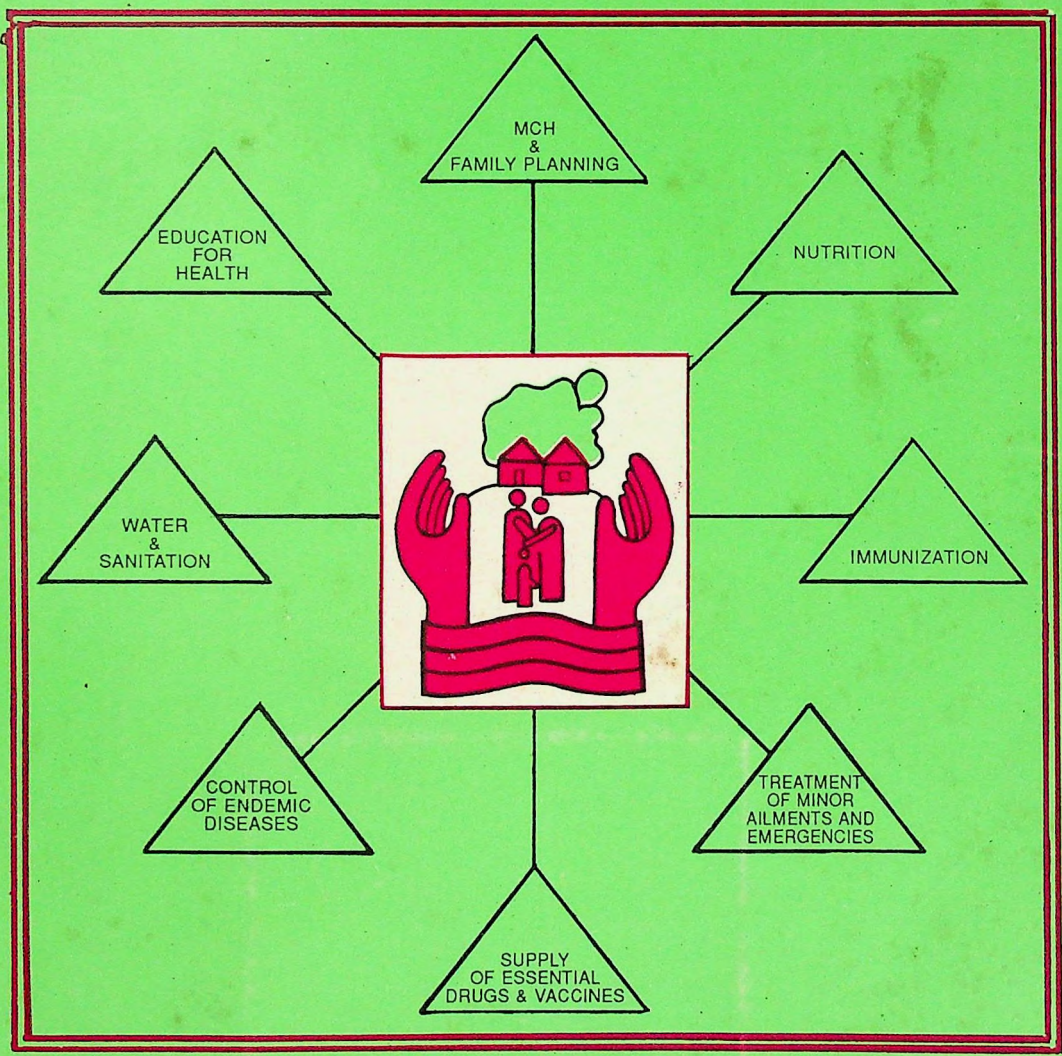
Indira Gandhi National Open University
School of Health Sciences

HSIT 1 (PHN)
PRIMARY HEALTH
NURSING



Health For All

1

Indira Gandhi
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Primary Health Nursing

Block

1

HEALTH FOR ALL

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COURSE INTRODUCTION

India comprises 80 per cent of rural population. There is a great imbalance in provision of medical care facilities and it has become a great challenge to provide health services to underserved population. Primary health care has been considered as the main instrument of action for providing Health For All.

Primary health nursing addresses to the health needs of the community at all levels of care — primary, secondary and tertiary, in homes, school, health centres and hospitals etc.

The course on primary health nursing is divided into four blocks.

Block 1 deals with the concepts related to Health For All which focus on how goal of health for all can be achieved and what type of services are needed to achieve this goal. Block 2 focuses on Family Health Care which focuses on the concepts and services provided to the family. Block 3 deals with Maternal and Child Health Care. Study of maternal and child health is extremely essential because these constitute the larger and vulnerable segment of population. Block 4 explains the various elements of primary health care and the role of nurse in providing primary health care related to all these elements.

After studying the course on Primary Health Nursing, you should be able to:

- Explain the concepts of Health For All and Primary Health Care,
- Explain the concepts related to Family Health Care,
- Provide Maternal and Child Health Care, and
- Perform your role as a nurse in providing primary health care.

