



**BLOCK 4**

**HEALTH SECTOR IN INDIA**

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## **BLOCK 4 INTRODUCTION**

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**Block 4** is focused on Health Sector in India. It has two units (Units 8 and 9). **Unit 8** is on ‘Status of Health and Medical Care in India’. The major health problems in terms of ‘trends in disease burden’ is first discussed. The deficiencies and achievements in terms of healthcare inputs, healthcare delivery and healthcare outcomes are explained next. The issue of ‘catastrophic health expenditure and equity’ is discussed in the context of ‘measurement of health inequity’.

**Unit 9** is on Health Policy in India. The ‘progress and challenges’ of public health policy in India is first outlined. It also enumerates the causes of poor health outcomes. Different public health programmes in India like National Health Mission and Reproductive and Child Health Programmes are explained. An account of National Health Policies in India is also given.



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## UNIT 8 STATUS OF HEALTH AND MEDICAL CARE IN INDIA

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### 8.0 OBJECTIVES

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After reading this unit, you will be able to:

- define the concepts of ‘incidence rate’ and ‘prevalence rate’ distinguishing the latter between the point prevalence rate and period prevalence rate;
- explain the institutional mechanism under which the primary, secondary and tertiary public healthcare services are provided in India;
- provide a comparative profile of healthcare delivery status in terms of the three core medical professional services between India and its neighbouring countries;
- discuss the health outcomes based on the two factors of ‘institutional births’ and ‘immunisation levels’ among the major Indian states;
- suggest reasons for the lower achievement in ‘immunisation levels’ than that in ‘institutional births’ in India;
- outline the concepts of ‘catastrophic health expenditure’ and ‘equity in health’;
- state the factors responsible for inequity in health identifying the demand and supply side sources that contribute to their causation; and
- specify the steps involved in the measurement of ‘health inequity’.

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## 8.1 INTRODUCTION

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The present unit deals with the status of health and medical care in India. It contrasts the health problems to the health inputs, delivery mechanisms and then the outcomes of health. As is well acknowledged, India must improve its health systems to attain its economic potential and the Sustainable Development Goals. For this, one first needs to understand the health problems prevailing in the country, its trends and inputs necessary to attain the targeted health outcomes. In the 21<sup>st</sup> century, Indians are living longer with nearly doubled life expectancy compared to the situation at the time of her independence. It has successfully eradicated small pox and significantly reduced cases of malaria, polio and leprosy.

In the past, India used to suffer more from communicable diseases like malaria, jaundice, diarrhoeal disorders, etc. In recent times, the country suffers from dual burden of diseases where non communicable diseases like cardiovascular diseases, stroke, diabetes and cancer are also affecting the health of the people. While poor sanitation, hygiene and access to safe drinking waters are few of the leading causes of high incidence of communicable diseases, prevalence of non communicable diseases (NCDs) are increasing because of industrialisation and urbanisation which result in changing life style habits.

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## 8.2 MAJOR HEALTH PROBLEMS

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In Unit 7 of the course on Indian Economy I, you have read about DALY which is the summation of the years of life lost (YLL) due to premature mortality and years of healthy life lost due to disability (YLD). In India, DALY is highest for maternal, neonatal, nutritional diseases followed by cardiovascular diseases, diabetes and other NCDs. According to World Health Organisation, heart disease is the leading cause of death in India with a share of 12.4 percent followed by: (i) chronic obstructive pulmonary diseases (11%), (ii) stroke (9%), (iii) diarrhoeal diseases (6%), (iv) lower respiratory infections (5%), (v) preterm birth complications (4%), (vi) tuberculosis (3%), (vii) self harm (3%), (viii) falls (3%) and (ix) road injury (2%). Thus, the share of non communicable diseases in total share of causes of death stands as high as 54 percent and rest are due to communicable diseases like diarrhoeal and tuberculosis.

### 8.2.1 Trends in Disease Burden

Before we move further, let us familiarise ourselves with some concepts related to measurement of morbidity. Morbidity is defined as any departure from a state of physiological well-being. Morbidity is measured in terms of: (i) persons who were ill, (ii) periods of spells of illness that these persons experienced and (iii) the duration (days, weeks, months, etc.) of the illness.

Here we shall focus on the persons who were ill i.e. the frequency of illness measured by incidence and prevalence rate.

**Incidence:** Incidence is defined as the number of new cases occurring in a defined population during a specified period of time. That is:

$$\text{Incidence Rate} = \frac{\text{Number of new cases of specific disease during a given time period}}{\text{Population at risk during that period}} \times 100$$

Disease prevalence, on the other hand, refers to all current (old + new) cases existing at a given point of time or over a period of time in a given population. Prevalence is of two types viz. (a) point prevalence and (b) period prevalence. They are defined as:

**Point Prevalence Rate =**

$$\frac{\text{Number of all current cases (old+new) of a specified disease existing at a given point of time}}{\text{Estimated population at the same point of time}} \times 100$$

**Period Prevalence Rate =**

$$\frac{\text{Number of all current cases (old+new) of a specified disease during a given period of time interval}}{\text{Estimated mid-interval population at risk}} \times 100$$

Therefore prevalence = incidence \* mean duration. For example, if Incidence = 10 cases/1000 population per year and mean duration of disease = 5 years, then:

$$\text{Prevalence} = 10 \times 5 = 50 \text{ per } 1000 \text{ population}$$

India's situation in comparison to her neighbouring countries on the 'status of health and medical care' figures very poorly. For instance, mortality rate [attributed to exposure to 'water, sanitation and hygiene' (WASH) services] per 1 lakh population is the highest in India (27.4) as compared to some other Asian countries (e.g. Sri Lanka, 3.3; Bangladesh, 6.0; Bhutan, 7.1). Incidence of Malaria (per 1000 population at risk) is also highest in India (18.6) compared to some other Asian countries (e.g. 0 in Sri Lanka, 0.1 in Bhutan, 0.8 in Bangladesh and 8.6 in Pakistan).

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### 8.3 HEALTHCARE INPUTS, HEALTHCARE DELIVERY AND HEALTHCARE OUTCOMES

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Healthcare inputs mainly covers infrastructure and human resources. Under this, we shall focus here only on the three layers of public institutions offering the primary, secondary and tertiary healthcare services. Healthcare delivery includes both private and public services. In this, we shall focus on the availability of three critical human resource categories viz. physicians, paramedical personnel and pharmacists. This means, we shall be considering the availability of trained human resources, as a ratio of per 1000 members of population, as indicating the potential healthcare delivery services. Under health outcomes, which reflect the ground level reality of both the healthcare inputs and healthcare delivery factors, we confine ourselves to looking at the

picture on two important aspects viz. institutional births and children immunised for BCG and DPT.

### 8.3.1 Healthcare Inputs

Hierarchically, from the lowest to the highest, the public healthcare centres are designated as: (i) sub centres (SCs), (ii) primary health centres (PHCs) and (iii) community health centres (CHCs). The three cater to the primary, secondary and tertiary healthcare services provided by the government respectively. SCs serve as the first point of contact providing primary healthcare services like immunisation, curative care for minor ailments and ‘maternal and child health’ needs. Each SC employ one male and one female worker where the latter also serves as ANM (auxiliary nurse and midwife). At the secondary level of healthcare, a PHC caters to 6 SCs. Equipped with four to six beds and a qualified doctor they serve as referral units. At the third level, a CHC also serves as referral unit for every four PHCs. They are equipped with 30 beds, an operation theatre and an X ray room. Each CHC is provided with four doctors and up to 20 para-medical and other staff. As per Indian Public Health Standards (IPHS) norms, a SC should cover a population of 3000-5000, a PHC a population of 20000 to 30000 and a CHC a population of 80000 to 120000. Against these norms, Table 8.1 provides a synoptic view of the actual coverage in terms of SCs, PHCs and CHCs in India.

