CHAPTER

1

Status of Heath Care System in India

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OUTLINE

The World Health Organization (WHO) defines *health* as a 'state of complete physical, mental and social well-being, not merely the absence of disease or infirmity'. Health and socioeconomic developments are so closely interrelated that it is impossible to achieve one without the other. Although economic development in India has been gaining momentum over the past decade, our health system is at crossroads. Even though government initiatives in public health have recorded some remarkable success over time, the Indian health system is ranked 118 among 191 WHO countries on the health programme. The health profile of the Indian population is presented in Table 1.1.

Undoubtedly, despite making huge strides in overall development and progress in different spheres of life, total health coverage remains a distant dream. It faces three major health challenges:

1. Dealing with communicable diseases, maternal and child health and health systems strengthening
2. Dealing with new emerging challenges of noncommunicable diseases (NCDs) such as HIV/AIDS, cancer and hepatitis
3. Dealing with the global health policy environment

India committed itself to the universal health care in the Bhore Committee report in 1946. Later, in 1978, the Alma-Ata Declaration provided a window for better understanding of primary health care. It considered health as an essential part of the socioeconomic development of a country.

TABLE 1.1 Health Profile of the Indian Population: Statistics

Total population (2005)	1,103,371,000
Population under 15 (2005), %	32.0
Rural distribution of population (2005), %	71.0
Life expectancy at birth (2004), years	62.0
Under-5 mortality per 1000 live births (2004), %	85.0
Maternal mortality ratio per 100,000 live births (2001–2003)	301.0
Total expenditure on health care as of gross domestic product (2004), %	4.5
General government expenditure on health care as of general government expenditure (2004), %	3.6
Human Development Index rank, out of 177 countries (2003)	127.0
Gross National Income (GNI) per capita (2005), US$	720.0
Population living below national poverty line (1999–2000), %	26.1
Adult (15+) literacy rate (2000–2004), %	61.0
Adult male (15+) literacy rate (2000–2004), %	73.4
Adult female (15+) literacy rate (2000–2004), %	47.8
Population with access to improved drinking water source (2002), %	86.0
Population with sustainable access to improved sanitation (2002), %	36.0

Source: WHO Country Cooperation Strategy.

The declaration recommended that primary health care ought to include the following:

- Education related to prevailing health issues and strategies of identifying, preventing and controlling them
- Provision of optimum food supply and nutrition
- Ample supply of safe water and basic sanitation
- Maternal and child health care
- Family planning
- Vaccination against major infectious diseases
- Prevention and control of regional endemic diseases
- Rational treatment of common ailments and injuries
- Mental health promotion
- Supply of essential medicines

Subsequent to the Alma-Ata commitment, the government of India passed the National Health Policy (NHP) in 1983. The NHP mentioned comprehensive primary health care services related to extension and health education; large-scale transfer of knowledge, skills and requisite technologies to health volunteers; intersectoral cooperation; and better utilization and strengthening of traditional systems of medicine. The new policy proposes the need to improve access to health services among all social groups and in all areas by establishing new facilities in deficient areas and improving the existing ones. Consequently, over the past 60 years, India has established health infrastructure and work force at the primary, secondary and tertiary levels in government, voluntary and private settings, resulting in significant progress in improving the health of the population. However, major communicable diseases such as tuberculosis (TB) and malaria are still not eradicated; additionally, chronic NCDs such as heart diseases, diabetes and cancer cases are on the rise.

ORGANIZATION OF THE HEALTH CARE SYSTEM

The health care services organization in the country spreads across the national level to the village level. The total organization structure of the health care system can be divided into national, state, district, community, primary health centre (PHC) and subcentre levels.

National Level

The organization at the national level consists of the Union Ministry of Health and Family Welfare. The ministry has two main departments: (1) Department of Health and Family Welfare and (2) Department of AYUSH, each headed by a secretary to the Government of India (Fig. 1.1). The other two departments are (1) Department of Health Research and (2) Department of AIDS Control. The department of health and family welfare is supported by a technical wing, and the directorate general of health services is headed by the director general of health services (DGHS).

