4.1 Introduction

Primary health care is the first level of contact of individuals, the family and community with the national health system where “primary health care” (“essential” health care) is provided. The Alma-Ata conference defined primary health care as “essential health care made universally accessible to individuals and acceptable to them through their full participation and at a cost the community and country can afford”. Alma-Ata Declaration has outlined 8 essential components of primary health care (K. Park 2005 pp 685-686)

1. Education concerning prevailing health problems and the methods of preventing and controlling them.

2. Promotion of food supply and proper nutrition.

3. An adequate supply of safe water and basic sanitation.

4. Maternal and child health care, including family planning.

5. Immunisation against major infectious diseases.


7. Appropriate treatment of common diseases and injuries and

8. Provision of essential drugs.

In India, primary health care is provided by the network of primary health centres and their sub-centres.
In this chapter an attempt has been made to introduce primary health care and family welfare programmes in our country. The chapter is divided into the following six parts.

**Part I** : The relation between health and economic development has been highlighted in the first part.

**Part II** : This part briefly sketches the origin, structure, and functions of Primary Health Centres in India.

**Part III** : In this part an attempt has been made to briefly explain about how Primary Health Centres are focused in various committees, health policies and in Five year plans of the country.

**Part IV** : This part offers information about some family welfare programmes implemented in the country.

**Part V** : This part is devoted to provide a bird’s eye view of infrastructural facilities at primary health centres.

**Part VI** : In this part a few observations are listed as conclusion.

**PART – I**

4.2 Health and Economic Development

The earliest notion on health in economic literature had welfare connotations. Macroeconomic issues here centered on the health and strength of the population (Kelekari Sharmila Shashiker 2006 pp – 13-14). The classical economist Adam Smith considered the acquired useful abilities of the people as part of the capital. People are an important part of the Wealth of nations, said Schultz. Harvey Leibenstein emphasized that better nutrition is correlated with higher productivity. “unless societies recognise that their real wealth is their
people, an excessive obsession with the creation of material wealth can obscure the ultimate objective of enriching human lives" (LN Dash 2007, pp 158-159).

Improvement in health status contributes in a great way to the economic growth rates of the countries. Experiences of a few developed countries illustrate how health forms a part of development. During the last one and a half century better health has boosted rates of economic growth all over the world. Bloom, Canning and Selvilla found that one extra year of life expectancy raises G.D.P. per capita by about 4 percent. It has been revealed that improvement in nutritional intake alone accounts for 30 percent per capita growth in the United Kingdom. (LN Dash 2008 pp 159-160)

In the second half of the 20th century better health gave rise to rapid increase in labour supply in East Asia. Theodore Schultz (1981, p.34) points out increase in longevity led to an increase in the need for saving to secure retirement income. Finally this gave rise to a saving boom and high rate of capital formation. Diseases carve a substantial portion of national income. In 2005 the estimated loss in national income from premature deaths due to heart disease, stroke and diabetes were $ 18 billion in China, $ 11 billion in India and $3 billion in Brazil (David E Bloom et al. 2004, pp 1-13). The rapid economic growth in the East-Asian countries has become possible due to significant improvement in public health, whereas high level of disease burden is one of the factors responsible for Africa's slow economic performance (L. N. Dash 2007 pp. 201-202).

Good health is considered as a pre-condition for economic development and social welfare. Human beings are not only instruments of production but also ends in themselves. Strong, sturdy and healthy people as an instrument of
production exploit the available potentialities of the country and condition the level of economic progress. Epidemiological theories suggest that reduction in the prevalence of disease is positively related with economic progress.

Improved health reduces the losses due to morbidity, mortality and increases supply of potential man-hour. Citing J.A. Sinton, Nirmal Chandra Sahu and Santoshkumar Bali have pointed out Malaria caused a loss of Rs. 1000 crores per annum in India (2007, pp 141-144)

The proverb “a stitch in time saves nine” supports the fact that the economic loss of malnutrition to the nation is far higher than the money required eradicating it. Hence if prevention is taken against the occurrence of diseases, large amount of resources both men and materials can be saved and gainfully employed in alternative uses which would otherwise have to be spent on treating the illness.

Health is an engine of growth as it stimulates virtuous cycle of economic progress. Good health improves productivity of the labour and enables them to actively involve in the production function. This leads to increase in volume of production, expansion in employment opportunities, enhancement in income, escalation in demand, better opportunities for investment etc. This will pave the way for sustainable economic development.

Ill health on the other hand makes a person to spend on purchase of drugs and medicines, loss of work days and work efficiency and ultimately drives towards debt trap. Health expenditure is the major cause for rural indebtedness and out of pocket expenditure on hospital care causes almost 25 percent of hospitalised Indians to fall below poverty line (Shubhra Singh 2008 p 214). Thus disease makes a person poor and poverty makes him diseased.
PART - II

4.3 Origin, Structure and Functions of Primary Health Centres

The Bhore committee, as early as in 1946 had sketched the concept of primary health centre as a basic unit to provide curative and preventive health care to the rural community with emphasis on preventive and promotive aspects of health care (K. Park 2005, p696). In 1953, the Central Council of Health in its meeting strongly recommended the establishment of Primary health Centres.

On the eve of independence, health care services were skewed in favour of urban centres. Keeping the dire need of spreading the health care facilities in rural areas, national norms for the primary health care infrastructure were drawn up. Ear marked funds were provided under the Minimum Needs Programme in the state plan allocations. Thus PHCs raised their heads as government petronised health care institutions under the Minimum Needs Programme (M.N.P.) and Basic Minimum Service Programme (BMS).

The health care services in India are grouped under two broad heads viz state list and concurrent list. The former consists of public health and hospitals whereas the latter comprises controlling the population growth and family welfare programmes, medical education and quality control of drugs. The Union Ministry of Health and Family Welfare (UMHFW) is at the apex level which is entrusted to implement various programmes and schemes in areas of family welfare, prevention and control of major diseases.

