Health System in India: Bridging the Gap between Current Performance and Potential

1. Achievements

India has made remarkable achievements in areas like Polio elimination and lowering fertility. Total fertility rate has fallen by 21 percent between 2005 and 2013 (2.9 in 2005 to 2.3 in 2013). HIV prevalence has decreased by 42.6 percent from 2001 to 2011, reversing the trend in the epidemic (0.47 percent in 2001 to 0.27 percent in 2011). The incidence of malaria is set to decrease by 50-75 percent between 2000 to 2015. The National Rural Health Mission (NRHM) contributed to this progress through deployment of additional human resources, over 18,000 ambulances for free emergency response, and cash transfers to one crore women annually, providing access to maternal health care services. As per the Twelfth Plan strategy, NRHM has been converted into National Health Mission (NHM) and covers all villages and towns in the country with a universal coverage.

2. Gaps in outcomes

India's progress in health outcomes has been slower in comparison to other countries with comparable incomes and at a similar stage of development. For instance, IMR in India has declined by 50 percent from 1990 to 2012, while the decline in countries such as Bangladesh (67 percent) Nepal (66 percent) and Cambodia (60 percent) has been steeper for the same period [Figure 1].

Figure 1. Trends in IMR since 1990: India and Peers

Under-5 mortality in India has decreased by 58 percent from 1990 to 2013 with an annual rate of decline of 3.8 percent. Comparable countries such as Bangladesh, however, show a faster decline...
of 71 percent (annual 5.4 percent), Nepal – 72 percent (annual 5.6 percent), Cambodia – 68 percent (annual 4.9 percent) and Kyrgyzstan – 63 percent (annual 4.3 percent) for the same period [Table 1]. Similarly the rate of decline in MMR for India is at 70 percent from 1990 to 2010, while Nepal had a 78 percent decline and Vietnam a 75 percent decline [Table 2].

Thereby, progress towards the MDGs is limited, especially for infant mortality (target = 27, IMR 2013 = 40) maternal mortality (target = 109, MMR, 2011-13 = 167), and proportion of births attended by skilled professionals (target = 100, rate for 2011 = 66.6 percent).

Table 1. Under-five Mortality rate and percentage decline

<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2013</th>
<th>Percentage decline</th>
<th>Annual rate of decline (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>126</td>
<td>53</td>
<td>58</td>
<td>3.8</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>144</td>
<td>41</td>
<td>71</td>
<td>5.4</td>
</tr>
<tr>
<td>Nepal</td>
<td>142</td>
<td>40</td>
<td>72</td>
<td>5.6</td>
</tr>
<tr>
<td>Cambodia</td>
<td>118</td>
<td>38</td>
<td>68</td>
<td>4.9</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>66</td>
<td>4</td>
<td>63</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Table 2. Maternal Mortality Ratio and percentage decline

<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2010</th>
<th>Percentage decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>600</td>
<td>178</td>
<td>70</td>
</tr>
<tr>
<td>Nepal</td>
<td>770</td>
<td>170</td>
<td>78</td>
</tr>
<tr>
<td>Vietnam</td>
<td>240</td>
<td>59</td>
<td>75</td>
</tr>
</tbody>
</table>

Despite impressive gains in per capita income, India’s Human Development Index rank has stagnated since 2008, having risen by only 1 unit. In comparison to Nepal, which has risen by 4 units and Bangladesh by 2 units. In bringing down mortality due to infectious diseases, the decrease in mortality due to TB was 43.6 percent from 2000 to 2012, while that in China was 63.1 percent for the same period. Mortality due to measles decreased in India by 58.5 percent between 2000 and 2012; while it decreased in Bangladesh by 87.3 percent and in China by 81.4 percent [Table 3]. This indicates the slower progress by India in controlling these conditions. Consequently, India is faced with a triple burden of disease with communicable disease contributing to 41.6 percent of mortality and 33 percent of DALYs. Simultaneously non-communicable diseases take a toll on higher number of Indians and at younger age groups contributing 43.6 percent of mortality and 55.3 percent of DALYs, as also injuries, which contribute 14.9 percent of mortality and 11.7 percent of DALYs.

Table 3. TB and Measles mortality rates and percentage decline

<table>
<thead>
<tr>
<th>Country</th>
<th>TB 2000 *</th>
<th>2012 *</th>
<th>% decline</th>
<th>Measles 2000 *</th>
<th>2012*</th>
<th>% decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>38.7</td>
<td>21.8</td>
<td>43.6</td>
<td>8.2</td>
<td>3.4</td>
<td>58.5</td>
</tr>
<tr>
<td>China</td>
<td>8.6</td>
<td>3.2</td>
<td>63.1</td>
<td>0.3</td>
<td>0.06</td>
<td>81.4</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>56.8</td>
<td>44.9</td>
<td>21.0</td>
<td>10.2</td>
<td>1.3</td>
<td>87.3</td>
</tr>
</tbody>
</table>

Global Health Estimates, WHO
Out of pocket (OOP) expenditures in India are high (at 69.5 percent of total health expenditure); these are catastrophic for the poor and push an estimated 37 million into poverty every year.\textsuperscript{12,13} A deeper analysis reveals that 66.4 percent of OOP is on medicines, which could have been grossly reduced if access to medicines had been prioritized.\textsuperscript{14} High private household spending on health (71.1 percent) is largely at the point of care, with pre-payments through insurance in all forms covering 21.5 million persons.\textsuperscript{12,15} Our financial system has not been able to transform payments for healthcare at point of care into pre-payments, a form which is considered progressive and helps consumers get assured care at reasonable cost.