**Table 8.1: Coverage (%) of States as Per IPHS Norm**

Type of Unit/Services	IPHS Norm	No. of States	% of Coverage	Uncovered (%)
SC (primary)	3000-5000	23	64	36
PHC (secondary)	20000-30000	25	69	31
CHC (tertiary)	80000-120000	13	38	62

**Source:** Rural Health Statistics, 2016.

**Note:** Percentage for SC and PHC is for 36 and for CHC for 34 States/UTs.

Major states which are outside the IPHS norm for SCs (5000-7000) include Odisha, M.P., Maharashtra, Punjab, Assam, West Bengal, Jharkhand and Haryana. Two states U.P. and Bihar have SCs covering an average population of more than 7000. States in which PHCs are outside the IPHS norm (30000-40000) include Telangana, A. P., Maharashtra, Haryana and Punjab. The states of M.P. and U.P. are in the 40000 to 50000 range and three more states of Bihar, W.B. and Jharkhand have PHCs far more outside the norm i.e. with an average population of above 50000 per PHC. In case of CHCs for tertiary medical care, only 13 states have CHCs for a population range of ‘below 1 lakh’ with the remaining 21 states being in the above 1 lakh range [20 states in the 1-3 lakhs range and 1 state (Bihar) in the ‘5 lakhs and above’ range]. Major states which are inside this norm for CHCs include

H.P., Rajasthan, T.N., Kerala and Arunachal Pradesh. Two inferences that can be drawn from this sketchy picture are: (i) in a large country like India with vast segments of population living in rural areas, even after seven decades of growth and development after independence, nearly one-third of total number of states are yet to expand the reach of their SCs and PHCs to their population for primary and secondary healthcare; and (ii) the gap in achievement of reach for tertiary health services is even larger (i.e. close to two-thirds of total states: 62 percent) in the country. The states which need to improve in access to primary and secondary healthcare services (as identified above) are the ones which need to pay greater attention as in its absence the prospects of growth of the country, in terms of healthy human resource base, would be stifled adversely. A direct effect of limited reach of public health services is a greater stress or burden to meet the healthcare expenses by out-of-pocket resources (an aspect covered later in Section 8.4) which acutely hits the already impoverished segments of the country.

### 8.3.2 Healthcare Delivery

To assess the healthcare delivery, we consider data for the three critical segments of human resource viz. physicians, paramedical personnel and pharmacists. Such an approach has the limitation of relating the healthcare only to its quantitative dimension. However, for a macro picture on the aggregate levels of healthcare we need to go only by the quantitative figures and an indirect assessment on the quality dimension, which depends on both access and affordability, can be made based on the OPE (made later in Section 8.4).

**Table 8.2: Comparative Profile of Human Resources in India and Neighbouring Countries**

(per 1000 population)

Country	Year	Physician Density	Nursing and Midwifery Personnel Density	Pharmaceutical Personnel Density
Bangladesh	2010	0.354	0.186	0.385
Bhutan	2012	0.261	0.99	0.015
India	2010	0.663	1.539	0.533
Pakistan	2010	0.852	0.59	-
Sri Lanka	2010	0.726	1.751	-

**Source:** Global Health Observatory Data Repository, WHO.

Drawing from the data of Global Health Data Repository of WHO, we consider here three broad indicators viz. density (per 1000 population) of: (a) availability of physicians, (b) availability of nursing and midwifery personnel and (c) availability of pharmaceutical personnel. The position of India on the

available number of physicians is better than Bangladesh and Bhutan but not as good as Pakistan and Srilanka. In terms of nursing and midwifery personnel, India stands better among the five Asian countries although here also it is second to Sri Lanka. In terms of density of pharma personnel, among the three countries only for which data is available, India stands in number one place.

### 8.3.3 Healthcare Outcomes

For assessing the trends in healthcare outcomes, we draw on data available for seventeen major Indian states from the two consecutive rounds of National Family Health Survey viz. NFHS 3 (for 2005-06) and NFHS 4 (for 2015-16). As stated before, we consider only two major health outcomes viz. number of institutional births and number of children (between 12 and 23 months of age) immunised – both as percentage to total number of cases in the respective states (i.e. total births). We compare the progress of the states from the benchmark of national level achievement (i.e. all India level achievement) which is more than 100 percent increase for institutional births (i.e. from 38.7 percent in 2005-06 to 78.9 percent in 2015-16) and 43 percent increase for immunisation (i.e. from 43.5 percent in 2005-06 to 62 percent in 2015-16). The increase in institutional births, in terms of percentage points, at the all India level over the ten year period is 40.2 (i.e.  $78.9 - 38.7 = 40.2$ ) and in immunisation it is 18.5 percent.

**Institutional Births:** In respect of institutional births, the performance of Kerala is unique. It had the highest level of attainment even in 2005-06 (99.3 percent). With a level of 99.9 percent attained in 2015-16 the State stands out at the top. Other states in the declining order of their achievement with more than 90 percent level achieved in 2015-16 in this respect are: Tamil Nadu (99 percent), Karnataka (94.3 percent), Andhra Pradesh (91.6 percent), Punjab (90.5 percent) and Maharashtra (90.3 percent). The extent of progress, from the level in which these states were in 2005-06, is also notable: Punjab, 39 percent (51.3 percent in 2005-06), Karnataka, 30 percent (64.7 percent in 2005-06), Maharashtra, 26 percent (64.6 percent in 2005-06) and Tamil Nadu, 11 percent (87.8 percent in 2005-06). For this reason, the states of Punjab, Andhra Pradesh, 33 percent (69 percent in 2005-06), Karnataka and Maharashtra could be counted among the best performing states.

Many other states are also notable for their achievement even though they are still below the 90 percent mark for institutional births in 2015-16. This is because from a very low level in 2005-06, they have achieved a quantum jump far higher than the all India level increase of 40.2 percent. These are 9 states viz. (i) Chhattisgarh (55.9 percent), (ii) M. P. (54.6 percent), (iii) Rajasthan (54.4 percent), (iv) Odisha (49.8 percent), (v) Assam (48.2 percent), (vi) U. P. (47.2 percent), (vii) Haryana (44.8 percent), (viii) Bihar (43.9 percent) and (ix) Jharkhand (43.6 percent). Two more states viz. Gujarat and J & K have also registered quantum jumps in their achievement



