Chapter – 3

Healthcare Economics – Concept, Development, Growth and Constraints with Reference to the Indian Economy

3.1 Concept of Health Economics
3.2 Significance of Health Economics
3.3 Conceptual Background of Health
3.4 Good Health – a Fundamental Right
3.5 International Covenants, Acts and Rules regarding Public Health
3.6 Significance of Good Health
3.7 Significance of Health Expenditure
3.8 Public Health and Economic Growth
3.9 Need for Investment in Public Health
3.10 Income Elasticity of Demand for Healthcare
3.11 Disease Burden in India
3.12 National Health Policies in India
   (A) Bhore Committee (1946)
   (B) Mudaliar Committee (1962)
   (C) Chadda Committee (1963)
   (D) Mukherjee Committee (1965)
   (E) Mukherjee Committee (1966)
   (F) Jungalwalla Committee (1967)
   (G) Kartar Singh Committee (1973)
   (H) Shrivastav Committee (1975)
   (J) The National Health Policy, 1983
   (K) The National Health Policy, 2002
3.13 India towards “Right to Health”
   (A) Projection of Resource Requirements
   (B) Nine is Mine Campaign
   (C) Right to Health in India
3.14 Conclusion
3.1 Concept of Health Economics:

Health economics is the study of how scarce resources are allocated among alternative uses for the treatment of sick people and the promotion, maintenance and improvement of health standards in the economy, including the study of how healthcare and health-related services, their costs and benefits, and health itself are distributed among the various segments of a society. It can, broadly, be defined as ‘the application of the theories, concepts and techniques of economics to the health sector’. It is, thus, concerned with such matters as the allocation of resources between various health promoting activities, the quantity of resources used in health services delivery; the organization and funding of health service institutions, the efficiency with which resources are allocated and used for health purposes, and the effects of preventive, curative and rehabilitative health services on individuals and society. Thus, health economics is the application of the principles of economics to healthcare sector.

The World Development Report (WDR) of 1993 views health as a basic human right and stresses the necessity of providing cost effective healthcare for the poor and that it can contribute towards alleviating poverty. Hence, understanding of health economics is essential for policy makers and for those guiding them.

The scope of health economics includes relationship between health status and productivity, financial aspects of health care services, economic decision making in health and medical care institutions, planning of health development and such other related aspects. The distinguished features of health economics as a discipline are – health and medical care as economic goods, health as a private or a public goods, measurement of quality of healthcare system, stock of health issues, investment aspects of healthcare industry, loss due to ill health, burden of diseases, resource costs of different diseases, effects of health and medical care provision, planning of health and medical care, choice of technology in health care system, etc.

Health economics addresses the problems in healthcare sector both in positive and normative ways. The normative issues relate to what should be, for example, what should be the appropriate budget allocation for HIV/AIDS control. The positive branch of health economics applies all modern micro economic theories in health care/medical care. Demand for health care, factors that affect the demand for healthcare such as income of individuals, their tastes and preferences, elasticity of demand for health problems, urgency of treating a disease, preference for public and private healthcare, supply of healthcare, etc., are the subject matters of positive health economics.


There is a direct correlation between the “Economics of Health” and “Economics of Healthcare”. The inter-connection between the health status of an individual (or the entire population) and usage of medical services builds the link between “Economics of Health” and “Economics of Healthcare”. Health is a state of well-being enjoyed by an individual or population of a country at a point of time or over a period of time. Healthcare refers to all types of services rendered by professionals or para-professionals which have a bearing on the health status of an individual or entire population of a country. Healthcare system is a formal structure of health service providing agencies, whose finance, management, scope and content is defined by laws and regulations. Such system provides for services to be delivered to people to contribute to their health … delivered in defined settings such as homes, educational institutions, workplaces, public places, communities, hospitals, clinics, etc.

3.2 Significance of Health Economics:

Health economics is a branch of economics which deals with the application of the principles and theories of economics to healthcare sector. It addresses the issues such as the demand for healthcare services in the economy, allocation of resources for the development of healthcare facilities, their supply through public and private sector agencies and the gaps that exists between the demand for and supply of healthcare services in the economy. Healthcare services are limited in supply and the demand for healthcare services is ever-increasing and unlimited. Again resources to meet the demand for healthcare services are limited in supply. The demand for healthcare is a derived demand in the sense that it derives its demand from the state of health and awareness among the population of the country about significance of good health. Healthcare services are demanded by people as a means by which people achieve good health that builds the standard of human capital of a nation. Unlike other goods and services which are demanded for consumption, healthcare services are demanded for both consumption as well as for ensuring good health. Thus, health is a capital as well as consumer good.

Economic analysis, if applied properly, can often help to clarify what choices are for health policy, how to choose among different health services, how to decide what to buy and how to pay for it, and how to evaluate the end results of such consumption. The indirect effects of good economic thinking, when dealing with such questions as the best use of taxes, insurance and out-of-pocket payment, or the best way for governments to intervene in health, may affect a population’s health and welfare more than decisions about how to combat particular maladies or risk factors. Thus, the main functions of a health economist include:

1) To identify the present and potential areas of health demand,

---

(2) To draw valuations in terms of market demand for health services,
(3) To calculate the cost of delivering health services,
(4) To estimate the real costs of acquiring health services in terms of time, loss of working days and wages, travelling cost and cost of travelling the distance to seek health care in terms of money as well as cost of not receiving timely treatment due to distance; and
(5) To suggest right health policies in terms of cost benefit analysis to the government. For example, a health economist can study the effect of levying user-charges in government hospitals on utilisation of health services and accordingly may recommend the government and planners the effective allocation of financial resources to the health sector and improving the health care delivery system.

Although there is no satisfactory measure of health benefits derived from the health service expenditure a number of factors such as (i) assessment of productivity from good health, (ii) allocation of financial resources to healthcare sector on the principles of equity and (iii) application of basic principles of economics to healthcare sector, may help to assess the contribution made by healthcare sector expenditure to national productivity and national income. A critical study of health economics may bring in certain pertinent solutions to the problems faced by the health sector.

There is a strong correlation between increased healthcare expenditure and poverty reduction and long term growth. The burden of diseases and poor health act as barriers to economic growth in developing countries. Thus, good health is the single most important need essential for formation of human capital and growth of an economy. Therefore, the most important task before health economists is to address issues related to good health to facilitate health sector reforms to achieve equity in health care for a country’s population.

Health economics is becoming a subject of increasing significance particularly in the developing countries primarily because of:

1. An economic climate where resources are extremely scarce and decisions on priorities are crucial but difficult;
2. A growing appreciation among health professionals and policy-makers that health economics and economists can help them formulate policies and make decisions;
3. The increasing maturity of the sub-disciplines of health economics; and
4. The growing of interest among economists and others in applying their economic skills to health issues.

---

3.3 Conceptual Background of Health:

Health is a multifaceted concept and thus it is very difficult to define it precisely. General notion about health is the absence of illness due to physiological and organic deficiencies. It is mainly concerned with an individual body’s mechanical ability and functioning of basic parts and organs of human body. The broad definition of health, however, does not mean mere absence of disease but it encompasses the whole range of personal, physiological, mental, social and even moral well-being of a person. The constitution of the World Health Organization’s (WHO) defines health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity”. However, the definition has been criticised by several scholars. Health in actual sense is the adequacy of physical and mental capacity of a person to enjoy life to the fullest possible extent and to reach his maximum level of productive capacity. According to Richard Doll the above definition is a fine and inspiring concept but health is a relative concept and differs from communities to communities and from time to time. According to Saracci Rodolfo such a definition is too wide and not amenable for any meaningful economic analysis or for any resource allocation. Besides there are many others who have raised objections to the word ‘complete’ in the definition of health. Therefore, health has to be defined from a practical point of view.

Good health indicates the state of tuneful functioning of the body and mind of a person in relation to one’s physical and social environment that enables a person to live contented life and to achieve maximum productive capacity. Reddy K. N. has proposed that practically health should be defined in terms of various health indicators such as life expectancy, infant mortality, crude death rate, etc. The lower life expectancy rates in developing countries are largely attributable to infant and child mortality rates which are many times higher than those in developed countries. Human development index includes life expectancy as one of the components to assess quality of human life in an economy. Good health is very important for improving life expectancy of people.

In fact, health is a function of number of variables such as medical care, income, education, age, sex, race, marital status, environmental pollution and also certain personal behaviour like smoking habits, exercise and the like. Health status is often used to explain wages, productivity, school performance, fertility and the demand for medical care. The results are quite sensitive to the particular measures of

---

health that are used but the direction of the effect generally confirms a priori preconditions.\textsuperscript{9} Thus, health does not mean just doctors and hospitals, but everything that influences the well-being of a human being.

The health of a population can itself influence economic progress. Healthcare produces primarily better health for the citizens of a country, who are productive human resource of an economy. Health programmes have therefore come to be seen as part of a comprehensive strategy aimed at improving the social and economic welfare of population. Thus, there is a need to design programmes which improve health services and the provision of other infrastructure such as water and sanitation and also the actions aimed at improving nutritional health most efficiently. People want to improve their health status to earn better living, so they expect good health care. The reason they want better health is presumably because of the desire to enjoy life, in all its consumption and production aspects, to a fuller extent than would be the case with less health. It is extremely difficult to measure the specific contribution each activity makes to health.

The relationship between a health service and health status is reconciled by a host of environmental and behavioural factors, which are in turn influenced by almost every aspect of the social and natural systems. It is, therefore, clear that the complexities of the interrelationships between health and economic development are neither well researched and documented nor well understood, and much work remains to be done. Absence of health care and poor and timely access to the health care render people sick and inefficient. Further illiteracy of population leads to superstition and ignorance and aggravate the health problems. Further poverty and unemployment have a direct bearing on health. Poor nutrition and imbalanced diet and bad environmental sanitation adversely affect the health of the people. Poor patients do not have the capacity to meet medical expenditure from their own resources and faces devastating consequences such as denial of treatment, incomplete treatment, or treatment at the cost of financial and social wellbeing. To seek medical treatment households curtail spending on food, children are pulled out of school and/or forced to work and people are made to work longer and harder leading to deterioration of health. In such situations, access to healthcare becomes a double-edged sword. Not having it amounts to a denial of one's rights, but having it, under these conditions, is detrimental to the wellbeing of the household.

**Holistic view of Health:**

The holistic perspective not only takes into account existing technologies and their organisation, it also underlines the importance of social determinants that contribute to people’s well being — such as food availability and nutritional status of

populations, drinking water supply, housing, transport, education, employment and, last but not least, the status of women.

People’s health can then be defined as an outcome of the interplay of socio-economic, cultural, political, and technological forces. This outcome varies, depending on gender and caste, class stratification, regional and ethnic factors. Talking of health services then touches upon only one aspect of the determinants of health. This is something that we don’t often fully appreciate, but we must if we have to make headway in achieving health for all.

Does this mean that health services are not important? It does not mean that at all. The provision of health services is one of the most important welfare responsibilities of the Indian State enshrined in the guiding principles of its Constitution. What it does mean, however, is that providers and planners of health must, above all, demand the other inputs necessary for health instead of simply building their empires as specialists.

