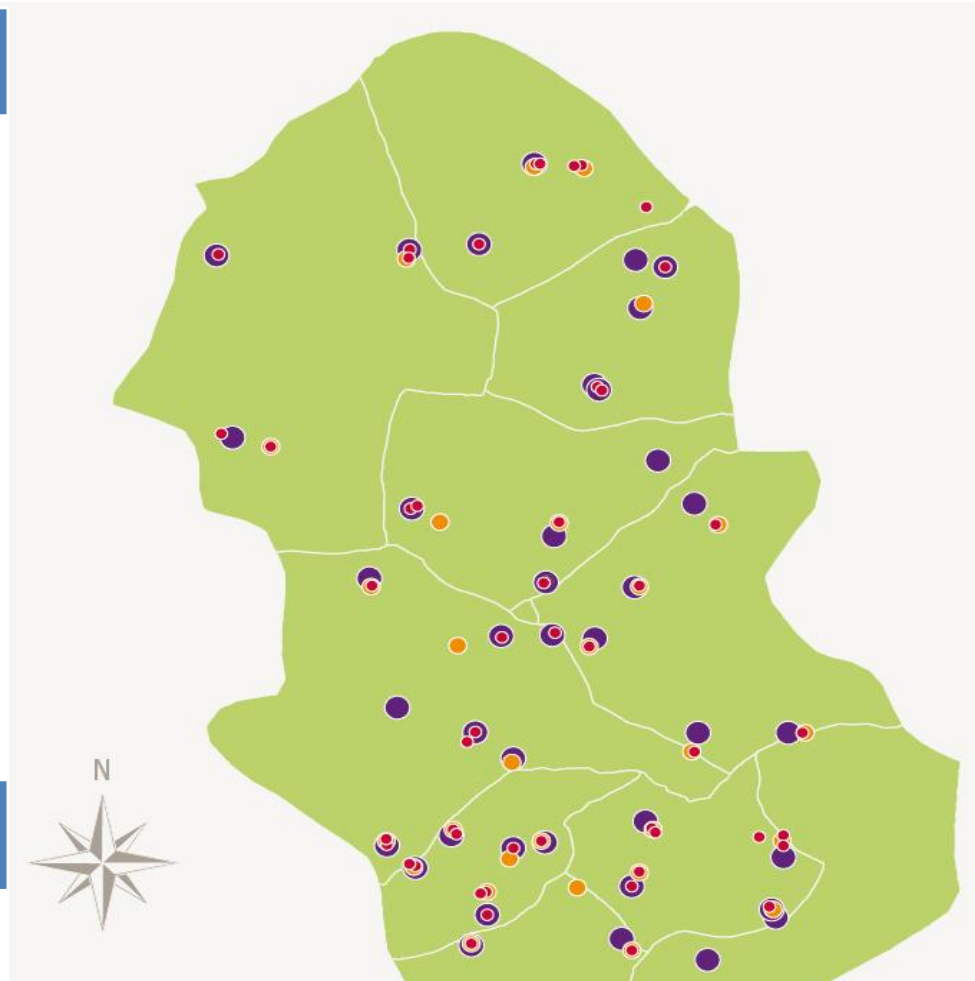
20 Skilled birth attendants

41 Unskilled attendants

25 Primary health facilities

22% delivered with a SBA

30% delivered in a facility



Nigeria, 2010:

MMR: 840/100,000

NMR: 39/1,000

Study area – Ethiopia

THIS SURVEY (June 2012)