near to the national average: Gujarat (36 percent) and J & K (35.5 percent). Rearranged in the descending order of their rank for their level of achievement in 2015-16 in institutional births, the above states acquire the following order: (i) Gujarat (88.7 percent), (ii) J & K (85.7 percent), (iii) Odisha (85.4 percent), (iv) Rajasthan (84 percent), (v) M. P. (80.8 percent), (vi) Haryana (80.5 percent), (vii) Assam (70.6 percent), (viii) Chhattisgarh (70.2 percent), (ix) U. P. (67.8 percent), (x) Bihar (63.8 percent) and (xi) Jharkhand (61.9 percent). Two conclusions that follows from this empirical rank ordering for their achievement are: (i) in terms of quantum jumps over the 10 year period of 2006-16, the states of Bihar, Odisha, U.P. and M. P., once regarded as backward, have performed well with a far higher than the 'all India' average achievement; and (ii) notwithstanding the above achievement, it is still the states from this very group (viz. Jharkhand, Bihar, U. P. and Chhattisgarh, including Assam) which need to improve in their performance in the coming years to catch up with the more progressive states in the achievement of their overall institutional births. Thus, the ranking of the states for their performance levels made as above permits four inferences to be made as follows: (i) among all the states in India, Kerala stands at the TOP for having achieved close to the 100 percent mark; (ii) Punjab, Karnataka, Maharashtra and A. P. are the next four states coming in the BEST performing category for having reached the 'above the 90 percent achievement mark'; (iii) the nine states (of Chhattisgarh, M. P., Rajasthan, Odisha, Assam, U. P., Haryana, Bihar and Jharkhand) have scored a quantum leap in their progress above the all India average during the years of 2006-16 to emerge as the GOOD performing states; and (iv) the focus of achievement must seriously centre on the five states of Jharkhand, Bihar, U.P., Chhattisgarh and Assam in the coming years in order that the gap in achievement with the more progressive states is bridged and also push up the all India score in this regard.

**Immunisation:** As stated before, the all India level achievement in immunizing children in the age group of '12 to 23 months from their birth' (which is available for 18 major states of the country) has increased from 43.5 percent in 2005-06 to 62 percent in 2015-16. This shows that there is still considerably more distance to cover in this respect. Even Kerala, which has attained the nearly 100 percent mark for institutional births, has achieved 82.1 percent level in immunisation. Interestingly, Punjab (89.1 percent) and West Bengal (84.4 percent) have performed better than Kerala in this respect. Other states, in their decreasing order of achievement (who have scored higher or close to the all India average of 62 percent in this respect) are: (i) Odisha (78.6 percent), (ii) Chhattisgarh (76.4 percent), (iii) J & K (75.1 percent), (iv) A. P. (65.3 percent), (v) Karnataka (62.6 percent), (vi) Jharkhand (61.9 percent) and (vii) Bihar (61.7 percent). These states together account for 10 of the 17 major states for which NFHS has published data. The other five states which have improved in terms of their performance in immunisation during the period 2006 to 2016 are: (i) Rajasthan (from 26.5

percent to 54.8 percent), M.P. (from 10.3 percent to 53.6 percent), U.P. (from 23 percent to 51.1 percent), A.P. (from 46 percent to 65.3 percent), Gujarat (from 45.2 percent to 50.4 percent) and Assam (from 31.4 percent to 47.1 percent). Thus, unlike in the case of institutional births, although the states of Punjab, West Bengal, Kerala, Odisha, Chhattisgarh and J & K are clearly the better performing states, not only these states too need to improve further, majority of the remaining states need to strive harder to improve their performance in this respect. It is relevant to recall at this instance that, earlier in Sub-section 8.3.1, we had observed that the states of Bihar, W.B., Jharkhand, M.P., U.P., Maharashtra and Haryana are having their SCs quite outside the IPHS norms. Clearly, therefore, improving the condition on this situation should matter in improving the level of immunised children in the first instance and to improve the health status of the economy in general at the second instance. Further, surprisingly, for three states (viz. Haryana, Maharashtra and T.N.) there is a decline in their percentage coverage of immunised children in 2016 over that in 2006 (T. N. from 81 to 70 percent, Maharashtra from 59 to 56 percent and Haryana from 65 to 62 percent). Major reason for stagnant or declining trend in immunisation coverage is due to decline in coverage in urban areas. While under National Health Mission there exists a state controlled immunisation system in rural areas, absence of the same for urban centres and greater reliance on private clinics leads to poor immunisation coverage. Further, change in vaccine delivery model is also considered to be responsible for such declining trend. While the latter need to be addressed at the system level, for the former, one need to increase the acceptability of immunisation programme among the urban communities.

**Check Your Progress 1** [answer within the space given in about 100 words]

- 1) Distinguish between 'incidence rate' and 'prevalence rate'.

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- 2) In what way the 'incidence rate' and the 'prevalence rate' are related?

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3) As a summary observation, what would you say on the extent of expansion of SCs and PHCs in India?

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4) How is healthcare delivery assessed and what is the relative position of India in this regard?

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5) How is healthcare outcome measured?

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6) Which of the Indian states have performed well in respect of number of institutional births over the period 2006-16?

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7) Which other states are also notable for better performance on number of institutional births and why?

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8) What is the important inference that flows from the state wise performance in institutional births despite the significant increase achieved over 2005-06?

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9) Why do you think that in immunisation states have scored lower than that in institutional births? What would you say is the needed focus of policy attention in this regard?

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#### **8.4 CATASTROPHIC HEALTH EXPENDITURE AND EQUITY**

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According to World Health Organisation whenever the health expenditure is equal to or in excess of 40 percent of a household's non-subsistence income, it is considered as catastrophic health expenditure. Subsistence need is defined as minimum requirement for household to maintain basic life needs like food, shelter and clothing. An estimate reveals that every year nearly 150 million people are exposed to catastrophic health expenditure out of which 100 million slip into poverty.

Health being an important and necessary condition of human life for overall economic growth and development, achievement of equity in health should be an important social sector goal. A poor person with poor health is more prone to morbidity (and mortality). Poor health further results in poor productivity and hence low income which further result in poor economic growth. It is, therefore, necessary to break this vicious circle of poor health and morbidity.

Equity in health is defined as absence of systematic disparities in health between social groups with different levels of social advantages/disadvantages. Social advantages mean wealth, power and/or prestige that define one's social hierarchies. Inequity in health is differences in health that are unfair and unjust. Therefore health inequity places disadvantaged groups in further disadvantageous position. Concept wise, it is an ethical concept

with strong linkages with human rights grounded in principles of distributive justice.

Health differences could be due to: (i) natural or biological differences; (ii) health damaging behaviour where degree of choice of lifestyle is severely restricted; (iii) exposure to unhealthy, stressful living and working conditions; (iv) inadequate access to essential health and other public services; and (v) health related social mobility involving the tendency for sick people to move down the social scale.

**Health Equity:** Health equity focuses on distribution of resources and other processes that drive a particular type of health inequality which is 'unjust and unfair'. All types of disparities are not unfair (e.g. a young person is healthier than an elderly, females naturally are prone to reproductive tract infections and not men). However, access to treatment of HIV infected persons could vary by gender, location, income level, etc. which is 'unjust and unfair'. In light of these, equity in healthcare can be stated as 'equal access to avoidable care for equal need, equal utilisation for equal need and equal quality of care for all'. Such a need can be classified into two types viz. (i) horizontal equity i.e. equal treatment for equal need and (ii) vertical equity i.e. different treatment for different need or more resources for greater need.

Health inequity can originate from the demand side factors as well as from the supply side factors. Demand side sources of inequity are:

- a) **Income:** It is the most important source of health inequity. Low income comes with poor access to resources like food, nutrition, healthcare, etc. which are unjust.
- b) **Gender:** Many a times, following social construction and beliefs, a specific sex (male or female) is discriminated which should be avoided or prevented.
- c) **Ethnicity/Race:** People belonging to certain ethnic group or race might be subject to discrimination in healthcare equity. For instance, in India caste systems are so strong and deep rooted that people belonging to backward classes have lower access to healthcare in spite of several inclusive policies by the government.
- d) **Education:** This is another important factor of health and healthcare inequity. Given the differential exposure to education, people often end up having differential health access to healthcare. Since education brings in better information and knowledge on health and well-being, disparities in education results in inequity of an unfair and preventable type.