**Meaning of Public Health:**

Public health is "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals."[^10] Public health services are conceptually distinct from medical services. Public health programmes have a key goal of reducing a population’s exposure to disease – for example through assuring food safety and other health regulations; vector control; monitoring waste disposal and water systems; and health education to improve personal health behaviours and build citizen demand for better public health outcomes. On the other hand, medical services are curative in nature. Medical services include all the measures taken in order to cure a patient who is suffering from some communicable or non-communicable diseases. Thus, public health means all the preventive measures undertaken by the government or private agencies or NGOs to ensure good health for citizens, while medical services means curative treatment of whatsoever nature given to a patient.

### 3.4 Good Health – a Fundamental Right:

The preamble to the Constitution of the World Health Organisation (WHO), states that “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition”.[^11]


Good health and human rights are inextricably linked. Violation of human rights can have serious health consequences. Therefore, the States should take all steps to reduce exposure to ill health by taking steps to protect the right to freedom from discrimination, right to health, right to education and right to housing. Thus, there is a need to introduce human rights based approach to health care policy.

In recent years there is increased recognition in the public health community that human rights provide a useful framework for ensuring the conditions in which people can be healthy. It is mandatory for the Governments to introduce Schemes to meet the basic needs, which are basic human rights, such as employment, health, education and housing. Social sector expenditures, particularly on health and education are complementary in nature and if put together do produce large individual as well as social benefits. In Henry Shue’s term, “Basic rights” of people are basic because they precondition the enjoyment of all other rights.\(^{12}\) “Basic rights” include basic needs, i.e. food, clothing, shelter, clean water, healthcare and minimum standard of education.

Health is one of the fundamental rights of every citizen. According to Article 21 of Indian constitution, the State should ensure good health and nutritional well-being of its entire people. Entry 6 in the State List (List II) in the Seventh Schedule of the constitution of India reads: “Public health and sanitation, hospitals and dispensaries” in the State List. Thus, public health is a State subject in India.\(^{13}\) According to the Directive Principles of State Policy laid down in the Constitution, raising the level of nutrition, and the standard of living and the improvement of public health are among the primary duties of the State.

Low-income countries, including India, bear a disproportionate burden of disease due to lack of clean water, food, shelter, employment and education, which are their basic rights. Vulnerability to ill health can be reduced by taking steps to protect such rights. In this context, provision of health services is one of the most important welfare responsibilities of the Government of India and the various state governments. A number of committees established in the post-independence period in India have emphasised directly or indirectly the recognition “Right to Health” as a fundamental right in order to ensure highest standard of health and sanitation for Indian people. The Bhore Committee in 1946, promised healthcare to all irrespective of individual’s paying capacity.\(^{14}\) However, even the most efficient health system cannot fulfil this promise unless it is supported by the basic welfare measures like sanitation, availability of food and nutritional status, safe drinking water supply, housing, basic education employment and gender equality.


\(^{13}\) Government of India (1950), ‘Constitution of India’, New Delhi, Ministry of Law and Justice.

World Health Assembly, 1977 adopted a resolution which said that the main social target in the coming decades should be the attainment by every citizen of the world of a level of health that will permit to lead a socially and economically productive life.\textsuperscript{15} The Assembly had set the year 2000 as the target date for achieving the objective. Subsequently, the Conference on Primary Healthcare held at Alma Ata declared that primary health care is the key to attaining this target as part of development, and in the spirit of social justice. Since then, many countries have adopted primary health care as the main instrument for achieving the goal of health for all. A vast network of institutions at primary, secondary and tertiary levels has been established for this purpose. Although, India too made commitments to recognise health as a fundamental right but the same has not been achieved even after a completion of a decade since the commitment of “Right to Health” which was to be achieved by the year 2000 A.D.

3.5 International Covenants, Acts and Rules regarding Public Health:

Health is a State subject and, in many areas, the state government legislations are applicable. Given the enormity of the task of compiling all health related laws, this compilation is restricted to laws applicable at the Central level and those related to health and healthcare issues. The Acts and Rules in this compilation were collected over a period of time from different sources, too many to be mentioned. The categorisation of legislations has been adopted from the WHO classification. Health related international covenants and guidelines have also been included under the head “Act & Rules”.

Act and Rules:

(1) Health Facilities and Services.
(2) Disease Control and Medical Care.
(3) Human Resource.
(4) Ethics & Patients Rights.
(5) Pharmaceuticals and Medical Devices.
(6) Radiation Protection.
(7) Hazardous Substances.
(8) Occupational Health and Accident Prevention.
(9) Elderly, Disabled, Rehabilitation and Mental Health.
(10) Family, Women and Children.
(11) Smoking Alcoholism and Drug Abuse.
(12) Social Security and Health Insurance.
(13) Environmental Protection.
(14) Nutrition and Food Safety.
(15) Health Information and Statistics.

(17) Custody, Civil and Human Rights.

**International Covenants and Treaties:**

(2) Basic Principles for the Treatment of Prisoners.
(3) Beijing Declaration 4th World Conference, 1995.
(4) CESCR General Comment 7, Right to Adequate Housing, 1997.
(10) Declaration on Social Progress and Development, 1969.
(14) Treatment or Punishment, 1975.
(18) General Comment 15, the Right to Water, 2002.
(23) International code of Medical Ethics, 1994.

**Covenants and Treaties:**

(4) Principles for those in Research and Experimentation, 1954.
(6) Proclamation of Teheran, Final Act, 1968.
(18) WMA Convening Torture and Other Cruel Etc., 1975.
(19) WMA International Code of Medical Ethics, 1949.
(20) WMA Declaration of Death, 1968.

3.6 Significance of Good Health:

Health has a great significance from economic point of view. Healthy population is an asset for an economy while ill and aged population is a burden. From the point of view of an individual, health performs dual functions. On the one hand, good health represents a value of its own, a target that needs to be reached as closely as possible. On the other hand, there are other aims in life as well such as good health gives good income in labour market.\(^\text{16}\) Therefore, the significance of health has been strongly emphasised by a number of international organisations.

The World Development Report, 1993 stressed good health as a crucial part of well-being and strongly justified health spending on purely economic grounds. According to the Report, improved health contributes to economic growth in 4 ways:

1. It reduces production losses caused by workers’ illness;\(^\text{17}\)
2. It permits the use of natural resources that had been totally or nearly inaccessible due to disease;
3. It increases the enrolment of children in schools and makes them capable of learning; and
4. It makes alternative uses of resources that would otherwise have to be spent on treatment.

Although Adam Smith opposed to state intervention in the economy, he welcomed state investment in infrastructure like transport and communications, education and health services.\(^\text{18}\) Well built transport and communication system will

---


help the formation of national market removing the regional barriers. Investment in
education and training will supply literate and trained work force to industry. Thus,
investment in social infrastructure like education and health can initiate development
in underdeveloped and developing countries.

Status of health shows the development of the society. This health status is
influenced by different indicators like employment, income, educational attainment,
social groups, level of awareness, accessibility to health care and availability of health
services. Poor health leads to deficiency in human capabilities and it also shows the
level of deprivation among the people. There is a close linkage between health and
poverty and health and development but the relationship is very complex. Hence, poor
health is considered to be a major constraint of development. Health being the basic
rights of all individuals, they are entitled to have quality health care service, safe
drinking water, sanitation and so on. It becomes the obligation of the government to
care for the health condition of the people.

**Economic Implications of Health:**
Good health contributes to the nation’s economy in the following four ways:

1. **Enhanced Workers’ Productivity:** The most obvious gains from healthier
   workforce are savings of workdays, enhanced workers productivity, greater
   better-paying job opportunities and longer working lives. A study on lepers in
   urban areas of Tamil Nadu concluded that if deformities with them are eliminated
   then the expected annual earnings of those with job will enhance by more than
   three times. The study also concluded that if deformity of all 645,000 lepers in
   India is eliminated, it would add an estimated $130 million to the country’s GNP
   (1985). As per the World Bank, 1993 estimates, leprosy accounted for only 1% of
   the country’s disease burden in 1990. If elimination of 1% of the disease burden
   of leprosy can boost India’s GNP by such a huge magnitude, then it would be
   interesting to estimate the effect of complete elimination or near to complete
   elimination of disease burden in India on India’s GNP.  

   There is strong link between poverty and ill health. Ill health creates immense
   stress even among those who are financially secure. Onset of a long and
costly illness can drive the economically well-off into poverty. Hence, it is
essential to prevent the non-poor from falling into poverty trap and reduce
suffering of those who are already below poverty line. Though productivity is
not everything, a country’s ability to improve its standard of living depends on
its ability to raise its per capita productive capacity that depends on one’s
physical well being. Health is both an end of development and means to it.

---

Monitoring & Evaluation; Health Systems Development & Reform; Health Economics & Finance;
(2) **Improved Utilisation of Natural Resources:** Health investment also contributes to better utilisation of economic resources of a country. Many developing economies waste huge sum of money on treatment of various diseases rather than their prevention. This leads to wastage of resources. In Sri Lanka, *for example*, the near-eradication of malaria during 1947-77 is estimated to have raised national income by 9 per cent in 1977. Over the period of three decades, the cumulative cost of such an initiative was $52 million as compared to the cumulative gain in national income of $7.6 billion, implying a spectacular benefit-cost ratio. Eradication of malaria has also led to effective land use in Sri Lanka. Areas, which were previously blighted by mosquitoes, were freed for human settlements and other productive purposes. This also released more space for migrants who ultimately contributed to the national output.\(^{20}\)

Eradication of diseases also enhances labour productivity. The investment made in treating disease can be diverted to other productive uses. Thus, health spending contributes to improved use of factors of production, *viz.* land, labour and capital. The challenges of increasing urbanisation with rapid growth of slums and low income families in cities have raised the need for health care facilities in and around urban slums. The Eleventh Five Year plan has focused on accessibility of health services in closer proximities of urban slums and in the areas where 20% or more of population are SC/ST or other minorities are concentrated.

(3) **Multiplier Effect of Health Expenditure Extending to Next Generation:**

Poor health conditions, inadequate sanitation and nutrition adversely affect the benefits of schooling, primarily in three ways: (i) decreased enrolment resulting in increased illiteracy, (ii) poor ability to learn resulting in high dropout rates, and (iii) limited participation by girls either due to poor health of self or others in family.

Good health at the initial stage of life, i.e. among children from 1-6 years of age is a pre-requisite for future development of these children. A child who is physically and mentally fit at the age of 5 or 6 years is more likely to enrol for school and will develop a strong foundation through active learning and regularity in class. A study conducted in Nepal concluded that the probability of attending school is only 5 per cent among nutritionally stunted children as compared to 27 per cent for those at the normal level.\(^{21}\)

Again it is a well established fact that a healthy and educated individual certainly generates more income than an uneducated and stunted individual,


\(^{21}\) *Ibid*, p.18.
thereby making contribution to the national income of the country. A study suggests that four years of primary education boosts farmers’ annual productivity by 9 per cent, on an average, and workers who do better at school earn more. Studies in Ghana, Kenya, Pakistan, and Tanzania indicated that the workers who scored 10 per cent above the sample mean in various cognitive tests had a wage advantage ranging from 13 to 22 per cent. In a study conducted in Nepal, it was found that farmers with better mathematical skills were more likely to adopt new crops which were more profitable.22

(4) **Long run Reduction in Cost of Medical Care**: Health spending in short run prevents and reduces the incidences of diseases in long run and results in huge savings in treatment costs. For some diseases, the expenditure pays for itself even when all the indirect benefits – such as higher labour productivity and reduced pain and suffering – are ignored. Polio is one such example. As per some estimates made in America in certain region, prior to the eradication of polio showed that investing $220 million over 15 years to eliminate the disease would prevent 22,000 cases and save between $320 million and $1.3 billion (depending on the number of people treated) in annual treatment costs. The programme’s net return, after discounting at even as much as 12 per cent a year, was estimated to be between $18 million and $480 million.23 Thus, money spent on healthcare in short run results in multiple gains in terms of improved health and cost savings in long run.

