



# ANNUAL REPORT

to the

# PEOPLE

on

# Health



Government of India  
Ministry of Health and Family Welfare  
December 2011



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We present to the People of India the Second Annual Report on Health with the objective to have discussions and debate on the health sector and the challenges we face in meeting the health needs of the people. The report examines the path travelled, the efforts that are underway and the challenges before us in promotion of health and in the organization, financing and governance of health services. We solicit valuable comments and suggestion from the people on the issues highlighted in the report.

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# EXECUTIVE SUMMARY

The Hon'ble President of India in her address to the Joint Session of the Parliament on 4<sup>th</sup> June, 2009 while outlining the broad areas of priority of the Government, mentioned the Commitment to provide to the people of India five Annual Reports on Education, Health, Employment, Environment and Infrastructure to generate a national debate. Ministry of Health and Family Welfare being nodal Ministry has been entrusted with the responsibility of preparing Report to the People on Health. The present Report is the second in its series and covers period from June, 2010 to May, 2011

The Report seeks to inform the people about the ongoing efforts of the Central Government in the Health Sector and aims to initiate a discourse and discussion among the people on policies, programmes, strategies and challenges that the Health sector faces in the task of nation building. The Report examines the progress made in the health sector, identifies the constraints in providing universal access and provides options and future strategies.

The report is divided into seven Chapters. **Chapter I** of the report brings out the Vision, Goals and Objectives of the Ministry. The objective is to achieve the goals of the National Health Policy and National Population Policy through improved access to Primary Health Services. It aims to reduce the Infant Mortality rate to 28/1000 live births, reduce Maternal Mortality Ratio to 1/ 1000 live births by 2012, reduce Total Fertility Rate to 2.1 by 2012 and reduce the mortality due to communicable diseases.

Major achievements in the past one year are brought out in the **Second Chapter**. This Chapter highlights the major achievements made during June 2010 to May 2011 covering Reproductive and Child Health, Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), Non-communicable and Communicable Diseases, Hospitals, etc.

**Chapter-III** of the Report is divided into four parts; the *first part of the Chapter* discusses the “*Demographic Scenario*” covering demographic indicators viz. Total Population, Sex Ratio, Life Expectancy, Crude Death Rate, Crude Birth Rate, Maternal Mortality Ratio, Infant Mortality Rate, Child Mortality Rate (0-4 years), Under –five Mortality Rate and Total Fertility Rate. The main highlights inter alia; include; decline in the Infant Mortality Rate in India from 53 infants per 1000 live births in 2008 to 47 (SRS 2010) in 2010 per 1000 live births and Maternal Mortality Ratio is down to 212 per lakh live births (SRS 2007-09). In terms of life Expectancy at birth, it has increased for male and female in India

and stood at 64.2 years for males and 62.6 years for females (2002-06). This has revealed the decrease in death rate and the better improvement of quantity and quality of health services in India.

*Part-II of this Chapter* highlights “*Programme Interventions and Progress*” covering Reproductive and Child Health Programme (RCH), under the umbrella of National Rural Health Mission launched in 2005, addresses the issues relating to maternal and child health care through a range of initiatives. The important initiatives inter-alia include the Janani Suraksha Yojana (JSY) and Navajati Shishu Suraksha Karyakram (NSSK). The JSY has resulted in a huge increase in institutional deliveries within four years - the number of beneficiaries rising from 7.39 lakhs per year in 2005-06 to about 1.13 crore in 2010-11. In parallel to these efforts, massive training of Anganwadi workers, ANMs and Nurses for safe delivery and management of sick children, establishment of special newborn care units, new born stabilization units have also helped in achieving improved maternal and child health care. This part of the Chapter also deals with strategies and activities implemented to achieve population stabilization in the country.

*Part-III of this Chapter* covers “*Disease Burden*”. The Report presents an overview of national programmes for control of important Communicable and Non-communicable Diseases such as RNTCP, Leprosy, Vector Borne Diseases, HIV, health care for elderly, Mental Health, etc. and highlights the policy measures, achievements and strategies to achieve short term and long term goals. The programmes have shown considerable improvements in controlling the diseases over the years. Polio is near elimination and diseases like Tuberculosis, Neonatal Tetanus, Measles, and even HIV have shown decreasing trends. The Dengue mortality have shown decreasing trend. However, Malaria continues to be a challenge. A number of newly emerging diseases like H1N1 have made it essential to strengthen surveillance and epidemic response capacities.

*Part-IV of the Chapter* deals with “*Social Determinants of Health*”. Social determinants of health viz. Nutrition, access to safe drinking water and sanitation and prevalence anaemia etc. are discussed in this part.

Design of health care services is discussed in the **Fourth Chapter**. This Chapter is devoted to bring out the characteristics of health care system, the pattern of ownership of service providers, various systems of medicine, Departments of the Ministry and the thrust areas of each Department. etc.

**Chapter V** deals with Human resources for health. This Chapter is divided into three parts. Part-I deals with steps taken in Medical Education to overcome shortage of human resources for health. Part-II and III covers the initiatives taken in Nursing Education and Para Medical Education respectively. This Chapter also highlights the status of introduction of a mid-level health functionary at Sub Centre level through a course of Bachelor of Rural Health Care (BHRC), National Eligibility and Entrance Test (NEET) in the country and progress made in setting up of National Commission for Human Resources for Health (NCHRH).

Issues relating to financing of health care are discussed in **Chapter VI**. Financing of health is the most critical of all determinants of health system. As per National Health Accounts (NHA 2009), the Out Of Pocket (OOP) expenditure in India in 2004-05 was more than two-thirds of total health spending, which is high compared to global standards. The rural households accounted for 62 percent of the total OOP expenditure by households for availing different health care services while urban households accounted for 38 percent. The Report highlights the need for reduction of high share of OOP expenditure as it aggravates the inequities by impoverishing the poor further.

The breakup of total health expenditure, in terms of source of financing, shows that around 78 percent of the expenditure was financed by private entities with households accounting for the major share (71 percent). About 20 per cent of the total health expenditure was financed by the Central Government, State Government and local bodies while external flows accounted for 2 percent of the total health expenditure.

The allocation for health sector increased from Rs. 8000 crore in 2004-05 to over Rs. 26760 crore in 2011-12. The challenge now is to further step up the capacities, improve efficiency in the use of these funds while simultaneously securing greater allocation of funds to the health sector both at the Central and State level.

In the concluding section (**Chapter-VII**) of the Report, those challenges and policy options are outlined which require a national consensus for increasing public investment in health and universal access to services. These are issues that will determine the nature of the health system tomorrow.



# Chapter I

## Vision, Goals and Objectives

### Introduction

Improvement in the standard of living and health status of the population has remained one of the important objectives in Indian planning. The five year plans had reflected long term vision consistent with the international aspirations of which India has also been a signatory. These long term goals have been stressed in National Population Policy, National Health Policy, etc. These goals have to be achieved through improving the access to and utilization of Health services, Family Welfare and Nutrition Services with special focus on underserved and under privileged segments of population.

In line with National Health Policy 2002, the National Rural Health Mission (NRHM) was launched on 12<sup>th</sup> April 2005 with the objective of providing accessible, affordable and quality healthcare to the rural population. It sought to re-invigorate the system of health care delivery through a comprehensive outlook. It seeks to bring about architectural correction in the Health Systems by adopting the following main approaches- Increasing involvement of communities in planning, management of healthcare facilities, improved programme management, flexible financing and provision of untied grants, decentralized planning and augmentation of human resources. It provides special focus on 18 states, which have weak public health indicators and weak infrastructure namely, 8 Empowered Action Group States (Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttaranchal, Odisha and Rajasthan) 8 North Eastern States (Assam, Arunachal Pradesh, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, Tripura) Himachal Pradesh and Jammu and Kashmir.

The Mission aims to achieve the goals of the National Health Policy and National Population Policy through improved access to Primary Health Services. It aims to reduce the Infant Mortality rate to 28/1000 live births, reduce Maternal Mortality Ratio to 100/ 100000 live births by 2012, reduce Total Fertility Rate to 2.1 by 2012 and reduce the mortality due to communicable diseases.

NRHM has emerged as a major financing and health sector reform strategy to strengthen State Health Systems. Most prominent features of NRHM are involvement of communities in planning and monitoring, provision of untied grants to the health facilities and the communities annually, placing a trained female health activist in each village for 1000 population known as Accredited Social Health Activist (ASHA) to act as a link between

the public health system and the community and bottom-up planning. It stresses on infrastructure strengthening and providing Human Resources both, medically skilled/technical and managerial at all levels. The Mission attempts to integrate vertical Health & Family Welfare Programmes and their budget and bring them on one horizontal platform. It provides a platform for convergence with departments looking after determinants of health like safe water, sanitation and nutrition

The broad strategies coupled with the vision as enunciated in the Eleventh Five Year Plan (Ch.3, pg. 57- 58), and the Framework of Implementation of flagship programme the National Rural Health Mission currently provide the guiding principle for the health sector. The Vision, Goals and Objectives of the Ministry are as briefly summarized below:

### **Vision**

- Health as a right for all citizens is the goal that the Ministry will strive towards.
- A comprehensive approach that encompasses individual health care, public health, sanitation, clean drinking water, access to food, and knowledge of hygiene, and feeding practices.
- To transform public health care into an accountable, accessible, and affordable system of quality services.
- Convergence and development of public health systems and services that are responsive to the health needs and aspirations of the people.
- Public provisioning of quality health care to enable access to affordable and reliable health services, especially in the context of preventing the non-poor from entering into poverty or in terms of reducing the suffering of those who are already below the poverty line.
- Reducing disparities in health across regions and communities by ensuring access to affordable health care.
- Good governance, transparency, and accountability in the delivery of health services that is ensured through involvement of Panchayati Raj Institutions (PRI)s, community, and civil society groups.

### **Goals**

- To rise public spending on health from 0.9 per cent of GDP to 2-3 per cent of GDP, with improved arrangement for community financing and risk pooling.
- To undertake architectural correction of the health system to enable it to effectively handle increased allocations and promote policies that strengthen public health management and service delivery in the country.

- Reduction in child and maternal mortality.
- Universal access to public services for food and nutrition, sanitation and hygiene.
- Universal access to public health care services, integrated comprehensive primary health care, with emphasis on services addressing women's and children's health and universal immunization.
- Prevention and control of communicable and non-communicable diseases, including locally endemic diseases.
- Population stabilization, gender and demographic balance.
- Revitalize local health traditions and mainstream AYUSH.
- Promotion of healthy lifestyles.

## **Objectives**

The time-bound objectives set out for the XIth Eleventh Five Year Plan for achievement by the year 2012 are:

- Reducing Maternal Mortality Ratio (MMR) to 1 per 1,000 live births.
- Reducing Infant Mortality Rate (IMR) to 28 per 1,000 live births.
- Reducing Total Fertility Rate (TFR) to 2.1.
- Providing clean drinking water for all by 2009 and ensuring no slip-backs.
- Reducing malnutrition among children in the age group 0–3 year to half its present level.
- Reducing anaemia among women and girls by 50 per cent.
- Raising the sex ratio in the age group 0–6 years to 935 by 2011–12, and to 950 by 2016–17.
- Malaria Mortality Reduction Rate: 50 per cent up to 2010, additional 10 per cent by 2012.
- Kala Azar Mortality Reduction Rate: 100 per cent by 2010 and sustaining elimination until 2012.
- Filaria / Microfilaria Reduction Rate: 70 per cent by 2010, 80 per cent by 2012 and elimination by 2015.
- Dengue Mortality Reduction Rate: 50 per cent by 2010 and sustaining at that level until 2012.
- Cataract operations: Increase to 46 lakhs by 2012.
- Leprosy Prevalence Rate: Reduce from 1.8 per 10,000 in 2005 to less than 1 per 10,000 thereafter.
- Tuberculosis DOTS series: Maintain 85 per cent cure rate through entire mission period and also sustain planned case detection rate.

In terms of systems improvements the NRHM targets were:

- Upgrade all PHCs into 24x7 PHCs by the year 2010.
- Upgrading all Community Health Centres to Indian Public Health Standards.
- Increase utilization of first referral units from bed occupancy by referred cases of less than 20 per cent to over 75 per cent.
- Engaging 4,00,000 female Accredited Social Health Activists (ASHAs).

## **Chapter II**

### **Major Achievements in the Past One Year (June 2010 To May 2011)**

Ministry of health and Family Welfare implements several national level programmes / schemes to control Communicable and Non-communicable diseases. The National Rural Health Mission, under implementation since 2005, in mission mode, is the flagship programme of the Ministry. It covers the entire country, with special focus on 18 states where the challenge of strengthening poor public health systems and thereby improve key health indicators is the greatest. These States are Uttar Pradesh, Uttaranchal, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Rajasthan, Himachal Pradesh, Jammu and Kashmir, Assam, Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Mizoram, Sikkim and Tripura. The national programmes, like Reproductive and Child Health -II project, (RCH II) the National Disease Control Programmes (NDCP) and the Integrated Disease Surveillance Project (IDSP) function under the aegis of National Rural Health Mission. The major achievements of these programmes / schemes during the period are as follows:

#### **A. NATIONAL RURAL HEALTH MISSION**

The major achievements of National Rural Health Mission (NRHM) and two components of NRHM namely Reproductive and Child Health (RCH) Programme and National Disease Control Programmes are as under:

- Number of districts with Mobile Medical Units increased from 363 in 2010 to 442 in 2011 in order to provide diagnostic and outpatient care closer to hamlets and villages in remote areas.
- 26926 VHSNCs were constituted during 2010-11. As a result, the number of VHSNCs constituted has been increased from 4.67 lakhs in 2010 to 4.95 lakhs in 2011 (as on June 2011).
- Large numbers of medical and paramedical staff has been taken on contract to augment the human resources. During the year 2010-11 (July 2010-June 2011), about 1334 MBBS doctors, 2003 specialists, 14711 ANMs, 4892 staff nurses, 3079 AYUSH doctors and 1113 AYUSH paramedics were appointed.
- Under National Programme for Control of Blindness, number of cataract operation performed have registered a significant increase from about 50.38 lakh operations in 2006-07 to 60.32 lakh cataract operations in 2010-11.

## **REPRODUCTIVE AND CHILD HEALTH**

- Under Janani Suraksha Yojana (JSY), a safe motherhood intervention for promoting institutional delivery, the number of beneficiaries has increased from 7.39 lakh in 2005-06 to about 1.13 crore in 2010-11.
- A new intervention viz. Janani –Shishu Suraksha Karyakram (JSSK) aimed to provide free and cashless health care services to pregnant women including normal deliveries, caesarean operations and sick new born (up to 30 days after birth) in Government health institutions, in both rural and urban areas, was approved in May, 2011.
- Tracking of pregnant mothers has been recognized as priority area for providing effective health care services. As major initiative, a system of name based tracking of pregnant women and children for Ante-Natal Care and immunisation has been introduced at the national level. The tracking system also captures the contact numbers of the beneficiaries and the health providers. The information is also cross-checked to ascertain whether services have been received by these mothers and children. 1.18 crore pregnant women and 60 lakh children have already been registered under Mother and Child Tracking System (MCTS).
- For the first time, an Annual Health Survey (AHS) was launched in 2010. The AHS, inter-alia, generate indicators such as Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR), Total Fertility Rate (TFR), Maternal Mortality Ratio (MMR), Sex Ratio at Birth & host of other indicators on family planning practices, maternal & child care and changes therein on a year to year basis at appropriate level of aggregations. The survey was conducted by the Office of Registrar General, under the overall guidance of Ministry of Health and Family Welfare, in all the 284 districts in eight Empowered Action Group States (Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand, Odisha, and Rajasthan) and Assam. The survey results of the first round of the AHS have since become available for key indicators and are posted on the website of the Register General of India.

