NATIONAL HEALTH MISSION OF INDIA

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Outline

- Historical Milestones/Background
- National Health Mission (NHM)
- Impact of NHM?
- Challenges
HISTORY

1835
- Establishment of Calcutta Medical College – start of formal medical education

1869
- Appointment of Sanitary Commission - Public Health administration started in India

1896
- Indian Medical Services (IMS) - one of the military medical services of British India- also had some civilian functions

1912
- Teaching of hygiene started in medical colleges by Medical Officers of Health

1946
- Health Survey and Development Committee Report (Bhore Committee)
Milestone in Indian public health that is credited with shaping the present Indian health system

Suggested that all levels of health care must integrate the curative and preventive aspects of health care

Advocated 3 months of training in social medicine for physicians as an integral part of the medical education system - deemed necessary for creating social physicians
Health Organization in a District

Main Agenda: Family Planning & Communicable Diseases Control
Alma-Ata Declaration (1978): Health for All

- Emphasis shift from

- Prevention of disease to promotion of healthy life styles

- Modification of individual behaviour to modification of ‘social environment’ in which the individual lives

- Community participation to community involvement

- Promotion of individual and community ‘self-reliance’

Major Agenda: Family Planning; Immunization, MCH & CD
Health Organization in a District

- **ICDS**
  - **PROGRAMME OFFICER** (1 per district)
  - **C.D.P.O.** (1 per block = 100 AWWs)

- **Health Services (MOHFW)**
  - **State Health Services (MOHFW)**
  - **Supervisors** (1 per 20 AWWs)

- **Department of Women & Child Development**
  - **AWW + Helper**
  - **Angelwari Centre**
  - **DAIS (TBAs)**
  - **Health Guides and ASHA** (1 per....)

**Anganwadi Centre**

- **Programme Officers** (Each P.O. Looks after a specific programme for the whole Distt. & supervises 1-2 CHCs in addition)

- **Senior Medical Officer**

- **Medical Officer**
  - Male - 1
  - Female - 1

- **Health Assistants** (Per 4-5 HWs)
  - Male - 1
  - Female - 1

- **Health Workers** (For sub Centre)
  - Male - 1
  - Female - 1

- **Delivery Hut**
  - Delivery Kit
  - Essential Drugs / Dressing Materials
  - HB / Urine testing Kits
  - B.P. Apparatus / Weighing machine (Provision of residence / O.P.D.)

- **Sub Centre (HQ Village)**
  - **1 Pharmacist**
  - **1 Lab Technician**
  - **1 Class IV**
  - **Deep Freezer / ILR Microscope**

- **Primary Health Centre (PHC)**
  - (6 Beds Hospital)

- **Community Health Centre**
  - (30 Beds Hospital)
  - Physician, Paediatrician, Obst / Gynae, Surgeon & Community Physician
  - Driver / Vehicle
  - Nursing staff, Pharmacist
  - Lab technician
  - X-Ray Machine (small)

- **District Hospital**
  - (50 - 200 Beds Hospital)
  - Indoor operation
  - Lab.
  - X-Ray
  - Blood Bank
  - Obst & Gynae
  - Orthopedic
  - Dentist / Anesthesia

**Average Population**

- **1 to 1.6 million**
  - 8-10 CHCs per Distt.
  - 593 Districts in India

- **1,00,000**
  - 3-4 PHCs per CHC
  - 3346 CHCs in India

- **30,000**
  - 4-5 SCs. Per PHC
  - 23,236 PHCs in India

- **5000**
  - 1-7 Villages per SC.
  - 1,46,026 SCs. in India

- **700 - 800**
  - Total 5,80,781 Villages in India
Millennium Development Agenda


- Voluntary Health Association of India (VHAI) set up Independent Commission on Health (ICH) (1997)

  - Recommended **strengthening public health system**

  - IHC also stressed the need to open **new schools of public health** in addition to efforts to strengthen the existing schools

- UN Millennium Development Goals
Causes of Death by Verbal Autopsy

Source: Sample Registration System (2001-2003)

Group I: Communicable, maternal, perinatal and nutritional conditions, Group II: Non-communicable diseases, Group III: Injuries, Others: Symptoms, signs and Ill-defined conditions
Causes of Death by Regions
2001-2003