Supply side sources of inequity could be:

- a) **Health Financing:** Sources of health financing is an important cause of inequity from supply side. Public finance is the major source of health financing in India but its distribution is skewed towards urban areas

whereas majority of Indians live in rural areas. Such disparities in allocation of public finance are unfair and can be prevented and avoided.

- b) **Community Factors:** It accounts for factors like environment, geographical location, availability and accessibility of healthcare services that influence both the health status and healthcare seeking behaviour. It is certainly difficult to reach a health centre when there is no concrete road which is even more difficult during rainy season. Even after one reaches the health centre, if there is no doctor or medicines available, people will not get treatment. These disparities are avoidable and should be addressed to ensure proper healthcare.

### 8.4.1 Measurement of Health Inequity: Concentration Index

Concentration index is a universally used standard tool to measure inequality in health outcome or the extent of health care utilisation or the adequacy of health financing. Its value lies between +1 and -1. A negative value of index implies that the study variable is concentrated among the poor (or disadvantaged group) while the opposite is true in case of positive value. For instance, if the study variable is maternal mortality rate (MMR), a negative value of the concentration index of MMR implies that maternal mortality rate is higher among the poorer mothers. Likewise, if the variable is women literacy rate and its concentration index shows a positive value it implies that richer class women are more literate compared to women from poorer class. The different steps involved in measuring the Concentration Index are as follows.

**Step 1:** First, rank the population according to their monthly per capita consumption expenditure (MPCE). Second, group the ranked population into five ascending quintiles (i.e. population in quintile 1 is the poorest and the one in quintile 5 the richest). Third, collect the data on the number of hospitalised persons for each quintile (i.e. the number of in-patients) and multiply the same by the number of times they were hospitalised.

**Step 2:** First, calculate the cumulative percentage of sample population (from quintile 1 through 5) and denote it as:  $p_t$  ( $t=1, \dots, 5$ ). Second, calculate the cumulative percentage of estimated cases (from quintile 1 through 5) and denote it as:  $L_t$  ( $t = 1, \dots, 5$ ).

**Step 3:** The concentration index is then computed as:

$$CI = (p_1 L_2 - p_2 L_1) + (p_2 L_3 - p_3 L_2) + (p_3 L_4 - p_4 L_3) + (p_4 L_5 - p_5 L_4)$$

Let us take an example to illustrate the calculation of Concentration Index. We consider the distribution of under-five mortality by wealth quintiles in India for the year 1982-92. Column 2 represents the number of births by wealth quintile, 3 and 4 represents the percent and cumulative percent of births for each of the five quintiles. Column 5 represents under five mortality for these five quintiles, whereas columns 7 and 8 represents the percent and cumulative percent of deaths. The last column is the Concentration Index.

Note that:  $(p_1 L_2 - p_2 L_1) = (0.23 * 0.59 - 0.45 * 0.30)$ . Calculating the other entries in column 9 similarly, we have their sum as  $-0.1694$  which is the concentration index. The negative concentration index reflects the higher mortality rates among poorer children.

Wealth Group	No. of Births	Percent of Births	Cumulative Percent of Births (p)	Under Five Mortality per 1000	No of Deaths	Percent of Deaths	Cumulative Percent of Deaths (L)	Concentration Index
1	2	3	4	5	6	7	8	9
Poorest	29,939	23	23	154.7	4632	30	30	-0.0008
Second	28776	22	45	152.9	4400	29	59	-0.0267
Middle	26528	20	66	119.5	3170	21	79	-0.0592
Fourth	24689	19	85	86.9	2145	14	93	-0.0827
Richest	19739	15	100	54.3	1072	7	100	0.0000
Total/ Average	129671			118.8				-0.1694

**Check Your Progress 2** [answer within the space given in about 100 words]

1) How does WHO define ‘catastrophic health expenditure’?

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2) Why is it necessary to break the vicious cycle of poor health and morbidity?

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3) How is ‘equity in health’ defined?

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4) How is 'health inequity' measured? How is it interpreted?

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## 8.5 LET US SUM UP

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The incidence of sickness on account of non-communicable diseases has increased in the recent years. The trend is suggestive of a higher incidence due to NCDs as compared to the communicable ones on which mankind has made significant progress in its control. The comparative picture on the incidence of mortality rates owing to WASH services and malaria suggest that India lags behind some of its other neighbouring countries. Further, the location and spread of sub-centres and PHCs also suggest that India is yet to attain their reach as per the IPHS norms. As they cater to the primary and secondary health services, large sections of population residing in rural areas are put to severe economic hardship. Although significant improvement have been attained in respect of establishing these centres of healthcare, it is clear that certain states like Bihar, M.P., Chhattisgarh, Jharkhand, Odisha, Haryana, Maharashtra, U. P., etc. should strive harder in the coming years to bridge the gap that has come to exist with some of the other progressive states. There is a difference in the attainment of 'institutional deliveries' and immunisation of newly born children with the former being on the higher side. This is suggestive of lack of priority accorded to children's immunisation which impact adversely on the future productivity of younger workforce. This calls for remedial measures. Inequality in healthcare due to supply side constraints needs removed by suitable measures. A measure of health inequality viz. the concentration index is a useful policy instrument in this regard.

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## 8.6 KEY WORDS

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- Incidence Rate** : Used to measure frequency of illness, this is defined as the number of new cases occurring in a defined population during a specific period of time.
- Prevalence Rate** : This refers to all current (old + new) cases of illnesses existing at a given point of time or over a period of time in a given population. Prevalence rate is of two types a) point prevalence and b) period prevalence. The first one considers all current cases of a specific disease existing at a given point of time. The second one considers the same during a given period of time.



**Catastrophic Healthcare Expenditure** : Whenever the health expenditure is equal to or exceeds 40 percent of a household's non-subsistence income, it is considered as catastrophic health expenditure. Here, subsistence income is defined as income required to meet the minimum requirement of household for maintaining the basic life needs like food, shelter and clothing.

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## 8.7 SOME USEFUL BOOKS AND REFERENCES

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- 1) World Health Statistics, WHO, 2017.
- 2) Rural Health Statistics, Ministry of Health & Family Welfare, Government of India, 2016.
- 3) Whitehead M, The Concepts and Principle of Equity and Health, World Health Organisation.
- 4) Kanjilal B (2007). Health, Equity and Poverty: Exploring the Links in West Bengal, India. (accessed online).

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## 8.8 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

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### Check Your Progress 1

- 1) Incidence rate, in general, refers to number of new cases of illness (for any disease) registered in a population or region during a specified period of time. Expressed as a percentage of the 'population at risk', it provides an indicator of morbidity which itself is defined as 'any departure from a state of physiological well-being'. Prevalence rate refers to cases of both new and old illnesses either at a given point of time (when it is referred to as the point prevalence rate) or at a given period of time (when it is referred to as period prevalence rate).
- 2) It is related as:  $\text{prevalence} = \text{incidence} * \text{mean duration}$ . Thus, for arriving at prevalence rate, it is necessary to have an estimate of both incidence rate as well as the 'mean duration' of diseases.
- 3) Even after close to 7 decades of investment in public health services, close to one-third states lie outside the IPHS norms for coverage of SCs and PHCs and a still higher 62 percent of states are outside this norm for CHCs.
- 4) Healthcare delivery can be assessed by considering the density of key professional manpower viz. physicians, paramedical personnel and pharmacists. The relative position of India on physicians is lower than countries like Pakistan and Srilanka and with respect to paramedical personnel also it is lower than that in Srilanka.
- 5) Healthcare outcomes can be measured by considering the progress made in number of institutional births and proportion of immunised children

for which data from the two latest surveys of NHFS is available for 18 major states in India.