## **DISEASE CONTROL PROGRAMMES - COMMUNICABLE DISEASES**

### **Revised National TB Control Programme**

- TB mortality has decreased from over 5 lakh deaths every year at the beginning of programme to the present level of about 2.8 lakh deaths, despite growth in population
- The RNTCP Programme has achieved and sustained its twin objectives of Case Detection (73% against the objective of 74%) and Treatment Success Rate (88%

against the objective of >85%) amongst the New Smear Positive TB cases and now is aiming for 'Universal Access to TB care'.

- MDR-TB Services have been extended to 14 more States thus now covering 24 States
- TB-HIV intensified package activities have been extended to 11 more States and now implemented in 22 States.

### **National Vector Borne Disease Control Programme (NVBDCP)**

- Malaria which used to cause 75 million cases in early 1950s has been reduced to less than 1.5 million cases every year.
- Under NVBDCP, Long Lasting Insecticidal Nets (LLINs) are being supplied in high endemic states (Andhra Pradesh, Arunachal Pradesh, Assam, Chattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Tripura and West Bengal). The number of LLINs supplied during 2009, 2010 and 2011 were 2.235 million, 2.57 million and 6.58 million respectively.
- Under Global Fund supported project 86 malaria endemic districts of 7 North Eastern States are continuing under Round IX with an outlay of Rs. 417 Crores for five years from October 2010 to September 2015.
- Bivalent Rapid Diagnostic Kit for improving diagnostic facilities for both types of malaria (*Plasmodium Falciparum* and *Plasmodium Vivax*) in difficult and inaccessible areas have been introduced in the programme.
- Case Fatality Rate (CFR) due to Dengue Haemorrhagic Fever (DHF) has been reduced to 0.4% in 2010. JE vaccination was administered in a campaign mode in 111 districts.
- Performance based incentive for ASHAs in endemic areas for Malaria and Kala Azar has been introduced.
- Under World Bank supported project 50 malaria endemic districts of 5 states in phase I since 2008 are continuing and 74 additional Malaria endemic districts of 9 states have been included in Phase II during 2010. In addition, 46 Kala-Azar endemic districts in 3 states are continuing under the project. The World Bank supported project is with outlay of Rs.1000 Crores from 2008-09 to 2012-13.
- Capacity building of the faculty of Medical colleges from Preventive and Social Medicine, Medicine, Paediatrics and Microbiology is being trained on Vector Borne Disease Prevention and Control.

- 72 Zonal Entomological Surveillance Units are being strengthened.

### **HIV Prevention and Control**

- 1127 blood banks were established and over 21,72,969 blood donation camps organized
- Established 5210 ICTCs and conducted tests for over 140 lakh people including 59 lakh pregnant women.
- The free ART programme was scaled up to 324 centres and the number of patients receiving free ART services reached to 4,48,860 as of September, 2011. Second line ART initiated in Centres of Excellence and more than 2,558 patients enrolled.
- The second phase of specifically designed exhibition train, the Red Ribbon Express, (1st Dec 2009 – 1st Dec 2010) reached out to 80,000 people covering 152 stations in 22 states.

### **Leprosy**

- For the first time in the country, a National Sample Survey to estimate the burden of Leprosy was taken up in June, 2010. The National JALMA Institute for Leprosy & Other Mycobacterial Diseases (ICMR), Agra, acted as the nodal agency. The Survey has been completed and the report is awaited.
- Leprosy has been eliminated as a public health problem in 32 States / UTs covering 83% districts. Prevalence rate of leprosy has decreased from 1.34 per 10,000 populations in 2005-06 to 0.69 per 10,000 populations in 2010-11 and annual new case detection rate has decreased from 14.27 per lakh population in 2005-06 to 10.48 per lakh population in 2010-11.

### **Lymphatic Filariasis (LF)**

- All 250 filarial endemic districts have been covered with Mass Drug Administration (MDA). Microfilaria (Mf) rate has been reduced from 1.24% in 2004 to 0.34% in 2010. The coverage of population during MDA is more than 80%.
- 170 districts out of 250 Lymphatic Filariasis endemic districts have achieved Microfilaria Rate <1%.+

### **Kala-azar**

- 320 out of 543 Kala Azar endemic blocks have achieved elimination (<1 case/10,000 population at block level)



## **Japanese Encephalitis (JE)/Acute Encephalitis Syndrome (AES)**

- Special efforts have been taken to introduce JE vaccination in high endemic districts and also address the issues relating to safe water, sanitation, nutrition, community education, medical attention and rehabilitation to control AES.

## **DISESE CONTROL PROGRAMMES - NON-COMMUNICABLE DISEASES**

### **National Programme of Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke Programme (NPCDCS)**

- A new National Programme of Prevention & Control of Cancer, Diabetes, and Cardiovascular Diseases & Stroke (NPCDCS) was approved in July, 2010. This programme will cover 100 districts selected on the basis of their backwardness, inaccessibility and poor health indicators, spread over 21 States, during 2010-11 and 2011-12. The focus of the programme is on promotion of healthy life styles, early diagnosis and management of diabetes, hypertension, cardiovascular diseases and common cancers e.g. cervix cancer, breast cancer, and oral cancer and will cover about 200 million persons in all the districts.

### **National Mental Health Programme (NMHP)**

- An intensive national level mass media campaign on awareness generation regarding mental health problems and reduction of stigma attached to mental disorders was undertaken under NMHP.
- 10 Centres of Excellence in Mental Health and 23 PG Departments (in 10 Institutes) in mental health specialties have been established across the country to increase the PG training capacity in mental health as well as improving the tertiary care treatment facility in mental health with the objective to address the shortage of mental health professionals in the country.
- An exercise to amend Mental Health Act, 1987, is in progress.

### **Programme for Prevention of Burn Injuries (PPPBI)**

- A programme for Prevention of Burn Injuries has been piloted in the 3 States of Assam, Haryana and Himachal Pradesh covering one Medical College and 2 districts Hospitals in each state.

## **The National Programme for the Health Care for the Elderly (NPHCE):**

- National Programme for the Health Care for the Elderly (NPHCE) was initiated in June, 2010 with the main objective of providing preventive, curative and rehabilitative services to the elderly persons at various level of health care delivery system of the country.

## **B. PRADHAN MANTRI SWASTHYA SURAKSHA YOJANA (PMSSY)**

- Construction of Medical College Complex for all the six AIIMS-like institutions at Bhopal (Madhya Pradesh), Bhubaneswar (Odisha), Jodhpur (Rajasthan), Patna (Bihar), Raipur (Chhattisgarh) and Rishikesh (Uttarakhand) is in progress. The residential complex at Jodhpur and Raipur has been completed and work is in progress at remaining sites. The six AIIMS-like institutions are expected to be operational with the Academic Session from July-August, 2012 and Hospitals by 2013-14.
- Manpower requirement for the six AIIMS-like institutions has already been worked out and appointment of faculty and other administrative staff is in progress. Appointment orders to 6 Directors have been issued and Director, AIIMS, Patna and Bhopal have assumed charge.
- Out of 13 medical college institutions taken up for up-gradation in the first phase of PMSSY, up-gradation work at 6 medical colleges has been completed. Out of 6 medical college institutions being upgraded in second phase, civil work at two institutions and tendering process for the remaining four is in progress. At one institution where up-gradation programme involves only procurement of equipments, the procurement process has already been initiated.

## **C. HOSPITALS**

- The State of art Sports Injury Centre (SIC) at Safdarjung Hospital, New Delhi was inaugurated by Hon'ble Prime minister of India on 26.09.2010. The SIC has been established for catering to the needs of the sports persons and to, provide its specialized services to the general patients sustaining similar injuries and disorders.

## **D. MEDICAL EDUCATION**

- During this period, 4442 MBBS seats and 2398 Post Graduate seats were added to the existing seats in the recognized colleges.

## **E. LEGISLATION**

- The Clinical Establishments (Registration and Regulation) Bill, 2010 which aims at providing registration and regulation of clinical establishments in the country with a view to prescribing the minimum standards of facilities and services for them has been passed by both Houses of Parliament. This Act has been published in the Gazette of India on the 19th August, 2010.
- As per the newly inserted Section 3(B)(ii) in Indian Medical Council (Amendment) Act, 2010, the Board of Governors shall grant independently permission for establishment of new medical colleges or opening a new or higher course of study or training or increase in admission capacity in any course of study or training referred to in Section 10A without prior permission of Central Government including exercise of power to finally approve or disapprove the same.
- The Government of India has notified the Cigarettes and Other Tobacco Products (Packaging and Labelling) Rules, 2008 vide GSR No. 182 dated 15th March 2008, and came into force from 31st May 2009. A new set of pictorial health warnings has been issued vide notification G.S.R. No. 417 (E) dated 27-05-11 and shall come into force with effect from 1st December, 2011.

# Chapter-III

## Trends in Health Status, Interventions and Progress

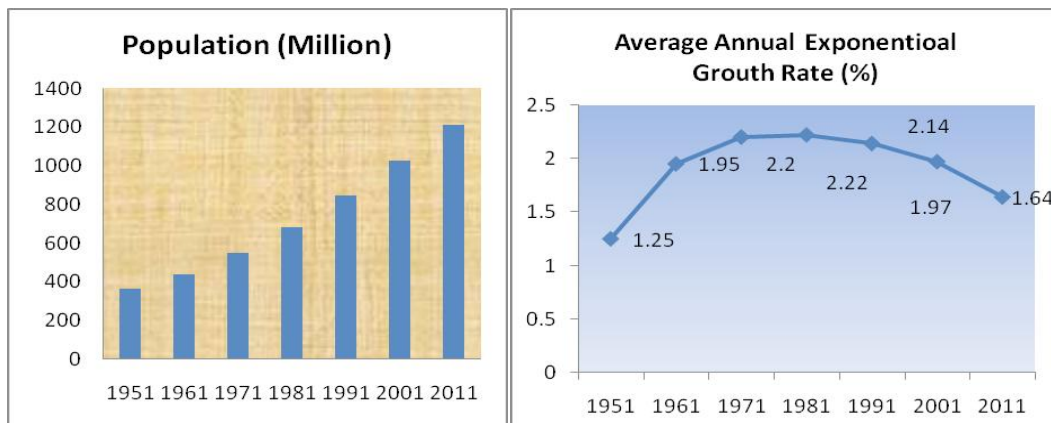
### Part-I

#### Progress on Key Indicators

#### A: Demographic and Mortality Scenario

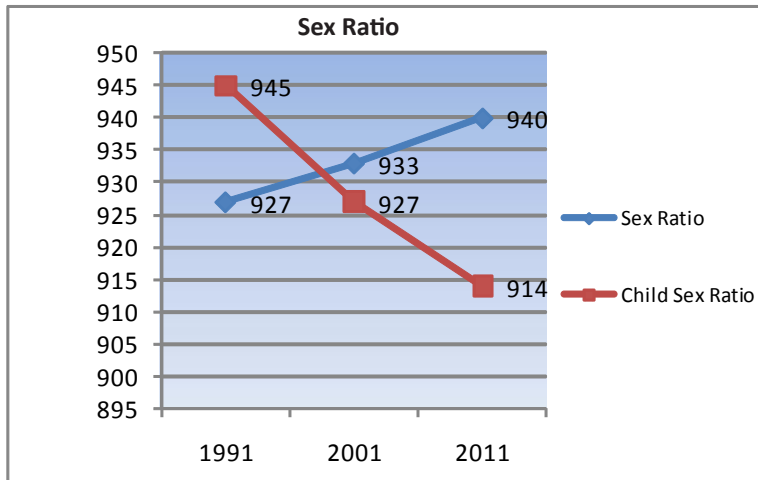
**A.1: Population and Average Annual Exponential Growth Rate (AAEGR):** As on 1st March, 2011 India's population stood at 1.21 billion comprising of 623.72 million (51.54%) males and 586.46 million (48.46%) females. India, which accounts for world's 17.5 percent population, is the second most populous country in the world next only to China (19.4%). In 1951, the population of India was around 381 million.

In absolute terms, the population of India has increased by more than 181 million during the decade 2001-2011. Of the 121 crore Indians, 83.3 crore (68.84%) live in rural areas while 37.7 crore (31.16%) live in urban areas, as per the Census of India's 2011.



The Average Annual Exponential Growth Rate (AAEGR) for 2001-2011 dipped sharply to 1.64 percent per annum from 1.97% in 1991-2001 and 2.14 percent during 1981-91.

**A.2: Sex Ratio:** Post independence the sex ratio (Number of females per 1000 males) in India had recorded decline till 1991. Sex ratio in India has since shown some improvement. It has gone up from 927 females per 1000 males in 1991 census to 933 females per 1000 males in 2001 census and to 940 females per 1000 males in 2011 Census of India.



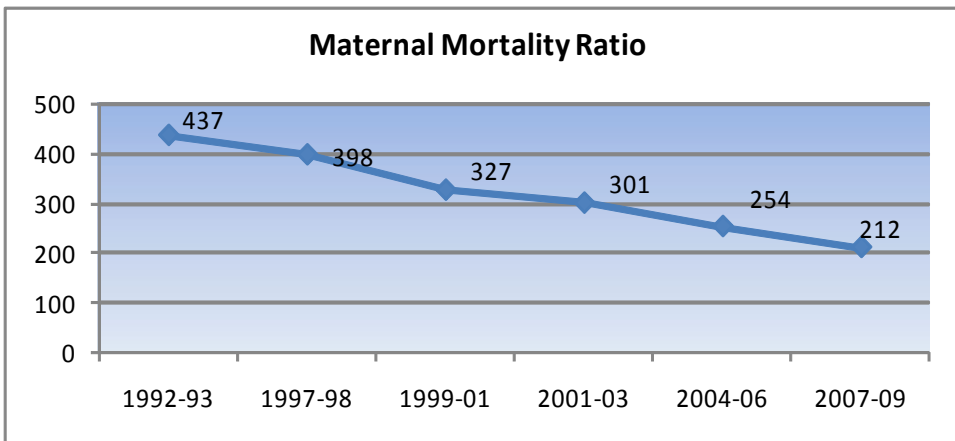
The sex ratio among children less than 6 years of age has worsened in the last decade to 914 per 1000 males. Haryana with 830 girls per 1000 boys, Punjab with 846 girls per 1000 boys and Jammu & Kashmir with 859 girls per 1000 boys are the States with most adverse child sex ratios in the country

**A.3: Life Expectancy at Birth:** The Life Expectancy which was 49.7 years during 1970-75 increased to the level of 63.0 years in 2000-04 further improved and stood at 63.5 years during 2002-06. This has revealed decrease in death rate and the better improvement of quality health services in India. However, there are inter-state, male-female and rural-urban differences in life expectancy at birth due to low literacy, differential income levels and socio-economic conditions and beliefs. In Kerala, a person at birth is expected to live for 74 years while in states like Bihar, Assam, Madhya Pradesh, Uttar Pradesh, etc, the expectancy is in the range of 58-61 years.

**A.4: Crude Birth Rate:** The Crude Birth Rate declined from 29.5 per 1000 population in the 1991 to 22.1 in 2010. The CBR is higher (23.7) in rural areas as compared to urban areas (18.0). However, there are inter-state and rural-urban differences are quite pertinent. Uttar Pradesh recorded the highest CBR (28.3) and Goa the lowest (13.2). Assam (23.2), Bihar (28.1), Haryana (22.3), Chhattisgarh (25.3), Jharkhand (25.3), Madhya Pradesh (27.3), Rajasthan (26.7) and Uttar Pradesh (28.3) recorded higher CBR as compared to the national average. Among the Smaller States / UTs, D&N Haveli (26.6) and Meghalaya (24.5) recorded higher CBR as compared to the national average. Kerala (14.8) among the bigger States and Goa (13.2) among the smaller states /UTs recorded the lowest CBR during 2010.