3. Possible Causes

Health is a subject allotted to States in the Indian Constitution. The Central Government is jointly responsible for items in the Concurrent List, which include regulation of food, drugs, population control and family planning, medical education, medical professions, prevention of spread of infectious diseases across States and vital statistics including registration of births and deaths. Overlapping responsibility tends to blur accountability of outcomes and systems for this are yet to develop fully.

Despite having one of the most expansive publicly provided networks of health facilities, regional disparity, access, quality and affordability to basic care remain serious issues. Efficiency of public service delivery has been uneven across states, with a World Bank study reporting 40 percent absenteeism among doctors.\textsuperscript{16} Even though the Centrally Sponsored Schemes have been reorganized and rationalized, our health system remains fragmented in terms of schemes and provides disparate levels of care across primary to tertiary sectors. Absence of empirical priority setting in resource allocation constrains the ability of the State to ensure optimal deployment of available funds.

We should have a basic essential health package whose provision is assured across all areas in the country. There is a lack of synergy between public, private and the not-for-profit sector. The private sector despite being utilized by the majority of the population is characterized by issues of quality and cost, remaining largely unregulated.\textsuperscript{17,18} Although programmes such as RNTCP and Blindness Control have managed to form effective linkages with the private sector for increased diagnosis and access to care, these successes have not been extended to other programmes.\textsuperscript{19,20} There is an excessive focus on vertical disease control programs and less than adequate attention to Health System Strengthening. Briefly, issues related to the six building blocks of the health system, i.e. service delivery, financing, human resources for health, health information, governance and accountability mechanisms limit the efficiency of the health system. Inadequate engagement with communities or attention to prevention, and the near absence of Public Health regulation or enforcement machinery are some other challenges facing the system.

A less than adequate access to social determinants of health, in terms of access to nutrition, safe water & sanitation, housing, clean air, and productive employment bears on the health burden. India has had persistently high levels of under nutrition in children and women in the world.\textsuperscript{21} Dietary risks, household air pollution from solid fuels and tobacco smoking are the risk factors that form the largest contributors to disease burden in India.\textsuperscript{22} Availability of newer technologies in health care, expansion of private provision, and access to modern communication channels have raised people's expectations.

4. Hope ahead

India has immense potential in achieving what the country sets out to do. Successful conduct of election, census, projects in space and atomic sciences are some examples. We have been able to achieve considerable reduction in poverty levels over recent times.\textsuperscript{23} India is termed as the “pharmacy of the global south”, providing affordable, life saving generic medicines to
developed and developing countries.\textsuperscript{14}

The Twelfth Plan sets the path towards strengthening health systems so as to reach the long term objective of Universal Health Coverage (UHC).\textsuperscript{8} UHC aims to ensure that each individual would have assured access to a defined range of essential services and medicines without financial hardship. Even though public expenditure on health is at 1.04 percent of the GDP and the Union Budget 2015-16 allocation for the Ministry of Health and Family Welfare has remained at the level of revised expenditure in 2014-15, an opportunity lies in the greater devolution of untied funds to States following recommendations of the Fourteenth Finance Commission.\textsuperscript{8,24}

Enormous challenges facing the sector with limited funds at hand press the question on how to maximize returns from available resources, and also increase investments in health. The Health division of the NITI Aayog invites comments and suggestions on the two key themes facing the sector, efficiency and resources, to stimulate an open and informed discussion while eliciting ideas to guide a future action at all levels in our system.

Wide disparateness exists across states in level of health systems and achievement of health goals. Some States have already achieved MDG-4 (Ten states namely Delhi, Kerala, Maharashtra, Punjab, Tamil Nadu, Goa, Manipur, Sikkim, Nagaland, Tripura and all UTs except Dadra & Nagar Haveli); MDG-5 (namely States of Andhra Pradesh, Kerala, Tamil Nadu and Maharashtra). States like Tamil Nadu have extremely strong health systems founded in primary care and public health. The challenge is to replicate such successes all over the country.

It is our belief that a Health System Strengthening approach is the solution to bridging the gap between our current performance and potential. A model of comparability for the two models of service delivery is presented in Figure 2.

**Figure 2. Two models of service delivery**

- **1. Vertical Disease Based Approach**
  - DISEASE 1
  - DISEASE 2
  - DISEASE 3
  - DISEASE 4
  - DISEASE 5

- **2. Health System Strengthening Approach**
  - EQUIPMENT & BUILDING
  - HUMAN RESOURCE
  - I.T.
  - DRUGS & DIAGNOSTICS

**References:**

1. Sample Registration System, Registrar General of India.
3. A decade of public health achievements in WHO South East Asia region. WHO 2013. Available at: http://www.searo.who.int/mediacentre/events/governance/rc/66/doi.pdf?ua=1
4. World Health Statistics, WHO
7. World Health Organization. Global Health Observatory Data Repository Available at : http://apps.who.int/gho/data/view.main.1630
8. Twelfth Five Year Plan- Health Sector, Planning Commission of India, Government of India 2012.
11. WHO Burden of Disease data Available at: http://apps.who.int/gho/data/node.main.BURDENOFDISEASE?lang=en
15. IRDA 2013-14
17. Nandraj S. Private healthcare providers in India are above the law, leaving patients without protection, BMJ 2015; 350: h675
18. Gadre A. India’s private healthcare sector treats patients as revenue generators, BMJ 2015; 350:h826
20. Jose R. Thulsiraj R et al. Tackling Blindness in India- Have we done enough JIMSA July - September 2010 Vol. 23 No. 3