- 6) Kerala, T.N., Karnataka, A.P., Punjab and Maharashtra. For two reasons, these states can be considered as BEST performers: one, all these states have scored more than 90 percent in this regard; and two, the extent of improvement made in terms of the quantum jump from its level in 2006 is in the range of 26 to 39 percent (leaving aside T. N. and Kerala, both of which were at a much higher level in 2006: Kerala at 99.3 percent and T. N. at 87.8 percent).
- 7) Nine states which includes the yesteryears BHIMARU states (along with Assam and Haryana) have registered an increase of more than 43 percent from their level in 2005-06. These states therefore emerge as GOOD performers.
- 8) The focus of achievement in respect of institutional deliveries should remain on the five states of Jharkhand, Bihar, U.P., Chhattisgarh and Assam in the coming years to bridge the gap between the top performing states and push up the all India score in this regard.
- 9) The achievement of higher institutional deliveries is a necessary but not sufficient condition for the improvement in immunisation scores. There is evidence of reduced priority given to immunisation after the institutional births. Hence, follow up efforts to draw the children through motivating their mothers is needed.

### Check Your Progress 2

- 1) It is defined as greater than or equal to 40 percent of subsistence income of a family where subsistence income itself is defined as the income required to meet the basic needs of 'food, clothing and shelter'.
- 2) Poor health means higher risk for morbidity or illness. This further means low productivity in work and hence low income. This in turn means low national income and low economic growth. Thus the need to break the vicious cycle.
- 3) Grounded in principles of distributive justice, equity in health means the absence of systematic disparity in affording health services. It refers to the treatment of the poor in the society in the matter of access to healthcare on the grounds of ethnicity, gender, income, etc. making it 'just and unfair' on the already disadvantaged.
- 4) Health inequity is commonly measured by the construction of Concentration Index (CI). Its construction requires the ranking of population as per MPCE, grouping the ranked population into five ascending quintiles, collecting data on number of hospitalised patients along with the frequency of hospitalisation, etc. The value of CI lies between -1 and +1. A negative value implies that the variable is concentrated among the poor. For further steps, refer Sub-section 8.4.1.

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## UNIT 9 HEALTH POLICY IN INDIA

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### Structure

- 9.0 Objectives
- 9.1 Introduction
- 9.2 Public Health Policy in India
  - 9.2.1 Health Status in India: Progress and Challenges
  - 9.2.2 Causes of Poor Health Outcomes
- 9.3 Public Health Programmes in India
  - 9.3.1 National Health Mission
  - 9.3.2 Reproductive and Child Health Programmes
- 9.4 National Health Policies in India
  - 9.4.1 Prior to 2000
  - 9.4.2 Post-2000
- 9.5 Let Us Sum Up
- 9.6 Key Words
- 9.7 Some Useful Books and References
- 9.9 Answers/Hints to Check Your Progress Exercises

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### 9.0 OBJECTIVES

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After reading this unit, you will be able to:

- define the term ‘public health’ indicating its main thrust and objectives;
- compare the trends in the changing health status of India over time;
- identify the factors responsible for the poor public health outcomes in India;
- explain the major initiatives taken under the ‘public health programmes’ in India; and
- bring out the thrust in the National Health Policies of India between the pre-2000 and post-2000 years.

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### 9.1 INTRODUCTION

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Health status of a country is measured by a number of indicators. These are: (i) life expectancy at birth, (ii) infant mortality rate, (iii) child and maternal mortality rate, (iv) morbidity incidence and prevalence rate, (v) disability adjusted life years, (vi) anthropometric measures like stunting, wasting and under-weight children, (vii) body mass index (BMI), etc. Poor child health outcomes are due to poor reproductive health status of women. The term reproductive health of women implies: (i) access to safe, effective, affordable

and acceptable methods of birth control and (ii) access to appropriate healthcare services during pregnancy and later after child birth. The ultimate objective of reproductive health is to ensure good health of the mothers and new born babies.

The socio-economic development of a country is determined by the health status of the population along with other factors like income and educational attainment. Health outcome and educational attainment acts as complementary to each other. This is well documented for different countries in the annual UNDP's Human Development Report (HDR). Research shows that poor health outcomes and poverty are both interdependent and are simultaneously determined. This means, health affects poverty and poverty, in turn, aggravates the health status of a country. Hence, poverty cannot be eradicated if health is ignored. Likewise, health status of the population can be improved if poverty is tackled. Deprivation such as lack of access to resources and critical amenities (including safe drinking water, sanitation, lack of education and general awareness) contribute to reinforcing ill health, morbidity and higher mortality levels. Contrary to this, attainments of other dimensions of human development, especially education and economic well-being, reinforces the transition towards better health and longevity. At the time of independence, the health situation of India was extremely poor. There have been large gains in the health status of India measured in terms of increase in life expectancy at birth and a continuous decline of infant mortality rate (IMR). However, India has not been able to perform well compared to international standards. India shares about 17.5 percent of global population but its disease burden is disproportionately higher (about 20 percent of global disease burden).

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## **9.2 PUBLIC HEALTH POLICY IN INDIA**

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Public health is defined as 'the science and art of preventing disease, prolonging life and promoting human health through organised efforts and informed choices of society, organisations (public and private), communities and individuals'. Public health aims at improving the quality of life through prevention and treatment of disease, including reproductive and child health and mental health. Public health practice requires numerous professionals like doctors, nurses, midwives, medical assistants, epidemiologists, biostatisticians, microbiologists, etc. The focus of a public health intervention is to prevent and manage diseases, injuries and other health conditions. This is achieved through surveillance of cases and promotion of healthy behaviours in communities and environment. Many diseases are preventable through simple, non-medical methods. For instance, simple act of hand washing with soap can prevent the spread of many contagious diseases. Similarly, treating a disease or controlling a pathogen can be vital to prevent its spread, either during an outbreak of infectious disease or through contamination of food or water supply.

Public health communication programmes (e.g. distribution of condoms) and vaccination programmes are examples of common preventive public health measures. Measures like these have contributed greatly to the health of population like increasing the average life expectancy at birth. Public health, through local health systems and non-governmental organisations, plays an important role in disease prevention efforts in both the developing and developed countries. The 'world health organisation' (WHO) coordinates and acts on global public health issues. Most countries have their own governmental public health agency. Often called as the 'ministry of health', they are responsible for domestic health issues. India is the first country in the world which has officially initiated the family planning programme to tackle population growth and unwanted pregnancies. However, over the decades the strategy and policies of family planning programme has changed (family planning is now renamed as family welfare programme). The main objective of this programme is not to increase the couple protection rate (or to increase the contraceptive prevalence rate) but rather to ensure safe delivery and give proper pre and post natal care comprising of complete immunisation of children along with safe motherhood strategies.