**A.5: Crude Death Rate:** The Crude Death Rate which was 25.1 per 1000 population in 1951 came down to 9.8 in 1991 and further declined to 7.4 in 2007. During 2008 it remained at 7.4 but came down to 7.3 in 2009. During 2010 the CDR further declined to 7.2. The CDR is higher in rural areas (7.7) as compared to urban areas (5.8). The CDR is higher as compared to national average in respect of Andhra Pradesh ((7.6), Assam (8.2), Chhattisgarh (8.0), Madhya Pradesh (8.3), Odisha (8.6), Tamil Nadu(7.6), Uttar Pradesh (8.1), Puducherry (7.4) and Meghalaya (7.9). Delhi (4.2) among the bigger States and Nagaland (3.6) among the smaller states /UTs recorded the lowest CDR during 2010.

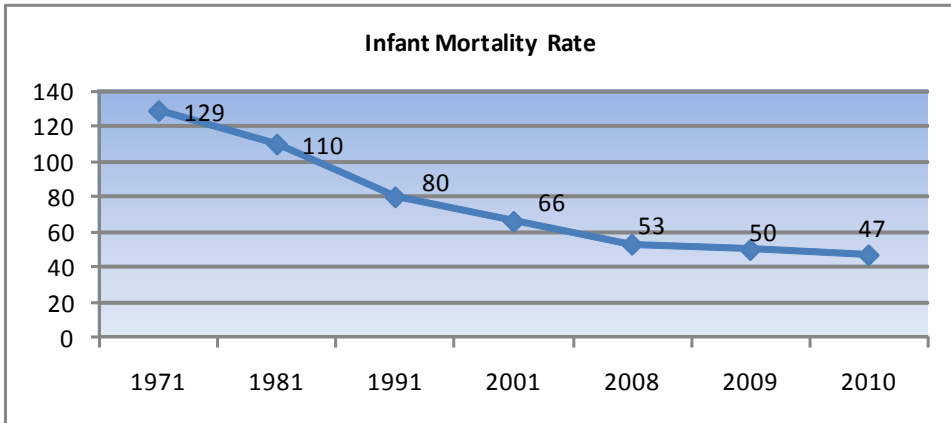
**A.6 Maternal Mortality Ratio (MMR):** MMR has reduced from 254 per 100000 live births in 2004-06 to 212 per 100000 live births in 2007-09 (SRS), a reduction of 42 points over a three year period or 14 points per year on an average.



In the four southern states, Kerala and Tamil Nadu have already achieved the goal of a MMR of 100 per 100000 live births but, within the group, Karnataka lags significantly behind with a MMR of 178 per 100000 live births and at current rate of decline would only reach to about 130 per 100000 live births in the year 2012.

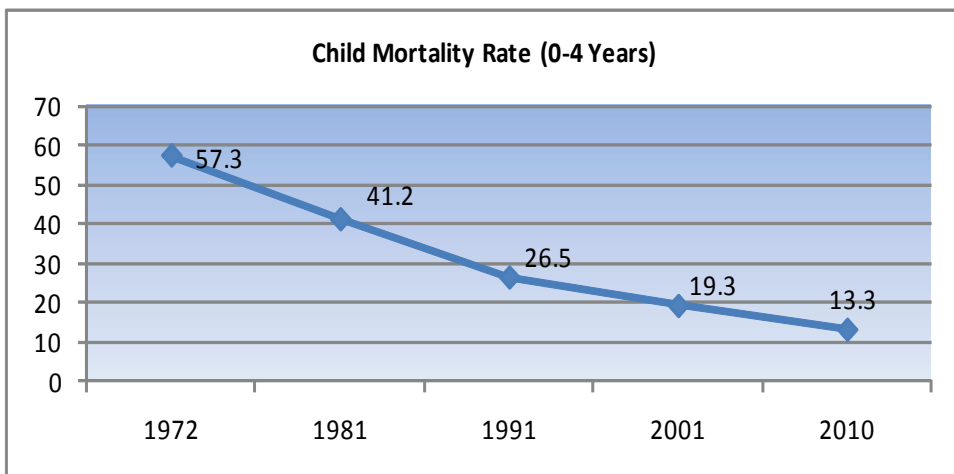
In the non EAG large states the MMR is 149 per 100000 live births. Many of these states have shown acceleration in reduction in the latest three year period, notably Assam, Madhya Pradesh and Rajasthan. Assam where MMR declined at only 3 per 100000 live births during 2004-06 now recorded a decline of 30 points per year- but still at a MMR of 390 per 100000 live births, Assam remains India’s most maternal death prone state., it is the State with lowest MMR.

**A.7 Infant Mortality Rate (IMR):** The IMR, according to SRS 2010 at national level was 47 per 1000 live births in 2010 as compared to 50 in 2009. The IMR has shown a steady decline from 129 deaths per 1000 live births in 1971 to the current level.



The IMR is higher in respect of Female (49) as compared to Male (46). IMR is also higher in rural areas (51 per 1000 live births) as compared to urban areas (31 per 1000 live births) during 2010. The IMR varied very widely across the states; Kerala with an IMR of 13 is the best performing state among the bigger States in the country

**A.8 Child Mortality Rate (0-4 years):** As per SRS estimates, the Child Mortality Rate (CMR) has come down from 57.3 in 1972 to 26.5 in 1991 and 13.3 in 2010.



The CMR is very high in rural areas (14.9) as compared to urban areas (7.8) in 2010 and this observation is relevant for almost all States uniformly. The highest Child Mortality Rate was recorded in Madhya Pradesh (20.0) closely followed by Uttar Pradesh (19.6), Assam (17.9) and Odisha (17.1). Kerala with 2.9 CMR is the best Performing State.

**A.9 Under-five Mortality Rate:** Under-five Mortality Rate (U5MR) is measured in terms of death of number of children (under five years of age) taking place per 1000 live births. The U5 MR declined from 69 in 2008 to 59 in 2010. However, the Male–Female and Rural-Urban differentials persists. Kerala with U5MR of 15 in 2010 is the best performing state in the country.

**A.10 Total Fertility Rate (TFR):** India's Total Fertility Rate (TFR) is at 2.5 (SRS-2010) and the target is to achieve Replacement level of Fertility of 2.1 by 2012. While 21 States and UTs (Andaman & Nicobar Islands, Goa, Puducherry, Manipur, Tamil Nadu, Kerala, Tripura, Chandigarh, Andhra Pradesh, Himachal Pradesh, Jammu & Kashmir, West Bengal, Punjab, Delhi Maharashtra, Daman & Diu, Karnataka, Mizoram, Nagaland, Sikkim and Lakshadweep) have already achieved the replacement level, 8 States have TFR between 2.1 and 3.0. Six States/UT (Bihar, U.P, Rajasthan, M.P., Meghalaya, and D&N Haveli) have TFR more than 3.0.

## **Part-II**

### **Programme Interventions and Progress**

**B.1 Reproductive and Child Health (RCH):** With the launch of the National Rural Health Mission, RCH programme efforts got further boost with the two-pronged policy of restructuring the rural health care system (the supply side) along with stimulating the demand side with the introduction of the innovative conditional cash transfer scheme for pregnant women to deliver the child in public health facilities. Under the NRHM the following interventions have been initiated by the Ministry.

Janani Suraksha Scheme (JSY): Popularly known as the Janani Suraksha Yojana (JSY), the conditional cash transfer scheme resulted in dramatic increases in institutional delivery. The JSY encourages women to make use of public health facilities for safe delivery by providing Rs. 1,400 to cover travel costs and other expenses in rural areas of low performing states. It also provides cash incentives to female community health workers for promoting safe care in pregnancy and facilitating access to institutional care. Quality of antenatal and



postnatal care is also being strengthened, with the ASHA providing support for increasing utilization.

Janani–Shishu Suraksha Karyakram (JSSK): Government of India has decided to launch the Janani–Shishu Suraksha Karyakram (JSSK), a new national initiative, to make available better health facilities for women and child. The new initiatives provide the following facilities to the pregnant women:

- All pregnant women delivering in public health institutions to have absolutely free and no expense delivery, including caesarean section. The entitlements include free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, and free blood wherever required. This initiative would also provide for free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborns accessing public health institutions for treatment till 30 days after birth.
- The scheme is estimated to benefit more than 12 million pregnant women who access Government health facilities for their delivery. Moreover, it will motivate those who still choose to deliver at their homes to opt for institutional deliveries.
- The new initiative has provision for both pregnant women and sick new born till 30 days after birth as follows:
  - Free and zero expense treatment
  - Free drugs and consumables
  - Free diagnostics
  - Free provision of blood
  - Free transport from home to health institutions
  - Free transport between facilities in case of referral
  - Drop back from institutions to home
  - Exemption from all kinds of user charges.

The strategy for child health care, aims to reduce under-five child mortality through interventions at every level of service delivery and through improved child care practices and child nutrition. One major component of the strategy was training to the Anganwadi workers and ANMs for early diagnosis and referral to facilities. At the facility level, the focus was on strengthening capacity to cope with essential newborn care in newborn corners in every facility and promptly treat or refer sick newborns and sick children to more specialised newborn stabilisation units or special newborn care units at the district hospital. 293 special newborn care units, 1124 newborn stabilization units and 8582 newborn care corners have been set up so far.

A new two-day training programme on basic newborn care and resuscitation “Navjat Shishu Suraksha Karyakram (NSSK)” has been launched in September 2009. 455 Nutrition Rehabilitation Centres have been set up across states for treatment of sick and severely malnourished children and this would be expanded to more districts. Infant and young child feeding programme has been undertaken in convergence with Ministry of Women & Child Development to improve child nutritional status and promote exclusive breastfeeding.

Another aspect of the strategy is in scaling up the universal access to immunization initiating catch up campaign for measles immunization and focus on eradicating polio. More effort at micro-planning, mobilisation of beneficiaries by ASHAs, improved cold chain management, Vitamin A administration, paediatric anaemia management and periodic de-worming are also a part of this programme.

More concerted efforts to tackle malnutrition and neo-natal mortality will be carried out to facilitate the 4 points decline per year required for achievement of expected outcome (i.e. IMR below 28 per 1000 live births by 2015). 10 States / UTs have achieved the goal of reducing IMR below 28 and 9 States/UTs are in the 30-40 range.

In keeping with the above and embedding the child health strategy as an integral part of maternal health the following new initiatives have been introduced in the policy mix:

- Expand training of ASHAs for Home-Based Newborn Care and develop a policy framework for constituting community-based women empowerment groups under the leadership of the women Panchayat members but also consisting of other women networks that may be existing in the village. The aim of such a strategic direction would be to one day ensure that the female functionaries—ASHA, AWW, and ANM—become accountable to and work with these groups to help them realise their well-being and rights.
- Strengthen all primary and secondary health care facilities providing institutional delivery with capacity for newborn care through stricter supervision and monitoring.
- More closely monitor the immunisation program by listing the mothers and the children for tracking their care. Computerisation of this data which is underway would enable identifying the missing children and enhancing the timeliness of the coverage.
- Exploring the possibility of adding new and underutilized vaccines for prevention in the Universal Immunization Program.
- Overall tighten supervision, particularly in the 264 laggard districts.

The Key components of RCH strategy, progress made in comparison with base line information/ data are given at **Annexure-I** and the main child health strategies, progress made so far and achievement to be made by next year is brought out at **Annexure-II**.

Keeping in view the achievements made, targets have been fixed in respect of Infant Mortality Rate (IMR), Maternal Mortality Ratio (MMR) and Total Fertility Rate (TFR) to be achieved by 2012 and 2015 as shown in the following Table.

<i>Indicator</i>	<i>Expected Outcomes</i>	<i>Outcome Achieved</i>	<i>Outcome Aimed</i>
Infant Mortality Rate (IMR)	IMR to be reduced to 30/1,000 live births by 2012	Achieved 47/1,000 live births by 2010	Current rate of decline should accelerate to about 9 points per year to achieve the goal of IMR of 30 by 2012.
Maternal Mortality Ratio (MMR)	MMR to be reduced to 100 per 1,00,000 live births by 2012	Achieved 212/1,00,000 in 2007-09	To decline by 112 points to reach the goal of 100 by 2012– about 37 points per year from the level of 212 in 2009.
Total Fertility Rate (TFR)	TFR reduced to 2.1 by 2012	2.5 in 2010.	Needs to decline by about 0.2 points per year during 2011-2012.

To achieve the targets for 2012 and 2015, and in view of the recommendations made in the Mid Term Appraisal Report of the Planning Commission, a five-pronged strategy with following key elements is an option:

- Improving quality of the facilities where institutional deliveries are being conducted in accordance with the standards laid down and certified by the Quality Council of India;
- Focusing on 264 districts that account for a major proportion of the infant and maternal deaths and having a high TFR for intensive training of health care service providers and community health workers in home-based care;
- Strengthening supportive supervision in these 264 districts by placing trained public health nurses to improve capacity of health workers for delivering the package of reproductive and child health services in accordance with the laid down protocols in

institutions and home settings;

- Providing an additional package of incentives for those facilities notified by district authorities as remote and inaccessible; and
- Re-formulating the financing of these services based on results and performance based so as to ensure all key partners – the beneficiary - clients, the health providers and the health facility managers are all equally incentivized to maximize the outcomes.

The State-wise figure of MMR, TFR and key demographic indicators are given at Annexure-III. The performance of some of these indicators at national level is discussed below:

**B. 2 Population Stabilization:** The two important demographic goals of the National Population Policy (2000) are: achieving the population replacement level fertility (TFR 2.1) by 2010 and a stable population by 2045. Currently following strategies and activities are implemented by the Ministry of Health and Family Welfare to achieve Replacement level of Fertility.

- **New Initiative:** To improve access to contraceptives by the eligible couples, it has been decided to utilize the services of ASHA to deliver contraceptives at the doorstep and incentivise her for the effort. To begin with, the initiative is being implemented on a pilot basis in 233 districts in 17 States. Under the schemes contraceptives are being directly supplied to the districts.
- **Strong Political Will and Advocacy** at the highest level, especially in states with high fertility rates. In the past 2 years, World Population Day celebration involving all the elected representatives has been a great platform for advocating masses about Family Planning programme and services.
- **Emphasis on Spacing methods like IUCD;** a ten year effectiveness IUD was introduced earlier for which more than 50000 personnel have already been trained in different states to provide quality services. Recently approval has been provided to launch a new Cu IUCD-375 with effectiveness of 5 years as a short term spacing method.
- **Revitalizing Postpartum Family Planning** including PPIUCD in order to capitalise on the opportunity provided by increased institutional deliveries. MoHFW has already identified and designated institutions with high institutional deliveries (above bench mark) as 'delivery points'; focus is being given to ensure availability of PPFPP services at least at these facilities.
- **Availability of Fixed Day Static Services** at all facilities: attempts have been made to operationalise facilities to provide fixed day static family planning services at different levels. Supports such as HR, infrastructure, equipments etc. have been provided through state PIPs.

- Ensuring quality care in Family Planning services by establishing Quality Assurance Committees at state and district levels
- Accreditation of private providers; states have been encouraged to identify and accredit private / NGO facilities to provide FP services such as sterilisation, IUD insertion etc.
- Increasing male participation and promoting Non scalpel vasectomy.
- Improving contraceptives supply management up to peripheral facilities.