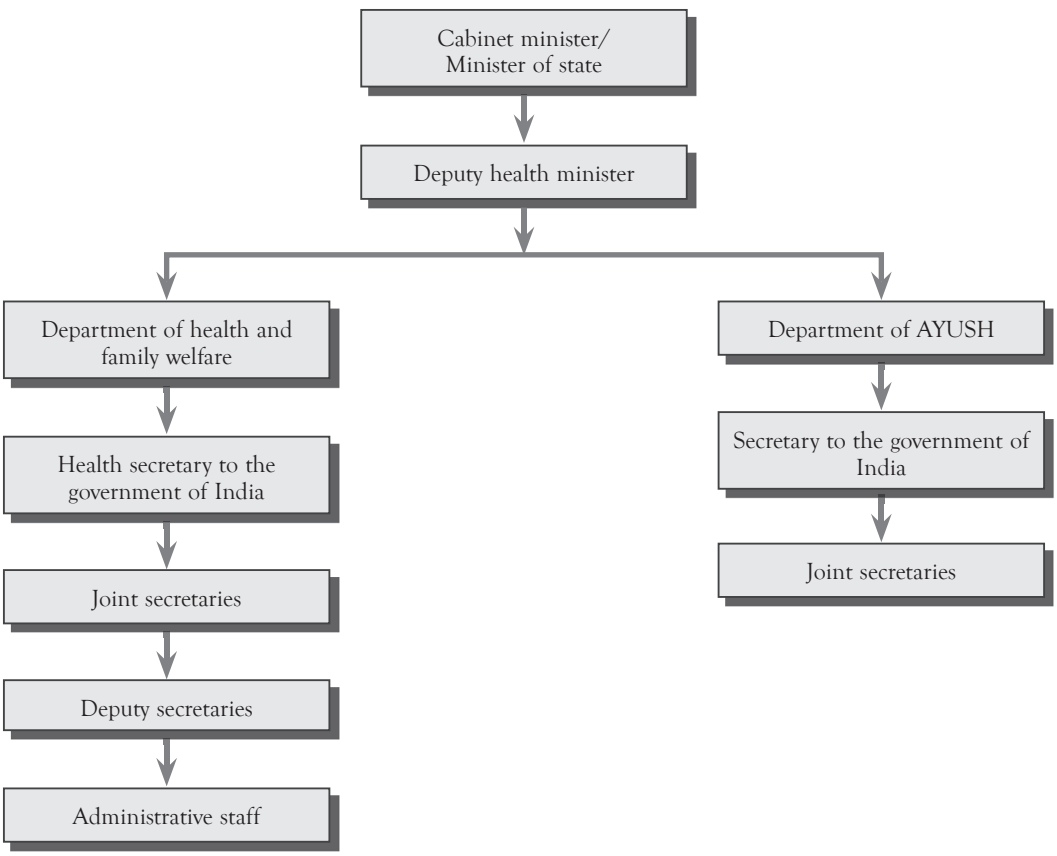

FIGURE 1.1 Organization of health care system at national level.

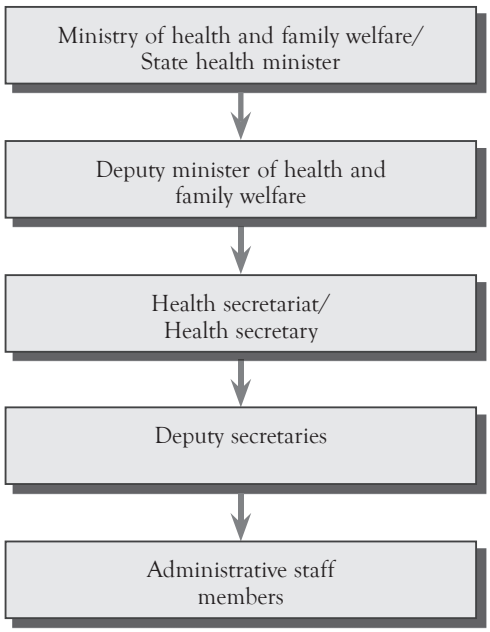

FIGURE 1.2 Organization of health care system at the state level.