### 3.7 Significance of Health Expenditure:

According to eminent scholar Duggal Ravi, “Health outcomes are a function of poverty but more importantly poverty levels are closely associated with public health investment, and hence again public financing of healthcare becomes critical even for poverty.”24 There is a direct correlation between increase in health expenditure and economic development of a nation. Healthy and well educated population is a driving force for the growth and development of nation. Prof. Harbison writes “human resource constitutes the ultimate basis of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organisations; and carry forward national development. Clearly, a country which is unable to develop the skills and knowledge of its people and to utilise them effectively in the national economy will be unable to develop anything else”.25 Prof. Harbison emphasises health as essential component for economic growth and stability of a nation.

---

Human resource is the only active factors of production that activates the other factors. The resources of the economy may remain idle without a well educated and well developed human capital. It is the responsibility of the state to ensure high standards of health and education for its population.

Improvement in health standards such as increase in life expectancy, reduction in infant and maternal mortality and access to health services with equity has been one of the major thrust areas in social and economic development programmes of developing countries. Health is a very peculiar asset because unlike almost anything else, including even some other forms of human capital, it is almost entirely inalienable. One can donate blood or even a kidney to improve someone else’s health, but “health” itself cannot be transferred and one must have some state of health, however poor he may be\(^\text{26}\). Thus, health has great value-in-use but no value-in-exchange, as good health cannot be purchased from any source through money or any other means.

According to the Endogenous Growth Model developed by Lucas, the labour can be devoted either to production or to the accumulation of human capital that is, acquiring of new skills and knowledge. Acquiring of new skills and knowledge will not only make a worker more productive but also increase the productivity of capital and other resources in the economy. Thus, any efforts undertaken to develop human capital through whatever means, will have a multiplier effect. Each new knowledge or skill makes the next idea possible and so the knowledge can grow indefinitely. Therefore, improvement in the knowledge and skill of a labour requires improvement of economic well-being of labour in the economy. Improvement in knowledge and skills also makes individual aware about significance of good health and means of achieving same. It also makes people aware of their right to enjoy good health. People learn to exercise pressure on the government to increase healthcare budget and ensure health for all with equity in the economy. Thus, health and education go hand in hand.\(^\text{27}\)

The World Development Report 1991, published by World Bank asserts: “the challenge of development is to improve the quality of life, especially in the world’s poor countries. A better quality of life generally does not call for higher incomes but it involves much more. It encompasses as ends in themselves better education, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity.”\(^\text{28}\) Necessarily, health has to be defined from a practical point of view and, therefore, it has been defined according to life expectancy, infant mortality and crude death rate etc. Thus, the World Banks Report emphasises among other things,


health and quality of life as essential components of economic development. Today, economic development involves increase in economic well-being as well as good quality of life for the people in terms of education, health and good living conditions.

World Health Organisation’s (WHO) constitution defines health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity”.\(^{29}\) The concept of health is not restricted to absence of diseases but it consists of complete well-being of all individuals in the country. Thus, the above definition increases the responsibilities of the government manifold. The governments today are not obliged to provide only health services to their citizens but should also ensure that these services are made available to all without discrimination and should contribute to social and mental developments of individuals in addition to their physical well being.

Amartya Sen writes “economic growth cannot be sensibly treated as an end in itself. Development has to be more concerned with enhancing the life we lead and the freedoms we enjoy”.\(^ {30}\) Thus, every citizen has a right to lead socially and economically productive life. It is the moral responsibility of the government to transform the society where people enjoy long and diseases free life with high values. This can happen only with the continued commitment of the government to spend on physical, mental, educational and emotional development of a child who is a prospective human capital of the country.

Achievement of health objectives involves much more than curative or preventive medical care. Many communicable diseases can be prevented through a combination of health and non-health interventions such as safe drinking water and sanitation which directly contribute in reducing the burden of communicable diseases. Besides high levels of air pollution, unhygienic living conditions combined with malnutrition may cause respiratory problems and other communicable diseases. An onslaught of new diseases such bird flu, swine flu, Japanese fever etc. is taking heavy toll of population in developed and developing countries. Slum population is more prone to communicable diseases due to unhygienic living conditions due to improper sewage and solid waste management system coupled with overall ignorance of personal and environmental hygiene.

3.8 Public Health and Economic Growth:

As a convention labour quality in the form of human capital contributes significantly to economic growth. Most cross-country empirical studies identify labour quality narrowly with education. The central argument is that this practice


ignores strong reasons for considering health to be a crucial aspect of human capital, and therefore a critical ingredient of economic growth. Healthier workers are physically and mentally more energetic and robust. They are more productive and earn higher wages. They are also less likely to be absent from work because of illness (or illness in their family). Illness and disability reduce hourly wages substantially, with the effect especially strong in developing countries, where a higher proportion of the workforce is engaged in manual labour than in industrial countries. A research paper by David E. Bloom, David Canning and Jaypee Sevilla concluded that health has a positive and statistically significant effect on economic growth. It suggests that a one year improvement in a population's life expectancy contributes to a 4 percent increase in output.31

Health is not only an important element of well being, it is also an important component of human capital, and is of major importance for economic growth and development. In poor countries, where physical jobs tend to be in abundance, health is more important than education in determining labour productivity. More than 80 developing countries of the world face problem of malnutrition. These countries bear huge economic burden of poverty and malnutrition. If the burden of malnutrition and poverty is so high, how can these economies think of progressing and achieving moderate rate of growth? Undernourishment prevents not only physical and mental growth of an individual but it also prevents an individual’s economic progress. A malnourished and unhealthy child is a burden not only for a nation but the world economy as a whole. People suffering from malnourishment are less intelligent and less able to learn than others are. This results in poor productivity in their workplace. Greater physical health and strength may enable a person to carry out tasks more efficiently than an undernourished person. Over a billion people suffer from micronutrient malnutrition and 180 million pre-school children, nearly a third of all pre-schoolers in developing countries, are stunted by under nutrition.32 For families, malnutrition has tragic human costs, contributing to 3.4 million unnecessary deaths a year. Developing countries with serious problem of malnutrition lack capacity to design effective programmes to tackle the problem of malnutrition and consequently health problems, affecting the quality of their workforce and overall economic growth.

Studies have shown that most of the underdeveloped and developing economies invest less than their financial capacity in the health improvement programmes. Though developing countries have a number of nutritional programmes, actual spending on nutrition programmes is much lower than allocated amount in the

budget. Again multiple malnutrition programmes are the cause for poor commitment and creation of stakes resulting in poor implementation and management of malnutrition programmes in these countries. Health investments improve the productivity of a nation. Some of the empirical evidences suggest strong correlation between improvement in health programmes and consequent increase in rate of economic growth and development.

To achieve the goals of economic growth and economic development, developing countries should improve their health standards such as life expectancy of poor population and reduce infant mortality rate and maternal mortality rate. Good health enables a person to earn more and create additional resources to maintain his health. Health promotes development through increase in productivity and therefore improvement in the health status of people is essential for social and economic development. According to the World Development Report (1993) an increase in life expectancy from 50 to 70 years (a 40% increase) would raise the growth rate by 1.4 percentage points per year, a 10% decrease in malaria is associated with an increased annual growth of 0.3%. Better health is not just a by-product of rising income: it also promotes the rise in income levels. The association between poverty and ill health reflects causality running in both directions. Though the availability of health facilities shows improvement in poor countries, it is found that the curative care rather than preventive care is given the topmost priority.

Sub-Saharan Africa and Asia, millions of people still die from communicable but preventable diseases like tuberculosis, malaria, Severe Acute Respiratory Syndrome (SARS), bird-flu, chickungunya and dengue. About one third of the population is infected with tuberculosis (TB) with almost two-thirds of them living in Asia. In the developing world, 1.2 billion people lack access to safe water, adequate sanitation and poor housing, 800 million people lack access to health services. Health services are poor and inaccessible for a large majority of the population in the world. A most urgent and worrisome problem around the world is how to finance and provide health care for more than two billion poor who do not have adequate health care to meet their basic needs. Most countries try to serve their population through public clinics and public hospitals. But these hospitals and clinics lack basic facilities, such as adequate staff, medicines, beds for patients etc. In most of the developing countries poor patients have to pay for inpatient services and many of them have to bankrupt their families to pay for services or forgo the treatment and die. Generally women of the families suffer without treatment due to poverty.

3.9 Need for Investment in Public Health:

Until the early 1990s, health was relatively neglected as a factor that influences national economic performance. Much of the focus was only on education, an important component of human capital. Today, improvements in health constitute an important element of what has come to be known as ‘pro-poor’ economic growth strategies that have the potential of enhancing economic growth, while simultaneously reducing economic inequality. There is now a considerable body of international evidence that suggests that while improvements in national economic performance may positively influence health, there also appears to be a strong link running from improved health to improved economic performance. In fact, evidence shows that about one-third of the increase in income in Britain during the nineteenth and twentieth centuries could be attributed to health and nutrition.\(^\text{35}\)

The figure 3.1 explains the three stages framework of health-wealth nexus. India is currently in stage 2 as depicted in the figure below. A rapid transition is needed in which efficient health systems improve quality of life, well-being of people and reduce burden of diseases, which will in turn increase productivity and growth in the country (stage 3). India needs a huge public investment in order to push Indian health sector from stage 2 to stage 3.

---


Those countries having an index equal to 3.5 of the “Country Policy and Institutional Assessment Index (CPIA)” are the one who would obtain these benefits on average. CPIA measures the extent to which a country’s policy and institutional framework supports sustainable growth and poverty reduction, and consequently the effective use of development assistance.

The expenditure on health in India comprises 5.2% of GDP including public health investment at 0.9% of the GDP. The average Indian life expectancy is 15 years less than that of a citizen of a high-income country. Countries like Bangladesh and Sub-Saharan Africa spend about 3% of their GDP on health. If one further disaggregates this data, one realises that 33% of this budget goes to the richest 20% of the population, whereas the poorest quintile gets only 10% of the money. This results in understaffed public health centres with minimum medicines, poorly maintained equipment and poor quality of care. This pushes people into the private sector and there they have to spend their meagre income on health care. Studies show that about 80% of outpatient care and about 40% to 60% inpatient care is provided by the private sector. Patients end up paying out of their pocket for health care, one of the basic needs of any population. This naturally affects access to health care, especially for the poor. For example, the hospitalisation rate for the poorest quintile is only about 5 per thousand populations, whereas for the richest quintile it is about 35% that is practically seven times more. So poor people specially have two options, either they spend their valuable money going to the private sector or remain without any treatment putting their lives at risk. They sell their assets and properties to pay the doctors and the hospital.