Increased emphasis has been put on spacing methods, particularly IUCD to ensure healthy birth spacing, which would help in stabilising population as well as improving quality of life. It has been proposed to ensure fixed day IUD insertion services at SHC and PHC levels (at least twice a week) and regular services at higher facilities.

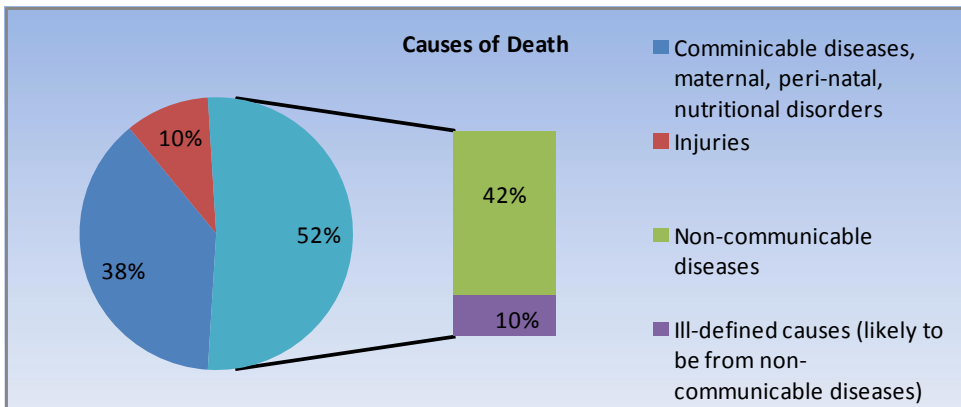
## **Part – III Disease Burden**

### **Introduction**

Although non-communicable diseases like cancers, diabetes, cardiovascular diseases, chronic obstructive pulmonary diseases, etc are on the rise due to change in life style, communicable diseases continue to be a major public health problem in India. Many communicable diseases like tuberculosis, leprosy, vector borne diseases (malaria, kala-azar, dengue fever, chikungunya, filaria, Japanese encephalitis), water-borne diseases (cholera, diarrhoeal diseases, viral hepatitis A & E, typhoid fever etc), zoonotic diseases (rabies, plague, leptospirosis, anthrax, brucellosis, salmonellosis etc), and vaccine preventable diseases (measles, diphtheria, tetanus, pertussis, poliomyelitis, viral hepatitis B etc) are endemic in the country. In addition to these endemic diseases, there is always a threat of new emerging and re-emerging infectious diseases like nipah virus, avian influenza, SARS, pandemic H1N1 influenza, hanta virus etc. Local or widespread outbreaks of these diseases result in high morbidity, mortality and adverse socio-economic impact.

### **Causes of Deaths**

Communicable diseases, maternal, peri-natal and nutritional disorders constitute 38 per cent of deaths. Non-communicable diseases account for 42 per cent of all deaths. Injuries and ill-defined causes constitute 10 per cent of deaths each. However, majority of ill-defined causes are at older ages (70 or higher years) and likely to be from non-communicable diseases. About one-quarter of all deaths in the country are due to diarrhoeal diseases, respiratory infections, tuberculosis and malaria.



Rural areas report more deaths (41 per cent) due to communicable, maternal, peri-natal and nutritional conditions. The proportion of deaths due to non-communicable diseases is less in rural areas (40 per cent). Injuries constitute about the same proportion (about 10 per cent) in both rural and urban areas.

### C. Communicable Diseases

India is undergoing an epidemiologic, demo-graphic and health transition. The expectancy of life has increased, with consequent rise in degenerative diseases of aging and life-styles. Nevertheless, communicable diseases are still dominant and constitute major public health issues.

Because of the existing environmental, socioeconomic and demographic factors, the developing countries like India are vulnerable to rapidly evolving micro-organisms. During the past three decades more than 30 new organisms have been identified worldwide including HIV, *Vibrio cholerae* O139, SARS corona virus, highly pathogenic avian influenza virus A, and pandemic H1N1 influenza virus. Many of these organisms emerged in the developing countries of Asia.

#### Trends of Communicable Diseases

Diseases showing Up trends	Diseases showing Down trends
Dengue, Chikungunya	Poliomyelitis
Cholera O139	Tuberculosis
Japanese Encephalitis	Neonatal tetanus
Leptospirosis	Measles

Diseases showing Up trends	Diseases showing Down trends
	<b>Eradicated:</b> Smallpox , Guinea worm
	<b>Eliminated:</b> Yaws, Leprosy
<b>Emerging Diseases:</b> Influenza A H5N1, Influenza A Pandemic H1N1	

## Control of Communicable Diseases - Progress

Despite high disease burden, health system constraints and shortage of funds, country has achieved noteworthy successes.

- Smallpox and guinea worm have been eradicated; their last cases occurred in the country in May 1975 and July 1996 respectively.
- Yaws which mainly occurs in remote tribal areas has been eliminated.
- Prospects of polio eradication in near future are very bright.
- Malaria which used to cause 75 million cases in early 1950s has been reduced to less than 1.5 million cases every year.
- All 250 filarial endemic districts have been covered with Mass Drug Administration (MDA). Microfilaria (Mf) rate has been reduced from 1.24% in 2004 to 0.34% in 2010.
- Kala-azar cases have been reduced to less than 1 per 10,000 population in 320 of 514 endemic blocks.
- Case Fatality Rate (CFR) due to Dengue Haemorrhagic Fever (DHF) has been reduced to 0.4% in 2010. JE vaccination was administered in a campaign mode in 111 districts.
- Revised National Tuberculosis Control Programme launched in 1996 presently covers the entire country, detects over 70% of new sputum cases with treatment success rate of 87%. TB mortality has decreased from over 5 lakh deaths every year at the beginning of programme to the present level of about 2.8 lakh deaths, despite growth in population.
- Leprosy has been eliminated as a public health problem in 32 states and 83% districts. Prevalence rate of leprosy has decreased from 1.34 per 10,000 populations in 2005-06 to 0.69 per 10,000 populations in 2010-11 and annual new case detection rate has decreased from 14.27 per lakh population in 2005-06 to 10.48 per lakh population in 2010-11.

## **Communicable Diseases - Challenges and Policy Response**

To further control communicable diseases, there is a need to address several public health challenges, such as ensuring primary health care to all including urban slum population, strengthening of health care infrastructure as per Indian Public Health Standards, increasing public health workforce, strengthening disease surveillance and response system, strengthening and networking of public health laboratories, optimizing use of modern information technology for disease control, formulation and enforcement of appropriate Public Health Laws, enhancement of public private partnership in disease prevention and control, increasing public health allocation and spending and decentralizing and communitizing planning and response. It is important to develop an adequate number of public health professionals in the country with appropriate competencies and skills to make proper use of large health infrastructure developed with focus on core public health functions and competencies. Public health should address the demographic and epidemiologic transition needs. Time has come to increase allocation for public health to deliver the services efficiently.

**C.1 Tuberculosis:** Recent policy shift in TB control is on improving case detection and treatment success by closer monitoring, strengthening of management capacity and providing additional manpower wherever required. Broader and more diverse partnerships with the private sector, NGOs, civil society, corporate entities is another important element in the strategy towards ensuring universal access to TB care in India. The programme is not focusing on early detection and treatment of at least 90% of estimated TB cases in the community (all types) including TB associated with HIV and successful treatment of at least 90% of new TB patients, and at least 85% of previously-treated TB patients.

Further, despite admittedly successful implementation of DOTS strategy in India, MDR-TB has emerged as a major public health concern with. India has the second highest number of (multi-drug resistant) MDR-TB cases in the world. However, at the policy level India has effectively moved towards rolling out DOTS-Plus plan for the control of MDR-TB, which besides being more difficult is also more expensive to treat. DOTS-Plus services have already been initiated in 18 states and will be available in all the states by 2012. India has successfully negotiated a grant from Global Fund of about Rs. 1,000 crore for scaling up of MDT treatment DOTS-Plus plan throughout the country.

### **Current Status and Progress**

- RNTCP Programme has achieved and sustained its twin objectives of Case Detection (73% against the objective of 74%) and Treatment Success Rate (88% against the



objective of >85%) amongst the New Smear Positive TB cases.

- More than 13,000 Designated Microscopy Centers (DMCs) are functional throughout the country for quality assured diagnosis of pulmonary TB.
- More than 4,00,000 people are trained as DOT Providers in all most all the villages of the country to ensure Directly Observed Treatment (DOT) services nearest to the residence of the TB patients.
- 414 million (35%) pop in 211/659 (32%) districts have access to services.
- Of these in 21 districts all re-treatment TB cases are provided with diagnostic services for MDR-TB.
- 31 Culture and Drug Susceptibility Testing laboratories are accredited (11 of them has Line Probe Assay).

### **Policy Changes and Future Plans**

- Early detection and treatment of at least 90% of estimated all type of TB cases in the community, including TB associated with HIV.
- Successful treatment of at least 90% of new TB patients, and at least 85% of previously-treated TB patients.
- Reduction in default rate of new TB cases to less than 5% and re-treatment TB cases to less than 10%.
- To decrease morbidity and mortality of HIV associated TB.
- Intensified case finding activities in high risk groups like – smokers, diabetics, Malnourished, HIV, urban slums & difficult to reach areas etc.
- Creating support mechanisms for establishing linkages with district level hospitals for management of seriously ill and drug resistant TB cases by strengthening the district hospitals.
- Extend RNTCP services to patients diagnosed and treated in the private sector.
- Improve utilization of services by tribal, vulnerable and at risk populations through involvement of Civil Societies.
- Involvement of Private corporate sectors for Tuberculosis control in areas with persistently poor performance for lack of proper health infrastructure.
- ‘Universal Access to TB Care’ All TB patients in the community to have access to:
  - early, good quality diagnosis and treatment services:
    - in a manner that is affordable and convenient to the patient in time, place and person;
    - all affected communities must have full access to TB prevention, care and treatment,
  - including women, children, elderly, migrants, homeless people, alcohol and other drug users, prison inmates, people living with HIV and other clinical risk factors,

- and those with other life-threatening diseases; and
- all types- Smear positive, negative, EP, Drug Resistant TB.

**C.2 Leprosy:** Leprosy though eliminated at the National level as a Public Health Problem, afflicts more than 1,26,000 People in the country and is a Public Health Challenge in some parts of India. For further reducing the disease burden, 209 districts in 16 States/UTs with Annual New Case Detection Rate (ANCDR) of more than 10 cases per 100,000 population have been identified for special action. More emphasis has also been given on prevention of disability in leprosy cases. Institutions with facilities for reconstructive surgery for correction of deformity due to leprosy have been increased to 87. Moreover, after 1983, a nationwide representative and systematic survey to estimate the disease burden on account of leprosy has been undertaken.

Policy changes to be made in future are:

- Reassess the burden of leprosy in the country by shifting from prevalence as the main indicator to Annual New Case Detection Rate (ANCDR) and burden of disability in new cases of leprosy.
- Improving the quality of services to all patients with easy accessibility without discrimination.
- Provide integrated leprosy services with primary health care system for sustainability,
- Adequate Referral System for complicated cases.
- Prevention and management of impairments and disabilities.
- Improving community awareness and involvement.
- Support of National Rural Health Mission.
- Cure and rehabilitation.
- Re-define the indicators for monitoring and evaluation.

**C.3 Vector Borne Diseases:** The strategy employed to prevent/control vector borne diseases include disease management including early case detection and prompt treatment, strengthening of referral services; integrated vector management including indoor residual spraying, use of insecticide treated bed nets/ Long Lasting Insecticidal Nets (LLIN), larvivorous fish and supportive interventions like human resource development, behaviour change communication, public private partnership, monitoring and evaluation, and operational research.

### **Malaria**

- About 80% of malaria burden is in North-eastern (NE) states, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Andhra Pradesh, Maharashtra, Gujarat, Rajasthan, West

Bengal and Karnataka. However, other states are also vulnerable and have local and focal outbreaks. The focus is on empowering grass-root workers in diagnosing and treating malaria cases even in remote and accessible areas by scaling-up the availability of bivalent Rapid Diagnostic Kits (RDK) and Artemisinin-based Combination Therapy (ACT). There is a need give thrust for prevention/control of malaria (and other VBD also) in urban areas under the Urban Malaria Scheme which is presently implemented in only 131 towns/cities. These efforts coupled with integrated vector control strategies including distribution of Long Lasting Insecticide Treated Nets (LLIN) in endemic areas will greatly reduce the malaria morbidity and mortality.

- Bi-valant Rapid Diagnostic Kit for improving diagnostic facilities for both types of malaria (Plasmodium Falciparum and Plasmodium Vivax )\_in difficult and inaccessible areas have been introduced in the programme.
- Performance based incentive for ASHAs in endemic areas for Malaria and Kala azar has been introduced.

### **Chikungunya**

- To tackle increasing dengue and chikungunya cases in urban, peri-urban and rural areas because of expanding urbanization, deficient water and solid waste management, the emphasis is on avoidance of mosquito breeding conditions in homes, workplaces and minimizing the man-mosquito contact. Improved surveillance, case management and community participation, inter-sectoral collaboration, enactment and enforcement of civic bye laws and building bye laws are emphasized for both these vector borne diseases.
- To address human resource gap, the Government of India is supplementing the efforts of state governments by providing about 10,000 health workers in malaria-endemic states. Yet there is a need of more workers which need to be addressed upfront by the state governments so that the newly available tools for malaria control are fully taken advantage of by trained and motivated manpower at the community level.
- In addition to various JE control measures like strengthening of surveillance, availability of case management facilities, vector control and other supportive interventions, vaccination of 1 to 15 year old children with a single dose of live attenuated SA-14-14-2 vaccine was initiated in 2006 under the Universal Immunization Programme. 111 districts have been covered till 2010.

**C.4 Lymphatic Filariasis (LF):** LF has been targeted for elimination by 2015. The strategy of annual Mass Drug Administration (MDA) with annual single recommended dose of DEC + Albendazole tablets is being implemented in the country since 2004. In addition, scaling up of home based foot care and hydrocele operation have been initiated for disability alleviation. The coverage of population during MDA is more than 80% and about 150

districts have achieved the target of less than 1% microfilaria prevalence. 170 out of 250 Lymphatic Filariasis endemic districts have achieved Microfilaria Rate <1% +.

**C.5 Kala-azar:** Important recent initiatives taken to control Kala-azar include case detection through rapid diagnostic kits and improved treatment compliance by using oral drug Miltefosine. In addition, compensation to the patients for loss of wages and incentive to ASHAs/volunteers for case detection and ensuring complete treatment have also been provided. 320 out of 543 Kala Azar endemic blocks have achieved elimination (<1 case/10,000 population at block level) .

**C.6 Acute Encephalitis Syndrome (AES):** AES is emerging as a serious public health challenge. Given its complex etiology, medical complications and after-effects of illness, effort is on to develop a multi-pronged strategy including safe water, sanitation, nutrition, community education, medical attention and rehabilitation to address the problem.

**C.7 HIV Prevention and Control:** India has an estimated 2.4 million HIV positive persons in 2009 at an estimated adult HIV prevalence of 0.31%. Recent HIV estimations highlight an overall reduction in adult HIV prevalence as well as new infections (HIV incidence) in the country, although variations exist across the states. Number of annual new HIV infections has declined by more than 50% during the last decade. This is one of the most important evidence on the impact of the various interventions under National AIDS Control Programme (NACP) and scaled-up prevention strategies. The trend of annual AIDS deaths is showing a steady decline since the roll out of free ART programme in India in 2004. Wider access to ART has resulted in a decline of the number of people dying due to AIDS related causes.