### 9.2.1 Health Status in India: Progress and Challenges

India has progressed considerably since independence on certain health indicators. Bad indicators of health like CBR, CDR and IMR have reduced dramatically. Likewise, good indicator of health like life expectancy at birth has increased (from 33 in 1947 to 69 years in 2016). This suggests that India is progressing in respect of health outcomes over time. India has eradicated

**Table 9.1: Health Status in India: Progress and Challenges**

Indicators	1947	2014
Crude Birth Rate (CBR)	40.8	21
Crude Death Rate (CDR)	27.4	6.7
Infant Mortality Rate (IMR)	146	39
Life Expectancy at Birth	32.7	68.6 (2016, projected)

**Source:** Sample Registration System, Registrar General, GoI.

many communicable diseases. Certain diseases like polio, leprosy and neonatal tetanus are on the verge of elimination. In spite of this progress, non-communicable diseases are expected to continue to remain a major public health problem in the coming decades posing a real threat to India's public health. Some endemic diseases like AIDS, tuberculosis (TB), malaria, dengue, swine flu, etc. continues to challenge India's public health

infrastructure. In order to combat these diseases, a high level of readiness, in terms of early detection and rapid response is required.

There is also an increase in non-communicable (chronic) diseases [NCD]. Some of these diseases are associated with life style (e.g. diabetes, high blood pressure, stroke, heart disease, cancer etc.). These diseases are predominantly found among the persons belonging to age group 35 to 60. Recent surveys reveal that by 2025 about 189 million Indian population will be more than 60 years of age. Majority of this aged population will suffer from non-communicable or life style diseases. Life style disease claim more than 50 lakh lives every year in India (5.9 million in 2014) constituting about 15.6 percent of the global NCD's share. Diabetes has become the most alarming health issue with major public health consequence in India. The proportion of diabetics for adults above the age 20 in urban India has increased from 2.1 percent in 1970 to 12.1 percent in 2011. International Diabetes Federation suggests that of the 366 million diabetes all over the world (in 2011), 61 million (or 16.7 percent) are in India. These trends indicate that there will be an enormous burden on India's health infrastructure. The public health in India is therefore under serious threat since it is poor and inadequate.

### **9.2.2 Causes of Poor Health Outcomes**

India accounts for 16.5 percent of the world's population but shoulders one-fifth (20 percent) of the world's share of diseases. A major health challenge posed by the specific phase of its current demographic transition relates to infant mortality, child malnutrition, anaemic mothers and women with poor reproductive health. Given that the proportion of women in the reproductive age-group is a high 55 percent (in 2016) and is expected to remain around this level for the next decade, the situation is extremely challenging from the point of view of health policy. This requires increased efforts to reduce not only maternal mortality but also the number of infant and child deaths. About 1.6 billion people across the world are estimated to be living in multidimensional poverty (in which health figures as an important component). Nearly 440 million of them (i.e. 27.5 percent) are in the eight large Indian states of Bihar, Jharkhand, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Odisha, Rajasthan and West Bengal. Poor health and multidimensional poverty are interlinked. India's public health expenditure is extremely low compared to all major countries in the world (it is just about one percent of our GDP). As a result, there is a high proportion (85.6 percent) of out-of-pocket expenditure in India.

The health sector is a state subject in India. There exists wide range of health inequality (as well as inequality of health expenditure) across the states in India. Hence, in order to ensure health equality across the states in India, there is a need to address income inequality. This is a critical issue needing to be addressed from the dimensions of social justice, equity and balanced regional development. This calls for more development grants for eradicating poverty in the poorer states of the country.

**Check Your Progress 1** [answer within the given space about 50-100 words]

1) State the indicators with which health status of an economy is assessed.

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2) Define the term 'public health'.

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3) In what respect, the strategy of 'family health programme' has changed over time in India?

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4) Would you say that India has made good progress in its public health status? What are its present challenges in this regard?

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5) Do you think that India shoulders a disproportionately higher burden of disease burden of the world? Justify your answer.

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## 9.3 PUBLIC HEALTH PROGRAMMES IN INDIA

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The 'ministry of health and family welfare', government of India, is responsible to formulate and execute all 'public health programmes' including family welfare. It deals with public healthcare, awareness campaign, immunisation programmes and preventive medicine. There are 13 national programmes run by this central authority. The areas covered under these public health programmes include treatment/prevention of: AIDS, cancer, filaria, iodine deficiency disorder, leprosy eradication, mental health, control of blindness, prevention and control of deafness, etc. Family welfare, in particular, is responsible for aspects pertaining to: (i) rural healthcare services, (ii) family planning and welfare, (iii) reproductive and child health (RCH), (iv) maternal health, (v) paediatrics, (vi) information, communication and knowledge about family planning, (vii) cooperation with NGOs and other international donors.

### 9.3.1 National Health Mission

In order to address the health needs of under-served rural areas in India, the government has launched the 'national rural health mission' (NRHM) in 2005. Subsequently, a 'national urban health mission' (NUHM) was launched in 2013 as a part of overarching 'national health mission' (NHM). Under the NRHM, 18 states, found to be weak in respect of public health indicators compared to other developed states are given special focus. The major objectives of the NRHM are to: (a) set-up community owned decentralised healthcare delivery system, (b) establish a fully functional healthcare delivery system so as to ensure inter-sectoral convergence at all levels and (c) ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality. Some of the major initiatives of NRHM are the following.

- Community health volunteers called 'accredited social health activists' (ASHA) are entrusted to act as link between community and health system in rural areas.
- Capacity building programmes are undertaken under NRHM with due importance given to training of nursing staff and 'auxiliary nurse midwives' (ANM).
- 'Safe motherhood intervention scheme' [called 'Janani Suraksha Yojana (JSY)'] is introduced under NRHM. JSY aims at promoting institutional delivery among poor pregnant women to reduce neo-natal and maternal mortality. The Scheme provides cash incentive to poor pregnant mothers where institutional delivery is low.
- 'Janani Shishu Suraksha Karyakram' (JSSK) is introduced to provide free to and fro transport, free drugs, free diagnostic and free diet to pregnant mothers who come for delivery in public health institutions.



- There is a significant departure in the implementation of NRHM. This is in terms of a pre-requisite to allocation of funds to states requiring the signing of a MOU (memorandum of understanding) with the centre. The MOU is to the effect that agreement to the policy is bound by the 'timeline and performance benchmarks' against identified activities.

### 9.3.2 Reproductive and Child Health Programmes

Recent findings reveal that India is one of the most backward countries in the world in terms of gender inequality, especially in respect of health and survival. Gender is one of the main social determinants of health which includes cultural, economic and social factors which play a major role in health outcomes of women. Thus, higher gender inequality adversely affects the health of women (especially those belonging to reproductive age group) as well as new born babies. Various studies have revealed that, in our patriarchal society, boys are more likely to receive treatment from healthcare compared to girls. Widespread malnutrition of children further contributes to the incidence and severity of health related problems. It poses a major threat to the children and, in extreme cases, threaten their lives. Malnutrition creates serious health problems by contributing to premature births and to abnormally 'low weight at birth'. Malnutrition is also a major contributing factor in spreading infectious diseases. By weakening the body response to diseases, malnutrition reduces acquired immunity. Research on health has established that malnutrition of children, besides others, is mainly due to ill reproductive health of the mothers. Therefore, reproductive and child health plays an important role in the context of future demographic health of a nation like India. This is particularly important to be focused upon in our national health policy since India is slated to reap the benefit of demographic dividend around 2025.