The World Health Organisation report 1999 mentions that India lost $1.7 billion due to Plague epidemic in Surat in 1994. Hospitality, tourism and other services and industries in Surat during the spread of Plague epidemic also incurred huge losses. Developing countries have strong capacity to fight the epidemics when they occur but they cannot prevent them from occurring. The most effective approach to improve public health is to prevent rather than treat the diseases. The expenditure on public health has a direct impact on prevention of spread of certain communicable diseases. Similarly, there is a broad overall correlation between per capita spending on health and basic health indicators such as infant mortality rate, nutrition, morbidity rate, death rate etc. States that are richer, tend to have higher per capita spending on health and generally tend to have lower infant mortality rates and better nutrition indicators. Many low-income countries do not spend enough for the health of poor

due to narrow tax base and ineffective tax collection system. The result is poor investment in health care of poor. Investment in human resource through improvement in health expenditure with a special focus on underprivileged population is need of the hour. Therefore, larger investment in health is needed. The plight of the average Indian can improve only if the health budget increased significantly. India’s healthcare budget, at a mere 0.9% of the GDP, is not good enough to treat its ailing millions or prevent diseases that most countries do not suffer any more.  

Amartya Sen points out that “While the case for economic reforms may take good note of the diagnosis that India has too much interference in some fields, it ignores the fact that India also has insufficient and ineffective government activity in many other fields, including basic education, health care, social security, land reform and promotion of social change”. Hence, comprehensive approach is needed in the areas of individual health care, public health, sanitation, clean drinking water, knowledge of hygiene, spread of basic education and social welfare. Provision of preventive and promotive health care services including suitable housing, sanitation, safe drinking water, etc. is the responsibility of the State. Although the availability of health facilities shows an upward trend, yet these facilities are inadequate and almost negligible for India’s massive population. As a result, people living in such condition fall sick very often and spend good amount of their earning to seek treatment. “Prevention is always better than cure,” and therefore, provision of minimum basic amenities should stand in the priority list of the government.  

The outcome of a one-day Summit organised by the Associated Chambers of Commerce and Industry, on “Emerging Trends in Healthcare – a Journey from Bench to Bedside” on 17th February 2011, concluded that a combination of demographic and economic factors is expected to bring about increased healthcare coverage in India which is expected to drive the growth of the sector.  

A. Demographic Factors:  

(1) Increase in Population: Indian population is expected to rise to 1.4 billion by 2026. Such a huge increase in population will require huge investment in health sector not only to maintain the existing level of health care facilities but also to improve it to ensure “Health for All”.  

(2) Shift in Demographics: 60% of the Indian population is in the younger age bracket and the geriatric population of India is likely to increase from 96 million to around 168 million by 2026. This represents a huge patient base and creates a market for preventive, curative and geriatric care opportunities. 

---

39 The Times of India (2007), ‘India is in poor health’, 14th January.  
(3) **Rise in Disposable Income**: The disposable income of households in the above INR 200,000 per annum bracket is likely to increase from present 14 percent in 2009-2010 to 26 percent in 2014-2015. This will make healthcare services more amenable and affordable.

(4) **Increase in Lifestyle-related Diseases**: Increased urbanisation and changing lifestyle is likely to increase the incidence of lifestyle-related diseases, such as cardiovascular, oncology and diabetes, when compared to the communicable and infectious diseases.

(5) **Rising Literacy**: There is a direct correlation between literacy and improved healthcare. Literacy in India has increased considerably during last decade. Increased literacy rate will result in growing general awareness, patient preferences and better utilisation of institutionalised care.

**B. Economic Factors:**

1. **Tax Benefits**: The Government is also providing a number of incentives to hospital sector for boosting health care sector in India. Some of these incentives are lower direct taxes, higher depreciation on medical equipment and income tax exemption for 5 years to hospitals in rural areas.

2. **Medical Tourism**: India is emerging as a major medical tourism destination in the world for high class medical care and health services. It is expected that the Indian medical tourism market will reach USD 2 billion by 2012.

3. **Insurance Coverage**: With the privatisation of insurance sector, a number of private health insurance companies with foreign equity participation have entered Indian market to tap vast untapped potentials of Indian insurance market especially country side.

**3.10 Income Elasticity of Demand for Healthcare:**

The concept of ‘Elasticity’ has an important role in economics. The understanding of elasticity of healthcare demand and expenditure is important to understand the health economics of the country and to guide policy making.

**Income Elasticity – Definition**

Elasticity in economics refers to a change in demand or supply of a commodity or a service in response to the change in its price or consumer income. The Income Elasticity of Demand measures the rate of change in quantity demanded of a commodity or service due to an increase (or decrease) in consumer income.\(^{42}\) High income elasticity suggests that when a consumer's income rises, consumers will purchase more of that commodity and vice versa. Negative income elasticity means

that the commodity is inferior, and an increase/decrease in consumer income would decrease/increase the demand for that commodity. Positive income elasticity means the commodity is normal, and an increase/decrease in consumer income would increase/decrease the demand for that commodity.

**Demand for Healthcare:**

Health care is not a single commodity or service but it consists of a basket of services which are consumed simultaneously. Again, all health care services are not equally urgent and hence the elasticity of demand for health care services varies according to nature of service and urgency of availing those services. There might be a differential demand for inpatient services, outpatient services, acute and preventive care, lab work, pharmaceuticals, x-rays, and a variety of other goods and services. This heterogeneity in healthcare demand suggests that it would be more informative if separate demand elasticity for each category of health services is estimated.43

**Is Health Care a Luxury?**

The Economist magazine stated this as a conventional wisdom in 1993, writing – “As with luxury goods, health spending tends to rise disproportionately as countries become richer….44 However, it is difficult to generalise that demand for healthcare is income elastic. Demand for health care is income elastic for middle and rich income groups. As income increases, people prefer to have better health care services. Rise in income and improvement in standard of living add preventive and curative health expenditure in their family budget. They also spend more money on day-to-day health care and better nutrition; they take personal care to stay away from infections and spend more money on it. This happens in case of middle class, higher middle class and rich class families. However, the poor, who would have to spend almost 7% of his/her annual income, which happens to be one full month’s salary, just on avoiding diseases, tend to and stay without treating minor ailments. Spending on unavoidable treatments means he/she has to choose between the month’s food expenses and the medicines. For poor families, income elasticity of demand for healthcare is inelastic, as they have to spend for the treatment or else go without food until the person is unwell. Studies related to elasticity of health expenditure reveal that the income elasticity of healthcare expenditure is greater than one and therefore, it should be treated as “luxury goods”.45 This raised a major debate in the literature that whether health care is luxury or necessity. A study reconsidering the economic relationship between healthcare


expenditure and income on a long-run (period ranging from 1971-2004) using a panel of 20 OECD countries observed health care as a necessity.46

Literature gives a contrasting view of the elasticity of health care expenditure with respect to income. Some studies like Newhouse47 (1977), Kleiman48 (1974) and Gerdtham49 (1992) found the elasticity greater than one while many other studies (Manning et al.50 1987 and Di Matteo51 1998) found elasticity much less than one. Getzen52 (2000) in his paper analyses the literature and concludes that health care is neither a ‘‘necessity’’ nor a ‘‘luxury’’ but ‘‘both’’, since the income elasticity varies with the level of analysis. People with medical insurance may have zero elasticity, while that of nation is more than one. In general, higher the level of income higher is the elasticity of demand for health care expenditure. However in case of a poor person, demand for health care is less than one. For people below poverty line, it is almost Zero. It is because these people are below subsistence wage and avoid treatment since they cannot afford minimum transport charges even to the nearest public dispensaries or public hospitals.

Poverty estimates in India are derived from consumer expenditure of household data collected by National Sample Survey Organization (NSSO) every fifth year. The “Poverty Line”53 has been calculated to be Rs. 356.35 per month per capita for rural India and Rs. 538.60 per month per capita for urban India, in both the cases one cannot afford to buy treatment even for a minor ailment. Let us take the case of a poor person, who earns about Rs. 50 per day. Per visit to a doctor would cost him Rs. 30 which, normally local physicians charge from poor people in Mumbai region. Therefore, he has to choose between the day’s most essential needs of food and medicine. Obviously, he has to borrow to either buy his treatment or avoid the

treatment. Avoiding treatment may cost him wages for unreported days for work due to illness. The person with normal fever would have to attend a doctor at least twice. Therefore, many times they remain without treatment. As compared to other parts of India, Mumbai spends higher amount on public health yet cases of malnutrition, malaria, hepatitis and leptosporasis are on the rise. It was revealed in the field survey that 67% of the respondents avoid treatment due to a fear of loss of subsistence (Refer to Q.27 of the Questionnaire) and 71% of them admitted of borrowing money for meeting their health care needs (Refer to Q.31 of the Questionnaire).

Income Elasticity and Health Insurance:

When consumers have the benefit of free access to healthcare, changes in their income does not have an effect on their ability to obtain such care.54 Two studies done by Marquis and Long (1995) and Marquis et al. (2004) shows that all else being equal, the demand for health insurance does not significant change with personal or family income. The estimated income elasticities in the two studies were in the range of 0.01 to 0.15 and 0.03 to 0.04 respectively with health insurance.55 In both these studies, family income was measured relative to the federal poverty level. This clearly emphasises the need for health insurance so as to reduce burden of medical expenses on masses. The Government should take initiative in insuring every individual below poverty line and those within low income bracket in the country to achieve goal of “Health for All”. The health insurance market in India is very poorly developed. The Indian health insurance industry stands at INR 5,125 crores with only a small section of the total population (around 2%) being covered so far.56 Thus, there is a greater need for emphasizing health insurance cover for poor families as a preventive measure.

Income Elasticity and User Fee:

There are several studies to show that that the out-of pocket expenditure on health is quite large as people prefer to visit private clinics rather than public for curative care.57 The utilisation of healthcare services by the poorer sections is affected by the introduction of user fees, possibly due to its regressive nature. This argument presupposes that the poor are more price sensitive for health services than the rich are and regarding the elasticities, the demand of these poorer section lies on the elastic segment of the demand curve of the community. It was revealed in the field survey

that 99% of the respondents consider cost of availing health care services to be one of the most important considerations while selecting health care service providers. (Refer to Q. 2 of the Questionnaire)

3.11 Disease Burden in India:

Knowledge and understanding of the epidemiological profile is an essential pre-requisite to assess and address public health needs in the country. It also enables efficient planning and management of communicable and non-communicable diseases in the country. Disease burden and health status indicators are being increasingly used to assess the successes various health care programmes of the government. Changes in the population age structure, improvements in the nation’s economic status, altered life-styles of people and duality of disease burden testify to the demographic, development and health transition occurring in the country. Population stabilization, poverty alleviation, life-style modification, surveillance and control of communicable and non-communicable diseases constitute the major challenges demanding urgent attention in the future.\(^{58}\)

The basic problem of health economist is to allocate limited physical and financial resources among numerous health problems in the economy. This gives rise to a number of questions such as:

1. How should one decide which health conditions/interventions need priority policy attention?
2. What is the present state of technology and scientific knowledge available to address the causal factors that underlie the spread of these conditions?

The National Commission on Macroeconomic and Health invited some of India’s leading health experts to help answer these questions. The group identified a number of diseases within three broad categories, viz., communicable, non-communicable and other non-communicable disease that majorly contribute to India’s disease burden. Together, these priority conditions accounted for over 80% of the overall burden of disease in India in 1998, and ranged from maternal and child health conditions, various infectious and vector-borne diseases to major non-communicable conditions such as cardiovascular disease and cancers.\(^{59}\) Three criteria were used to decide the list of priority health conditions:

1. Likelihood of the burden of a specific health condition affecting the poor disproportionately more such as airborne and waterborne infectious and vector-borne diseases;


(2) In the absence of interventions, the probability of health conditions continuing to impose a serious health burden in future years; and
(3) The possibility of a health condition driving a sufficiently large number of people, not necessarily the poor, into financial hardship, including their falling below the poverty line.