The health system in India has three main links viz. Central, State and Local or peripheral. At the national level the organisation of health care structure consists of the Union Ministry of Health and Family Welfare. The Health Department is headed by a Secretary to the Government of India as its
executive head. The Department of Family Welfare was created in 1966 within the Ministry of Health and Family Welfare. The secretary to the Government of India in the Ministry of Health and Family Welfare is in overall charge of the Department of Family Welfare (K. Park, 2005, p.674). The Director General of Health Services is the principal adviser to the Union Government in both medical and health matters. The Central Council of Health acts as an intermediary agency between centre and states in connection with health subjects fall in the concurrent list.

In states, the state government is empowered to envisage health services. The Department of Health and Family Welfare is headed by State Ministry of Health with a secretariat. The Director of Health services or also known as Director of Medical and Health Services in some states is the technical adviser to states in the fields of medicine and public health.

The district structure of health services come under the purview of Chief Medical and Health Office (C.M. and H.O. or C.M.O.). It is a link between the state and peripheral level. Community Health Centres (CHCs), Primary Health Centres (PHCs), and Sub Centres (SCs) are directly controlled by the C.M.O. (M.K. Rana 2003, pp. 461-462).

The health care system in India has a three tier structure based on predetermined population norms. The sub-centres are the most peripheral institutions and the first contact point between the primary health care system and the community sub centres are equipped with basic drugs for minor ailments. They render services in the fields like maternal and child health, family welfare nutrition, immunization, diarrhea control and control of communicable diseases.
Primary Health Centres comprise the second tier in rural health care structure. These centres are designed to provide integrated curative and preventive health care to the rural population with emphasis on preventive and promotive aspects.

Community Health Centres form the uppermost tier. Four medical specialists including surgeon, physician, gynaecologist and paediatrician supported by twenty-one paramedical and other staff are supposed to staff each community health centre. It possesses thirty indoor beds, labour room, obstetric care O.T., X-ray, and laboratory facilities. It serves as a referral unit also for four primary health centres within its jurisdiction. (India Infrastructure Report 2007, pp 264-265) Besides these, various other centres such as Family Welfare Training Centres, Rural Health and Training Centre, Family Planning Training and Research Centres are also established by the government to impart training services to medical staff with the objective of improving the quality of health care services.

Primary Health Centres are supposed to provide integrated curative and preventive health care to the rural population. Alma Ata Declaration (1978) stressed that the primary health care approach should focus on preventive and promotive services rather than curative services (Annapoorni R. 2007, p. 210). Hence a typical PHC is expected to render preventive and promotive health care services to the rural people. Promotive activities include promotion of better health and hygiene practices, tetanus inoculation of pregnant women, intake of IFA tablets and institutional deliveries.
The functions of the primary health centre in India cover all the eight “essential” elements of primary health care as outlines in the Alma-Ata Declaration. They are –

1. Medical care including Medical and referral services.
2. Control of communicable diseases / prevention and control of locally endemic diseases.
3. Environmental sanitation with priority for provision of safe drinking water supply and sanitary disposal of human excreta.
4. Maternal and child health services.
5. MCH including Family planning.
6. School health education / Education about health
7. Collection and reporting of vital statistics.
8. Carrying out the national health programmes.
9. Basic laboratory services and routine day to day services in the form of treatment provided to the patients.
10. Training of health guides, health workers, local dais and health assistants. 

(K. Park 2005, p.696)

Primary Health Centres are the corner stone of the rural health care system. They are established on the basis of pre determined population norms. The following table reveals the same

<table>
<thead>
<tr>
<th>Health Centre Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sub centres (Scs)</td>
</tr>
<tr>
<td>Primary Health Centres (PHCs)</td>
</tr>
<tr>
<td>Community (CHCs) Health Centres</td>
</tr>
</tbody>
</table>

Source: India Infrastructure Report 2007 p. 277
In each community development block there are one or more PHCs each of which covers 30,000 rural population. In the new set-up each PHC will have the following staff (K. Park 2005, p. 696)

<table>
<thead>
<tr>
<th>Staff Position</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Officer</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
</tr>
<tr>
<td>Nurse Mid wife</td>
<td>1</td>
</tr>
<tr>
<td>Health workers (Female)/ANM</td>
<td>1</td>
</tr>
<tr>
<td>Block Extension Educator</td>
<td>1</td>
</tr>
<tr>
<td>Health Assistant (Male)</td>
<td>1</td>
</tr>
<tr>
<td>Health Assistant (Female)/LHV</td>
<td>1</td>
</tr>
<tr>
<td>UDC</td>
<td>1</td>
</tr>
<tr>
<td>LDC</td>
<td>1</td>
</tr>
<tr>
<td>Lab Technician</td>
<td>1</td>
</tr>
<tr>
<td>Driver (Subject to availability of vehicle)</td>
<td>1</td>
</tr>
<tr>
<td>Class IV</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

PART – III

4.4 Primary Health Care and the Health Policies in India

Health is considered as fundamental to human right. Article 12 of the International Convenant on Economic Social and Cultural Rights (ICESCR) provides that “Every one has the right to the enjoyment of the highest attainable standard of physical and mental health”. Article 25 of the Universal Declaration of Human Rights (UDHR) provides that “Every one has the right to a standard of living adequate for the health of himself and of his family including food, clothing, housing and medical care”. (LN Dash 2008, pp 10-11)
The world leaders realised the importance of primary health care at the International conference on Primary Health Care at Alma Ata in 1978. The perspective that the access to basic health care is a vital component of human right was further strengthened by the inclusion of three health components in the Millennium Development Goals (MDGs) They are the reduction in child mortality by two thirds, maternal mortality ratio by three quarters and combating HIV/AIDS, Malaria and other diseases (LN Dash, 2008 pp 158-159)

Article 43A of constitution of India clearly mentions that “State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public as among its primary duties”. India is one of the signatories to the “Alma-Ata Declaration 1978, was committed for goal of “Health for all” by 2000 AD through Primary Health Care Approach.