Poor maternal health contributes to future economic disparities of both mothers and their children. Poor maternal health also affects child's health in adverse ways and decreases a women's ability to participate in economic activities. Thus, NRHM and 'family welfare programmes' have set up and implemented various programmes to strengthen the health of the mothers and children. The RCH (reproductive and child health), Phase I, was launched in 1997. This includes four major components viz. (i) family planning, child survival and safe motherhood, (ii) need based cliental approach to healthcare, (iii) prevention and management of sexually transmitted diseases (STD) and AIDS and (iv) reproductive tract infection (RTI). The RCH – Phase II's (begun in 2005) major focus is to reduce maternal and child mortality in rural areas. Its major strategies are: (i) essential obstetric care including institutional delivery or delivery attended by skilled attendant and (ii) emergency obstetric care which includes operationalisation of first referral units, primary health centre (PHCs) and Community Health Centre (CHCs) for round-the-clock-delivery of health services.

**Check Your Progress 2** [answer within the space given in about 50-100 words]

1) State the objectives of NRHM.

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2) State the specific objective of JSY under NRHM.

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3) How is 'malnutrition' a serious health hazard?

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**9.4 NATIONAL HEALTH POLICIES IN INDIA**

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India's health policies and programmes are influenced by Bhore Committee's recommendation initiated in the pre-independence period. Set-up in 1943, under the chairmanship of Sir Joseph William Bhore to assess the health status of India, the committee submitted its report in 1946. The major objective of the Bhore Committee was to strengthen the public healthcare system. The Committee therefore undertook a survey to ascertain: (i) the existing health conditions of the population, (ii) the nature and functions of healthcare organisations and (c) the healthcare policy orientation needed to shape the future development of India. The Bhore Committee recommended that: (i) preventive and curative healthcare services must be integrated at all levels and (ii) for a short-term measure, there should be a 'primary health centre' (PHC) per 40,000 population (with two doctors, one nurse, four public health nurses, four midwives, four trained dais, two sanitary inspectors, two health assistants, one pharmacist, and fifteen other employees as attendants). For a long-term measure, setting-up of 'primary health units' with 75 bedded hospitals for each 10,000-20,000 population and 'secondary

health units' with 650 bedded hospitals regionalised around district hospitals (which should be of 2500 beds). The committee further recommended that medical education should include three months training in preventive and social medicine. The recommendations of the Bhore Committee were accepted in 1952 but due to fiscal constraints soon after independence, the proposals could not be implemented. However, the subsequent 'national health policies' (NHPs) and programmes were greatly influenced by the Bhore Committee recommendations. Under the NHPs, for the period prior to the year 2000, the NHP of 1983 and the 'national population policy' of 2000 (for the health issues covered under it) are important and therefore is briefly discussed here.

#### **9.4.1 Prior to 2000**

The first National Health Policy (NHP) after independence was adopted in 1983. The basic objective of the NHP-1983 was to ensure 'healthcare for all' by 2000. A massive rural healthcare infrastructure was undertaken by the government in which the rural public healthcare infrastructure was split into three tiers [viz. Sub-Centre (SC), Primary Health Centre (PHC) and Community Health Centre (CHC)]. The NHP-1983 suggested that there should be one SC for 5,000 population, one PHC for 30,000 population and one CHC for 1,20,000 population in plain areas. For hilly, tribal and difficult areas, the norm recommended was: one SC per 3,000 population, one PHC for 20,000 population and one CHC for 80,000 population. The NHP-1983 highlighted the following to be focused upon: (i) nutritional development of the population, (ii) measures to prevent food adulteration, (iii) maintenance of quality of drugs, (iv) water supply and sanitation, (v) protection of environment, (vi) strengthening the immunisation programme, (vii) maternal and child health services, (viii) school health programmes, (ix) occupational health services, (x) re-orientation of health personnel and (xi) inclusion of various systems of medicine and healthcare at the appropriate level.

The above outlines were to be evolved within a integrated planning framework seeking to provide universal comprehensive primary healthcare services, relevant to the needs and priorities of the community at a cost which the people can afford. The policy was to ensure the planning and implementation of various health programmes through the organised involvement and participation of the community by utilising the services of private voluntary organisations active in the health sector.

The National Population Policy (NPP) 2000 also provided a policy framework for achieving the goals of meeting the RCH needs along with the target to achieve the net replacement levels (called 'total fertility rate') aimed at stabilising the population by 2045. In order to achieve the outlined national socio-demographic goals and the health issues, RCH was especially to be given the top most priority. Specifically, these included: (i) addressing the unmet needs for basic reproduction, (ii) focusing on child health services, (iii) reducing the IMR to below 30, (iv) reducing the MMR to below 100, (v)

achieving the universal immunisation of children, (vi) reducing the reproductive time span of women by increasing the age at marriage, (vii) achieving universal access to information and services pertaining to fertility regulation and contraception, (viii) achieving 80 percent institutional deliveries and 100 percent deliveries by trained health professionals, (ix) preventing and controlling the STDs and AIDS and (x) integrating the Indian system of medicine in the provision of RCH services.

#### **9.4.2 Post-2000**

The National Health Policy (2002) recognised that morbidity and mortality levels of the country are exceptionally high and hence stronger preventive and curative measures are needed. It took special note of the fact that macro and micro nutrient deficiency among women and children are high. Major diseases like Malaria, TB and HIV received special mention. Given this scenario, the main features of the policy thrust are the following:

- 1) flexibility to state public health administrations to implement policies in their areas;
- 2) vertical implementation of structure for disease control programmes;
- 3) more training to paramedical staff to cater to backward regions of the country;
- 4) rectifying the uneven distribution of medical colleges across country;
- 5) upcoming medical disciplines like molecular biology to get developed infrastructure;
- 6) increase the number of persons specialised in family medicine and public health;
- 7) encourage the usage of generic drugs and vaccine;
- 8) include mental health in the public health domain;
- 9) since college and school children are the most impressionable target for inculcating the basic principles of preventive healthcare, the policy to target these youth for increasing the awareness of health promoting behaviour; and
- 10) encourage health related research among non-government service providers.

The National Mental Health Policy (2014) aims at: (i) providing universal access to mental health care; (ii) increasing access to mental health service to the vulnerable section of the society; (iii) reducing the risk and stigma of mental disease; (iv) ensuring the supply of skilled resources to treat the cases of mental sickness; and (v) identifying the social, biological and psychological determinants of mental health disorder. The more recent National Health Policy, 2017 also reiterates the goal of attaining the highest possible level of health and well-being by ensuring universal access to good

quality healthcare services (without financial hardship) linked to the Sustainable Development Goals. To achieve universal health coverage, specific steps identified are: (i) establishment of a comprehensive and free primary healthcare service for maternal, child and adolescent health through public hospitals and not-for profit private care providers; and (ii) providing a good quality secondary and tertiary healthcare service. The policy particularly emphasises the need for reducing the out-of-pocket expenditure on healthcare needs. The other major objectives of this policy are to: (i) increase the life expectancy at birth from 67.5 to 70 by 2025; (ii) reduce the under-five mortality to 23 by 2025 and maternal mortality to 100 by 2020; (iii) reduce the infant mortality rate to 28 by 2019; (iv) reduce neo-natal mortality to 16 and still birth rate to single digit by 2025; (v) eliminate leprosy by 2018; (vi) comprehensively immunise 90 percent newborn by 2025; (vii) ensure adequate availability of paramedics and health workers for primary and secondary healthcare in high priority districts by 2025; (viii) ensure district level electronic database of information on health system by 2020; etc.