While declining trends are evident at national level as well as in most of the states, some low prevalence and vulnerable states have shown rising trends in HIV epidemic, warranting a focused prevention efforts in these areas. Female sex workers at national level and in most states show declining HIV trends. However, Men who have Sex with Men (MSM), Injecting Drug Users (IDU) and Single Male Migrants are emerging as important risk groups in many states.

The National AIDS Control Programme (NACP) Phase – III (2007 – 2012) has the overall goal of halting and reversing the epidemic in India over the five year period. It places the highest priority on preventive efforts while, at the same time, seeking to integrate prevention with care, support and treatment through a four – pronged strategy:

1. Prevention of new infections in high – risk
  - (a) Saturation of coverage of high – risk groups with targeted interventions (TIs).
  - (b) Scaled up interventions in the general population.
2. Providing greater care, support and treatment to larger number of persons living with HIV/AIDS (PLHA).
3. Strengthening the infrastructure, systems and human resources in prevention, care, support and treatment programmes at the district, state and national level.
4. Strengthening the nationwide Strategic information Management System.

The specific objective is to reduce new infection as estimated in the programme's first year by 60 per cent in high prevalence states so as to obtain reversal of the epidemic; and by 40 per cent in the vulnerable states so as to stabilize the epidemic. NACP's organizational structure was decentralized to implement programmes at the district level, with priority for more vulnerable districts.

The main achievements inter-alia include a) Establishment of 1127 blood banks b) organization of over 21,72,969 blood donation camp c) establishment of 1775 Targeted Intervention projects d) establishment of 5210 ICTCs e) scaling up of ART programme to up to 324 centres, and providing free ART facilities to over 4,48,860 etc. (Details of the achievements are discussed in detail in Chapter II).

**C.8 Emerging Infectious Diseases:** The speed and virulence with which the pandemic H1N1 virus spread in 2009 in over 200 countries, including India, took the public health system by surprise and created a public health crisis. Containment of epidemics and rapid response to disease outbreaks through a nationwide networking of public health resources including public health laboratories is one of the major problems today. In an important policy shift, the Government of India recently decided to provide the services of epidemiologists in all district headquarters and state headquarters and entomologists and microbiologists in all state headquarters; of them so far 279 epidemiologists, 55 microbiologists and 22 entomologists have joined. However, integrated disease surveillance is still faced with inadequately trained professionals, ill-equipped public health labs and inadequate capacity for rapid response to disease outbreaks in many states. The ongoing initiative of upgrading the National Institute of Communicable Diseases into National Centre of Disease Control with responsibility for enhanced capabilities for lab-based surveillance of communicable diseases and rapid response for minimizing the effects of disease outbreaks is a major development in this field.

**C.9 Integrated Disease Surveillance Project:** An effective disease surveillance and response system is critical for early detection and control of disease outbreaks. Under IDSP,

surveillance units have been established at all state and district headquarters and training of state/district surveillance teams has been completed in all states. Presently, more than 90% districts in the country report weekly surveillance data for epidemic prone diseases through e-mail/portal. The weekly data give information on the disease trends and seasonality of diseases. Whenever there is rising trend of illnesses in any area, it is investigated by a Rapid Response Team to diagnose and control the outbreak. Accordingly, on an average, 20-30 outbreaks are reported every week by the states. Earlier, only a few outbreaks were reported in the country by the States/UTs. This is an important public health achievement.

Communicable diseases will continue to engage public health attention and resources in India for quite some time to come because of factors relating to ecology, climate and human behaviour. However, as more emphasis is being laid on tackling these challenges, there is a much greater need for inter-sectoral collaboration, community empowerment and community participation through different mechanisms like, village health and sanitation committees and district and state health societies.

#### **D. NON-COMMUNICABLE DISEASES**

Non-communicable Diseases (NCDs) account for nearly half of all deaths in India. Cardiovascular Diseases (CVD), Cancer, Diabetes, Chronic Obstructive Lung Disease (COPD), Mental Disorders and Injuries are main causes of death and disability due to NCDs. Unless interventions are made to prevent and control NCDs, their burden is likely to increase substantially in future. Considering the high cost of medicines and longer duration of treatment NCDs constitute a greater financial burden to low income groups.

While socioeconomic development tends to be associated with healthy behaviours, rapidly improving socioeconomic status in India is associated with a reduction of physical activity and increased rates of obesity and diabetes. Increased consumption of foods rich in salt, sugar and trans fats, use of tobacco and alcohol and reduced physical activity have increased risk of occurrence of NCDs in the country.

Earlier there was no serious intervention with regard to non-communicable diseases barring giving some limited financial assistance for purchase of equipment or undertaking pilot projects or studies. A National Programme for the Control of Cancer, Vascular Diseases and Diabetes, Health Care of Elderly (Geriatrics Care) and Mental Health has been taken up in 100 districts. Major NCD programmes launched for implementation are:

- National Cancer Control Program with an outlay of Rs. 731.52 crores.
- National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Strokes with an outlay of Rs. 499.38 crores.
- National Mental Health Programme (district component) with an outlay of Rs. 600 crores.
- National Programme for Health Care of the Elderly with an outlay of Rs. 288 crores.

Under this key initiative, dedicated staff will be positioned in community health care centres and district hospitals and training being given to frontline health workers as well as medical and paramedical staff at different health facilities for diagnosis and early referral to appropriate health care facilities. It is also believed that decentralization of such a comprehensive package of services (including prevention, diagnosis and early treatment) would reduce patient flow to city hospitals, reduce out-of-pocket expenses among the affected families and save lives due to timely treatment. Effort has been made to integrate and synergise all these programs at various levels.

For effective control of NCDs, a comprehensive approach would be required for both prevention and management of NCDs in the country. It is proposed to continue ongoing efforts and introduce additional programmes, in the years to come, to cover important NCDs of public health importance through following key strategies:

- Health Promotion for healthy life styles that preclude NCDs and their risk factors.
- Specific prevention strategies which reduce exposure to risk factors.
- Early Diagnosis through periodic/opportunistic screening of population and better diagnostic facilities.
- Infrastructure Development and facilities required for management of NCDs.
- Human Resources and their capacity building for prevention and treatment of NCDs.
- Establish emergency medical services with rapid referral systems to reduce disability and mortality due to NCDs.
- Treatment and care of persons with NCDs including rehabilitation and palliative care.
- Health Legislation and population based interventions through multi-sectoral approach for prevention of NCDs.
- Building evidence for action through surveillance, monitoring and research.

**Role of Health Promotion:** Given the high cost of treatment for non-communicable diseases and the pressure of the unfinished agenda of communicable diseases, the most cost-effective option for the country today is to invest in health promotion, behaviour

change and promotion of healthy lifestyles. It is for this reason that a major effort in tobacco control in the form of a national programme has been initiated. Short-term courses on health promotion are also being planned through the National Institute of Health and Family Welfare.

**D.1 National Cancer Control Programme:** National Cancer Control Program was under implementation since June 2010. Under this scheme 27 Regional Cancer Centres (RCCs) including 13 Medical Colleges were assisted. In addition, 57 Institutes including 40 Medical Colleges were assisted under the ‘Development of Oncology Wing Scheme’. This programme has been revamped and synergized with Diabetes, CVD & stroke and named as ‘National Program for Prevention and Control of Cancer, Diabetes, CVD & Stroke’ (NPCDCS). The cancer component of the NPCDCS provides support to District Hospitals, Tertiary Centres. Support is also provided for establishment of district NCD Cell in addition to recruitment of Specialists on contractual basis.

**D.2 National Programme of Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke Programme (NPCDCS):** National Cancer Control Program was implemented since 1975 till June 2010. The program has been revamped and synergised with Diabetes, CVD & stroke and named as ‘National Program for Prevention and Control of Cancer, Diabetes, CVD & Stroke’ (NPCDCS). The programme is being implemented in 100 Districts across 21 States. In the first phase, 30 districts have been taken up in 2010-11 & in the second phase, 70 districts are being taken up during 2011-12. The focus is more on early detection, diagnosis & management of Diabetes; Hypertension, Cardiovascular Diseases & Cancers. e.g. Cervix Cancer, Breast Cancer & Oral Cancer.

### **Objectives of the NPCDCS**

- Prevent and control common NCDs through behavior and life style changes.
- Provide early diagnosis and management of common NCDs.
- Build capacity at various levels of health care facilities for prevention, diagnosis and treatment of common NCDs.
- Train human resource within the public health setup viz doctors, paramedics and nursing staff to cope with the increasing burden of NCDs.
- Establish and develop capacity for palliative and rehabilitative care.

### **Present Status**

- NPCDCS is a new initiative in the 11th Five Year Plan. 100 Districts in 21 States have been taken up under the programme.
- Operational Guidelines have been developed and put on the web-site of the ministry



of H&FW.

- MOU has been received from 18 States (viz. Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Uttarakhand and West Bengal).

### **Targets Proposed (till the Eleventh Plan)**

- Setting up of 21 State NCD Cells and 100 District NCD Cells.
- Strengthening of 100 District Hospitals by establishing NCD Clinic, District Cancer Facility and Cardiac Care Unit.
- Screening of common non-communicable diseases up to sub-centre level in the 100 districts.
- Screening of 6,00,000 school going children under Pilot Phase of School Health Programme in 6 Districts viz. Nainital (Uttaranchal), Theni (Tamil Nadu), Nellore (Andhra Pradesh), Ratlam (Madhya Pradesh), Bhilwara (Rajasthan) & Dibrugarh (Assam).

**D.3 National Mental Health Programme:** It is estimated that 6-7 % of population suffers from mental disorders. The World Bank report (1993) revealed that the Disability Adjusted Life Year (DALY) loss due to neuro-psychiatric disorder is much higher than diarrhea, malaria, worm infestations and tuberculosis if taken individually. Together these disorders account for 12% of the global burden of disease (GBD) and an analysis of trends indicates this will increase to 15% by 2020 (World Health Report, 2001). One in four families is likely to have at least one member with a behavioral or mental disorder (WHO 2001). These families not only provide physical and emotional support, but also bear the negative impact of stigma and discrimination. Most of them (>90%) remain un-treated. Poor awareness about symptoms of mental illness, myths & stigma related to it, lack of knowledge on the treatment availability & potential benefits of seeking treatment are important causes for the high treatment gap. The Government of India has launched the National Mental Health Programme (NMHP) in 1982, with the following objectives:

- To ensure the availability and accessibility of minimum mental healthcare for all in the foreseeable future, particularly to the most vulnerable and underprivileged sections of the population;
- To encourage the application of mental health knowledge in general healthcare and in social development; and
- To promote community participation in the mental health service development and to stimulate efforts towards self-help in the community.

The NMHP has four schemes being run to fulfill above mentioned objectives. Given below are the schemes with their description, objectives, eligibility criteria and financial assistance available.

- District Mental Health Programme (DMHP).
- Manpower Development Schemes-Centres Of Excellence And Setting Up/ Strengthening PG Training Departments of Mental Health Specialities (Started in 11<sup>th</sup> five year plan).
- Modernization of State Run Mental Hospitals.
- Up-gradation of Psychiatric Wings of Medical Colleges/General Hospitals.

**D.4 National Programme for Health Care of Elderly (NPHCE):** Government of India has launched the NPHCE in 2010-11 to address health related problems of elderly people. The programme has been initiated in 100 identified districts of 21 States during the 11<sup>th</sup> Plan period. Eight Regional Medical Institutions (Regional Geriatric Institutions) have also been selected under the programme.

The basic aim of the programme is to provide separate and specialized comprehensive health care to senior citizens at various level of State Health care, management of illness, health manpower development for geriatric services, medical rehabilitation and therapeutic intervention and IEC are some of the strategies envisaged under the programme.

The important components of the programme include i) establishment of 30 bedded Department of Geriatrics at 8 Regional Medical Institutions ii) Development of 10 bedded geriatric ward at district hospitals of 100 identified districts iii) Development of rehabilitation unit and provision of biweekly geriatric clinic at CHC iv) provision of once weekly geriatric at PHC under 100 identified districts v) provision of supportive equipments like walking sticks, callipers etc. at sub centres.

The important achievements are:

- MOU has been signed with 19 States.
- Operational guidelines have been launched.
- A geriatric OPD has been inaugurated at AIIMS, New Delhi.
- A training workshop has been organized in which medical specialists and surgical specialists from 21 districts were trained.

**D.5 National Tobacco Control Programme (NTCP):** The National Tobacco Control Programme (NTCP) aims at creating public awareness against tobacco use, setting up of testing labs and monitoring adult tobacco surveys. The Programme will increase the awareness of the community about the harmful effects of the tobacco use, make the public aware, establish tobacco product testing labs and also provide baseline estimates of tobacco prevalence and status of implementation of the Tobacco Control Law.

**D.6 Pilot Programme for Prevention of Burn Injuries (PPPBI):** The Scheme was approved in 2010, as a pilot project covering three states Haryana, Himachal Pradesh & Assam for two years, up to march 2012. MoU has been signed with all states implementation the programme. Approved cost outlay of the project is Rs. 29.70 crore. Aims at establishment of burn's unit in one Medical College & two District Hospitals in each states.

**D.7 National Programme for Prevention and Control of Deafness (NPPCD):** The Ministry of Health & Family Welfare, Govt. of India had pilot phase of National Programme of Prevention and Control of Deafness (NPPCD) in indentified 25 districts of 10 states and one UT in the country.

The main objective of the program is to train professionals in early identification, diagnosis, treatment of ear problem, development of institutional capacity and promote outreach activities and public awareness. The long term objective is to prevent control major causes of hearing impairment and deafness, so as to reduce the total disease burden by 25% of the existing burden by the end of Eleventh Five Year Plan.

## **PART IV THE SOCIAL DETERMINANTS OF HEALTH**

Nutrition, access to safe drinking water and sanitation, and education are the three most important proximate determinants of health status that have an impact on both infectious disease and vital health statistics.

All these three are closely related to poverty and marginalisation. Unhealthy lifestyle, tobacco, alcohol and other substance abuse underlie much of the non-communicable disease epidemics we face. Social determinants of health are the economic and social conditions under which people live which determine their health. They are “societal risk conditions”, rather than individual risk factors that either increase or decrease the risk for a disease. For example, marginalisation and discrimination on account of gender and caste are social determinants themselves..

It is, therefore, not surprising that the poor performing states are those with the highest levels of poverty and the highest levels of malnutrition, among children and adult women. Female literacy rates, School enrolment rates, and rates of households with safe drinking water and sanitation are all distinctly lower.

**Malnutrition and Anaemia:** Of great concern is the persistent level of malnutrition with over 40% of children and 36% of adults women classified as undernourished.

The reasons for such high levels of malnutrition and anaemia are complex. They include poverty, gender inequity, specific dietary patterns and recurrent illness, all these acting in conjunction. Patriarchy and gender discrimination contribute to malnutrition levels by early age of marriage and birth of the first child, reduced access to nutrition during critical periods like pregnancy, lactation, adolescence and the first five years of life, and less access to education and health care. Keeping girls in schools till they complete adolescence could be one of the most effective health measures.

The health department does promote correct infant and young child feeding practices including exclusive breastfeeding for the first six months and micronutrient supplementation, especially iron and folic acid tablets for children and pregnant women, Vitamin A supplementation and promotion of the use of iodised salt. The health department also organises institutional care services in over 600 facilities for sick and severely malnourished children. The issues of availability of safe drinking water and sanitation along with other areas of preventive and promotive actions in health are also important.