North
Central
North-East
West
South

Cardiovascular Diseases
Chronic Respiratory Diseases
Cancers
Diarrhoea
Acute Respiratory Infections
Tuberculosis
Perinatal Conditions
Senility
Others
Cause-Specific Mortality Trends
A Rural Community of Haryana

Health Transition

- Unfinished agenda: Infectious Diseases
- Emerging agenda: Non Communicable Diseases
- Persisting agenda: Public Health System
Human Resource Ratio

- Beds per 1000 population: 0.9
- Doctors per 1000 population: 0.55
- Health Worker per 1000 population: 1.29
- Nurse per doctor: 1.5
Utilization of Health System

Public-Private Sector Shares (%)

- Immunization: 10% Private, 90% Public
- Antenatal Care: 40% Private, 60% Public
- Institutional Deliveries: 43% Private, 57% Public
- Hospitalization: 58% Private, 42% Public
- Outpatient Care: 82% Private, 18% Public
Inequitable Utilization of Health Facilities

Hospitalisations by income quintile

Hospitalisations per 1,000 population

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Public Hospital</th>
<th>Private Hospital</th>
</tr>
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<tbody>
<tr>
<td>Q1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Q2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Q3</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Q4</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Q5</td>
<td>14</td>
<td>10</td>
</tr>
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Public Hospital | Private Hospital
# Out of Pocket Expenditures for Hospitalization

<table>
<thead>
<tr>
<th>Setting</th>
<th>OOP expenditure per hospitalization (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban</strong></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>11,600</td>
</tr>
<tr>
<td>Private</td>
<td>29,500</td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>10,300</td>
</tr>
<tr>
<td>Private</td>
<td>17,800</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>10,800</td>
</tr>
<tr>
<td>Private</td>
<td>22,800</td>
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</tbody>
</table>
Health Expenditure as % of Consumption Expenditure

Source: National Sample Survey, 42nd, 52nd and 60th rounds
National Health Mission: Towards Universal Health Care

- To provide accessible, affordable, accountable, effective primary health care to all
- Commitment of govt. to raise public health expenditure from 0.9% to 2-3% of GDP
Major Goals

• Reduce by 2012
  – Infant Mortality to 30/1000 live births
  – Maternal Mortality to 100/100000 live births
  – Total Fertility Rate to 2.1/woman
Main Objectives

• Universal access to public services for food/nutrition, and sanitation & hygiene
• Addressing women’s and children’s health needs such as universal immunization
• Access to integrated comprehensive primary health care
• Prevention and control of communicable and non-communicable diseases
• Revitalize local health traditions
Approaches

**Communitization**
- Village Health & Sanitation Committee
- ASHA
- Panchayati Raj Institutions
- Rogi Kalyan Samiti

**Flexible Financing**
- Untied grants
- NGOs as implementers
- Risk Pooling
- Flexipool

**Improved management through capacity**
- DPMU/ BPMU/ FMG
- NGOs for capacity building
- NHRC/ SHRC
- Continuous skill development

**Monitor progress against standard**
- IPHS Standard
- Facility Surveys
- Independent Monitoring Committee

**Innovations in Health Management**
- Additional manpower
- 24*7 Emergency services
- Multi-skilling
Accredited Social Health Activist (ASHA)

- Resident of the village
- Woman between 25-45 years, with formal education up to 8th class, having communication skills and leadership qualities
- Chosen by the Panchayat to act as the interface between the community and the public health system
- Honorary volunteer, receiving performance based compensation
- One ASHA per 1000 population
Measuring the Impact of National Rural Health Mission (NRHM) on Maternal & Child Survival
Impact Evaluation

Logical Framework

Inputs–Processes–Outputs–Outcomes–Impact

Time Trend
## Fund Allocation by Government of India

(Million Rupees)

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</thead>
<tbody>
<tr>
<td>RCH Flexipool</td>
<td>16991.6</td>
<td>31230.4</td>
<td>42097.5</td>
<td>57143.6</td>
</tr>
<tr>
<td>NRHM Flexipool</td>
<td>-</td>
<td>25974.4</td>
<td>49134.0</td>
<td>59499.8</td>
</tr>
<tr>
<td>Infrastructure Maintenance</td>
<td>19134.0</td>
<td>28364.7</td>
<td>35993.7</td>
<td>33147.3</td>
</tr>
<tr>
<td>Pulse Polio</td>
<td>3140.0</td>
<td>6180.2</td>
<td>2993.4</td>
<td>3281.0</td>
</tr>
<tr>
<td>Disease Control Programmes</td>
<td>7068.3</td>
<td>10172.6</td>
<td>12418.6</td>
<td>15014.8</td>
</tr>
</tbody>
</table>
## Health Infrastructure