The National Health Policy is the direct outcome of the land mark declaration towards health care. The primary objective of National Health Policy was improving health status of people and there by ultimately promotion of human resource development. The Alma Ata Declaration on primary health care and the National Health Policy of the government paved the way for effective health planning in India, keeping primary health care as the centric issue of national health system to attain Health for all by the year 2000. Health planning in India is incorporated in national socio economic planning. Government of India has appointed a number of committees from time to time to study the prevailing health situation and suggest suitable remedial measures to improve the health status of the community.
4.4.1 PHCs and Committee Reports

Primary health care and family welfare programmes in India to a greater extent are influenced by the guide-lines provided by the aforesaid committees. A brief review of the recommendations of these committees has been given in the following paragraphs. (K. Park 2005 pp 671-672 and L.N. Dash 2008 pp 202-205)

1. Bhore Committee 1946.

The Government of India in 1943 appointed the Health Survey and Development Committee headed by Sir Joseph Bhore. The committee submitted its comprehensive proposals in 1946 for the development of a national programme of health services for the country. The important recommendations of the Bhore committee were

i. Integration of preventive and curative services.

ii. Primary health care as the foundation of the national health care system.

iii. Special emphasis on preventive methods and controlling the communicable diseases.

iv. Development of Primary Health Centres in two stages. Firstly, as a short term measures it was proposed that each PHC in the rural areas should cater to a population of 40,000 with a secondary health centre to serve as a supervisory, co-ordinating and referral institution. Secondly a long term programme of setting up primary health units with 75 bedded hospitals for each 10,000 to 20,000 population, secondary units with 650 bedded hospitals, district hospitals with 2500 beds.
2. Mudaliar Committee 1962

In 1959, the Government of India appointed another committee known as "Health Survey and planning committee" known as Mudaliar Committee. The Committee recommended the followings.

(i) Strengthening of the existing primary health centres before new centres were established.

(ii) Strengthening of sub-divisional and district hospitals enabling them to effectively function as referral centres.

(iii) Each primary health centre not to serve more than 40,000 population.

(iv) To improve the quality of health care provided by the primary health centres.

(v) One bed per 1000 population, one doctor per 3000 population, one medical college per 5 million population.

3. Chadah Committee 1963

The committee recommended the followings.

(i) The "vigilance" operations in respect of the National Malaria Eradication Programme should be the responsibility of the general health services i.e. Primary Health Centres at the block level.

(ii) Each basic worker per 10,000 populations was recommended to make monthly visits in connection with vigilance operations.

(iii) These workers were envisaged as "multipurpose" workers to lookafter additional duties of collection of vital statistics and family planning in addition to malaria vigilance.
4. Mukerji Committee 1965

The recommendations of the committee are

(i) There is a need of separate staff for the family planning programme and they should be entrusted to look after only the family planning duties.

(ii) Delinking the malaria activities from the family planning which would ensure improvement in quality of services of the both.

5. Kartar Singh Committee 1973

The Government of India constituted a committee in 1972 known as “The Committee on Multipurpose Workers under Health and Family Planning” under the chairmanship of Kartar Singh.

The Committee’s recommendations are

(i) To provide good health services, there should be one primary health centre for a population of 50,000.

(ii) Each primary health centre should be divided into 16 sub-centres each having a population of about 3,000 to 3,500 depending upon the local conditions.

(iii) Each sub centre to be staffed by a team of one male and one female health worker.

(iv) There should be a male health supervisor to supervise the work of 3 to 4 male health workers and similarly one female health supervisor to supervise 4 female health workers.
6. Shrivastav committee 1975

Government of India constituted a “Group on Medical Education and Support Manpower” in the Ministry of Health and Family Planning in November 1974. This Group is popularly known as the ‘Shrivastav committee’.

The committee recommended the followings.

(i) Increasing the PHC drug budget.

(ii) One additional doctor and nurse at PHC for maternal and child health services.

(iii) Compulsory national service of two years at PHC by every doctor between fifth and fifteenth year of career.

(iv) One male and one female health worker should be available for every 5000 population.

(v) One male and female health assistant for two male and two female health workers.

(vi) Establishment of two cadres of health workers namely multipurpose health workers and health assistants at the PHC level.

(vii) Development of a ‘Referral Services Complex’ by establishing proper linkages between the PHC and higher level.

4.4.2 Health and the National Health Policies

The most important recommendations of the various committees were that primary health care should be provided to the community. The access to primary health care was seen as the basic right. The National Health Policies recognized primary health care as the foundation of the national healthcare system. The government has incorporated most of the suggestions given by the various committees in national health policies. The health policies adopted by
the government could be explained in terms of the priorities fixed for various aspects of health and objectives which it sought to achieve.

**National Health Policy 1983**

The policy felt that there is acute need of provision of universal and comprehensive primary health care services. It recommended, private sector should come forward to support the objective of providing health care services by expanding its coverage to large chunk of population. The policy was also aimed at strengthening the efficiency of village based workers through proper training.

**National Health Policy 2000**

The policy focused on many health issues. First of all, it highlighted the need of expansion of public health infrastructure. With the intention of peoples' participation in the health sector, it strongly recommended that Panchayat Raj institutions and community groups should be involved in meeting the health requirements of the people. It stressed the need of joining the hands by the private and the NGOs with the government in improving the health status in the fields of reproductive and child health care services.

**National Health Policy 2002**

This policy was aimed at organizational restructuring the National Health System. Improving and expanding primary health care facilities were given top priority. The plan designed area specific programmes to meet the health needs. More scope was given to meet health needs of women, child and tribal community. Special care was taken to child hood deaths from diarrhea and under nourishment.
The policy fixed targets for eradication of diseases. Eradication of polio, yaws and leprosy by 2005, Kala azar by 2010, lymphatic filariosis by 2015, and zero level growth of HIV/AIDS by 2007. Reduction of mortality on account of vector / water borne diseases by 50 percent, prevalence of blindness by 0.5 percent by 2010.