State Level

The organization at the state level is headed by a minister and with a secretariat under the charge of the secretary/commissioner (health and family welfare). It comes under the State Department of Health and Family Welfare in each state. The organizational structure adopted by the state conforms to the pattern of the central government (Figs. 1.1 and 1.2). The State Directorate of Health Services is the technical wing and works in association with the office of the state department of health and family welfare chaired by the Director of Health Services. However, the organizational structure of the state directorate of health services varies throughout the country. The Directorate of Medical Education and Research is an independent department under the Director of Medical Education, who reports directly to the health secretary/commissioner of the state. Some states have the provision for the posts of Director (Ayurveda) and Director (Homeopathy).

Regional Level

In the states of Bihar, Madhya Pradesh, Uttar Pradesh, Andhra Pradesh and Karnataka, zonal, regional or divisional health care arrangements have been made. Each regional/zonal set-up covers 3–5 districts and works under the state directorate of health services. The in charge/designation officers of these regional/zonal centres vary from state to state as they are called *additional/joint/deputy directors of health services*.

District Level

In the recent past, Indian states have restructured their health sector to cover all health care programmes in a district under a single authority. The district-level management of health care services is a midlevel organization and serves as a liaison between the state and the regional structure on the one hand, and between the peripheral-level facilities such as PHC and subcentre on the other hand. It disseminates the information received from the state-level management to the peripheral centres with suitable modifications to meet the local demands. The district officer with the overall control is designated as the chief medical and health officer (CM&HO) or as the district medical and health officer (DM&HO), also popularly known as DMOs or CMOs. They are responsible for implementing the programmes in their respective districts according to policies laid down and finalized at the state and centre levels (i.e. these DMOs/CMOs are assisted by deputy DMOs/CMOs and programme officers). The number of such officers as well as their specialization and status in the hierarchy of medical services vary from state to state.

Subdivision/Taluka Level

At the taluka level, health care services are regulated through the office of the Assistant District Health and Family Welfare Officer (ADHO). A limited number of specialities are made available at the taluka hospital. The ADHO is assisted by medical officers of health, lady medical officers and medical officers of the general hospital. These taluka hospitals are being gradually converted into community health centres (CHCs).

Community Level

Effective referral support is required for a successful PHC programme. One CHC takes care of 80,000−120,000 people. The CHC dispenses basic speciality services in general medicine, paediatrics, surgery, obstetrics and gynaecology. It is set up by upgrading the subdistrict hospitals or the block-level PHCs or by inducting a new centre. As on March 2007, there were 4045 CHCs operating in the country.

PHC Level

PHC is the first point of contact between the rural population and the medical officer. The PHCs were created to provide a composite preventive and curative health care to the village residents. At present, there is one PHC covering about 30,000 people (20,000 in hilly, desert areas). Many rural dispensaries have been upgraded to establish these PHCs. Each PHC has one medical officer, two health assistants (a male and a female) and health workers with supporting staff. The PHC acts as a referral unit for six subcentres. It has four to six beds for patients. The activities of PHC involve primitive, preventive, curative and family welfare services. There were 22,370 PHCs as on March 2007.

Subcentre Level

The subcentre is the foremost contact point between the PHC system and the community. Each subcentre is manned by a male health worker (MPW) and an auxiliary nurse midwife (ANM).

At present, in most places there is one subcentre for a population of about 5000 (3000 in hilly and desert areas). The subcentres carry basic essential drugs for minor ailments for the people in the vicinity of the subcentre. The ministry of health and family welfare provides full financial aid to the subcentres. At present, there are 145,272 subcentres in the country.