80 clusters

4294 households

533 women with recent birth

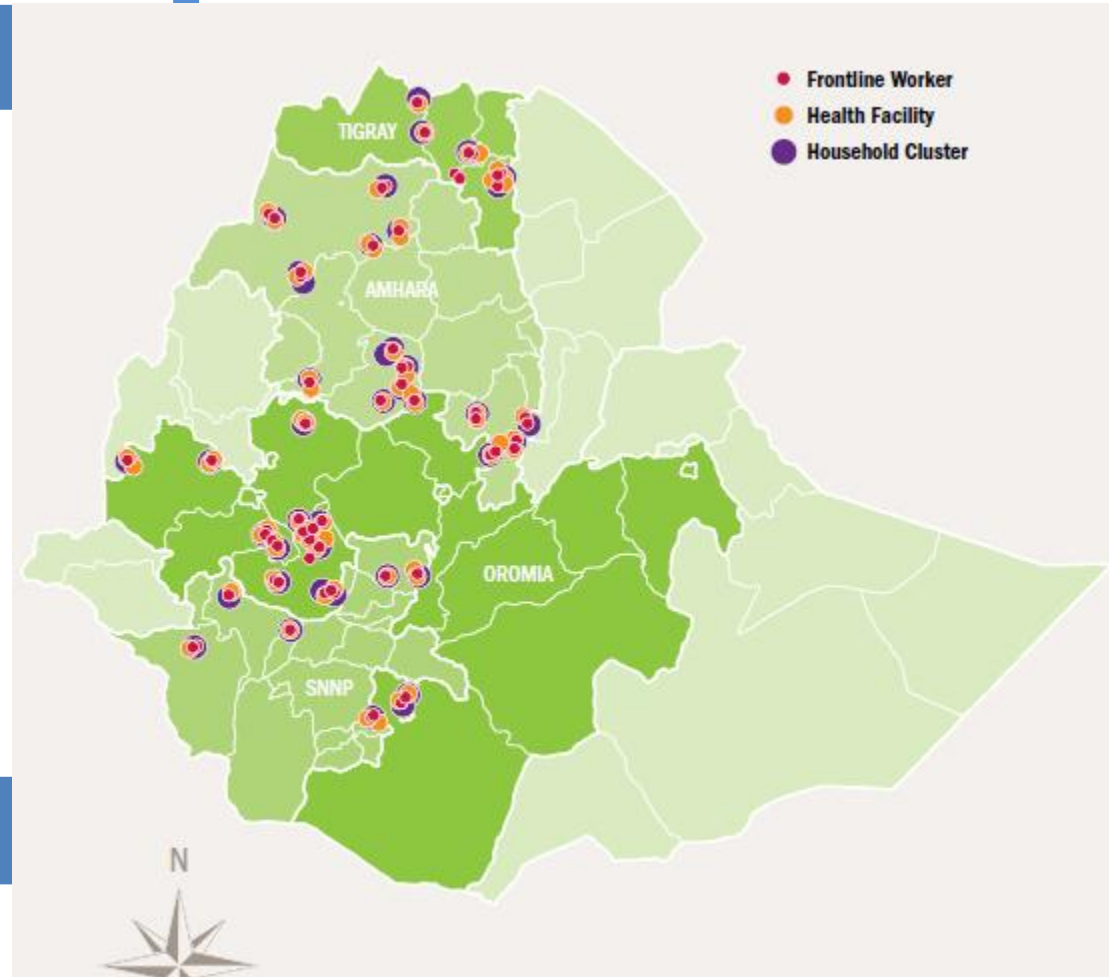
77 Skilled birth attendants

239 Unskilled attendants

81 Primary health facilities

16% delivered with a SBA

15% delivered in a facility



Ethiopia, 2010:

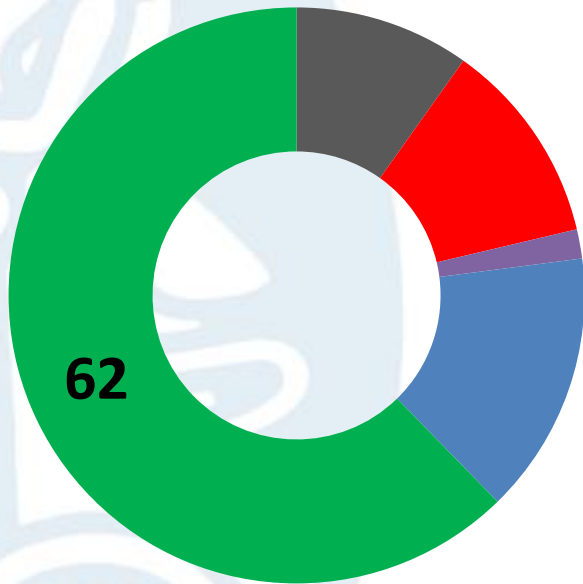
MMR: 470/100,000

NMR: 35/1,000

Facility Readiness: infection prevention

disinfectant, disposable gloves, soap, clean cord cutter, cord tie

Uttar Pradesh



62

Service not provided

Service provided, not available, items missing

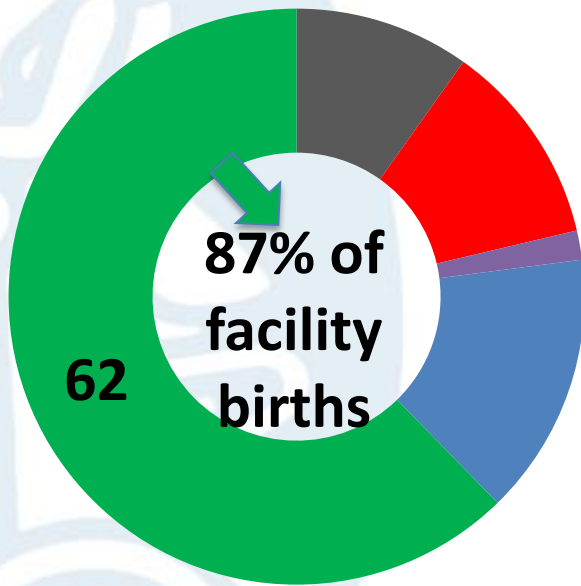
Service provided, not available, all items present

Service provided, available, items missing

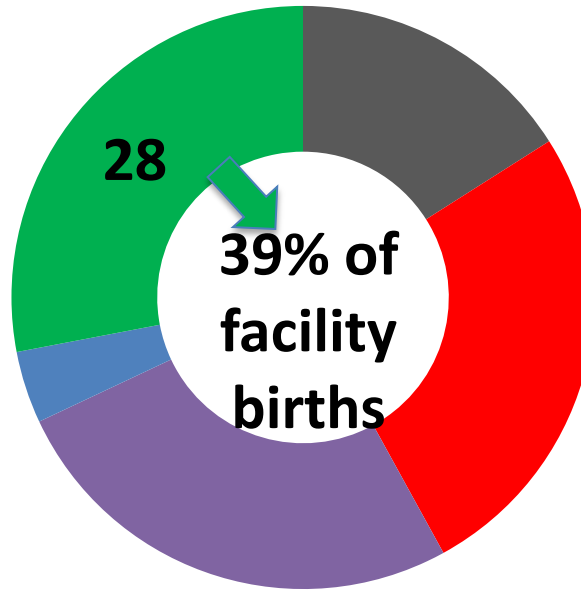
Service provided, available, all items present

Facility Readiness: infection prevention: disinfectant, disposable gloves, soap, clean cord cutter, cord tie