The policy was hopeful in increasing the utilising of public health care services from the then existing 20 percent to more than 75 percent by 2010. Establishment of an integrated system of surveillance was another proposal stemmed out in the policy.

The policy also laid stress on strengthening primary health care infrastructure suffering from understaffing and under equipments. It suggested increasing public health spending from 0-8 percent to 3-4 percent of GDP so as to provide commercial support to the objectives of the policy.

4.4.3 Primary Health Care and Five Year Plans.

In early 1950’s the government of India had adopted some of the recommendations of the Bhore committee regarding spread of modern medicines through primary health centres. Independent India launched ambitious health programmes through five year plans. Primary health care and family planning services have been accorded top priority in all the five year plans. An attempt has been made to focus the specific objectives and measures taken by the government regarding improving the primary health care infrastructure and family welfare programmes in the following paragraphs.

The first five year plan (1951-56) had the specific health objectives like preventive health care of the rural population through primary health centres, health services for mother and children, family planning control, and control of
malaria etc. One of the important recommendations of the ‘Health Survey and Development Committee’ popularly known as the Bhore Committee was to establish primary health centres at the block level was followed in the plan. In 1952, each block of about 100 villages was given health education and steps were taken to start PHCs at each block head quarter to provide curative and preventive health services in rural areas. The rapid extension of network of rural health services opened a new profile in the rural health scenario. In all during the plan 725 PHCs were established.

The Second five year plan (1956-61) supported the development efforts started in the first plan. The second five year plan gave more emphasis to expansion of existing health services, improving the quality of health services through a variety of training programmes, development of technical man power. Maternity and child welfare services became part of the strategy of the health-planning. Family planning measures were also introduced vigorously. All these schemes were implemented through PHCs. In all there were 2565 PHCs during the plan period.

During the period of the third five year plan (1961-66) attempts were made to strengthen preventive public health care services. Improvement of environmental hygiene and control of communicable diseases were given a high priority. Family planning, maternity and child health care services, and supplying safe drinking water were also emphasized. The total number of PHCs during the plan period was 4631.

The fourth plan (1969-74) laid much emphasis on controlling malaria, tuberculosis, leprosy and eradication of small pox. Attempts were made to strengthen primary health centres and sub divisional and district hospitals.
During the planning period the number of primary health centres and subcentres was 5283 and 33509 respectively.

The fifth five year plan (1974-79) laid much emphasis on the improvement of health services in the rural areas as a major component of the Minimum Needs Programme. The plan aimed at enhancing the quality of health services by upgrading the technical skills of medical and paramedical personnel at the primary health centres. National programmes for eradication of communicable diseases like malaria, small-pox were further intensified. During this plan period the number of PHCs and SCs was 5484 and 47112 respectively.

During the period of sixth five year plan, (1980-85) the Minimum Needs Programme was allowed to continue as the main instrument for the development of the rural health care delivery system. Most of the measures taken during this plan were based on the Srivastava Committee Report (1975). Provision of better health care services to the rural poor in order to achieve “Health for All” by the turn of the 21st century, received a high priority in the plan. During this plan the number of PHCs and SCs was 9115 and 84376 respectively.

Family welfare occupied a central position in the seventh five year plan (1986-90). The plan stressed the need for the promotion of family planning on a voluntary basis as a people’s movement in improving the quality of the life of the people. (S.Sagaya Doss 2008, p.51) During this plan period the government published a serieses of health documents on family welfare programmes. Reduction in the infant mortality rate, improving the status of women, female literacy and education, bringing down the net reproductive rate (NRR) were the main objectives of the plan. During this plan period the number of PHCs and SCs was 18,671 and 1,30,165 respectively.
In the eighth five year plan (1992-97) the major components of the National Health Policy were incorporated. The plan was aimed at “Services must begin where people are and where the problems arise”. Preventive, promotive and rehabilitative health care services occupied an overwhelming importance than the hospital-based curative system. Highest priority was given to provision of maternal and child health care services in rural areas. Making available of pre-natal care to all pregnant women and access of trained, attendants during child birth, referral facilities for high risk pregnancies were some other objectives of the plan. To improve the quality of rural health care services, it was decided to maintain one primary health centre for 30,000 rural population. During this planning period, the number of PHCs and SCs was 22149 and 1,36,258 respectively.

The ninth five year plan (1997-2002) gave the highest importance to the international strategy of “Health care for All”. Effective control of communicable and non communicable diseases and maternal and child health got the top priority. The plan had strong objectives of increasing the life expectancy from 62.4 to 65 years and reducing the death rate from 7.9 to 6 per 1000 population by the year 2002. The plan proposed to introduce health system reforms enabling the population to access the essential health care. During the planning period the number of PHCs and SCs was 22842 and 1,37,311 respectively.

During the tenth five year plan (2002-07) efforts were made to optimise the health care services both in terms of quality and coverage. The plan properly identified and rectified the mismatch between demand and supply in health infrastructure. The plan aimed at strengthening the primary health care system
as a part of ‘Basic Minimum Services’. Stress was given to improve the mother and child health (MCH). The plan set the targets of reducing infant mortality rates to 45 per 1000 live births by 2007 and reducing maternal mortality rate to 2 per 1000 live births (K. Park 2005, p.673). The plan, committed to provide essential primary care, emergency life saving services, and access to potable drinking water were the other objectives of the plan. In all there were 22370 Primary Health Centres and 1,45,272 subcentres.

The eleventh five year plan (2007-2012) envisaged an increase in public expenditure on health at least 2 percent of G.D.P. The plan is not only intended to provide curative health care services, but also revitalising the public health related services. The architects of the plan laid stress on access to clean drinking water, sanitation, improved child rearing practices which in turn depend on education and empowerment of women. The plan initiatives for increasing the outreach and quality of health services (Planning commission GOI 2011 p. 146). Many Programmes of the National Rural Health Mission (NRHM) were aimed at providing improved health care facilities to rural areas, particularly to women, children and the down trodden classes. The Rashtriya Swasthya Bima Yojana (RSBY) was designed to financially insulate the below poverty line (BPL) households against the health problems that involve hospitalisation.