NATIONAL HEALTH POLICY (NHP)

The first national health policy (NHP) was framed and developed in 1983. Several major developments were made in the policies in the health sector, leading to the adoption of the NHP in 1983, the National Nutrition Policy in 1993, the NHP in 2002, the National Policy on Indian Systems of Medicine and Homoeopathy in 2002, the Drug Policy in 2002 and the National Rural Health Mission (NRHM) in 2005. Several national health programmes in government, charitable and private sectors were launched under the recommendations of various consultative committees (namely Bhore, Mudaliar, Kartar Singh and Srivastava committees), associated with the ministry of health and family welfare.

The first NHP of 1983 was a response to the Alma-Ata Declaration to achieve 'Health for All by 2000', through the provision of comprehensive PHC services. A new NHP 2002 has now been implemented, which aims to reduce the overall burden of disease, promote health and improve the service delivery system. Broadly, NHP 2002 emphasizes on the need for enhanced funding and an organizational restructuring of the national public health programmes to facilitate more equitable access to the health facilities. It also focuses on diseases like TB, malaria, blindness and HIV/AIDS. The improvement of education and training and the integration of appropriate technology to assure high-quality affordable care is a feature of this policy.

The primary objective of the revised NHP 2002 is to attain an acceptable standard of good health among the general public of the country and has set targets to be achieved by the year 2015. The major policy recommendations are as follows:

1. Increment in public expenditure from 0.9 to 2–3%.
2. Allocation of public health investment to the tune of 55% for the primary health sector, and 35 and 10% to secondary and tertiary sectors, respectively.
3. Consolidation of all health programmes in phases, except the special ones (e.g. TB, malaria and HIV/AIDS), which need to be continued until moderate levels of prevalence are achieved.
4. Emphasizing the need for more frequent in-service training of public health medical personnel, at the level of medical officers as well as paramedics. Mandatory 2-year rural posting before awarding the graduate medical degree. Also 6 institutions similar to AIIMS are to be set up in different states and 13 medical colleges have to be upgraded.
5. Envisaging the progressive implementation of mandatory norms to raise the proportion of postgraduate seats in 'public health' and 'family medicine' in medical colleges.
6. Levying user charges for certain secondary and tertiary public health services, for those who can afford to pay.
7. Establishing two-tier urban health care system – PHC for a population of 1 lakh, with a dispensary providing an OPD facility and essential drugs, and government general hospital as the second tier.

8. Decentralizing the implementation of health programmes to local self-governing bodies.
9. Setting up Medical Grants Commission for funding new government medical and dental colleges in different parts of the country.
10. Dissemination of information to all population groups through the Information, Education and Communication (IEC) programme.
11. Increase in government-funded health research to a level of 25% of the total health spending.
12. Enactment of legislation for regulating private health facilities.
13. Draft procedures for accreditation of public and private health settings.
14. Support to nongovernmental organizations (NGOs) in national disease control programmes.
15. Promotion of telemedicine in the health sector.
16. Supervision of overall functionality of National Disease Surveillance Network from the lowest rung of public health administration to the central government.
17. Notification of contemporary code of medical ethics by the Medical Council of India.
18. Encouraging the setting up of private insurance instruments to bring secondary and tertiary sectors into its purview.
19. Promotion of medical facilities to users from overseas.
20. Encouragement and promotion of alternative systems of medicine.
21. Emphasizing the need for basic treatment regimens, in both the public and the private domain, on a limited number of essential drugs of a generic nature.

Within these broad objectives, NHP 2002 will strive to achieve the time-bound goals mentioned in Table 1.2.

TABLE 1.2 National Health Policy: Goals to Be Achieved by 2015

Eradicate polio and yaws	2005
Eliminate leprosy	2005
Eliminate kala-azar	2010
Eliminate lymphatic filariasis	2015
Achieve zero-level growth of HIV/AIDS	2007
Reduce mortality by 50% on account of TB, malaria and other vector and waterborne diseases	2010
Reduce prevalence of blindness to 0.5%	2010
Reduce infant mortality rate to 30 per 1000 and maternal mortality ratio to 100 per 100,000	2010
Increase utilization of public health facilities from the current level of <20 to >75%	2010
Establish an integrated system of surveillance, National Health Accounts and Health Statistics	2005
Increase health expenditure by government as a percentage of GDP from the existing 0.9–2.0%	2010
Increase share of central grants to constitute at least 25% of total health spending	2010
Increase state sector health spending from 5.5 to 7% of the budget	2005
Further increase to 8%	2010

Source: National Health Policy, 2002.