<table>
<thead>
<tr>
<th>Type of Health Institution</th>
<th>2005</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub- Centers (SC)</td>
<td>1,46,026</td>
<td>1,47,069</td>
<td>1,48,366</td>
<td>1,52,326</td>
</tr>
<tr>
<td>Primary Health Centers (PHC)</td>
<td>23,236</td>
<td>23,673</td>
<td>24,049</td>
<td>25,020</td>
</tr>
<tr>
<td>Community Health Centers (CHC)</td>
<td>3,346</td>
<td>4,535</td>
<td>4,833</td>
<td>5,363</td>
</tr>
<tr>
<td>Sub-District Hospitals (SDH)</td>
<td>364</td>
<td>944</td>
<td>987</td>
<td>1,024</td>
</tr>
<tr>
<td>District Hospitals (DH)</td>
<td>233</td>
<td>635</td>
<td>722</td>
<td>755</td>
</tr>
</tbody>
</table>
## Human Resources

<table>
<thead>
<tr>
<th>Type of Human Resource</th>
<th>2005</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Nurse Midwife</td>
<td>1,33,194</td>
<td>1,66,202</td>
<td>1,93,593</td>
</tr>
<tr>
<td>Nursing staff at PHCs &amp; CHCs</td>
<td>28,930</td>
<td>58,450</td>
<td>63,938</td>
</tr>
<tr>
<td>Allopathic doctors at PHCs</td>
<td>20,308</td>
<td>25,870</td>
<td>27,355</td>
</tr>
</tbody>
</table>
Accredited Social Health Activist (ASHA)
Maternal Health: Child-Birth in Hospital

Percentage

- 2007: 38.6
- 2008: 47.1
- 2009: 58.2
- 2010: 60.5
- 2011: 66.6
- 2012: 73.1
- 2013: 74.4
## Child Health: Immunization

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<tbody>
<tr>
<td>Full immunization coverage of children #</td>
<td>45.9%</td>
<td>54.0%</td>
<td>61.0%</td>
</tr>
<tr>
<td>Received BCG vaccine</td>
<td>75.0%</td>
<td>86.7%</td>
<td>86.9%</td>
</tr>
<tr>
<td>Received 3 dose of DPT vaccine</td>
<td>58.3%</td>
<td>63.5%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Received measles vaccine</td>
<td>56.1%</td>
<td>69.5%</td>
<td>74.1%</td>
</tr>
</tbody>
</table>
### Child Health: Treatment of Illness

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</thead>
<tbody>
<tr>
<td><strong>Children with Acute Respiratory infection or fever in last two weeks who were given advice or treatment</strong></td>
<td>73.9%</td>
<td>77.4%</td>
<td>82.6%*</td>
</tr>
<tr>
<td><strong>Children with Diarrhoea in the last two weeks who received ORS</strong></td>
<td>30.3%</td>
<td>34.2%</td>
<td>67.8%#</td>
</tr>
</tbody>
</table>

*Care seeking for ARI  
**ORT or increased fluid in diarrhea
Infant Mortality Rate (IMR)
Maternal Mortality Ratio (MMR)

*Source: SRS*
Conclusions

• Health Indicators (MMR & IMR) have improved but expected goals not yet achieved; more funds & better management needed

• National Rural Health Mission provided opportunities for innovations

• Impact Assessment by Time Series Analysis should adjust for effect of rising income, education, transport, communication etc.

• Better Impact Evaluation Methods need to be developed that clearly find the contribution of the program
Challenges

• Population is ageing: Longer life; but more diseases

• Chronic diseases rising; communicable diseases exist; maternal & child health problems & malnutrition co-exist

• Health system is overburdened; infrastructure not adequate and shortage of health human resources

• Major policy shifts required to achieve SDG by 2030
  – Smart Governance (Use of IT)
  – Financing of universal health care (3% of GDP by Govt.)
  – Social Policies (Health Promotion-Regulation & Education)
  – Health Human Resources (Socially Relevant & Rural Orientation)
Thanks

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