The plan set the targets like bringing down the maternal mortality ratio to 100 per 1,00,000 live births, reducing the infant mortality rate to 28 per 1000 live births, lowering malnutrition among children in the age group 0-3 years to half its present level, reducing anaemia among women and girls by 50 percent and reducing total fertility rate to 2.1. There are 23,458 PHCs and 1,46,036 SCs functioning as on March 2008 in the country (Santosh L. Patil et al. 2011, p 88).
4.5 Family Welfare Programmes

A series of policies have been introduced which aimed at providing quality health care to the poor and under privileged population. Rashtriya Arogya Nidhi (RAN), previously known as National Illness Assistance Fund (NIAF) was set up under the Ministry of Health and Family Welfare (MoHFW) as early as in 1977. The patients belonging to BPL (below the poverty line) categories used to get financial assistance upto 50,000 per case. (India 2007, p. 467)

“Health is a fundamental right”. The Alma-Ata Declaration in 1978 called on all governments to design national policies, strategies and plans of action to provide health care facilities in general and primary health care as part of a comprehensive national health system. India has introduced public health care facilities at large scale within the country covering every individual.

Infant Mortality Rate (IMR) is said to be a good indicator of performance made in health sector. Essential New Born Care has been included in the Reproductive and Child Health Programme (RCH) to bring down the infant mortality rate. Pulse Polio Immunisation (PPI) was launched in 1995-96 to cover children below the age of 3 years, later increased to 5 years to accelerate the pace of polio eradication. The PPI- programme consisted of vaccination of children at fixed booths on National Immunisation Days, house to house search of missed children for vaccination besides routine immunisation. There has been 92 percent decline polio cases between 2002 and 2004 (India 2007, p.476).

National population policy 2000 has set the goal of reducing Maternal Mortality Rate (MMR) to less than 100 per 10,000 live births by the year 2012.
These interventions include providing essential obstetric care, emergency obstetric care, cash assistance to pregnant women from poor families and provision of drugs and equipments at subcentres, Primary Health Centres and first referral units (FRUs). Funds were also provided to the states and UTs for making available 24 hours delivery services at selected PHCs and CHCs. Under RCH-II all the CHCs and 50 percent of PHCs are proposed to be operationalised for providing round the clock delivery services. Provision of RTI and STI services at all FRUs, CHCs and 24x7 PHCs is also being made under RCH-II. (India 2009, pp 495-499) MMR came down from 301 (SRS-2001-03) to 254 (SRS 2004-06) that is an average decline of 16 per year. However during the pre-Eleventh plan period, the state wise decline in MMR varied from an average of 26 percent per year for UP/Uttarkhand, 20 per year for Bihar/Jarkhand, 19 per year for Rajasthan and 18 per year for Orissa/ West Bengal to 15 per year for Madhya Pradesh and Chhattis garh. (Planning Commission, GOI 2011, p148).

Vande Mataram Scheme was launched on the 9th February 2004. The scheme was a major initiative in public–private partnership with the Federation of Obstetric and Gynecological Society of India (FOGSI) The scheme envisages provision of free out patients services including antenatal check-up to all pregnant women and family planning counselling to new mothers regularly by the government and private doctors at their facility on a fixed date (India 2007, p 478)

Janani Suraksha Yojana (JSY) was launched on the 12th April 2005 by the government of India with the objective of encouraging institutional deliveries. JSY provides cash incentive to expectant mothers who opt for institutional
deliveries. As on 1st April 2007 JSY beneficiaries were 28.74 lakh (Ruddar Dutta & KPM Sundharam 2009, p.166)

Family planning programmes (FPP) received a top priority in the Tenth Five Year Plan (2002-07). The achievements with regard to contraceptive usage in the two subsequent years can be seen in the following table.

**Table No. 4.1**

<table>
<thead>
<tr>
<th>Methods</th>
<th>Achievements in Lakhs</th>
<th>Change in percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilisation</td>
<td>45,140,922</td>
<td>46,91,975</td>
</tr>
<tr>
<td>IUD insertions</td>
<td>59,45,859</td>
<td>61,68,584</td>
</tr>
<tr>
<td>Condom Users</td>
<td>2,06,30,468</td>
<td>2,07,18,296</td>
</tr>
<tr>
<td>Oral pills</td>
<td>89,46,014</td>
<td>81,94,545</td>
</tr>
</tbody>
</table>

Source: India 2009, p.499

Family planning (Indemnity) insurance scheme was launched w.e.f. 29-11-2005 which provides insurance cover to all persons undergoing sterilisation operations in public or accredited private health facility against death, failure of sterilisation and medical complications (Ibid p.504).

The government has launched a National Rural Health Mission (NRHM) in 2005-06. The NRHM is a major flagship programme of the government which aims at improved access to quality health care for those residing in rural areas particularly women and children.

Rashtriya Swasthya Bima Yojana (RSBY) has been introduced to provide monetary assistance to BPL households in the unorganised sector for financial liabilities arising out of health problems that involve hospitalisation.
The launch of the RSBY by Ministry of Labour and Employment (MoLE) in 2007 has been an important step in supplementing the efforts being made to provide quality health care to the poor and under privileged population. It provides cash less health insurance cover up to `30,000 per annum per family. Till February 2010, more than 1.25 crore biometric enabled smart cards have been issued for providing health insurance cover to more than 4 crore people. Around 4-5 lakh persons have already availed hospitalization facility. (Planning commission GOI, 2011 pp 155-156)

Immunisation under NRHM is one of the key interventions to prevent six vaccine preventable diseases viz, tuberculosis, diphtheria, pertussis, tetanus, polio and neasles. The latest District Level Household Survey (DLHS-III, 2007-08) shows that the percentage of children in the age group of 12-23 months fully immunised increased from 45.9 percent during 2002-04 (DLHS-II) to 54.1 percent in 2007-08 (DLHS-III). In case of Karnataka the figures were 71.3 percent and 76.7 percent for the corresponding years respectively. (Planning Commission GOI, 2011 p152) As per NRHM’s Delivery Monitor Unit (DMU) report, 70.3 percent Children were fully immunized till 31st December 2009 (Ibid, p.153)

Family Welfare Programmes in Karnataka State:

“Prasuti Araike”

This programme is aimed at provision of nutritious food to eligible pregnant women so as to enabling them to have good health and smooth delivery. An incentive of `1000 will be given to pregnant women between 6th and 9th months of her pregnancy. `1000 additional incentive will be given within 48 hours of her delivery. The programme is intended to reduce maternal
and infant mortality, to ensure nutritious food and rest, and encouraging deliveries at government hospitals.