# Chapter-IV

## Design of Health Care Services

### Introduction

India's health care system is characterized by a pattern of mixed ownership and with different systems of medicine - Allopathy, Ayurvedic, Unani, Siddha and Homoeopathy. The health sector in India comprises of private sector that mostly provides curative services and government sector that provides publicly financed and managed promotive, preventive and curative health services. The private health sector consists of the 'not-for-profit' and the 'for-profit' health sectors. The not-for-profit health sector includes various health services provided by Non Government Organisations (NGO's), charitable institutions, missions, trusts, etc. Health care in the for-profit health sector consists of various types of practitioners and institutions. The private sector in India has a dominant presence in all the submarkets—medical education and training, medical technology and diagnostics, pharmaceutical manufacture and sale, hospital construction and ancillary services and, finally, the provisioning of medical care.

### Public Health Sector

The public health sector consists of the central government, state government, municipal & local level bodies. Health is a state responsibility, however the central government does contribute in a substantial manner through grants and centrally sponsored health programs/schemes. There are other ministries and departments of the government such as defence, railways, police, ports and mines who have their own health services institutions for their personnel. For the organized sector employee's (public & private) provision for health services is through the Employee's State Insurance Scheme (ESIS).

The National Health Policy envisages a three tier structure comprising the primary, secondary and tertiary health care facilities to bring health care services within the reach of the people. The primary tier is designed to have three types of health care institutions, namely, a Sub-Centre (SC) for a population of 3000-5000, a Primary Health Centre (PHC) for 20000 to 30000 people and a Community Health Centre (CHC) as referral centre for every four PHCs covering a population of 80,000 to 1.2 lakh. The district hospitals were to function as the secondary tier for the rural health care, and as the primary tier for the urban population.

The tertiary health care was to be provided by health care institutions in urban areas which are well equipped with sophisticated diagnostic and investigative facilities. In pursuance of this policy, a vast network of health care institutions has been created, both in rural and urban areas. Increased availability and utilisation of health care services have resulted in a general improvement of the health status of our population, as is reflected in the increased life expectancy and marked decline in birth and mortality rates over the last fifty years. However, these achievements are uneven, with marked disparities across states and districts, and between urban and rural people.

As on March, 2010, there were 147068 Sub Centres, 23673 Primary Health Centres and 4535 Community Health Centres functioning in the country in addition to 1579 District Hospitals/Sub-divisional Hospitals.

### **Structure of Ministry of Health and Family Welfare**

The Ministry of Health and Family Welfare consist of the following four Departments:

- Department of Health and Family Welfare
- Department of AYUSH
- Department of Health Research
- Department of AIDS Control

While Department of Health and Family Welfare is responsible for implementation of national level programmes for control of communicable and non- communicable diseases, hospitals and dispensaries and medical education, the department of AYUSH takes care of promotion of indigenous systems of medicine such as Ayurveda, Homoeo, Unani, Siddha and ongoing research in indigenous medicine. The Department of Health Research is mainly concerned with research in medical and health activities. The Department of National AIDS Control Organisation (NACO) is responsible for planning and implementation of programmes for prevention and control of AIDS.

### **Thrust Areas of Department of Health and Family Welfare**

The National Health Policy 2002 aims to achieve acceptable standards of good health amongst general population of the country. In line with the policy frame work, the National Rural Health Mission, the flagship programme of Ministry of Health and Family Welfare was launched in 2005 to provide accessible, affordable and equitable health care services for people living in rural areas of the country with focus on under-served population and marginalized groups. The Goal of the Mission is to improve the availability of and access to

quality health care by people, especially for those residing in rural areas, the poor, women and children.

The Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. The Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system, and operationalising community health centers into functional hospitals meeting Indian Public Health Standards in each Block of the Country.

**Monitoring against set standards:** Clear standards are defined for infrastructure and deployment of Human Resources to ensure provision of quality services at all levels through the Indian Public Health Standards (IPHS). With IPHS the minimum requirements at the facility level in terms of infrastructure and human resources has changed. Based on past experiences, the guidelines have been revised.

## **1. Communitisation:**

- a) **ASHA:** More than 8 lakh women have been trained (minimally in the first module) and deployed as ASHAs at the village level. More than 6.9 lakh ASHAs are provided with drug kits. The deployment of these Activists have opened the space for community participation and facilitation of services and increased utilization of public facilities. ASHAs have contributed significantly in promotion of JSY and institutional delivery, and the promotion of attendance on immunization day.

**Rogi Kalyan Samitis/ Hospital Development Societies:** Rogi Kalyan Samiti (Patient Welfare Committee)/ Hospital Management Society is a simple yet effective management structure. It is a registered society that acts as a group of trustees for their respective hospital. RKS grants, annual maintenance grants and untied funds are being given to each of these societies to empower them to undertake activities necessary to ensure smooth functioning of the facilities. RKSs decide about the procurement issues, rate fixation of the services and renovation plans. RKSs have also provided water filters, inverters and other such utilities to health facilities. In

some States like Tamil Nadu and Kerala, RKS has also been actively involved in raising funds from local sources for betterment of health facilities. Presently, there are 30818 RKSs functional in the country, of which 1198 RKSs were registered in the last one year.

- b) Village Health, Sanitation and Nutrition Committees (VHSNC):** It is an important tool of community empowerment at the grassroots level. The VHSNC reflects the aspirations of the local community, especially the poor households and children. This year the mandate of the pre-existing Village Health and Sanitation Committee was expanded and the component of nutrition was added. They were renamed as Village Health, Sanitation and Nutrition Committee. Untied grants of Rs. 10,000 are provided annually to VHSNC under NRHM, which are utilized through involvement of Panchayati Raj Representatives and other community members in many states. Presently, there are 4.95 lakh VHSNCs functional at the village level in the country.
- c) District level Monitoring and Vigilance Committee (DLVMC):** In this year, setting up of District level Monitoring and Vigilance Committees was initiated as an additional mechanism of monitoring NRHM and its various dealings by including the Community and Panchayati Raj members. Guidelines for making such a committee and its functions were prepared and sent to States.
- 2. Human Resources augmentation:** Nearly 1.5 lakh skilled Human Resources are added in the Public Health System in the last 6 years under NRHM. Of these, 41% are ANMs, 20% are staff nurses, and 14% are Medical Officers including Allopathic and AYUSH doctors. In the last one year (since June 2010), 1334 MBBS doctors, 2003 Specialists, 4892 staff nurses and 3079 AYUSH doctors were added in the system. 14711 ANMs were added and deployed at the sub-centres. As of June 2011, there were 61436 sub-centres with a second ANM.
- 3. Improved Programme Management:** Programme Management is being improved by addition of managers and accountants at State, District, Block and also facility levels. Thus, presently all the states have a State level Programme Management Unit and 636 districts have established a full-fledged District Programme Management Units. Overall, more than 15000 personnel have been added in the capacity of programme managers, accounts managers and data managers at the State, District, Block and facility levels in the last 6 years.



**4. Infrastructure Development:** Through decentralized planning, the State undertakes new constructions of facilities to meet acute gaps in access to public health services under NRHM. Further, it also identifies facilities for upgradation and renovation at all levels. Thus, in the last 6 years (up to June 2011), 55 New Constructions and 238 projects of upgradation and renovation have been completed at the District level facilities; 252 New Constructions and 1238 projects of renovation and upgradation have been completed at the CHC level facilities; 1713 New Constructions and 4919 renovations and upgradation have been completed at the PHC level and 7802 New Constructions and 8853 projects of renovations and upgradations have been completed at the Sub-centres. Currently, 2510 facilities are operational as First Referral Units (FRU) in the country and 127 centres were made operational as FRUs in the last one year.

### **Thrust Areas of Department of AYUSH**

The strategic role of AYUSH to meet health needs as part of medical pluralism was visualized at the beginning of 11<sup>th</sup> Plan. As “better health is not only about curative care but also about better prevention”, the need of effective contribution from AYUSH systems, which are by and large preventive and promotive health systems, is thought of with strategic interventions and programmatic utilization of AYUSH among communities at national and global levels.

With the perpetual growth of demand of improvement in various aspects of AYUSH, Government response in allocating financial outlay for AYUSH has grown phenomenally over the plan periods. In the 11<sup>th</sup> Five year Plan (2007-12) it is to the tune of Rs. 3988 crore, which is the highest ever since the Dept. of AYUSH came in to being in 1995. Through various Centrally Sponsored and Central Sector Schemes implemented during the last three Plans, a lot of financial support has been provided to AYUSH sector for strengthening of education & industrial infrastructure, capacity building of institutions & workforce, quality control & strengthening of regulatory mechanism and awareness building. These schemes appear to have succeeded in bridging the gaps to certain extent and need to be continued to build up marked quality difference, outreach and outcomes in strengthening the mutually inclusive growth of various AYUSH facets for health benefits of the people. Adequate implementation of the schemes, predominantly on account of huge size and needs of the AYUSH sector and limitations of funding provisions, has to be ensured to achieve value outcomes with effective strategies and monitoring mechanisms.

The mandate of AYUSH Department encompasses seven key areas of activity and intervention, namely AYUSH services, Medicinal Plants, Research & Development, Human Resource Development, International Collaboration, IEC and Drug administration. The prime functions of the Department are aimed at improving health delivery mechanism in terms of quality & outreach, enforcement of educational standards, quality assurance & effective regulation of drugs, fostering collaborative & interdisciplinary AYUSH research of contemporary relevance, awareness building both within and outside the country, mainstreaming of AYUSH in health delivery system and development of properly trained and professionally competent AYUSH workforce.

### **Thrust Areas of Department of NACO**

In 1992, the Government launched the first National AIDS Control Programme (NACP I) and in 1998 NACP II was initiated. Based on the learning from NACP I and II, the government designed and implemented NACP III (2007-2012) with an objective to **“halt and reverse the HIV epidemic in India”** by the end of the project. There is a steady decline in overall prevalence and nearly 50% decrease in new infections over last ten years. India is committed to achieving Millennium Development Goals (MDG) in reducing HIV mortality. The country is clearly progressing towards achieving this goal through focused effort by a large number of partners brought together through National AIDS Control Program.

NACP is an excellent example of community involvement and ownership in developing appropriate strategies and in reaching out to high risk and vulnerable populations. The program has been greatly benefited by the critical role played by civil society and PLHA networks in community mobilization, increasing access to services, addressing stigma and discrimination issues. NACP IV will build on the motivation of these stakeholders particularly at the community level (NGOs, social activists, service providers, consumers and policy makers) to actively engage with complex issues of HIV. It will focus on reduction of stigma and discrimination at health care setting, work places and educational institutions.

Funding from Development Partners has played significant role in supporting the NACP programme interventions in the past. During NACP III external resources were substantial. In fact Domestic Budgetary Support to the Department of AIDS Control was less than 5% of the Department’s budget. However, in light of the global economic recession external funding for HIV will shrink dramatically. Therefore, the next phase of the programme will primarily depend upon domestic resources. Therefore, one of the critical challenges is to move towards more effective and efficient approaches through convergence and integration

of programme components such as basic HIV services, comprehensive care, support and treatment with National Rural Health Mission (NRHM) and general health systems to the extent possible.

Based on the learning from NACP II, the government designed and implemented NACP III with an objective to “**halt and reverse the HIV epidemic in India**” by the end of the project period. Analysis of targets done at the time of mid-term review and subsequent joint implementation review mission suggest that most of the targets have been achieved or will be achieved by end of the program by 2012. Results of the epidemiological models and program data (surveillance ANC, HRG population, and ICTC) shows that the target of halting the epidemic has been achieved and reversal process has been initiated at the national level during this time frame.

NACO has been conducting regular thematic **Mass Media** campaigns on TV and Radio to cover issues of condom promotion, ICTC/PPTCT, STI treatment and services, stigma and discrimination, vulnerability of youth to HIV, ART, HIV-TB and blood safety. The Red Ribbon Express (RRE) program covered 8 million population and 81,000 grassroots functionaries were trained on HIV/ AIDS issues in the villages to further take down the messages. In addition, through mainstreaming with NYKS and other youth organizations, out-of-school youth have been reached. As part of mainstreaming efforts a large number of self-help groups, ASHA, ANM, Anganwadi Workers and PRI members have been trained/ sensitized on HIV/AIDS.

The thrust areas of the Department are:

- High Risk Group (HRG) Coverage:
- Coverage of Bridge Populations
- Counselling and Testing:
- Condom Promotion:
- STI Control:
- Provision of Safe Blood:
- Red Ribbon Express (RRE) - special exhibition train, on HIV/ AIDS and other health issues.
- Strategic Information Management: Capacity Building:

### **Thrust Areas of Department of Health Research**

Health research is the key to a well functioning and effective health sector in the country.

Major scientific breakthroughs hold the promise for more effective prevention, management and treatment for an array of critical health problems. “Over the years, health research activity in the country has been very limited. In the Government sector, such research has been confined to the research institutions under the Indian Council of Medical Research, and other institutions funded by the Central/ State Governments. Research in the private sector has assumed some significance only in the last decade.

There must be further efforts for integration of various systems of medicine, with emphasis on developing synergy between modern and AYUSH systems of medicine and offering choice of system of treatment to patients. There is a need to institutionalise courses in various medical systems for practitioners belonging to other systems, e.g., we could consider courses for training in basic allopathic care for AYUSH practitioners who desire to acquire these skills. Similarly there could be courses for basic care in specific systems like ayurveda and homeopathy for desiring allopathic practitioners. Of course in all these cases, practice should be in keeping with the level of training and expertise based on some regulation.

Adequate support for ongoing research about validity and effectiveness of integrated practices. This should be combined with weeding out of specific harmful practices through research actively involving indigenous practitioners. As in the case of modern medicine, there is a definite need for strengthened professional regulatory mechanisms to be developed within the framework of each system.

Over a period of time, there is a need to work out a model of primary healthcare based on integration of different systems, incorporating various efficacious and synergistic remedies. These systemic changes would be part of the larger process of moving towards a system for universal access to healthcare, which provides space for medical pluralism and rational integration of systems.

## **Chapter -V**

### **Human Resources for Health (HRH)**

Shortage of human resources is a distressing feature of India's healthcare services. Several initiatives have been taken in the a) Medical Education b) Nursing Education and c) Para Medical Education, to overcome the shortage of human resources for health.

#### **PART-I**

#### **MEDICAL EDUCATION**

At present there are 334 medical colleges in the country. Out of which 154 medical colleges are in government sector and the remaining 180 medical colleges in private sector. The annual intake capacity of these medical colleges is approximately 41,500 students. The Post Graduate capacity of these medical colleges is approximately 21,100. During the academic year 2011-12, 20 new medical colleges were established in the country. During this period, 4442 MBBS seats and 2398 Post Graduate seats were added to the existing seats in the recognized colleges. Though shortage of Doctors / Specialists in the country as whole is not available, according to Rural Health Statistics in India 2010, the shortage of Doctors at PHC and Specialist in CHC against sanctioned posts is estimated at 13794 in 2010

#### **A. Steps taken to overcome shortage of Human Recourses**

##### **A.1 Increase in the number of seats**

During the last three academic years (2009-10, 2010-11 & 2011-12), 8217 MBBS seats and 5120 PG seats were created. Apart from this, 47 new medical colleges were established during this period. Out of these 47 new medical colleges, 21 have been established in 2011-12. In 2011-12, a total number of 2350 PG seats and 4542 MBBS seats have also been added to the existing capacity.

##### **A.2 Setting up of new medical colleges**

###### **Land Requirement**

- The norm of Land requirement is relaxed from the current requirement of 25 acres to 20 acres throughout the country.
- In Metropolitan (Mumbai, New Delhi, Kolkata & Chennai) and A Grade cities

(Ahmadabad, Hyderabad, Pune, Bangalore and Kanpur), medical colleges can have multi-storied buildings with the required floor area as per MCI norms. In such cases the requirement of land would be 10 acres instead of 20 acres.