The 2017 policy thus aims to project an incremental assurance based approach. However, the policy gives cause for two types of criticisms viz. (i) agency stakeholder critique; and (ii) feasibility critique. On the first, while the policy identifies what needs to be done, it does not identify the ‘who, what and the how’ sides of its implementation. This is perhaps due to the reason that healthcare is a state’s responsibility. But it is important to improve the monitoring of the delivery systems. On the second (i.e. the feasibility critique), the policy calls for a reform in financing the public healthcare facilities where the operational costs would be in the form of reimbursements for care provision on a per capita basis for primary care. But the policy is silent on how this financing reform can be achieved and who will manage them. Thus, while the policy more lucidly identifies the need to address problems with respect to the three ‘As’ (Access, Affordability, Accountability) of healthcare system of India, it fails to provide a cohesive, tangible action plan to address the problems pertaining to any of the ‘As’ (especially when the public healthcare system is sinking under micro and macro managerial inefficiencies and is low on training and capacity building efforts).

**Check Your Progress 2** [answer within the space given in about 50-100 words]

- 1) In what way is Bhore committee recommendation significant for India’s national health policy?

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2) When was the first NHP adopted in independent India and in what way did it differ in its recommended emphasis from that of Bhore committee's recommendations?

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3) State the thrust on health policy front in the NPP 2000. What were some of NPP's specific quantitative health oriented targets set?

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4) In what respects NHP 2002 differed in its thrust from that of NHP 1983?

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5) What are some of the notable quantitative targets set in the NHP 2017?

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## 9.5 LET US SUM UP

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Given its socio-economic and demographic features, public health plays an important role in India. Private healthcare is not only expensive but creates a situations of market failure causing the problems of moral hazard and adverse selection. The poorer section of society therefore needs public health to a greater extent compared to the economically well-off segments. The NRHM is therefore a notable step aimed at mitigating the suffering of the poor rural population for their healthcare needs. There is a built-in efficiency clause in

NRHM for ensuring ‘timeline and performance benchmarks’ against identified activities. Despite some of the initiatives, the public health sector in India is considered stagnant when looked at from the share of public health expenditure to GDP which is just about 1 percent of GDP. Considering that India is slated to enjoy the benefit of demographic dividend roughly after 2025, it is necessary that various aspects of public health and in particular the RCH services needs to be given utmost priority. The NPP, 2000 had set a target of achieving IMR 30 which was achieved by 2016. However, many other targets, particularly the health infrastructure in terms of CHCs for every 1.2 lakh population is yet to be achieved. Even in terms of SCs and PHCs, although it is achieved at the aggregate average level, there are huge variations across states and districts.

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## 9.6 KEY WORDS

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- Public Health** : The science and art of preventing disease, prolonging life and promoting human health through organised efforts and informed choices of society, communities and individuals.
- Health Equity** : Refers to minimising disparity in health outcomes in respect of gender, caste, religion, occupational groups as well as different geographical regions.
- NRHM** : In order to address the health needs of under-served rural areas in India, the government of India has launched National Rural Health Mission (NRHM) in 2005. NRHM, particularly lays emphasis on states that are weak in respect of public health indicators compared to other developed states.
- RCH** : The RCH was launched in 1997 and includes four major components viz. (i) family planning, child survival and safe motherhood, (ii) need based cliental approach to healthcare, (iii) prevention and management of sexually transmitted diseases (STD) and AIDS and (iv) reproductive tract infection (RTI).
- Demographic Dividend** : During the process of demographic transition, for a certain period of time, the growth of working age population (between the age group of 15-60) would be higher than the non-working population (i.e. population below age 15 and above age 60). This is basically due to falling fertility and stable mortality. This gives a ‘window of opportunity’ to the economy. This is known as ‘demographic dividend’. For India, this is expected to reach its peak during 2020 to 2030, roughly around 2025, and is expected to last up to late 2060.

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## 9.7 SOME USEFUL BOOKS AND REFERENCES

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- 2) Goel S (2007). From Bhore Committee to National Rural Health Mission, A Critical Review, The Internet Journal of Health, 7(1).

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## 9.8 ANSWERS/HINTS TO CHECK YOUR PROGRESS EXERCISES

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### Check Your Progress 1

- 1) Life expectancy at birth, infant mortality rate, child and maternal mortality rate, morbidity incidence and prevalence rate, disability adjusted life years, anthropometric measures like stunting, wasting and under-weight children and body mass index (BMI).
- 2) It is defined as the 'science and art of preventing disease, prolonging life and promoting human health through organised efforts and informed choices of society, communities and individuals'.
- 3) It has changed from targeting the 'couple protection rate' to ensuring safe delivery and giving proper pre- and post-natal care comprising of complete immunisation of children along with safe motherhood strategies.
- 4) Yes. In many terms (e.g. life expectancy, CDR, CBR, IMR), there has been considerable progress over the years. The new challenges, however, include tackling endemic diseases like AIDS, tuberculosis (TB), malaria, dengue, swine flu, etc. Besides, there is also an increase in non-communicable life style diseases like diabetes, high blood pressure, stroke, heart disease, cancer etc.
- 5) Yes. Of the total of 1.6 billion people living under conditions of multi-dimensional poverty (MDP), nearly 440 million (i.e. 27.5 percent) live in the 8 major poor states in India. Because of the linkage between poor health and MDP, this requires better health infrastructure which, in turn, demands higher public health investment. But as a proportion of GDP, India spends low (less than 1 percent of GDP) forcing a high rate of out-of-pocket private health expenditure (86 percent).

### Check Your Progress 2

- 1) Set-up community owned decentralised healthcare delivery system, establish a fully functional healthcare delivery system so as to ensure inter-sectoral convergence at all levels and ensure simultaneous action on



a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality.

- 2) Promotion of institutional delivery among poor pregnant women to reduce neo-natal and maternal mortality.
- 3) It creates serious health problems by contributing to premature births and to abnormally 'low weight at birth'. It is also a major contributing factor in spreading infectious diseases.

### Check Your Progress 3

- 1) In recommending population-centred establishment of health centres (at grass roots and district levels) and in recommending that medical education should include three months training in preventive and social medicine. The recommended norms have been a guiding factor for all subsequent NHPs till now.
- 2) In 1983. The first NHP specified the population based norms for health units in terms of SC, PHC and CHC. The population norms also differed from the 40000 and 1000-20000 suggested by Bhore committee to 5000, 30000 and 120000 for SC, PHC and CHC respectively. The NHP 1983 also laid emphasis on as many as 11 different areas covering the areas of expansion in infrastructure, training of personnel, nutritional development and quality of drugs, etc.
- 3) Its thrust was to meet the goals of RCH and focus on achieving 'net replacement level' aimed at stabilising the population by 2045. Reduction of IMR below 30, MMR below 100, achievement of 80 percent of institutional deliveries and 100 percent of assisted deliveries were the NPP's quantitative targets set.
- 4) Taking special note of high levels of macro and micro nutrient deficiency in women and children, the NHP 2002 laid emphasis on preventive and curative measures to reduce high levels of morbidity and mortality levels in the country. Inclusion of mental health in public health domain was also a major shift of NHP 2002 as compared to that of NHP 1983.
- 5) Increasing the life expectancy at birth from 67.5 to 70 by 2025; (ii) reducing the infant mortality rate to 28 by 2019; (iii) reducing the under-five mortality to 23 by 2025 and maternal mortality to 100 by 2020; (iv) reduce neo-natal mortality to 16 and still birth rate to single digit by 2025; and (v) comprehensively immunise 90 percent newborn by 2025;