24x7 Primary Health Centres

A minimum 50 percent of the total number of primary health centres functioning in the state is upgraded as 24x7 PHCs, to provide qualitative medical services to the community. These centres are well equipped to provide obstetric services, care corner to new born babies and other emergency services. These centres manage normal delivery cases and shift the complicated delivery cases and new born babies to FRU (First referral units)

“Suvarna Arogya Chaitanya” School health programme

The already existing school health programme, has been renamed as “Suvarna Arogya Chaitanya” school health programme. This health programme is conducted regularly in the month of July of every year. Initially the health programme was restricted to government and aided schools and 2008-09 onwards extended to unaided schools also. The service is provided to the students studying between first and tenth standard. Medical facilities are provided to minor ailments in primary health centres, community health centres and district hospitals.

Juvenile health and Sneha Clinic

This scheme has been specially designed to cater health facilities to youth. Juvenile Health related programme popularly known as ‘Sneha Clinic’ has been organised in all primary health centres and community health centres, on every Thursday between 3pm and 5 pm. Medical officers and other staff offer health education activities, counselling and medical treatments to youth.
YESHSVINI TRUST Co-operative Farmers Health Scheme

This scheme is a young but incredibly successful micro insurance scheme. Having started in 2003 with 1.6 million insured right away it covered 2.2 million lives in its second year of operations. It has identified 1600 various operations. All together, 450 Yeshswini network hospitals are functioning in the state. Farmers and members of the co-operative societies are eligible to become the member of the scheme and can avail the benefit.

“Madilu” programme

Karnataka state government has implemented “Madilu” programme in the state on the 1st October 2007 in all the 30 districts of the state. The objectives behind this programme are promoting institutional deliveries, encouraging poor pregnant women to utilise delivery facilities in PHCs or government hospitals, protecting health of mother and new born babies and reducing maternal mortality and infant mortality. The programme is aimed at increasing the rate of institutional deliveries to 99 percent by 2011-12 from existing level of 93 percent in state. (Krishnamurthy 2011, p.5)

Arogya Kavach – 108

Since 2008, the government has introduced Emergency Management Response Service Commonly called “Rajya Sarkar Arogya Kavach – 108” under the public private participation. The service of this scheme can be obtained during the emergencies caused by accidents, fire accidents, natural calamities, complicated deliveries etc. The needy people can call the ambulance service to toll free telephone number ‘108’. First aid facilities are provided in the ambulance itself. Basic Life Support and Advanced Life Support ambulances
provide emergency services to the public throughout the year. There are 517 ambulances in all 30 districts of the state. (Krishnamurthy 2011 pp 5-14)

Tayi Bhagya

This programme has been implemented since 2011 to provide proper health services to mother and child belonging to rural areas of the state. The programme is aimed at to provide, obstetric services to public accessing the services of private doctors and private hospitals of rural and urban areas. This public-private participation programme is implemented in the 8 backward districts of the state viz. Gulbarga, Yadagiri, Koppal, Bijapur, Raichur, Bidar, Bagalkote and Chamarajnagar. Women of these districts who are below the poverty line are entitled to get absolutely free services in identified hospitals.

PART – V

4.6 Primary Health Centres – Infrastructure

In case of health, the term infrastructure has got a wider meaning. The health infrastructure encompasses the followings.

1. Physical infrastructure – which includes clinical buildings, staff quarters, laboratories etc.,
2. Personnel – This category includes both medical as well as paramedical staff.
3. Facilities at the health centres.
4. Equipments and Medicines.

4.6.1 Physical infrastructure

According to the report of Economic Survey (2007-08, pp 252-253) of the 22669 PHCs in the country 8755 PHCs are functional on 24x7 and 2852 of them had three staff nurses. But the Mid-Term Appraisal of Eleventh Five Year Plan reveals that in 2009, 8324 PHCs are functional on 24x7 basis and 5907 of them
have three staff nurses (Planning Commission – GOI 2011, p 151). It shows the number of functional PHCs is on declining order. Zakir Husain also shows (2011, p.54) the number of 24 hours functional PHCs comprise only 36 percent at the all India level and 27 percent in high focus states viz. Assam, Uttar Pradesh, Madhya Pradesh, Jammu and Kashmir, Chattisgarh, Himachal Pradesh and Rajasthan in 2009.

The following table depicts the establishment of sub centres, Primary Health Centres and Community Health Centres community Health Centres in major states of the nation during the Tenth Five Year Plan (2002-2007)