NATIONAL RURAL HEALTH MISSION (NRHM)

The National Common Minimum Programme (NCMP) of the United Progressive Alliance (UPA) government emphasizes to strengthen the rural health infrastructure under NRHM, with the objective to provide accessible, affordable, accountable, effective and reliable PHC, especially to poor and vulnerable sections of the population. It has been conceptualized and operationalized from April 2005 all over the country, with main focus on 18 states, which includes 8 Empowered Action Group (EAG) states (namely Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh), 8 Northeast States (namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura) and Himachal Pradesh, and Jammu and Kashmir. Out of the total budget allocation of INR 165,340 million for the health sector in the financial year (2008–2009), the flagship NRHM has been allocated INR 120,500 million.

It makes possible to bridge the gap in rural health care through the creation of a cadre of accredited social health activists (ASHAs) and improve hospital care, decentralization of programme to the district level to improve intra- and intersectoral convergence, and effective utilization of resources.

The major components of NRHM are as follows:

1. Building a core group of ASHAs in 2.5 lakh villages in 4 years.
2. Creation of village health scheme and drafting of village health plan.
3. Supporting subcentres with funds amounting INR 10,000 per annum.
4. Raising more than 2000 CHCs to the benchmark of codification of Indian public health standards (IPHSs).
5. Assimilation of vertical health and family welfare programmes under NRHM at the national, state and district levels in all states.
6. Promotion of programme management capacities at the national, state and district levels in all states.
7. Providing generic drugs (both indigenous and allopathic) to all states.
8. Promoting health check-up programmes in schools.
9. The Mid Day Meal Scheme in school lunch programme covering 139 million children.
10. India has launched 5959 integrated child development services (ICDS) projects and 932,000 Anganwadi and mini-Anganwadi centres, with 62.9 million children and 13.2 million pregnant and lactating mothers as beneficiaries.
11. Promotion of multiple health insurance models.
12. Provision of vitamin A, iron and folic acid supplement to deficient children at the Anganwadi level in all states.

Accredited Social Health Activists (ASHAs)

Every village has the provision of a female ASHA appointed by and accountable to the panchayat to act as liaison between the community and the public health system. The activist acts as a link between the ANM and the village community and is answerable to the panchayat. Basically, the activist is a volunteer who receives performance-based honorarium for promoting universal immunization, escort and referral services, construction of household toilets and other health care programmes. ASHA is also involved in facilitating the designing and implementation of the village

health plan along with an Anganwadi worker (AWW) and an ANM under the guidance of the village health committee of the panchayat. The activists are provided a medicine kit containing generic indigenous and allopathic formulations for common ailments.

HEALTH CARE SERVICES

Health Education and Promotion

In India, health education has low priority, although it has been an integral part of all national health and family welfare programmes. Lack of information is the major barrier to effective access to health and other services. Recently, efforts have been made by the central government to improve health through IEC activities. The main focus of IEC activities is on eradication of polio, safe pregnancy, maternal and child health, women empowerment, gender equality and male responsibility.

Population education projects in schools and universities (through NCERT, UGC and other organizations) with the United Nations Population Fund assistance are underway in various states/union territories (UTs). Social mobilization for the Pulse Polio Immunization Programme has been hailed as highly successful in the evaluation conducted by independent agencies. Other national awareness programmes in progress include those for TB control, leprosy eradication, HIV/AIDS control and malaria eradication.

