TOO LITTLE TOO LATE AND TOO MUCH TOO SOON – THE CASE OF INDIA

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Let’s start with some data.
Some important health outcomes are improving in India

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>total fertility rate</td>
<td>2.8</td>
<td>2.7</td>
<td>2.4</td>
</tr>
<tr>
<td>under-five mortality rate (per 1,000)</td>
<td>101</td>
<td>74</td>
<td>52</td>
</tr>
</tbody>
</table>

Sources: 1998-99 and 2005-06 National Family Health Surveys; 2012 Sample Registration System
But there are large inequalities, ...

... including urban-rural ...


... and socio-economic differences.

<table>
<thead>
<tr>
<th></th>
<th>wealth index quintile</th>
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<tbody>
<tr>
<td></td>
<td>lowest</td>
</tr>
<tr>
<td>stunting (% under-5)</td>
<td>50.7</td>
</tr>
<tr>
<td>birthweight &lt; 2,500 g (%)</td>
<td>22.3</td>
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<tr>
<td>exclusively breastfed (% 0-5 months)</td>
<td>70.0</td>
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<tr>
<td>given complementary foods (% 6-8 months)</td>
<td>41.2</td>
</tr>
<tr>
<td>vitamin A supplementation (% 6-59 months)</td>
<td>38.5</td>
</tr>
<tr>
<td>fully immunized (% 12-23 months)</td>
<td>50.6</td>
</tr>
<tr>
<td>received ORT when sick with diarrhea (% 0-59 months)</td>
<td>48.1</td>
</tr>
</tbody>
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Source: 2013-14 Rapid Survey on Children
The poor are less likely to access healthcare...

... spend less on healthcare, and depend more on government services.

There are also large differences in outcomes ...

... between the 29 states (and 7 Union Territories) across the country.

As well as differences in access to basic health services.

India’s state of maternal health reflects all these differences …

- India has an MMR of 167/100,000 live birth, despite a 70% fall in MMR over the past 25 years
  - 45,000 women die every year from maternal causes
  - Huge differences in MMR between wealth quintiles and regionally
  - Uttar Pradesh MMR 285 vs. Kerala MMR of 61

- **Janani Suraksha Yojana** (JSY) – government program aimed at reducing India’s high MMR by promoting institutional deliveries

- But the public health infrastructure is unable to support the rising number of institutional deliveries ⇒ lack of quality service

- There is a 77% shortage of OBGYN in Community Health Centers (CHCs) nationwide, and 15 states and union territories have more than 90% shortage of obstetricians, gynecologists in CHCs

(Source: Rural Health Statistics, 2016)
Mothers with 4+ antenatal care visits

Sources: Rapid Survey on Children 2013-4; NFHS 1992-3, 2005-6, 2015-6
Recent trends in place of delivery

- The number of institutional deliveries rose by 15% over the decade ending 2014, mostly aided by the JSY.
- Deliveries in government hospitals rose by 22%, fell by 8% in private hospitals and home-births dropped by 16%.
- However, there are great differences by place and wealth.

Source: Brookings India (2016), based on National Sample Survey Office (NSSO) data.
Institutional Delivery Rates In Focus States

<table>
<thead>
<tr>
<th>State</th>
<th>2005-06</th>
<th>2015-16</th>
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</thead>
<tbody>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>54.3%</td>
<td></td>
</tr>
<tr>
<td>Odisha</td>
<td>35.6%</td>
<td>85.4%</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>32.6%</td>
<td>68.6%</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>29.6%</td>
<td>84.0%</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>26.2%</td>
<td>80.8%</td>
</tr>
<tr>
<td>Assam</td>
<td>22.4%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>22.0%</td>
<td></td>
</tr>
<tr>
<td>Bihar</td>
<td>19.4%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>19.2%</td>
<td></td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>14.3%</td>
<td>70.2%</td>
</tr>
</tbody>
</table>
Place of delivery by sector and wealth

proportion of deliveries in health facilities, 2014

Source: 2014 National Sample Survey
India still has an overall low coverage of caesarean section (< 10%), indicating TLTL.

But it also has one of the highest ratios between wealth quintiles, suggesting TMTS for wealthy women.

According to WHO, C/S that are medically unnecessary command a disproportionate share of global economic resources.

Apart from the medical risks, C/S function as a barrier to universal coverage with necessary health services.

‘Excess’ C/S can have negative implications for health equity both within and across countries.
But there are other interventions in maternity care that are routinely overused

- Pubic shaving
- Enema
- Induction and/or augmentation of labor
- Intravenous infusion
- Episiotomy for 1st births (85.1% in a recent study of 120,000 deliveries in 18 tertiary hospitals)
- Lithotomy position for delivery
- Manual revision of the uterus
Non-evidence based use of uterotonic drugs during childbirth is widespread

- Many studies across India have found routine use of oxytocin during first and particularly second stage of labor for labor augmentation (78.9% in 2011 according to the 2016 Lancet study)
  => instead of the WHO recommended use of oxytocin for the prevention of PPH during the third stage of labor
- This is true in private and public facilities as well as in home deliveries
- Unmonitored intrapartum oxytocin use poses high risks for mothers and babies (e.g. uterine rupture, fetal distress)
- Often the oxytocin is administered intramuscularly by untrained practitioners and not stored properly (non refrigerated)
Reasons for the widespread inappropriate use of uterotonics at facilities and in communities

- There are cultural as well as contextual factors that promote the use of uterotonics, particularly oxytocin, for labor augmentation:
  - A high value placed on pain during labor (Karnataka, Tamil Nadu)
  - A cultural belief that outside intervention is necessary during childbirth (Gujarat)
  - The belief that pain speeds up delivery and is equivalent to active, progressing, and/or adequate labor (Uttar Pradesh)
  - Perceived pressure to provide and receive uterotonics early in labor and delivery => it is regarded as good, modern medical practice by practitioners and communities
  - Lack of knowledge regarding proper storage, dosage and administration of oxytocin
  - Danger of policies, which aim to increase provision of hospital birth without a commensurate concern for quality
What can be done to address the overuse of uterotonic drugs?

- Include messages about oxytocin misuse in maternal and neonatal health campaigns
- Expand pre-service and in-service/refresher training
- Improve quality of care in public and private facilities
- Ensure better health governance to guarantee adherence to evidence-based national and international guidelines
- Improve regulations of rural medical practice
- Take the issue into account in policy initiatives such as IMCI and the National Rural Health Mission
- Train more skilled midwives
- Conduct research on maternal and neonatal outcomes of inappropriate use of uterotonics
Sources


Thank you for your attention!