<table>
<thead>
<tr>
<th>States</th>
<th>Sub Centres</th>
<th>Primary Health Centres</th>
<th>Community Health Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>12522(8.61)</td>
<td>1570 (7.0)</td>
<td>167 (4.12)</td>
</tr>
<tr>
<td>Bihar</td>
<td>8909 (6.13)</td>
<td>1648(7.36)</td>
<td>70(1.73)</td>
</tr>
<tr>
<td>Gujarat</td>
<td>7274 (5.00)</td>
<td>1073(4.8)</td>
<td>273(6.74)</td>
</tr>
<tr>
<td>Karnataka</td>
<td>8143 (5.60)</td>
<td>1679(7.5)</td>
<td>254(6.27)</td>
</tr>
<tr>
<td>Kerala</td>
<td>5094 (3.50)</td>
<td>909(4.0)</td>
<td>107(2.64)</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>8834 (7.19)</td>
<td>1149(5.1)</td>
<td>270(6.67)</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>10413 (7.19)</td>
<td>1800(8.0)</td>
<td>407(10.06)</td>
</tr>
<tr>
<td>Orissa</td>
<td>5927 (4.07)</td>
<td>1279(5.71)</td>
<td>231(5.71)</td>
</tr>
<tr>
<td>Punjab</td>
<td>2858 (1.96)</td>
<td>484(2.16)</td>
<td>126(3.11)</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>10612(7.30)</td>
<td>1499(6.7)</td>
<td>337(8.33)</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>20521(14.12)</td>
<td>3660(16.3)</td>
<td>386(9.54)</td>
</tr>
<tr>
<td>West Bengal</td>
<td>10356(7.12)</td>
<td>922 (1.83)</td>
<td>346(8.55)</td>
</tr>
<tr>
<td>Haryana</td>
<td>2433(1.67)</td>
<td>411(1.83)</td>
<td>86(2.12)</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>8683(5.97)</td>
<td>1181(5.2)</td>
<td>236(5.83)</td>
</tr>
<tr>
<td>All India Rural</td>
<td>145272</td>
<td>22370</td>
<td>4045</td>
</tr>
</tbody>
</table>

Source: Santosh L. Patil and D.K. Kamble, 2011, p89
Figures in parenthesis indicate percentage
This table shows that the physical health infrastructure of Karnataka State is a just moderate. The highest number of PHCs were established in Uttar Pradesh i.e. 3660 (16.3) whereas very low in Haryana i.e. 411 (1.83) in Karnataka 1679 (7.5) PHCs were established. The table also discloses the number of sub Centres and Community Health Centres of the major states of the nation.

The mounting population and health consciousness of the people have exerted more pressure on health providers. The following table clearly shows the short fall in health infrastructure.

Table 4.3
Short fall in Health Infrastructure (based on 2011 population)

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Year</th>
<th>R Required</th>
<th>P In position</th>
<th>S Short fall</th>
<th>S in% shortfall in percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCs</td>
<td>2005</td>
<td>1,58,792</td>
<td>1,46,026</td>
<td>19,269</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>1,58,792</td>
<td>1,46,036</td>
<td>20,486</td>
<td>12.9</td>
</tr>
<tr>
<td>PHCs</td>
<td>2005</td>
<td>26,022</td>
<td>23,236</td>
<td>4,337</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>26,022</td>
<td>23,458</td>
<td>4,477</td>
<td>17.2</td>
</tr>
<tr>
<td>CHCs</td>
<td>2005</td>
<td>6,491</td>
<td>3,346</td>
<td>3,206</td>
<td>49.4</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>6,491</td>
<td>4,276</td>
<td>2,337</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Source : Planning Commission GOI 2011, p149

The table reveals the shortfall of subcentres and Primary Health Centres has been increased marginally between 2005 and 2008.

Four states of Bihar, Uttar Pradesh, West Bengal and Madhya Pradesh alone contribute towards 70 percent of the overall shortfall of PHCs. The following table shed light on shortfall in PHCs in major states of the nation.
### Table 4.4
Short fall in Health Infrastructure as per 2001 population in India
(as on March 2008)

<table>
<thead>
<tr>
<th>States</th>
<th>R- Required</th>
<th>P- In Position</th>
<th>S-Short fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>1924</td>
<td>1570</td>
<td>354</td>
</tr>
<tr>
<td>Gujarat</td>
<td>1172</td>
<td>1073</td>
<td>99</td>
</tr>
<tr>
<td>Bihar</td>
<td>2489</td>
<td>1641</td>
<td>848</td>
</tr>
<tr>
<td>Karnataka</td>
<td>1211</td>
<td>2195</td>
<td>+</td>
</tr>
<tr>
<td>Kerala</td>
<td>791</td>
<td>909</td>
<td>+</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>1670</td>
<td>1149</td>
<td>521</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>1984</td>
<td>1816</td>
<td>168</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>1555</td>
<td>1503</td>
<td>52</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>1173</td>
<td>1215</td>
<td>+</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>4390</td>
<td>3690</td>
<td>700</td>
</tr>
<tr>
<td>Orissa</td>
<td>1171</td>
<td>1279</td>
<td>+</td>
</tr>
<tr>
<td>Punjab</td>
<td>536</td>
<td>484</td>
<td>52</td>
</tr>
<tr>
<td>Haryana</td>
<td>500</td>
<td>420</td>
<td>80</td>
</tr>
<tr>
<td>West Bengal</td>
<td>1993</td>
<td>924</td>
<td>1069</td>
</tr>
<tr>
<td>All India Rural</td>
<td><strong>26022</strong></td>
<td><strong>23458</strong></td>
<td><strong>4477</strong></td>
</tr>
</tbody>
</table>

Source: Santosh L. Patil and D. K. Kamble 2011 p.90 (+ Surplus)

The mis-match between required number of PHCs and functioning PHCs clearly show that there is a shortfall to the extent of 17.2 percent.

Besides shortfall of the PHCs, there is shortfall of own buildings to house the health centres. The following table summarises the same.

### Table 4.5
Location of SCs, PHCs and CHCs (As on Sept. 2005)

<table>
<thead>
<tr>
<th>Health Centres</th>
<th>Location</th>
<th>Building Required to House</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Govt. Buildings</td>
<td>Rented/Rent free panchayat, voluntary society building</td>
</tr>
<tr>
<td>SCs</td>
<td>49.1%</td>
<td>50.9%</td>
</tr>
<tr>
<td>PHCs</td>
<td>78.0%</td>
<td>22%</td>
</tr>
<tr>
<td>CHCs</td>
<td>91.5%</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

Source: India Infrastructure Report 2007, p. 266
4.6.2 Health Personnel

NRHM intends to increase access of health personnel with the objective of providing uninterrupted health care services. But most states suffer from under staffing. The situation is particularly bad in Gujarat and Madhya Pradesh where more than 20 percent of PHCs do not have a single doctor. (L. N. Dash 2007, p189) Only 38 percent of all PHCs have all the critical staff. 8 out of every 10 PHCs had no pediatrician and 7 out of 10 had no specialisation (Ibid p. 190)

The following table gives the bird’s eye view of human resource engaged in Primary Health Centres in the nation.