BLOCK 1 HEALTH FOR ALL

In India the development of health services through primary health care approach is started with the recommendations and guidance provided by the Health Survey and Development Committee (Bhore Committee, 1946) followed by various committees. The International Conference held in Alma-Ata in 1978 declared primary health care as the main instrument of action towards achieving Health For All by the year 2000 AD.

Government of India agreed upon the Primary Health Care approach for providing health care services. As health care providers, we all need to understand and/or refresh our knowledge and skills related to the concepts of primary health care, and Health For All etc. We must also be interested to learn and understand how the goal of health for all can be achieved? What type of health manpower and health system is required for providing the health services and how should we evaluate such services.

This block is divided into five units. Unit 1 deals with Health Concepts and pre-requisites, Unit 2 explains the Primary Health Care concept and principles, Unit 3 deals with Health For All, Unit 4 focuses on Organisation of Health Care System at various levels, and Unit 5 explains the Resources, Monitoring and Evaluation of Health Services.

As a distance learner you have to study these materials by self study. We have given check your progress questions at appropriate places. These are given to make self assessment. We have also given answers to check your progress questions at the end of each unit. While working on check your progress questions you should not read through these answers. Instead you should make every effort to do them by yourself. We hope the information given in this block may help you in improving your knowledge and skill so as to provide effective health care to the people you serve.

UNIT 1 HEALTH CONCEPT AND PREREQUISITES

Structure Subject-matter in technical language.

1.0 OBJECTIVES

In this unit you will learn the concept of health and prerequisites of health. After completing this unit, you should be able to:

- Explain the concept of health,
- Define health,
- List and explain the various dimensions of health,
- Discuss determinants of health, and
- List and explain prerequisites of health.

1.1 INTRODUCTION

Overview, not in technical but learner language. Introduction Guideline & post learning. 2) Project of what will be learned. 3) Study guide like if you read video an activity it will help.

You have already studied the concepts of health in your basic Nursing Programme. We shall now review and try to build on that in order to help you gain a deeper understanding of health. This will enable you to develop knowledge and skill in promoting the health of the people you serve.

Health is considered a fundamental human right and a worldwide social goal. In this unit, we shall try to concentrate on the concept and definition of health and the concept of positive health and well-being. An individual is said to be healthy if he enjoys good health in four areas or dimensions i.e. **physical, mental, social and spiritual well-being**. These dimensions will be explained in Section 1.3. Health is affected by various interlinked factors. We shall examine how these factors affect health in Section 1.4. At the end you will learn about the prerequisites of good health. We hope that this knowledge will help you to contribute effectively towards promotion of health.

Study guidelines.

1.2 HEALTH CONCEPT

Every individual and, in fact, all communities have their own concept of health, which has some relationship with their culture. The oldest concept of health is "absence of disease". Even now, maintenance of health is neglected except in conditions of ill-health. It is only during the past few decades that health is conceived as a fundamental human right and a worldwide social goal; that is it is essential to the satisfaction of basic human needs and an improved quality of life. It is to be attained by all people. The perception of health varies among the members of a community including various professional groups (e.g. biomedical scientists, social scientists, specialists, health administrators, ecologists, etc.) which give varied views on the concept of health. You will learn about these changing concepts in the following subsection.

1.2.1 Changing Concepts of Health

Health has evolved as a concept from an individual concern to a worldwide social goal and encompasses the whole quality of life. A brief account of changing concepts of health is given below. Figure 1.1 will give you an overview of changing concepts of health. These are :

i) Biomedical concept
ii) Ecological concept
iii) Psychosocial concept
iv) Holistic concept

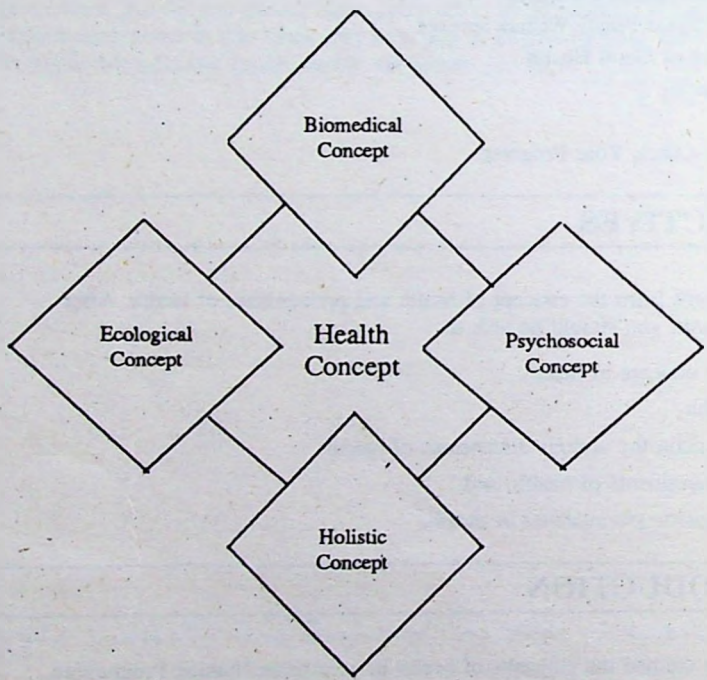

Fig. 1.1 : Changing concepts of health

i) **Biomedical Concept:** This concept stresses the germ theory i.e. disease or ill-health is caused due to disease causing organisms. The individual was considered to be healthy only if he was free from disease. The human body was viewed as a machine and disease was considered a consequence of the breakdown of the machine; and one of the doctor's tasks was to repair the machine. This concept was criticized on the basis that it had minimized the role of social, environmental, psychological and cultural determinants of health.