Maternal and Child Health, Family Planning and Adolescent Health

According to the statistics of Family Welfare Programme in India (Ministry of Health and Family Welfare, Government of India), the proportion of pregnant women attended by trained personnel during pregnancy (who received antenatal check-up during at least three visits) was 51%. Deliveries performed by trained personnel were 48%. The couples utilizing various methods of family planning increased from 22.8% in 1980–1981 to 44.1% in 1990–1991 and further increased to 56.3% in 2005–2006. Women and other underprivileged groups are recognized as the most affected by poor access to health care.

Thus, the central government has given top funding priority to programmes promoting women's health. The policy sets forth several time-bound objectives including reduction of maternal mortality ratio (MMR), infant mortality rate (IMR) and mortality due to TB and malaria, and zero growth of HIV/AIDS (Tables 1.2 and 1.3). Adolescents constitute 22% of the total population, and about 70% of adolescent girls are anaemic.

TABLE 1.3 Crude Birth Rate, Infant Mortality Rate and Total Fertility Rate of the Indian Population, 1997–2010

Year	Crude Birth Rate	Infant Mortality Rate	Total Fertility Rate
1997	27.2	71	3.3
1998	26.4	72	3.3
2002	23.0	50	2.6
2010	21.0	30	2.1

Source: Ministry of Health and Family Welfare, Government of India.

Immunization

The Universal Immunization Programme against six preventable diseases, namely poliomyelitis, diphtheria, measles, whooping cough, childhood TB and neonatal tetanus, was launched in the country in a phased manner in 1985, which covered the whole of India by 1990.

The proportion of infants (who were fully immunized according to national immunization policies in 2001) reaching their first birthday was 49.0%. Immunization against BCG was 73%, DPT-3 was 64%, polio-3 was 70% and measles was 56% in 2005. Because of the immunization programme, the incidence of poliomyelitis and neonatal tetanus has significantly diminished. The work strategies to this effect include mobile immunization camps, focus on high-risk areas, national immunization days (NIDs) (e.g. Pulse Polio Immunization days and mop-up rounds), intensifying surveillance, promoting IEC and training, supplying vaccines and essential items and enhancing supervision and monitoring. The recommendations by WHO are being followed in carrying out the above-mentioned activities.

PREVENTION AND CONTROL OF LOCAL ENDEMIC DISEASES

Kala-Azar

Kala-azar is an endemic disease detected in 33 districts of Bihar, 11 districts of West Bengal and 3 districts in Jharkhand, with occasional cases reported in Uttar Pradesh. After the number of cases and deaths increased due to kala-azar during 1989–1991, a comprehensive programme for containment of kala-azar was launched in 1992. The prevention procedure included interruption of transmission through insecticidal spraying with DDT (dichloro diphenyl trichloroethane) and early diagnosis and treatment. The central government supplies the insecticides and anti-kala-azar medicines, while the state governments bear the expenses involved in the diagnosis and treatment of cases and insecticide spraying. Drug resistance to sodium stibogluconate in Muzaffarpur and Darbhanga districts and insecticide resistance in other districts of Bihar have been reported.

Dengue

Dengue is one of the most resurgent infectious diseases of the tropics, affecting nearly half of the world's population. Dengue fever and dengue haemorrhagic fever (DHF) are acute fevers caused by four dengue virus serotypes (DEN 1, 2, 3 and 4) transmitted by the infected mosquitoes *Aedes aegypti*. Every year there are approximately 100 million cases of dengue fever and about 500,000 cases of DHF that require hospitalization. Continual dengue outbreaks happen in many parts of India. Deaths are usually low in number but may be high in case of DHF. There is lack of diagnostic test facilities for dengue in the country.

Filariasis

Filariasis is prevalent in 19 states/UTs in India. Survey estimates suggest that there are 29 million filariasis cases and 22 million filaria carriers in the country. At present, there are 206 filaria control units, 199 filaria clinics and 27 filaria survey units. A feasibility and efficacy study is being

conducted by the Indian Council for Medical Research (ICMR) on a mass annual single-dose administration of diethylcarbamazine and albendazole combination for the control of filariasis. The state of Kerala has launched a pilot project for controlling mosquito breeding in three filariasis endemic districts of Kottayam, Alappuzha and Ernakulam.