- In urban areas where the population is more than 25 lakhs (other than nine cities mentioned above) and hilly areas and notified tribal areas, North Eastern States, Hill States and Union Territories of Andaman & Nicobar Islands, Daman & Diu, Dadra & Nagar Haveli & Lakshadweep, the land can be in two pieces at a distance of not more than 10 kms.

### **Bed Strength**

- In North Eastern States & Hill States: The bed occupancy would be 50% at inception but increases to 60% at subsequent annual renewals for 50/100 MBBS seats. Earlier it was 60%, /70% for 50/100 seats. (Notified in Oct 2010)

### **Infrastructure**

- The requirement of infrastructure like institution block, library, auditorium, examination hall, lecture theatres, etc. has been rationalized for optimal use.
- Different laboratories in different departments have been pooled to have common laboratories which can be used by all the departments for better utilization of the equipment and space and to reduce capital expenditure.
- Requirement of hostels and residential quarters have been reduced for optimal utilization in tune with the demand.

### **Entrepreneurs:**

- Earlier only universities, State Governments/UTs, autonomous bodies promoted by Central and State Governments, registered societies; religious and charitable trusts were permitted to open medical colleges. Now companies registered under the Companies Act are also allowed to establish medical colleges.

### **Intake capacity**

- Maximum intake at MBBS level has been raised from 150 to 250.

## **A.3 Shortage of faculty in medical colleges**

### **Age Limit**

- The ceiling on age limit for appointment of medical faculty has been raised from 65 to 70 years. (Notified in Nov 2010)

### **DNB Qualification**

- DNB qualification is recognized for appointment as faculty. (Notified in Nov 2010)
- DNB professionals are eligible for admission to super specialty courses (DM/M.Ch).

### **A.4 Shortage of faculty in medical colleges and specialists & super specialists**

- The ratio of teachers to students has been relaxed from 1:1 to 1:2 for a Professor in Broad Specialty and for Professor & Associate Professor in Super-specialty for postgraduate courses.
- Postgraduate and Graduate medical degrees of five English speaking countries (US, UK, Canada, Australia and New Zealand) recognized for practice in India.
- Medical colleges can now start Postgraduate courses in Pre and Para clinical disciplines at third renewal without waiting for recognition.
- Teaching experience required for appointment in various grades of medical faculty has been reduced.
- Central Government is providing financial assistance (Rs 1350 crore) to State Governments for strengthening and upgradation of government medical colleges to increase intake at Postgraduate level and start new PG courses.

### **A.5 Steps taken to encourage rural posting**

- Additional marks will be given in the Post Graduate Entrance Examination at the rate of 10% for each year of rural service subject to a maximum of 30% which a student will be able to get with three years of rural service.
- 50% Seats in post graduate diploma courses have been reserved for medical officers in Government service who have served for at least three years in remote and difficult areas.

## **B. Up-gradation of Medical Colleges - Centrally Sponsored Schemes to provide financial assistance to State Governments**

To address the shortage of faculty & specialists, the Central Government is providing financial assistance to State Governments for strengthening and up-gradation of govt. medical colleges to enable them to create new PG seats and start new PG Departments. In

the years 2009-10 & 2010-11, Rs 241 crore was released to 46 medical colleges across the country which would result in an **additional 2384 PG seats**. In the current financial year **2011-12** also, a sum of **Rs 200 Cr** has been released to **21** medical colleges.

### **C. Bachelor of Rural Health Care (BRHC)**

To strengthen the primary health care especially at the Sub Centre level and to meet the growing health challenge it is considered necessary to create a cadre of mid-level health workers. Accordingly, the Ministry of Health and Family Welfare favoured at starting a BRHC course in the country. In this direction, the draft curriculum has been prepared and sent to MCI on 28th October 2010. Inputs from MCI on the draft course curriculum have been received, based on which it was further revised and sent to MCI.

### **D. National Commission for Human Resources for Health (NCHRH)**

The Hon'ble President of India in her address to the Joint Session of Parliament on 4<sup>th</sup> June, 2009, announced the Government's intention to set up a National Commission for Human Resources for Health (NCHRH) as an overarching regulatory body for health sector to reform the current framework and enhance supply of skilled personnel. The proposal was discussed with all stake holders including State Governments and experts in the field. On the basis of comments received from States and other stakeholders, a draft Cabinet Note and Bill was prepared and submitted in the Cabinet Secretariat in March 2011. Subsequently the same has been revised on the basis of the inputs received from Departments of Higher Education and Legal Affairs and Legislative Department.

### **E. National Eligibility and Entrance Test (NEET)**

The Central Government is engaged with a proposal for introduction of a Common Entrance Test for admission to medical courses at both Undergraduate and Postgraduate levels. The need for a system has been caused by the fact that presently students have to appear in multiple MBBS entrance exams across the country resulting in several hardships to them and their parents. Apart from this, the prevailing system has given rise to differential for standards for admission to MBBS course compromising the merit component. It is expected that NEET would mitigate the need of students to appear in multiple entrance tests and promote merit in the admission procedure. Apart from this, NEET would not disturb the reservation policy of individual states, fee structure prescribed by the State Committees and the distribution of seats in different quotas.



## **PART-II**

### **NURSING EDUCATION**

Presently the nurse physician ratio in the country is 1.5:1 as against international norm of 3:1. Current annual training capacity for nurses is 1.75 lakh. Number of registered nurses in the country is 1.70 lakh out of which around 4 lakh are active.

#### **A. Steps taken to facilitate reforms in the nursing sector:**

- Student patient ratio has been relaxed from 1:5 to 1:3.
- The land from 5 acres has been relaxed to construct building of 54,000 sq. ft. for School/College of Nursing and Hostel.
- Relaxed norms for teaching faculty to start B.Sc. (N) Program.
- Qualification and Experience of the Nursing Teachers has been relaxed up to 2012.
- Sharing of teaching faculty for both Diploma and Graduate Programs.
- Relaxation for opening M.Sc. (N) program. Super specialty Hospital can start M.Sc. (N) without having under graduate program.
- Relaxation of teacher student ratio for M.Sc (N) program has been relaxed from 1:5 to 1:10.
- Essentiality certificate to open M.Sc. (N) program from State Government is not required for those institution which are already having Indian Nursing Council recognized program like Diploma or Degree.
- Admission for Nursing allowed for married candidates.
- Age increased for Teaching Faculty up to 70 years.
- Maximum number of 100 seats will be given to those parent hospitals with 300 beds without insisting Medical College.
- A Centrally sponsored scheme providing financial assistance of Rupees 2030 crore to high focus States of the country for establishment of 132 ANM and 137 GNM Schools is under implementation. During the last financial year, Rs 252 crores has already been released for opening 53 ANM and 45 GNM schools.
- A scheme for establishment of 6 Colleges of Nursing at the sites of AIIMS like institutions at the cost of Rs. 120.00 crores is under implementation.

#### **B. Schemes for financial assistance to State Government**

Under the Centrally sponsored scheme of Development of Nursing Services the following schemes exist:

- Training of nurses – Rs 1.65 lakh per training program.
- Strengthening of Existing schools of nursing – During the 10th Plan period a sum of Rs 10 lakh was released and in the current Plan period a sum of Rs 25 lakh has been approved.
- Up gradation of the school of nursing attached to medical college in to college of nursing - During the 10th Plan period a sum of Rs 1.50 Cr was released and in the current Plan period a sum of Rs 6 Cr has been approved.

**C. New Scheme strengthening/up gradation of nursing services** – the components of this new scheme are as follows:

- Opening of ANM/GNM schools in different States.
- Strengthening of State Nursing Councils @ Rs 1.00 Cr per Nursing Council.
- Strengthening of nursing cells (Directorate of Health Services) at the State level @ Rs 1.00 Cr per State/UT.

**D.** A Centrally sponsored scheme providing financial assistance of Rs 2030 Crore to high focus States of the country for establishment of 132 ANM and 137 GNM schools is under implementation. During the last financial year, Rs 252 Cr has already been released for opening 53 ANM and 45 GNM schools. In the current financial year also, a sum of Rs 8.50 Cr has been released to Nagaland for setting up of 2 GNM schools.

**E.** A scheme for establishment of 6 Colleges of Nursing at the sites of AIIMS like institutions at the cost of Rs. 120.00 crores is under implementation.

### **Part -III Paramedical Education**

Hitherto in the field of Paramedical Education, there is no regulatory body governing these professions except the Pharmacy Council of India (PCI). The Ministry is proposing to create an overarching regulatory body *viz.* NCHRH, which is aimed to address all such issues related to paramedical education. However, as a prelude to this, the Ministry has taken the following various steps to address these issues.

- To standardize paramedical education across the country, one National Institute of Paramedical Sciences (NIPS) at Delhi and 8 Regional Institutes of Paramedical

Sciences (Chandigarh, Lucknow, Bhopal, Hyderabad, Coimbatore, Bhubaneswar, Patna and at an identified location in Maharashtra) are being set up at the cost of about Rs 1150 crore out of which a sum of Rs 87 Cr has been released.

- A scheme of Rs 85 crore as financial assistance is under implementation for Strengthening/ Up-gradation of Pharmacy Institutions across the country to conduct Degree and Postgraduate courses.

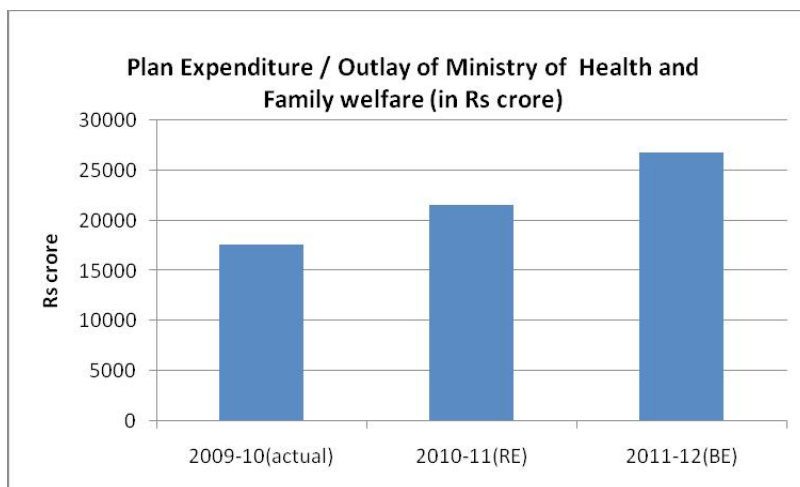
## **Chapter-VI**

### **Financing of Health Care**

The health care needs of India are vast and divergent . Health indicators viz. Maternal Mortality Ratio, Infant Mortality Rate, Life Expectancy at Birth are a matter of concern. Concerted efforts are required in bridging the shortfall in the availability of health infrastructure and its delivery for better health outcomes. The health delivery channels and access thereto need to be structured and sequenced. Health financing accordingly assumes great importance in the architecture of the health system. A desirable health financing edifice is one which not only reduces the ‘Out Of Pocket’(OOP) expenditure on health care but also lessens the probability of any financial impoverishment while meeting healthcare needs.

As per National Health Accounts (NHA2009), the OOP in India in 2004-05 was more than two- thirds of total health spending, which is high compared to global standards. Moreover, rural households accounted for 62 percent of the total OOP expenditure by households for availing different health care services while urban households accounted for 38 percent. Such high share of OOP expenditure needs to be reduced as it aggravates the inequities by impoverishing the poor further. Therefore, the role of the Government assumes importance in this context. The breakup of total health expenditure, in terms of source of financing, shows that around 78 percent of the expenditure was financed by private entities with households accounting for the major share (71 percent). About 20 per cent of the total health expenditure was financed by the Central Government, State Government and local bodies while external flows accounted for 2 percent of the total health expenditure. Breakup of total health expenditure between public and private providers show that private providers of health in 2004-05 accounted for about 77 per cent of health expenditure incurred.

In this backdrop, public intervention in making health care available and affordable is essential to meet the objectives of universal coverage, affordability and good health care delivery. Accordingly, the Government of India has been mobilizing resources for distributing across different entities, intervention and activities in the health system. The Plan outlay of the Ministry of Health and Family Welfare for health has been increased by 52 percent to Rs. 26760 crore in 2011-12, as against the levels in 2009-10 (actual).



Source: Budget 2011-12

This outlay constitutes among others, Rs. 17840.00 crore under NRHM , Rs. 2356.00 crore for the benefit of the schemes/projects in the North Eastern Region(NER) and Sikkim and Rs 5720.00 crore for Health. The allocation under NRHM, aims at providing universal access to equitable, affordable and quality health care that is accountable as well as responsive to the needs of the people. A provision of Rs. 1616.57 crore has been earmarked for the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) Scheme which is aimed at strengthening the tertiary sector. Further, development of human resources in health sector through building up of necessary institutional structures is targeted. The National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), which aims at health promotion and prevention, strengthening of infrastructure including human resources, early diagnosis and management and integration with the primary health care system through non-communicable disease cells at different levels for optimal operational synergies, has been allocated Rs.125 crore in 2011-12. During 2011-12, an amount of Rs. 1700 crores has been earmarked for National Aids Control Programme whose objective is to halt and reverse the HIV epidemic in the country by integrating programmes for prevention, care, support and treatment. The Government also seeks to develop and promote the Indian system of medicines in an organized and scientific manner by involvement/integration of AYUSH systems in National Health care Delivery and has allocated Rs.900 crore as plan outlay in 2011-12.

In addition to increasing the resource allocation for the health sector the Central Government is also playing a critical role in facilitating access to health care delivery channels, public and private, through subsidized health insurance schemes like the Rashtriya Swasthaya

Bima Yojana (RSBY) for providing a basic health care to poor and marginal workers. The RSBY is being extended to cover MGNREGA beneficiaries and beedi workers. In 2011-12 it is proposed to extend the coverage to the unorganized sector workers in hazardous mining and associated industries like slate and slate pencil, dolomite, mica and asbestos etc.

The Eleventh Five Year Plan had targeted for increasing the public spending on health to atleast 2 percent of GDP by the end of the Plan. However total public health expenditure as a percent of gross domestic product currently stands at around 0.9 percent. To achieve the target set in the Eleventh Five Year Plan continued effort is called for. Factors essential for achieving this target include among others, greater resource mobilization and re-engineering of the resource flows. The Government is committed to providing high quality cost effective health care and delivery especially to the vulnerable sections of society.

## **Chapter-VII**

### **Policy Challenges and Need for Consensus**

The National Rural Health Mission was launched on 12<sup>th</sup> April 2005, with the overarching objective of providing accessible, affordable, effective, accountable and reliable health care to all citizens and in particular, to the poorer and vulnerable sections of the population including women and children. The Mission aimed at undertaking an architectural correction of the health system to enable it to effectively handle the increased allocations as promised under the National Common Minimum Programme (NCMP).

Although progress has been made towards achieving the goals of NRHM much more needs to be done in order to attain the Millennium Development Goals (MDGs). The provision of adequate human resources for health remains a challenge. Further, inequities based on rural–urban divides, gender imbalances and caste patterns are concerns that need eradication. In addition, there is also the need to scale up and consolidate the gains made since the inception of NRHM. The current policy shift is towards addressing inequities, through a special focus on inaccessible and difficult areas and poor performing districts. The next phase of NRHM aims at retooling the health policies to effectively address the current scenario and revitalize the health system.

#### **1. Increase Public Investment**

The accepted norm for public spending on health is 2-3 per cent of GDP and about 15 per cent of public budget. It is proposed to increase the public expenditure on health in the 12<sup>th</sup> Plan to 2-3% of the GDP from the current level of less than 1%.