Table No. 3.1
Disease Burden Estimation, 2015 based on Actual Disease Burden of 2005

<table>
<thead>
<tr>
<th>Disease/Health Condition</th>
<th>Diseases Burden 2005/lakhs</th>
<th>Projected No. of Cases, 2015/lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Communicable Diseases, Maternal and Pre-natal Conditions:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>85 (2000)</td>
<td>N.A.</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>51 (2004)</td>
<td>190</td>
</tr>
<tr>
<td>Diarrheal Diseases Episodes/Year</td>
<td>760 (2005)</td>
<td>880</td>
</tr>
<tr>
<td>Leprosy</td>
<td>3.67 (2004)</td>
<td>To be Eliminated</td>
</tr>
<tr>
<td>Infant Mortality Rate (IMR)/1000 live births</td>
<td>63(2002)</td>
<td>53.14</td>
</tr>
<tr>
<td>Otitis Media</td>
<td>3.57 (2005)</td>
<td>4.18</td>
</tr>
<tr>
<td>Maternal Mortality /100000 births</td>
<td>440 (2005)</td>
<td>NA</td>
</tr>
<tr>
<td><strong>II. Non-Communicable Conditions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>310 (2005)</td>
<td>460</td>
</tr>
<tr>
<td>Mental Health</td>
<td>650 (2005)</td>
<td>800</td>
</tr>
<tr>
<td>Blindness</td>
<td>141.07 (2000)</td>
<td>129.96</td>
</tr>
<tr>
<td>Cardiovascular Diseases</td>
<td>290 (2000)</td>
<td>640</td>
</tr>
<tr>
<td>COPD and Asthma</td>
<td>405.20 (2001)</td>
<td>596.36</td>
</tr>
<tr>
<td><strong>III. Other Non-Communicable (Injuries):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>170 (2005)</td>
<td>220</td>
</tr>
<tr>
<td>Deaths</td>
<td>9.8 (2005)</td>
<td>10.96</td>
</tr>
</tbody>
</table>


India’s Epidemiologic Transition:

All countries during the course of their development pass through what is known as an ‘epidemiologic transition’. Epidemiological transition means the change in disease profile of the nation, where the initial high burden of disease and mortality due to infectious diseases and maternal and child mortality, declines and gives way to non-communicable diseases, injuries and geriatric problems as the main burden of disease. India’s epidemiologic transition, however, is marked by three challenges in disease control, all of which need to be managed concurrently.

(1) First, India has to complete its unfinished agenda of reducing maternal and infant mortality as well as communicable diseases such as Tuberculosis, vector-borne diseases of malaria, kala-azar and filaria, water-borne diseases
such as cholera, diarrhoeal diseases, leptospirosis, and the vaccine-preventable measles and tetanus.

(2) Second, India has to contend with the rising epidemic of non-communicable diseases including cancers, diabetes, cardiovascular diseases, chronic obstructive pulmonary diseases and injuries.

(3) Finally India has to develop a system to cope with the new and re-emerging infectious diseases like HIV, avian influenza, SARS, and novel H1N1 influenza.

As per the Annual Report to the People on Health published by the Ministry of Health and Family Welfare, Government of India in September 2010, the several causes of deaths in India were primarily categorised into three categories as under:

Table No. 3.2
Major Causes of Deaths in India

<table>
<thead>
<tr>
<th>Disease/Health Condition</th>
<th>Percentage of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
</tr>
<tr>
<td>I. Communicable Diseases, Maternal and Peri-natal and Nutritional Disorders</td>
<td>40%</td>
</tr>
<tr>
<td>II. Non-communicable Diseases</td>
<td>40%</td>
</tr>
<tr>
<td>III. Injuries and Ill Defined Causes*</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Majority of ill-defined causes are at older ages (70 or higher years) and likely to be from non-communicable diseases.


Burden of Communicable Diseases:

As per “the Annual Report to the People on Health (2010)”, of the 9.2 million cases of Tuberculosis (TB) that occur in the world every year, nearly 1.9 million are in India accounting for one-fifth of the global TB cases. Experts estimate that about 2.5 million persons have HIV infection in India, World’s third highest. More than 1.5 million persons are infected with Malaria every year. Almost half of them suffer from p.falciparum Malaria. Diseases like Dengue and Chikungunya have emerged in different parts of India and a population of over 300 million is at risk of getting Acute Encephalitis Syndrome (AES)/Japanese Encephalitis (JE). One-third of global cases infected with filaria live in India. Nearly half of leprosy cases detected in the world in 2008 were contributed by India. More than 300 million episodes of acute diarrhoea occur every year in India in children below 5 years of age.

Due to the existing environmental, socioeconomic and demographic factors, the developing countries like India are vulnerable to rapidly evolving micro-

---

organisms. During the past three decades more than 30 new organisms have been identified worldwide including HIV, Vibrio cholerae O139, SARS corona virus, highly pathogenic avian influenza virus A, and novel H1N1 influenza virus. Many of these organisms emerged in the developing countries of Asia.

**Burden of Non-communicable Diseases:**

Non-communicable diseases (NCDs) are now recognized as major cause of morbidity and mortality. World Health Report 2001 has indicated that non-communicable diseases accounted for nearly 60% of deaths and 46% of the global burden of diseases. 75% of the total deaths due to NCDs occur in developing countries. The rapidly growing epidemic of non-communicable diseases is clearly related to changes in life styles. These changes include risks that are more commonly associated with wealthy societies, such as high blood pressure and high blood cholesterol, tobacco and excessive alcohol consumption, obesity and physical inactivity. India is witnessing a rising incidence of non-communicable diseases (NCDs) and old age diseases. Recently, a National Programme for the Control of Cancer, Vascular Diseases and Diabetes, Health Care of Elderly (Geriatrics Care) and Mental Health have been approved to be taken up in 100 districts during the next two years (2010-11 and 2011-12). Major NCD programmes under approval for the remaining two years of the XIth Five-Year Plan are:

1. National Cancer Control Program with an outlay of Rs. 731.52 cr.
2. National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Strokes with an outlay of Rs. 499.38 cr.
3. National Mental Health Programme (district) with an outlay of Rs. 600 cr.

Under this key initiative, dedicated staff will be positioned in community health care centres and district hospitals and training being given to frontline health workers as well as medical and paramedical staff at different health facilities for diagnosis and early referral an appropriate health care facilities. It is also believed that decentralisation of such a comprehensive package of services (including prevention, diagnosis and early treatment) would reduce patient flow to city hospitals, reduce out-of-pocket expenses among the affected families and save lives due to timely treatment. Effort has been made to integrate and synergise all these programs at various levels. There’s acute shortage of specialists in the fields of diabetology, nephrology, cardiology, etc. The Health Ministry is currently engaged in formulating short-term courses for in-service MBBS doctors working in periphery services to gain technical proficiency in these areas.

**Dual Burden of Diseases:**

Urban India is now on the threshold of becoming the disease capital of the world and facing an increased incidence of lifestyle related diseases such as
cardiovascular diseases, diabetes, cancer, COPD etc. At the same time, the urban poor and rural India are struggling with communicable diseases such as tuberculosis, typhoid, dysentery etc. The four leading chronic diseases in India, as measured by their prevalence, are cardiovascular diseases (CVDs), diabetes mellitus (diabetes), chronic obstructive pulmonary disease (COPD) and cancer. All four of these diseases are projected to continue to increase in prevalence in the near future given the demographic trends and lifestyle changes in India. Thus, India has to face dual burden of conventional communicable diseases as well as non-communicable and lifestyle related diseases.

**Budgetary Allocation vs. Burden of Disease in India:**

In India, total government spending for health, as a percentage of total government spending, equalled 4.1% in 2010. While health is constitutionally a state responsibility, the Central Government sets the priorities in health which are executed by state governments (Berman and Ahuja 2008).\(^{61}\) In addition, the central government dominates financing of public health and family welfare activities as well as centrally sponsored communicable disease programmes for HIV/AIDS, TB and malaria (Deolalikar et al. 2008).\(^ {62}\) Thus, the Central Government priorities in public health provide an important indicator of state priorities in public health.

**Table No. 3.3**

<table>
<thead>
<tr>
<th>Categories</th>
<th>2001–02</th>
<th>2006–07</th>
<th>DALYs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Disease</td>
<td>15.2</td>
<td>65.6</td>
<td>3284</td>
</tr>
<tr>
<td>Neuropsychiatric Disease</td>
<td>0.9</td>
<td>9.5</td>
<td>3044</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>N.A.</td>
<td>8.9</td>
<td>2913</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>37.5</td>
<td>134.9</td>
<td>1011</td>
</tr>
<tr>
<td>TB</td>
<td>25.4</td>
<td>39.0</td>
<td>869</td>
</tr>
<tr>
<td>Malaria</td>
<td>36.1</td>
<td>73.1</td>
<td>69</td>
</tr>
</tbody>
</table>

* Disability Adjusted Life Years (DALYs) are the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

**Source:** Ministry of Finance, Government of India, 2008.

The table 3.3 shows India’s budgetary allocations for health for two periods, viz. 2001-1002 and 2006-2007 respectively. If measured using age-standardised DALY rates, several disease areas emerge as the most burdensome in India. The first is cardiovascular disease at 3284, followed by neuropsychiatric disease at 3044, then respiratory conditions and then unintentional injury at 2913. In contrast the DALY rates for HIV/AIDS, Tuberculosis and malaria are 1011, 869 and 69, respectively.

---


How financing compares with the burden of disease is shown in Table 3.3. HIV/AIDS receives a significantly higher allocation than all the other health areas, with a huge increase since 2001-2002 (Figure 3.2). HIV/AIDS has been addressed through the National AIDS Control Organisation (NACO) within the Ministry of Health and Family Welfare. External donors have played a significant role in funding NACO’s National AIDS Control Projects (NACP) as well as providing technical assistance. In contrast, the National TB programme was allocated only US$39.02 million for 2006–07. From 2001 to 2006, malaria was addressed through the National Anti-Malaria Programme. The programme was then integrated into the National Vector-Borne Disease Control Programme (malaria, kala-azar, Japanese encephalitis, filaria, dengue) in 2006. This programme is predominantly funded externally through the World Bank’s US$ 520.75 million National Vector Borne Disease Control and Polio Eradication Support Project.

The funding for 2001–2007 seem to be in line with what earlier researchers have noted that although only roughly 1.6–2% of financing in the health sector in India comes from external funds, this small percentage is distorting national priorities. For example, Qadeer (2000) notes that from 1990–91 until 1998–99 investments only

---

increased for selected programmes for TB, leprosy and AIDS control at the expense of the National Malaria Control and Diarrhoeal Diseases Control Programmes. Similarly, Deolalikar et al. (2008) note that external assistance constitutes a sizeable share of national disease control programmes for TB, HIV/AIDS and malaria.

3.12 National Health Policies in India:

After Independence, India adopted the welfare state approach, which was dominant worldwide at that time. As with most post-colonial nations, India too attempted to restructure its patterns of investment. During that time, India's leaders envisaged a national health system in which the State would play a leading role in determining priorities and financing, and provide services to the population.