Malaria

Malaria is one of the most prominent public health problems in India. At the time of independence, there were approximately 75 million malaria cases and 0.8 million deaths every year. In 1953, the central government launched a National Malaria Control Programme with the objective of decreasing malaria transmission. Later, the National Malaria Eradication Programme (NMEP) was launched in 1958, with the objective of eradicating malaria. About 2 million cases were reported in 2000, of which 1.04 million were due to *Plasmodium falciparum;* there were 972 deaths. WHO has launched a project called *Roll Back Malaria* (RBM) on worldwide partnership basis to coordinate malaria control activities in various countries.

Leprosy

In 1955, the central government launched the National Leprosy Control Programme to achieve control of leprosy through early detection and dapsone monotherapy. In 1983, the programme was renamed as the National Leprosy Eradication Programme, with the goal of eradicating leprosy by 2000. The occurrence of leprosy has reduced from 57 per 10,000 in 1981 to 4.2 per 10,000 population in 2002. A total of 0.44 million estimated number of leprosy cases were reported by March 2002. The discovery of multidrug therapy (MDT) has been a major development in the treatment history of leprosy. The myth that leprosy is a 'curse' is slowly fading out. WHO set a new target for eradication of leprosy by 2005 and formed Global Alliance for Elimination of Leprosy.

Tuberculosis

India accounts for one-third of worldwide TB and has more TB cases than any other country in the world. About 40% of the Indian population is a *Tuberculosis bacillus* carrier. It increases by about 2.2 million persons each year in addition to the existing load of about 15 million active TB cases; of these about 800,000 are smear positive (infectious) and about 450,000 result in fatalities. The National TB Programme (NTP) was initiated in 1962, with an impressive infrastructure of 446 district TB centres, 330 TB clinics, 764 hospitals and 47,600 beds. These hospitals diagnose nearly 1.3 million and treat 250,000 patients every year. The therapy outcome is, however, unsatisfactory as treatment completion is less than 40% of patients.

In 1993, the Revised National Tuberculosis Control Programme (RNTCP), based on the Directly Observed Treatment Short course (DOTS) strategy, was introduced on a pilot basis to detect at least 70% of sputum-positive patients and cure at least 85% cases. The RNTCP including DOTS strategy is operating in about 455 districts covering 829 million people. There is significant improvement with DOTS in diagnosis, with 1.2 smear-negative pulmonary TB cases for every case of smear-positive TB. The cure rate has increased from about 25 to 86%. The death rate has also been reduced to 4%, compared with at least 20% previously.

Noncommunicable Diseases

NCDs have emerged as major public health problems and caused 53% of all deaths in the age group 30−59 years in 2005. It is estimated that by 2015, 59% of the total deaths in India would be due to NCDs. The individual contribution of the NCDs is as follows: cardiovascular diseases (CVDs) 13%, injuries 8.7%, chronic respiratory diseases 6.7%, cancers 3.4% and diabetes 0.2%.

Cardiovascular Diseases

CVDs are lifestyle disorders and hence are on the rise in the modern age. The prevalence of hypertension ranges from 10 to 15% among the adult population in urban areas and 3–8% in the rural areas. There are about 2.5 million cases of ischaemic heart diseases (IHDs) and 1.9 million rheumatic heart disease (RHD) patients in the country. There are 5–7 cases of RHD per 1000 people in the 5–15 age group, resulting in 20–30% of hospital admissions due to all CVDs in India. One million cases of stroke occur every year in India; out of these cases, more than 100,000 patients die every year.

Diabetes

Indians seem to be genetically prone to diabetes. According to the International Diabetes Federation, there are about 32.7 million diabetics in the country. However, recently WHO estimated 28.7 million diabetes patients in India. India is already considered as the *diabetic capital of the world*.

Cancer

Cancer is reported to be 1 of the 10 leading causes of death in India. Every year over 600,000 new cases of cancer and 300,000 deaths occur due to cancer. National Cancer Control Programmes, policy and managerial guidelines, published in 2002, provide an insight into the policies and strategies that can be tailored according the socioeconomic and cultural considerations of the region.