#### **2. Purchasing Health Care Services from the Private Sector**

As per the report of the working group on NRHM in the 12<sup>th</sup> Five Year Plan it would be prudent to continue strengthening the public health infrastructure, keeping quality in mind and it is recommended that preventive health care and also primary health care should be delivered through public health infrastructure and should be kept outside the ambit of health insurance and health insurance for secondary and tertiary care should be introduced with caution. In the Twelfth Plan, Public Private Partnerships would play an important supplementary function to the development and strengthening of the public health function. PPPs would supplement and not substitute existing public health systems.

### **3. Focus on Health Determinants**

No insurance policies or government spending on health can be sustainable if the basic status of health as determined by access to safe water, nutrition and sanitation are not ensured. We need to move towards ensuring access to safe drinking water, sanitation including waste disposal systems, controlling environmental pollution and ensuring a measure of nutritional safety nets. Each of these basic entitlements—which has profound impact on health—is to be secured through a coordinated approach.

### **4. Human Resources for Health**

One major constraint in achieving universal access to health services is the non-availability of skills and trained human resources. By international standards, India fares very poorly, calling for strong remedial action. This requires primarily:

- a) Opening many more medical colleges and nursing schools, taking care to see by positive state action, that most of these are opened in the areas where skilled human resource densities are low and professional educational institutions are few. This would also require major efforts at faculty development and the use of modern technology to provide quality education. The challenge is to ensure that these colleges open up where they are needed most.
- b) How can we make our health services less doctor-dependent and more nurse-enabled? Can new models of medical and nursing and paramedical education be created to meet specific shortages? Should every medical college and nursing college be linked to a district hospital and a district health system and augment the skills of the service providers there?
- c) Putting in place a National Council for the Human Resources in Health, which would play a guiding role in defining national human resource requirements and policies to meet these requirements and which should define the regulatory framework with respect to professional bodies and standards and the expansion of professional and technical education with quality.

### **5. Impact of Technology and Technology Assessment**

Technological developments have contributed to improved quality outcomes and have also in several cases reduced the need for hospitalisation. There's been rapid development in telemedicine which has the ability to make the services of a specialist needed at every community health centre redundant. The coming years will therefore require a shift



in the way health care delivery is organised. How can public health policy integrate these developments into its delivery systems which have already been attempted in the private sector? What investments would need to be put in for obtaining these skills and competencies into public sector provisioning? Further given the inappropriate and inefficient use of technology resulting in increased biological and economic costs there is a need for guidelines, technology audits and cost-effective studies. Creation of an institution on the lines of the National Institute of Clinical Excellence would help develop evidence for technological assessment and decision-making. The issue is how will adoption of such guidelines be regulated and enforced?

## **6. Rising Out-of-Pocket Expenditures**

A major expenditure item is drugs. With the patent regime and the deregulation of administered pricing regime, prices of new drugs and drugs for many non-communicable diseases have made them unaffordable to the majority of the poor. There is a need to develop a balanced policy which would encourage innovation but also ensure that none are denied access to life-saving drugs due to inability to pay.

## **7. Health Promotion**

The rise of institutional care and technology necessitating a measure of specialisation and the increasing demand for such technology-based care have ‘medicalised’ health care. On the one hand, the huge wealth of low-cost, rational and sustainable systems of traditional medicines is not being optimally tapped and on the other basic preventive health care has been given a secondary place in public policy. In almost every state the public health cadres trained to promote good health, prevent disease and educate good-health values have been replaced by clinicians with little interest in preventing ill-health. India needs a health system where treating the disease is not the only option but health promotion is given priority.

## **8. Role for Civil Society Organisations**

In several parts of India, civil society organisations have played a pioneering role in developing community health programmes. The process of community participation that has started needs to be strengthened with a shift of much greater share of promotive and preventive work to community-level institutions and functionaries. The support from these NGOs should be broad based in the twelfth five year plan. A substantial proportion would be for capacity building and support for community processes (the VHSC, the ASHA programme, public participation in RKS, public participation in district planning and in

community monitoring). The element of community monitoring could be further expanded in areas such as improving data quality in HMIS and MCTS, measuring availability of drugs, monitoring support to JSSK, support to users in RSBY and other cashless PPP arrangements. The engagement with civil society organisations will be operationalised in a decentralised way.

## **9. Role of Centre in State Health Systems Development**

At present Central funding is largely programmatic. However it is increasingly being recognised that unless states also invest in primary health services the desired improvements in health indicators cannot be achieved. It is worth asking if it would not be more efficient to shift from programme-based financing to performance-based financing, where allocations are linked to achievements of specified indicators that are assessed by independent evaluations.

## KEY COMPONENTS OF RCH STRATEGY AND PROGRESS MADE

Key components of RCH strategy	Baselines and Progress Made	Baselines and Progress Made
Janani Suraksha Yojana (JSY) for promotion of institutional deliveries:	7.39 lakh beneficiaries in 2005-06 to about 1.13 crore in 2010-11.	Over one crore beneficiaries
Improving facilities for institutional deliveries on a 24*7 hour basis.	7823 Primary Health Care facilities (33 per cent of total) and 4000 out of the 4535 CHCs (88 per cent) strengthened to function on a 24*7 hour basis.	100 per cent of CHCs and 50 per cent of all PHCs to become 24*7 functional facilities. Ensure all the present 7823, 24*7 PHCs and 4535 CHCs are delivering basic emergency obstetric care services with specified quality as per guidelines.
Providing for Emergency Obstetric Care:	2510 facilities (district hospitals, sub-divisional hospitals, and CHCs) operationalised as First Referral Units (FRUs)	100 per cent of FRUs to be made functional as per standards.
Universalising and improving quality of antenatal care	51 per cent pregnant women received 3 or more antenatal care checkups. Early detection of pregnancy through rapid detection kits (Nishchay), by field level workers (ANMs and ASHAs) introduced.	To increase three ANC coverage and full ANC coverage rates by at least 10 per cent every year till over 95 per cent ANC coverage achieved.
Post natal care	As per DLHS-3, 49.7% women received post natal care within 2 weeks	To increase post natal care within 2 weeks by at least 5 per cent every year till over 95 per cent PNC coverage achieved.
Skilled Birth Attendant Training	25 per cent of nurses & ANMs complete training	Training of SBAs to be expedited with focus on poor performing districts with a focus of trained SBAs to be posted at all the delivery points in the State. MOs training to be continued.
Safe Abortion Services and RTI/STI services	Current baseline not available	All FRUs and 24*7PHCs providing emergency obstetric care should also be providing safe abortion services

**CHILD HEALTH-MAIN STRATEGIES, PROGRESS MADE AND PROGRESS AIMED FOR NEXT YEAR**

<i>Main strategy</i>	<i>Baselines and Progress Made</i>	<i>Progress aimed for next year</i>
Integrated Management of Neonatal & Childhood Illnesses (IMNCI):	Ongoing in 433 districts. Total 4.9 lakh front line workers are trained in IMNCI. IMNCI has been incorporated in curriculum of Medical colleges, SN and ANM schools.	To complete training of service providers in all these 433 districts and also ensure that all poor performing districts are covered as a priority.
Facility based Integrated Management of Neonatal & Childhood Illnesses (IMNCI):	2970 MOs & SNs are trained. These trained workers will be providing facility based child health care services.	To provide child health care services in facility where paediatrician are not posted/ placed specially in high focus districts and blocks.
Home Based Newborn Care.	Home Based Newborn and Child Care has been incorporated into the ASHA training (Module 6 & 7) and duties.	To train ASHAs in poor performing districts as a priority to conduct home based newborn and child care. Home visit are to be promoted through incentives to ASHA.
Navjat Shishu Suraksha Karyakram (NSSK):	Essential newborn care through trained health care providers in NSSK. 44977 health personals have been trained so far.	To complete training of service providers at each newborn care corners established at the delivery point. All poor performing districts are covered as a priority.
Facility Based Newborn and Child Care:	293 Sick Newborn Care Units (SNCUs) have been set up to address care of sick neonates at facilities.	All district hospitals to have SNCUs. All sites of institutional delivery to have newborn care corners.
Infant and Young Child Feeding (including Improving Early and Exclusive Breastfeeding, and Complementary Feeding)	Exclusive breastfeeding 36.8 percent- Integrated into ASHA training module.	Increase to 50 per cent in one year. To train ASHAs on this in all the poor performing districts

<i>Main strategy</i>	<i>Baselines and Progress Made</i>	<i>Progress aimed for next year</i>
Reduction in morbidity and mortality due to Acute Respiratory Infections (ARI) and Diarrhoeal Diseases Strengthening Routine	Use of ORS in diarrhoea at 42.8 percent. Appropriate care for acute respiratory infection : 82.6 percent	To increase by at least 10 per cent Annually. To promote the zinc with ORS for diarrhea management.  ARI and diarrhea management are to promoted through ASHA Module 6 & 7.
Immunisation:	Full Immunisation at 61.0 percent	Full Immunisation to increase by 10 per cent in the next year

## Key Demographic Health Indicators and Relationship to Poverty and Wealth

High Focus EAG States	Life Expectancy at Birth (2002-06)	IMR (2010)	MMR 2007-09)	TFR (2010)	Poverty Level (2004-05)	Per capita NSDP 2008-09 ( in Rs.)	Per capita Health Exp.(in Rs.)#
Bihar	61.6	48	261	3.7	41.4	10206	513
Chhattisgarh	-	51	-	2.8	40.9	19521	772
Jharkhand	-	42	-	3.0	40.3	16294	500
Madhya Pradesh	58.0	62	269	3.2	38.3	13299*	789
Odisha	59.6	61	258	2.3	46.4	18212	902
Rajasthan	62.0	55	318	3.1	22.1	19708	761
Uttar Pradesh	60.0	61	359	3.5	32.8	12481	974
Uttarakhand	-	38	-	2.55 (2005-06)	39.6	25114	818
<b>High Focus NE States</b>							
Arunachal Pradesh	-	31	-	-	17.6	22475	1454
Assam	-	58	390	2.5	19.7	16272	774
Manipur	-	14	-	1.6@	17.3	16508	673
Meghalaya	-	55	-	3.1@	18.5	23069	894
Mizoram	-	37	-	2.0@	12.6	20483	1133
Nagaland	-	23	-	2.0@	19.0	17129*	819
Sikkim	-	30	-	2.1 (2004-06)	20.1	30652	1507
Tripura	-	27	-	1.7@	18.9	12481	1486
<b>General Category States</b>							
Himachal Pradesh	67.0	40	-	1.8	10.0	32343	1511
Jammu & Kashmir	-	43	-	2.0	5.4	17590*	1001
Andhra Pradesh	64.4	46	134	1.8	15.8	27362	1061
Goa	-	10	-	-	13.8	60232*	2298
Gujarat	64.1	44	148	2.5	16.8	31780*	953
Haryana	66.2	48	153	2.3	14.0	41896	1078
Karnataka	65.3	38	178	2.0	25.0	27385	830

High Focus EAG States	Life Expectancy at Birth (2002-06)	IMR (2010)	MMR 2007-09)	TFR (2010)	Poverty Level (2004-05)	Per capita NSDP 2008-09 ( in Rs.)	Per capita Health Exp.(in Rs.)#
Kerala	74.0	13	81	1.8	15.0	35457	2950
Maharashtra	67.2	28	104	1.9	30.7	33302*	1212
Punjab	69.4	34	172	1.8	8.4	33198	1359
Tamil Nadu	66.2	24	97	1.7	22.5	30652	1256
West Bengal	64.9	31	145	1.8	24.7	24720	1259
INDIA	63.5	47	212	2.5	27.5	25494	1201

Note: IMR: Infant Mortality Rate, MMR: Maternal Mortality Ratio, TFR: Total Fertility Rate, NSDP: Net State Domestic Product (Per capita Income) at constant (1999-2000) prices

‘-‘ : Not available  
\* : 2007-08

Source: (col. 2) to Col. (4): Registrar General of India; Planning Commission; for col. (6), NHA 2004-05, for Col. 8 table 1.3. , Col.7-CSO.

The MMR estimate of Bihar, Madhya Pradesh and Uttar Pradesh also apply to Jharkhand, Chhattisgarh and Uttrakhand respectively.

@ Data relates to 2005-07

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## LIST OF ABBREVIATIONS

ANC	:	Antenatal care
ANM	:	Auxiliary Nurse Midwife
ARI	:	Acute Respiratory Infection
ARSH	:	Adolescent Reproductive and Sexual Health
ASHA	:	Accredited Social Health Activist
AWW	:	Anganwadi Worker
AYUSH	:	Ayurveda, Yoga, Unani, Siddha and Homeopathy
BMI	:	Body Mass Index
BPL	:	Below Poverty Line
CBR	:	Crude Birth Rate
CDR	:	Crude Death Rate
CGHS	:	Central Government Health Scheme
CH	:	Child Health
CHC	:	Community Health Centre
DHFW	:	Department of Health and Family Welfare
DH	:	District Hospital
DLHS	:	District Level Household Survey
DPMU	:	District Program Management Unit
DOTS	:	Directly Observed Treatment Strategy
EAG	:	Empowered Action Group
EC	:	Emergency Contraception
EmOC	:	Emergency Obstetric Care
ESIS	:	Employees State Insurance Scheme
FDS	:	Fixed Day Services
FMG	:	Finance Management Group (MOHFW)
FP	:	Family Planning
FRU	:	First Referral Unit
GoI	:	Government of India
GDP	:	Gross Domestic Product
GNM	:	General Nurse Midwives
HIV	:	Human Immunodeficiency Virus
HMIS	:	Health Management Information System
HR	:	Human Resources
HRD	:	Human Resource Development
HDR	:	Human Development Report

JE	:	Japanese Encephalitis
ICDS	:	Integrated Child Development Services
ICMR	:	Indian Council of Medical Research
IDSP	:	Integrated Disease Surveillance Project
IEC	:	Information, Education and Communication
IMEP	:	Infection Management and Environment Plan
IMNCI	:	Integrated Management of Neonatal and Childhood Illness
IMR	:	Infant Mortality Rate
IPHS	:	Indian Public Health Standards
IUD	:	Intra Uterine Device
JRM	:	Joint Review Mission
JSY	:	Janani Suraksha Yojana
LLINS	:	Long Lasting Insecticidal Nets
LSAS	:	Life Saving Anaesthesia Skills
M&E	:	Monitoring and Evaluation
MDR	:	Multi Drug Resistant
MMR	:	Maternal Mortality Ratio
NACP	:	National AIDS Control Programme
NCD	:	Non Communicable Disease
NCRP	:	National Cancer Registry Programme
NFHS	:	National Family Health Survey
NGO	:	Non Governmental Organisation
NHA	:	National Health Account
NHP	:	National Health Policy
NRHM	:	National Rural Health Mission
NSDP	:	National State Domestic Product
NSSK	:	Navjat Shisu Suraksha Karyakram
NSSO	:	National Sample Survey Organisation
OOP	:	Out of Pocket Expenditure
PHC	:	Primary Health Centre
PPP	:	Purchasing Power Parity
RDK	:	Rapid Diagnostic Kits
RCH	:	Reproductive and Child Health
RKS	:	Rogi Kalyan Samiti
RSBY	:	Rashtriya Swasthya Bima Yojana
RTI /STI	:	Reproductive tract infection / Sexually transmitted infection
SBA	:	Skilled Birth Attendant

SNCU	:	Sick Newborn Care Unit
TB	:	Tuberculosis
TFR	:	Total Fertility Rate
THOA	:	Transplant of Human Organs Act

Government of India  
Ministry of Health and Family Welfare  
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