The Health Ministry is the authorised agency for formulating and implementing health policy in India. Improvement in the health status of the population has been one of the major thrust areas in social development programmes of India since independence. The Indian government has set up a number of committees to assess and improve health standards in India. Some of the major committees and their recommendations are follows:

(A) Bhore Committee (1946):

Bhore Committee (1946), known as the Health Survey and Development Committee, was appointed in 1943 with Sir Joseph Bhore as its Chairman. It laid emphasis on integration of curative and preventive medicine at all levels. It made comprehensive recommendations for remodeling of health services in India. It was strongly remarked in the committee report that:

"If it were possible to evaluate the loss, which this country annually suffers through the avoidable waste of valuable human material and the lowering of human efficiency through malnutrition and preventable morbidity, we feel that the result would be so startling that the whole country would be aroused and would not rest until a radical change had been brought about."

The Bhore Committee report, submitted in 1946, had some important recommendations like:

1. The committee recommended that “No individual should, fail to secure adequate medical care because of inability to pay for it”.

2. The committee observed that:
   - Child Death Rate (CDR): 22.4/1000
   - Infant Mortality Rate (IMR): 162/1000 live births
   - Maternal Mortality Rate (MMR): 20/1000 live births
   - Life Expectancy at Birth: 27 years.

The committee emphasised improvement in housing, communication, water supply, sanitation, nutrition, agriculture and industrial production and elimination of unemployment for improvement of health.

The committee emphasised more on health care services for rural population and recommended that health services should be placed as close as possible to the people in order to ensure the maximum benefit to the communities to be served.

It also recommended the integration of preventive and curative services at all administrative levels.

The committee recommended development of Primary Health Centres (PHCs) in two stages:

- **Short-term Measures**: The committee recommended short-term plan to be implemented in 2-3 years time. One primary health centre as suggested for a population of 40,000. Each PHC was to be manned by 2 doctors, one nurse, four public health nurses, four midwives, four trained dais, two sanitary inspectors, two health assistants, one pharmacist and fifteen other class IV employees. Secondary health centre was also envisaged to provide support to PHC, and to coordinate and supervise their functioning.

- **Long-term Measures**: A long-term programme (also called the 3 million plan) recommended a 3-tier system:
  - **First Tier**: Primary health unit with 75 bedded hospital for each 10000-20000 population with a staff of 6 medical officers, 6 public health nurses, 2 sanitary inspectors, 2 health assistants and other supportive staff;
  - **Second Tier**: 650 bedded Regional Health Unit (RHU) to serve as a referral centre for 30-40 PHUs; and
  - **Third Tier**: District hospitals with 2,500 beds to serve the needs of about 3 million.

Major changes in medical education which includes 3-month training in preventive and social medicine to prepare “social physicians”.

Though most of the recommendations of the committee were not implemented at the time, the committee was a trigger to the reforms that followed. It was instrumental in bringing about the public health reforms related to peripheral health centres in India.

**Mudaliar Committee (1962):**

Mudaliar Committee (1962) known as the “Health Survey and Planning Committee”, headed by Dr. A. L. Mudaliar, Vice-chancellor of the then Madars University, was appointed in 1959 to assess the performance in health sector since the submission of Bhore Committee report. The committee recommended that:

1. The committee found the conditions in PHCs to be unsatisfactory and suggested that the PHC, already established should be strengthened before new ones are opened.

---

(2) The committee also advised strengthening of sub-divisional and district hospitals. It was emphasised that a PHC should not be made to cater to more than 40,000 population and that the curative, preventive and promotive services should be all provided at the PHC.

(3) The Mudaliar Committee also recommended that an All India Health Service should be created to replace the erstwhile Indian Medical service.

The concern of the Health Survey and Planning Committee (Mudaliar Committee 1962) was limited to the development of the health services infrastructure and the health cadre at the primary level. It felt the growth of infrastructure needed radical transformation and further investment.

(C) Chadda Committee (1963):

Chadda Committee (1963) was appointed under chairmanship of Dr. M. S. Chadha, the then Director General of Health Services, to advise about the necessary arrangements for the maintenance phase of National Malaria Eradication Programme (NMEP). The committee suggested that the vigilance activity in the NMEP should be carried out by basic health workers (one per 10,000 population), who would function as multipurpose workers and would perform, in addition to malaria work, the duties of family planning and vital statistics data collection under supervision of family planning health assistants. Basic health workers should visit house-to-house once in a month to implement malaria eradication activities. The scope of Chadda committee was restricted to malaria eradication.

(D) Mukherjee Committee (1965):

The recommendations of the Chadda Committee, when implemented, were found to be impracticable because the basic health workers, with their multiple functions could do justice neither to malaria work nor to family planning work. The Mukherjee Committee (1965) headed by the then Secretary of Health Shri Mukherjee, was appointed to review the performance in the area of family planning. The committee recommended separate staff for the family planning programme. The family planning assistants were to undertake family planning duties only. The basic health workers were to be utilised for purposes other than family planning. The committee also recommended to delink the malaria activities from family planning so that the latter would receive undivided attention of its staff.

(E) Mukherjee Committee (1966):

Multiple activities of the mass programmes like family planning, small pox, leprosy, trachoma, NMEP (maintenance phase), etc. were making it difficult for the

---


67 Government of India (1965), ‘Committee on Basic Health Services’ (Chairman: Mukharjee B.), Ministry of Health, New Delhi.
states to undertake these effectively because of shortage of funds. A committee of state health secretaries, headed by the Union Health Secretary, Shri Mukherjee, was set up to look into this problem. The committee worked out the details of the Basic Health Service which should be provided at the Block level, and some consequential strengthening required at higher levels of administration.

The Committee did not attempt to work out any details of the organisation that would be needed above the district level, i.e. at the Zonal, the State and the Central level. The Committee felt that the State Governments should work out the better methods for the functioning of the health organisations at the Zonal and State levels.

**(F) Jungalwalla Committee (1967):**

Jungalwalla Committee (1967)\(^{68}\), known as the “Committee on Integration of Health Services” was set up in 1964 under the chairmanship of Dr. N. Jungalwalla, the then Director of National Institute of Health Administration and Education (currently NIHFW). It was asked to look into various problems related to integration of health services, abolition of private practice by doctors in government services, and the service conditions of Doctors. The committee defined “integrated health services” as:

1. A service with a unified approach for all problems instead of a segmented approach for different problems.
2. Medical care and public health programmes should be put under charge of a single administrator at all levels of hierarchy.

Following steps were recommended for the integration at all levels of health organisation in the country:

1. Unified Cadre.
2. Common Seniority.
3. Recognition of extra qualifications.
4. Equal pay for equal work.
5. Special pay for special work.
6. Abolition of private practice by government doctors.
7. Improvement in their service conditions.

**(G) Kartar Singh Committee (1973):**

Kartar Singh Committee (1973)\(^{69}\), headed by the Additional Secretary of Health and titled the "Committee on Multipurpose Workers under Health and Family Planning" was constituted to form a framework for integration of health and medical services at peripheral and supervisory levels. Its main recommendations were:

---

\(^{68}\) Government of India (1967), ‘Committee on Integration of Health Services’ (Chairman: Jungalwalla N.), Ministry of Health and Family Planning, New Delhi.

(1) Various categories of peripheral workers should be amalgamated into a single cadre of multipurpose workers (MPW - male and female). The erstwhile auxiliary nurse midwives were to be converted into MPW(F) and the basic health workers, malaria surveillance workers etc. were to be converted to MPW(M). The work of 3-4 male and female MPWs was to be supervised by one health supervisor (male or female respectively). The existing lady health visitors were to be converted into female health supervisor.

(2) One Primary Health Centre should cover a population of 50,000. It should be divided into 16 sub-centres (one for 3000 to 3500 population) each to be staffed by a male and a female health worker.

**H) Srivastav Committee (1975):**

Srivastav Committee (1975)\(^{70}\) was set up in 1974 as "Group on Medical Education and Support Manpower" to determine steps needed to:

1. Reorient medical education in accordance with national needs and priorities.
2. Develop a curriculum for health assistants who were to function as a link between medical officers and MPWs.

The Srivastav Committee recommended immediate action for:

1. Creation of bonds of paraprofessional and semi-professional health workers from within the community itself.
   - Creation of Village Health Guide (VHG) or community health volunteers from the community itself like teachers, post masters, gram sevaks who can provide comprehensive health services as paraprofessional.
   - Primary health care should be provided within the community itself through specially trained workers so that the health of the people is placed in the hands of people themselves.
2. Establishment of 3 cadres of health workers namely – multipurpose health workers and health assistants between the community level workers and doctors at Primary Health Centres (PHCs).
3. Development of a “Referral Services Complex” by the development of proper linkages between the PHC and higher level referral and service centres.
4. Establishment of a Medical and Health Education Commission for initiating the reforms needed in health and medical education on the lines of UGC.

Acceptance of the recommendations of the Srivastav Committee led to the launching of the Rural Health Scheme in 1977-78. The major steps initiated were:

1. Involvement of medical colleges in health care of selected with the objective of reorienting medical education according to rural population called

---

Reorientation of Medical Education (ROME). It led to teaching and training of undergraduate students and interns at PHCs.

(2) Training of Village Health Guides and utilising their services in the general health service system.

With the widespread disillusionment with vertical programmes worldwide and the need to provide universal health services came the Primary Health Care Declaration at Alma Ata in 1978, which India was a signatory to. Accordingly, a working group on “Health for All by 2000 AD” was constituted in 1981 under the chairmanship of Kripa Narain.


‘The Working group on health for all by 2000 AD’71 under the Chairmanship of Kripa Narain submitted its report in 1981 and based on its recommendations the following health strategy was worked out for the Sixth Plan Period:

(1) Emphasis would be shifted from development of city based curative services and super specialities to tackle rural health problems.

(2) The infrastructure for rural health would consist of primary health centres serving a population of 30000 each, sub-centres serving a population of 5000 each and a trained health volunteers for every 1000 people.

(3) Facilities for treatment in basic specialities would be provided at community health centres at the block level for a population of 1 lakh with a 30 bedded hospital attached and a system for referral cases from the community health centre to the district hospitals would be introduced.

(4) Various programmes under education, water supply and sanitation, control of communicable diseases, family planning, maternal and child health care, nutrition and school health implemented by different agencies would be properly coordinated for optimal results.

(5) Medical and para-medical manpower would be given adequate training for meeting the requirements of a programme of this order and all education and training programmes would be given suitable orientation towards rural health care and finally, the people would be involved and community participation in the health programme would be encouraged. They would be entitled to supervise and manage their own health programmes.

The report submitted by the Committee was in fact a move towards articulating a national health policy that was thought of as an important step to realise the Alma Ata Declaration. It was realised that one had to redefine and

---

rearticulate and get back into track an integrated and comprehensive health system that policy-makers had wavered from. It reiterated the need to integrate the development of the health system with the overall plans of socioeconomic and political change. It recommended that the Government should formulate a comprehensive national health policy dealing with all dimensions-environmental, nutritional, educational, socioeconomic, preventive and curative.

(J) The National Health Policy, 1983:

For the first time in the history of free India a very comprehensive health policy was approved by the Parliament in 1983. The National Health Policy, 198372, has clearly admitted the failures of the government in health sector in the past.

(1) Firstly, the government felt that the then existing situation was largely caused by the almost wholesale adoption of health manpower development policies and the establishment of curative centres based on the Western models which were inappropriate and irrelevant to the real needs of the people and the socio-economic conditions obtaining in the country.