<table>
<thead>
<tr>
<th>Health Personnel</th>
<th>All India</th>
<th>R Required</th>
<th>S Sanctioned</th>
<th>P In position</th>
<th>S-P Vacant</th>
<th>R-P Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multipurpose workers (female) ANMs at SCs and PHCs</td>
<td>2006</td>
<td>1,67,657</td>
<td>1,62,772</td>
<td>1,49,695</td>
<td>13126</td>
<td>18318</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>1,69,494</td>
<td>1,43,269</td>
<td>1,53,568</td>
<td>8800</td>
<td>21066</td>
</tr>
<tr>
<td>Health assistants (female) LHV's at PHCs</td>
<td>2006</td>
<td>22,669</td>
<td>19,874</td>
<td>17,107</td>
<td>2781</td>
<td>5941</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>23,458</td>
<td>19,920</td>
<td>17,608</td>
<td>2664</td>
<td>6481</td>
</tr>
<tr>
<td>Health assistants (male) at PHCs</td>
<td>2006</td>
<td>22,669</td>
<td>24,207</td>
<td>18,223</td>
<td>5984</td>
<td>7169</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>23,458</td>
<td>23,705</td>
<td>17,976</td>
<td>6534</td>
<td>8831</td>
</tr>
<tr>
<td>Doctors at PHCs</td>
<td>2006</td>
<td>22,669</td>
<td>27,927</td>
<td>22,273</td>
<td>5801</td>
<td>1793</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>23,458</td>
<td>25,086</td>
<td>24,375</td>
<td>4708</td>
<td>3537</td>
</tr>
<tr>
<td>Pharmacists at PHCs &amp; CHCs and</td>
<td>2006</td>
<td>26,579</td>
<td>22,816</td>
<td>18,419</td>
<td>4445</td>
<td>4389</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>27,734</td>
<td>24,088</td>
<td>20,956</td>
<td>4282</td>
<td>7022</td>
</tr>
<tr>
<td>Lab Technicians at PHCs and CHCs</td>
<td>2006</td>
<td>26,579</td>
<td>15,143</td>
<td>12,351</td>
<td>2792</td>
<td>9509</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>27,734</td>
<td>15,223</td>
<td>12,886</td>
<td>3308</td>
<td>14134</td>
</tr>
</tbody>
</table>

Source: Planning commission GOI-2011, p.150

Figures in paranthesis indicate percentage of total.
The table shown above vividly reflects the magnitude of vacancy position of health personnel and shortfall of the same. The table also informs about rise in the shortfall of health staff between 2006 and 2008.

4.6.3 Facilities at the Health Centres

According to goals of National population policy 2000 government of India has taken policy decisions to provide essential health care services round the clock. These interventions include improving obstetric care, emergency obstetric care, provision of drugs and equipments at SCs, PHCs and FRUs and contractual staff.

States/UTs are funded for providing 24 hours delivery services at selected PHCs and CHCs. Instructions have been given to concerned authorities to monitor a minimum of three ante-natal check-ups for timely and early diagnosing the emergencies. In this regard under RCH-II all the CHCs and 50 percent of PHCs are proposed to be operationalised for providing round the clock delivery services. Provisions of RTI/STI services at all FRUs, CHCs and 24x7 PHCs, is also being made under RCH-II.

The ANM and LHV's and staff nurses are well informed and aware of post natal care for mother and new born within first 24 hours of delivery and subsequent home visits on day third and seventh.

Staff nurses and ANMs are permitted to give certain injections and also perform certain interventions under specific emergency situation. Medical Termination of Pregnancy (MTP) Services are provided at 24x7 PHCs, CHCs and FRUs (India 2009, pp 495-499)
However facilities at the health centres are not without the shortcomings. A survey conducted by the National Sample Survey Organisation (NSSO) in 43 districts from 14 states in the country observed that only about one fourth of all the PHCs surveyed had a tap on the premises. In more than half of the districts over 60 percent of PHCs were dependent on public hand pumps and few more on taps and unprotected wells for water. (L N Dash 2007, p190) In majority of the states surveyed PHCs did not have 4-6 beds, care corner for new born babies. Obstetric care facilities were also poor. Many SCs, PHCs and CHCs had no toilet facilities and medical waste disposal system. (Zakir Husain 2011, p54)

4.6.4 Equipments and Medicines

Many studies reveal that lack of equipments and medicines are the big road blocks in delivering the health care services. A large number of PHCs do not have minimum infrastructure and inputs. For instance, only 77 percent have an infant weighing machines, 65 percent had a deep freezer, 16 percent had a refrigerator, 60 percent had an auto clave and steam steriliser drums, less than 20% had facility for medical termination of pregnancy (L N Dash 2007, p 188) various studies clearly shows that PHCs suffer from shortage of baby cradles, laryngoscope wheel chairs, delivery tables and infant warmers.

Majority of the PHCs lack essential drugs and medicines required for the treatment of common ailments. About one third of the PHCs had stock of iron and folic-acid tablets. About 61 percent had vaccines. (L N Dash 2007, p.188) Even basic medicines like albendazole, mabendazole tablets, bandage etc were found to be out of stock or in irregular supply (Zakir Husain 2011, p.54)
PART – VI

4.7 Concluding Observations

The goals and targets made in the different Five year plan periods, the revisions in the health policies vividly manifest ambitious attitude of the government about providing adequate and quality primary health care services to the rural population. By and large 75 crore rural population of the country constitute the demand side of the health market. Poor health infrastructure, coupled with financial constraints is hindering the states which are at the supplying end of health care services in fulfilling the targets.