HIV/AIDS

It is estimated that India has the largest number of HIV/AIDS cases in the world. India constitutes almost 13% of the 40 million people living with HIV/AIDS globally and over 69% of the 7.4 million having HIV/AIDS in the Asia Pacific region in 2003. Since the first case was reported in Chennai in 1986, HIV has proliferated from urban to rural areas and from high-risk groups to the general public. The number of HIV-infected persons has increased to 5.1 million in 2003 from a meagre 0.2 million in 1990. The number of confirmed AIDS cases according to National AIDS Control Organization (NACO) as of August 2004 was 86,028, of which 72.1% were males and 27.9% females, indicating a prevalence of 1 out of 4 reported AIDS cases in women.

The World Bank project implemented through NACO covers the whole range of prevention, care and bilaterally funded projects work on the prevention of sexual transmission of HIV.

PREVENTION, CONTROL AND MANAGEMENT OF COMMON DISEASES

Acute Respiratory Infections

Acute respiratory infections (ARIs) are one of the most common causes of mortality in infants and children below 5 years, accounting for around 13% of deaths in paediatrics wards. The proportion of deaths due to ARIs in the society is probably much higher, as many children do not get hospital treatment due to distance, poor resources and high levels of ignorance. Lack of breastfeeding in infants is the major risk factor for acute lower respiratory tract infection in under-five age group. Other risk factors include environmental allergies, faulty immunization and familial history of lower and upper respiratory tract infections in the family. ARIs can be treated easily at home or at the subcentre by ANM.

Diarrhoea

It is one of the most common causes of infant mortality in India. Water pollution as well as improper management of sewage in both cities and rural areas is the major reason for acute diarrhoeal disease. The best treatment for dehydration is oral rehydration therapy by oral rehydration salt (ORS) solution. WHO provides ORS packets for dehydration, and these are available with Anganwadi workers in the villages as well as with the ANM.

GLOBAL HEALTH PARTNERS

Several international partners are active in the substantial improvement in the health sector in India. These partners are UN agencies, US and UK bodies and multinational NGOs. Previously, the World Bank group was the major external funding agency. Development aid, including loans and grants, contributes a small proportion of India's expenses on the health sector, and is in the range of 1–2% of the total public health expenditure.

Recently, various world bodies have contributed to various health programmes in India such as the Global Fund for AIDS, TB and malaria, the Global Alliance for Vaccine Initiative, the Bill and Melinda Gates Foundation and the Clinton Foundation's HIV/AIDS Initiative. Phase II of National AIDS Control Programme (NACP) implemented by NACO is supported by World Bank, with a credit of US$191 million in addition to the Indian government funding of US$14 million. In addition to the World Bank, state-level AIDS control projects are also being run by several bilateral donors such as USAID of the United States in Maharashtra and Tamil Nadu; DFID of the United Kingdom in Andhra Pradesh, Gujarat, Orissa and Kerala; and the Canadian International Development Agency (CIDA) of Canada in Karnataka and Rajasthan.

Revision Questions

1. Give a detailed account of organizational structure of health care system in India.
2. Give an overview of the national health policies of India.
3. Write a note on National Rural Health Mission.

4. Discuss various health services offered by the government of India.
5. Present the strategies and interventions by the government of India for prevention and control of the following:
   (a) Kala-Azar
   (b) Dengue
   (c) Malaria
   (d) Tuberculosis
6. Discuss the policies and procedures adopted by the government of India for prevention and control of the following:
   (a) HIV/AIDS
   (b) Diabetes mellitus
   (c) Cardiovascular diseases
   (d) Leprosy
7. What are the measures adopted by the government of India for prevention and control of the following diseases?
   (a) Cancer
   (b) Diarrhoea
   (c) Filariasis
   (d) Acute respiratory infections
8. Write short notes on the following:
   (a) Alma-Ata Declaration
   (b) Primary Health Centres

Suggested Readings

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