(2) Secondly, the establishment of medical services for urban poor through hospitals was undertaken at the cost of providing comprehensive primary health care services to the poor, especially in rural areas.

(3) Thirdly, the existing approach, instead of improving awareness and building up self-reliance in the community, has tended to enhance the dependence of the community and weaken its capacity to cope up with the growing health problems.

(4) Lastly, the existing methods of education and training of medical and health personnel have resulted in promoting a cultured gap between the health personnel and the people.

The National Health Policy, 1983 attempted to address all these issues. Its main goal was the provision of universal, comprehensive primary health services. It envisaged the integration of a large number of private and voluntary organisations, who were active across the country in the health field, with the government efforts to provide health services. It also recommended a decentralised system of health care and a nation-wide chain of epidemiological stations.

As a result of the new Policy, once again, a selective approach to health care became the focus. Verticality was reintroduced as an 'interim' arrangement and interventions of immunization, oral rehydration, breastfeeding and anti-malarial drugs were introduced. This was seen as a technical solution even before comprehensive primary health care could be realised. UNICEF too came out with its report on the state of the world's children and suggested immunization as the spearhead in the


The subsequent plans emphasised restructuring and developing the health infrastructure, especially at the primary level. The Seventh Plan (1985-90) restated that the rural health programme and the three-tier health services system need to be strengthened and that the government had to make up for the deficiencies in personnel, equipment and facilities. The Eighth Plan (1992-97) distinctly encouraged private initiatives, private hospitals, clinics and suitable returns from tax incentives. With the beginning of structural adjustment programmes and cuts in social sectors, excessive importance was given to vertical programmes such as those for the control of AIDS, tuberculosis, polio and malaria funded by multilateral agencies with specified objectives and conditions attached. Both the Ninth (1997-2002) and the Tenth Five-Year Plans (2002-2007) start with a dismal picture of the health services infrastructure and go on to say that it is important to invest more on building good primary-level care and referral services.

(K) The National Health Policy, 2002:

The National Health Policy, 2002 gives prime importance to ensure a more equitable access to health services across the social and geographical expanse of the country. It calls for a strong primary health network in rural India. Emphasis has been given to increase the aggregate public health investment through a substantially increased contribution by the Central Government. Priority has been given to preventive and curative initiatives at the primary health level through increased sectoral share of allocation. The highlights of the policy are:

1. Increase health sector expenditure to 6 percent of GDP, with 2 percent of GDP being contributed as public health investment, by the year 2010. With the stepping up of the public health investment, the Central Government's contribution would rise to 25 percent from the existing 15 percent by 2010. An increased allocation of 55 percent of the total public health investment for the primary health sector. The secondary and tertiary health sectors being targeted for 35 percent and 10 percent respectively.

2. The plan envisaged gradual convergence of all health programmes under a single field administration. Vertical programmes for control of major diseases


like TB, Malaria, HIV/AIDS, as also the Reproductive and Child Health and Universal Immunization Programmes, would need to be continued till moderate levels of prevalence are reached.

(3) It was proposed that the programme implementation be effected through autonomous bodies at State and district level. The interventions of State Health Departments may be limited to the overall monitoring of the achievement of programme targets and other technical aspects. The presence of State Government officials, social activists, private health professionals and MLAs/MPs on the management boards on the autonomous bodies will facilitate well-informed decision-making. All rural health staff should be available for the entire gamut of public health activities at the decentralized level, irrespective of whether these activities relate to national programmes or other public health initiatives.

(4) The policy envisages kick starting the revival of the Primary Health System by providing some essential drugs under Central Government funding through the decentralised health system. It recognises the practical need for levying reasonable user-charges for certain secondary and tertiary public health care services, for those who can afford to pay.

(5) The policy also recommended a mandatory two-year rural posting before the awarding of the graduates degree. This would not only make trained medical manpower available in the underserved areas, but would offer valuable clinical experience to the graduating doctors.

(6) The policy envisages the setting up of a Medical Grants Commission for funding new Government Medical and Dental Colleges in different parts of the country. It also recommended the need to modify the existing curriculum to enable fresh graduates to contribute effectively to the providing of primary health services as the physician of first contact.

(7) This policy also recommends a periodic skill updating of working health professional through a system of Continuing Medical Education. The policy also envisages the creation of additional seats for post-graduate courses.

(8) Panchayat bodies to be involved more in health care programmes. All State Governments to consider decentralising the implementation of the programmes to such institutions by 2005. In order to achieve this, financial incentives, over and above the resources normatively allocated for disease control programmes, will be provided by the Central Government.

(9) The policy emphasizes the need for an improvement in the ratio of nurses vis-

a-vis doctors/beds.
The policy proposed setting up of an organised two-tiered urban primary health care structure: the primary centre as the first-tier, covering a population of one lakh, and a second tier at the level of public general hospital. The funding for the urban primary health system will be jointly borne by the local self-government institutions and state and central governments.

The policy proposed establishment of fully equipped 'hub-spoke' trauma care networks in large urban agglomerations to reduce accident mortality.

It also recommended the upgrading of the physical infrastructure of mental hospital/institutions at Central Government expense so as to secure the human rights of this vulnerable segment of society.

The policy emphasised on giving priority to school health programmes which aim at preventive health education, providing regular health check-ups, and promotion of health-seeking behaviour among children.

The policy proposed an increase in Government funded health research to a level of 1 percent to the total health spending by 2005, and thereafter up to 2 percent by 2010.

The policy also proposed a social health insurance scheme, funded by the Government, and with service delivery through the private sector. As a first step, this policy envisages the introduction of a pilot scheme in a limited number of representative districts, to determine the administrative features of such an arrangement as also the requirement of resources for it.

It stressed involvement of non-governmental practitioners in the national diseases control programmes so as to ensure that standard treatment protocols are followed in their day-to-day practice.

The policy recognised the significant contribution made by the NGOs and other institution of the civil society in making available health services to the community. The disease control programmes would earmark not less than 10% of the budget in respect of identified programme components, to be exclusively implemented through these institutions.

The policy expected to fully operationalization an integrated disease control network from the lowest rung of public health administration to the Central Government. The programme for setting up this network will include the installation of data-base handling hardware. IT inter-connectivity between different tiers of the network and in-house training for data collection and interpretation for undertaking timely and effective response.

It also expected that the baseline estimates for the incidence of the common diseases such as TB, Malaria, and Blindness would be done by 2005.
Baseline estimates for non-communicable diseases, like CVD, Cancer, Diabetes and accidental injuries and communicable diseases like Hepatitis and JE would also be compiled.

(20) The policy notified a comprehensive code of ethics which is to be rigorously implemented by the Medical Council of India. It proposed the establishment of statutory professional councils for paramedical disciplines to register practitioners, maintain standards of training and monitor performance.

(21) It made mandatory periodic screening of the health conditions of the workers, particularly for high-risk health disorders associated with their occupation.

(22) The policy envisaged to provide such health services on a payment basis to service seekers from overseas – Medical Tourism. All fiscal incentives, including the status of "deemed exports", available to exporters of goods and services, would be extended for payment received in foreign exchange.

(23) It also proposed a national patent regime for the future, which, while being consistent with TRIPS, avails of all opportunities to secure for the country, under its patent laws, affordable access to the latest medical and other therapeutic discoveries.

Critical Assessment of Health Policies:

Both the Health Policies of 1983 and 2002 highlight the importance of the role of decentralisation but do not state how this will be achieved. The National Health Policy (2002) includes all that is wanted from a progressive document and yet it glosses over the objective of NHP 1983 to protect and provide primary health care to all. The Policy document talks of integration of vertical programmes, strengthening of the infrastructure, providing universal health services, decentralization of the health care delivery system through panchayati raj institutions (PRIs) and other autonomous institutions, and regulation of private health care but fails to indicate how it achieves the goals. It encourages the private sector in the first referral and tertiary health services.

The overview of the plans and policy reports not only throws light on the gap between the rhetoric and reality but also the framework within which these policies and programmes have been formulated. There has been an excessive preoccupation with single-purpose driven programmes. Above all, the spirit of primary health care has been reduced to just primary level care. The health reports and plans mostly concentrated on building the health services infrastructure and even this lacked a sense of integration. Most of the policy reports miss out on the importance of a strong referral system. Instead, there has been more emphasis on building the primary level care and even that has lacked proper implementation. The Bhore committee report and later, the Primary Health Care Declaration discussed the operational aspects of
integrating the other sectors of development related to health. The multi-sectoral approach that is much needed and the inter-sectoral linkages that are essential for a vibrant health system have not been well thought out, and there has been no plan drawn out for it later. The outline of plan documents and their implementation have been incremental rather than being holistic. It is important to question whether it is only the low investment in health that is the main reason for the present status of the health system or is it also to do with the framework, design and approach within which the policies have been planned.

The Government initiatives in the public health sector have recorded some noteworthy successes over time. Smallpox and Guinea Worm Disease have been eradicated from the country; Polio is on the verge of being eradicated; Leprosy, Kala Azar, and Filariasis can be expected to be eliminated in the foreseeable future. There has been a substantial drop in the Total Fertility Rate and Infant Mortality Rate. The success of the initiatives taken in the public health field is reflected in the progressive improvement of many demographic/epidemiological/infrastructural indicators over time.

Table 3.4
Achievements through the Years 1951-2000

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1951</th>
<th>1981</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Demographic Changes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>36.7</td>
<td>54</td>
<td>64.6</td>
</tr>
<tr>
<td>Birth Rate</td>
<td>40.8</td>
<td>33.9</td>
<td>26.1</td>
</tr>
<tr>
<td>Death Rate</td>
<td>25.0</td>
<td>12.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>146</td>
<td>110</td>
<td>70</td>
</tr>
<tr>
<td>B. Epidemiological Shifts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria (cases in million)</td>
<td>75</td>
<td>2.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Leprosy cases (per 10,000)</td>
<td>38.1</td>
<td>57.3</td>
<td>3.74</td>
</tr>
<tr>
<td>Small Pox</td>
<td>&gt;44,887</td>
<td>Eradicated</td>
<td>-</td>
</tr>
<tr>
<td>Guineaworm</td>
<td>-</td>
<td>&gt;39,792</td>
<td>Eradicated</td>
</tr>
<tr>
<td>Polio</td>
<td>-</td>
<td>29709</td>
<td>265</td>
</tr>
<tr>
<td>C. Infrastructure:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispensaries &amp; Hospitals</td>
<td>9209</td>
<td>23,555</td>
<td>43,322</td>
</tr>
<tr>
<td>Beds (Public and Private)</td>
<td>1,17,198</td>
<td>569,495</td>
<td>8,70,161</td>
</tr>
<tr>
<td>Doctors (Allopathy)</td>
<td>61,800</td>
<td>2,68,700</td>
<td>5,03,900</td>
</tr>
<tr>
<td>Nursing Personnel</td>
<td>18,054</td>
<td>1,43,887</td>
<td>7,37,000</td>
</tr>
</tbody>
</table>

Source: National Health Policy, 2002.