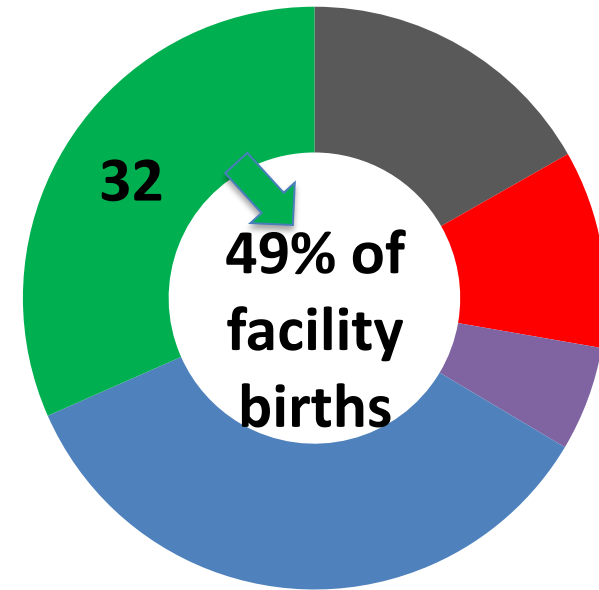
Uttar Pradesh



NE Nigeria



Ethiopia



Service not provided

Service provided, not available, items missing

Service provided, not available, all items present

Service provided, available, items missing

Service provided, available, all items present

Skilled birth attendant reported actions at last birth attended

Items prepared: %

Disinfectant

Gloves

Gauze

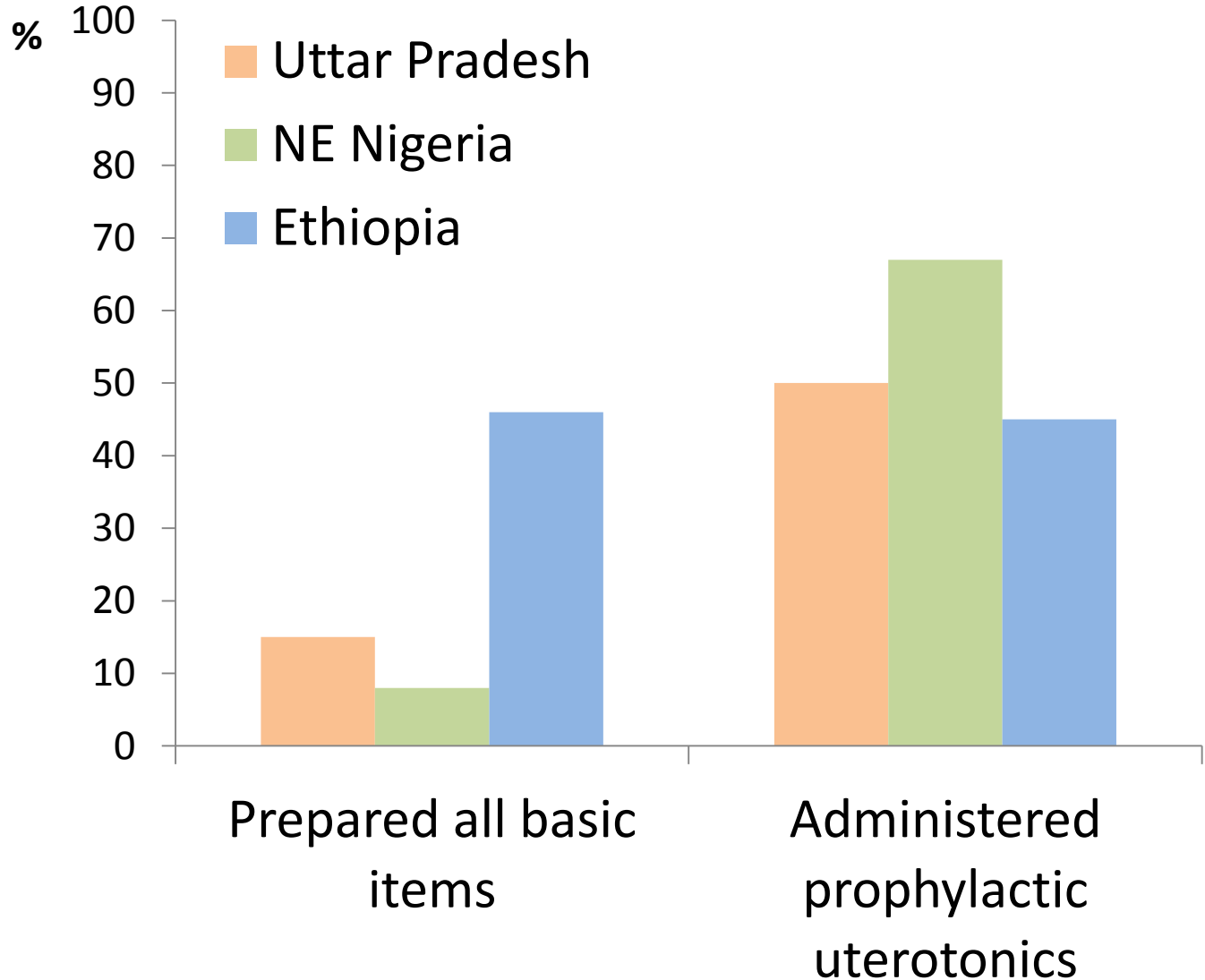
Uterotonic

Clean cloths

Sterile blade

Cord ligature

Eye ointment

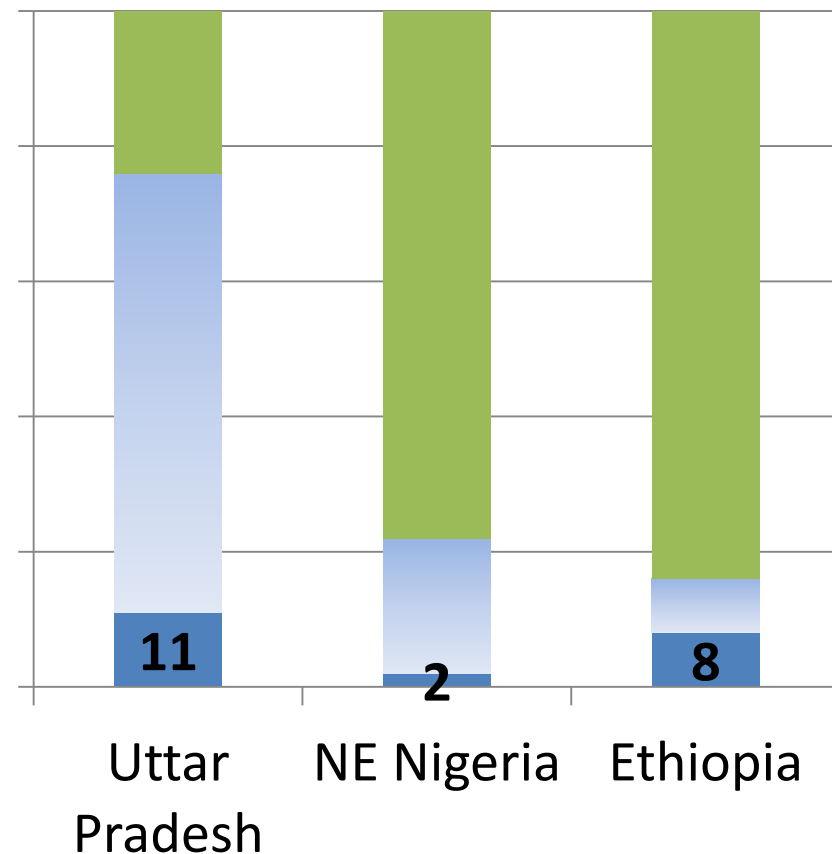


Effective coverage: components of skilled birth attendance

Items prepared:

Disinfectant
Gloves
Gauze
Uterotonic
Clean cloths
Sterile blade
Cord ligature
Eye ointment

- SBA where SBAs are prepared
- SBA where SBAs not fully prepared
- No SBA



Limitations

- Facility and frontline worker survey only extended to primary level care provision in this enquiry
- Facility readiness only assessed on the day of survey – does not reflect duration of stock-outs
- Likely (?upward) responder bias by skilled birth attendants – no observation of behaviours
- Skilled birth attendant information refers to the last birth attended: effective coverage estimates don't directly measure behaviours for individual women



Summary



1. PHC deliveries in a 'ready' facility	87%	39%	49%
Skilled birth attendance	76%	22%	16%
<i>Effective coverage</i>			
2. Quality SBA	11%	2%	8%
3. Prophylactic uterotonic	38%	15%	7%

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