Despite the impressive public health gains as revealed in the above table, the morbidity and mortality levels in the country are still unacceptably high. These unsatisfactory health indices are, in turn, an indication of the limited success of the public health system in meeting the preventive and curative requirements of the general population.
The National Health Policy (NHP) 1983, in a spirit of optimistic empathy for the health needs of the people, particularly the poor and under-privileged, had hoped to provide ‘Health for All by the year 2000 AD’, through the universal provision of comprehensive primary health care services. In retrospect, it is observed that the financial resources and public health administrative capacity which it was possible to marshal, was far short of that necessary to achieve such an ambitious and holistic goal. Against this backdrop, it was felt that it would be appropriate to pitch the National Health Policy (NHP), 2002. It was expected that the recommendations of NHP-2002 will attempt to maximize the broad-based availability of health services to the citizens of the country.

The National Health Policy, 2002 gives prime importance to ensure a more equitable access to health services across the social and geographical expanse of the country. It calls for a strong primary health network in rural India. Emphasis has been given to increase the aggregate public health investment through a substantially increased contribution by the Central Government. Priority has been given to preventive and curative initiatives at the primary health level through increased sectoral share of allocation.

3.13 India towards “Right to Health”:


“Large numbers of the world’s people, perhaps more than half, have no access to health care at all, and for many of the rest the care they receive does not answer the problems they have.”

The Joint WHO – UNICEF international conference in 1978 at Alma-Ata (USSR) declared that “the existing gross inequalities in the status of health of people particularly between developed and developing countries as well as within the countries is politically, socially and economically unacceptable.”

The Alma-Ata conference called for acceptance of the WHO goal of HEALTH FOR ALL by 2000 AD and ‘Primary Health Care’ as a way to achieve “Health for All”.

Alma-Ata Declaration called on all the governments to formulate national health policies according to their own circumstances to launch and sustain primary health care as a part of national health system.

The Alma-Ata conference defined that “Primary health care is essential health care made universally accessible to individuals and acceptable to them, through their full participation and at the cost the community and country can afford.”

(A) Projection of Resource Requirements:

Considering the increase in population during Census 2011, the following health care resources are immediately required to meet the increasing demand of health care services. Presently there are over 1.58 million doctors (of which allopathic are 780,000, including over 250,000 specialists), 1.4 million nurses, over 1.5 million hospital beds, 600,000 health workers and about 25,000 PHCs with government and municipal health care spending at about Rs.700 billion (excluding water supply). The increased population immediately requires, from public as well as private sector, the following resources during the financial year 2012-2013 to meet the goal of ‘Health for All’ by 2020.76

1. Family medical practitioners (GPs) = 500,000.
2. Epidemiological stations (PHCs rural and urban) = 50,000.
3. Health workers = 600,000.
4. Health supervisors = 125,000.
5. Public health nurses = 50,000.
6. Basic hospitals = 24,000.
7. Basic hospital beds = 1.2 million.
8. Basic hospital staff:
   - General duty doctor = 144,000.
   - Specialists = 144,000.
   - Dentists = 24,000.
   - Nurses = 432,000.

(B) Nine is Mine Campaign:

‘Nine Is Mine’ is the rallying call to the government that was given up by more than 200,000 children when they petitioned the Prime Minister Dr. Manmohan Singh in February 2007 to fulfil the promise made in the National Common Minimum Programme to increase public expenditure in Health and Education to 9% of India’s GDP.

Some of the key conclusions of the status report published on Health and Education are:

1. Both health and education are rights under the Constitution of India, the latter being a fundamental right. It is therefore the duty of the Indian government to deliver these services to the citizens.

2. It is the responsibility of the government to ensure that each citizen receives good education and health care. No private or voluntary agency can meet these requirements.

3. The campaign recommends increase public expenditure on Education to 6% of the GDP, and on Health to 2-3% of the GDP. However to date, the

---

total investment on Health and Education in India remains dismally low. Less than 1% of India’s GDP is spent on public health, which is even lower than the public health expenditures of countries like Sri Lanka and Sierra Leone. Public Expenditure on Education in India is a little over 3% of the GDP.

(4) The introduction of User Fees adds to the burden of the ‘invisible’ costs that are borne by families who struggle to access health and education, and also negates the ‘costs’ that are already paid by the poor by way of their recognised economic contribution to the overall GDP of the country.

(5) The government must prioritise the needs of traditionally marginalised groups in planning its investments and outreach. The poorest districts of the country and most vulnerable groups – including Women, Children, People with Disabilities, and communities like the Dalits, Adivasis, Denotified Tribes and Muslim Minorities – must be the focus while planning for infrastructure and allocating resources.

(6) The quality of services even in the poorest areas of the country should be commensurate with the standards and norms envisaged by the National Development Goals at the very least, and encourage further improvisation and enhancement through active local participation, information sharing and accountability.

(C) Right to Health in India:

Health is one of the goods of life to which man has a right; wherever this concept prevails the logical sequence is to make all measures for the protection and restoration of health to all, free of charge; medicine like education is then no longer a trade - it becomes a public function of the State ... Henry Sigerist

To establish right to healthcare with the above scenario certain first essential steps will be compulsory:

(1) Equating directive principles with fundamental rights through a constitutional amendment.

(2) Incorporating a National Health Act (similar to Canada Health Act) which will organise the present healthcare system under a common umbrella organisation as a public-private mix governed by an autonomous national health authority which will also be responsible for bringing together all resources under a single-payer mechanism.

(3) Generating a political commitment through consensus building on right to healthcare in civil society.

---

(4) Development of a strategy for pooling all financial resources deployed in the health sector.

(5) Redistribution of existing health resources, public and private, on the basis of standard norms (to be specified) to assure physical (location) equity.

Carrying out the above immediate steps, for which we need only political commitment and not any radical transformation, will create the basis to move in the direction of first essential steps indicated above. In order to implement the first-steps the essential core contents of healthcare have to be defined and made legally binding through the processes of the first-steps. The literature and debate on the core contents is quite vast and from that we will attempt to draw out the core content of right to health and healthcare keeping the Indian context discussed above in mind.

(D) Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY):

The State Government of Maharashtra has launched Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY)\(^78\) in order to improve medical access facility for both Below Poverty Line (BPL - Yellow card holders) and Above Poverty Line (APL- orange card holders) families in eight districts of Maharashtra – Gadchiroli, Amravati, Nanded, Sholapur, Dhule, Raigad, Mumbai and Suburbs. The scheme will extend quality medical care for identified specialty services, requiring hospitalization for surgeries and therapies or consultations, through an identified network of health care providers. The insurance of policy/coverage under the RGJAY for the eligible beneficiary families in 8 districts of Phase - I will be in force for an initial period of one year from the date of commencement of the policy. The scheme will cover 30 specialised service categories inclusive of 972 procedures and 121 follow up procedures.

The objective of the Scheme is to improve access of Below Poverty Line (BPL) and Above Poverty Line (APL) families (excluding White Card Holders as defined by Civil Supplies Department) to quality medical care for identified specialty services requiring hospitalisation for surgeries and therapies or consultations through an identified Network of health care providers. The scheme would provide 972 surgeries/therapies/procedures along with 121 follow up packages in 30 identified specialized categories. All eligible families in selected districts shall be provided with Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY) Health Cards.

3.14 Conclusion:

Indian health sector is characterized by several inconsistencies. To name a few – there are super specialty hospitals that attract patients from across the world and a large mass of malnourished citizens starving for 'medicine' that would cure their

ailment such as diseases caused due to undernourishment, coronary artery disease
diseases like Kala Azar, Malaria, swine flu, diabetes and several other vector and
water borne diseases. There is also dearth of doctors to run the Primary Health
Centers (PHCs) to serve these patients.

The concept of state's responsibility in health care or 'health as a right' has
never been a part of India's political culture and therefore, the health policies of
Government of India could do little to address the medical needs of the sick at the
primary level. Major ‘inputs’ for good health of a population are – adequate supply of
trained and motivated health-care providers, an adequate and equitably dispersed
network of health-care centers and hospitals, a good water supply and sanitation
system, decent nutrition and widely prevalent hygienic practices. Predictably, India is
found grossly wanting in all these dimensions. The key constraint is the lack of a
public health focus. There is a need to promote better planning and execution of
public health policies outside the domain of the Ministry of Health and Family
Welfare (MOHFW).

Government initiatives in the public health sector have recorded some
noteworthy successes over time. Smallpox and Guinea Worm Disease have been
eradicated from the country; Polio is on the verge of being eradicated; Leprosy, Kala
Azar, and Filariasis can be expected to be eliminated in the foreseeable future. There
has been a substantial drop in the Total Fertility Rate and Infant Mortality Rate. The
success of the initiatives taken in the public health field is reflected in the progressive
improvement of many demographic/epidemiological/infrastructural indicators over
time. Despite the impressive public health gains, the morbidity and mortality levels in
the country are still unacceptably high. These unsatisfactory health indices are, in
turn, an indication of the limited success of the public health system in meeting the
preventive and curative requirements of the general population.

Over the past few decades a number of committees and commissions have
been appointed by the Government to examine the issues and challenges affecting the
health sector. The earliest committees included the Health Survey and Development
Committee (Bhore Committee) and Sokhey Committee. Other main committees in the
post-independence period included Mudaliar Committee, Chadha Committee,
Mukherjee Committee, Jungalwalla Committee, Kartar Singh Committee, Mehta
Committee and Bajaj Committee. Some of the recent committees include the
Mashelkar Committee and the National Commission on Macroeconomics and Health.
The approach of most of these committees was fragmented and each one tried to
address the issue of health in India from micro perspective. These committees
individually addressed the issues such as organisation, integration and development of
health care services and delivery system, health policy and planning, national
programmes, public health, human resources, indigenous system of medicines, drugs
and pharmaceutical amongst the others. The Health Policy 1983 proclaimed ‘Health
for All’ by 2000 AD, but it failed to achieve its objective and therefore, the
government announced another comprehensive policy – the National Health Policy,
2002. Even this policy did not make much contribution towards health status in India
even after a decade of its implementation. The effect of all these is the increasing
burden of patients on existing health care infrastructure, mushroom growth of quacks especially on country side and slums in urban areas and large number of private
clinics and nursing homes, most of which are beyond the ken of a common man.

The Government of India has announced free medical facilities for population
below poverty line. The scheme encompasses public hospitals and selected private
hospitals for free treatment of major diseases without any charges up to certain limit.
However, the government failed to realize the fact that there is excessive pressure on
the present health infrastructure in urban as well as in rural areas. In government hospitals the number of in-patients is so large that many patients have to be accommodated on beds placed on floor in the ward. There is always dearth of basic medicines and equipments. Many government hospitals are understaffed. Again not all private hospitals have been included in the list of hospitals providing free hospitalization. Among those who have been included in the list, many are pack with patients. Private hospitals function according to certain norms and therefore cannot admit more patients then its installed capacity. Under such circumstances, the dream of providing free hospitalization merely remains a distant dream.

Thus, the piecemeal and half-hearted efforts of the government to provide
medical facilities to the patients are not going to provide its citizens their ‘Right to Health’. The government needs to give a positive thought to the issue and take concrete measure to resolve problem from the base, i.e. development of infrastructure and necessary facilities and their proper maintenance and replacement. For this, the approach of the government needs a radical change. It has a pathetic record of devoting a mere 1.2 per cent of GDP as public expenditure. To scale up care, that must be raised to at least 2.5 per cent by the end of the 12th Plan, and 3 per cent in the subsequent five years. This can bring about a dramatic reduction in out-of-pocket spending from 67 per cent of total health expenditures today to 47 per cent by 2017 and 33 per cent by 2022.79