This model was found to be inadequate to solve some of the major health problems (e.g. malnutrition, chronic diseases, accidents, drug abuse, mental illness, environmental pollution, population explosion). In other words, we can say that this concept focussed on the view that diseases can only be caused by the organism without taking other causative factors into consideration. For example, typhoid, cancer, malaria, hepatitis and accidents all lead to disease and/or ill-health of a man; but you will agree that only typhoid, malaria and hepatitis are caused by organisms whereas cancer and accidents are not. So this concept needed to be changed.

ii) **Ecological Concept:** Dubos defined health as the relative absence of pain and discomfort and a continuous adaptation and adjustment to environment to ensure optimal function, which leads to longer life expectancy and a better quality of life. Ecology focuses on mutual relationship between man and his environment and visualizes health as a dynamic equilibrium between man and his environment. Maladjustment of a human being to his environment results in disease.

The ecological concept raises two issues, imperfect man and imperfect environment. For example, environmental pollution caused by deforestation and urbanisation, resulting in water pollution, overcrowding and air pollution creates an imbalance between man and environment thus affecting his health.

iii) **Psychosocial Concept:** This concept visualizes health not only as a biomedical phenomenon but that it is also influenced by various other factors, e.g. social, psychological, cultural, economic and political. These factors are essential in defining and measuring health. This health is both a biological and social phenomenon.

If we are physically tired, our capacity to respond to social interactions will be diminished. Some studies have shown that single people who live isolated, friendless lives, face a much greater chance of becoming ill or dying than people with close relatives and good friends.

iv) **Holistic Concept:** This concept is a synthesis of all the concepts mentioned above. It focuses on the impact of socioeconomic, political, environmental and biomedical influence on health. It sees the well-being of a person as a whole in the context of his total environment.

The holistic approach to health insists that total good health and well-being can be achieved only by understanding the whole person in a perspective that includes physical, mental, social and spiritual dimensions. All these four aspects are not separate but they are constantly interacting. In other words, we can say that it corresponds to the ancient view that health implies a sound mind in a sound body, in a sound family and in a sound environment.

We know from our daily experience that problems in one area of our lives affect other areas as well; emotional strain and conflicts can lower our resistance to illness.

Check Your Progress 1

i) Traditionally health is viewed as absence of ..... .

ii) Changing concepts of health include

a) .....

b) .....

c) .....

d) .....

ii) Tick (√) the diseases caused by an organism:

a) Malaria

b) Typhoid

c) Cancer

d) Poisoning

e) Hepatitis

f) Accidents

iv) Explain the 'holistic approach' to health.

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1.2.2 Definitions of Health

We understand the meaning of health but still we find difficult to define it. Different people have different perceptions of health. Some feel that when an individual is free from any sickness or disease he is healthy; others feel that an individual is said to be healthy if he is able to perform activities of daily living normally. Still others feel that an individual is healthy if he is well adjusted in social life and can function effectively even in stressful situations. What exactly is meant by health? You will be able to understand better if you go through the following definitions.

Health is defined as:

a) The conditions of being sound in body, mind or spirit and especially free from physical disease or pain (Webster).

b) Soundness of body or mind; that condition in which their functions are duly and efficiently discharged (Oxford English Dictionary).

c) A condition or quality of the human organism expressing its adequate functioning in given conditions — genetic and environmental.

d) "A state of relative equilibrium of body, form and function which result from its successful dynamic adjustment to forces tending to disturb it. It is not passive interplay between body substance and forces impinging upon it but an active response of body forces working towards readjustment." (Perkin)

The above mentioned definitions give varied views of health. We shall now try to look into the most widely accepted definition of health given by World Health Organisation (WHO) which states:

Health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity.

If you look at the definition carefully, you will realize that three aspects or dimensions emerge from it. These are: (a) Physical (b) Mental and (c) Social.

Physical well-being means having the physical strength, endurance and energy to work towards your goals. **Mental** well-being is ability to cope with the world in a way that brings you satisfaction; **social** well-being means development of relationships with others — both with people in your immediate surroundings and with the larger community through cultural, spiritual and political activities.

This also implies that goal of health now calls for not only the cure or alleviation of disease. It calls for even more than prevention of disease. Rather it looks beyond, to strive for maximum physical, mental, and social efficiency for the individual, for his family, and for the community.

Check Your Progress 2

i) Health is defined as a state of relative ..... of body, form and functions by its dynamic adjustment to forces that disturbs it.

ii) Health is defined by the World Health Organisation as:

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1.2.3 Health as a Relative Concept

Health is a relative concept; this may be due to ecological conditions and the fact that standards of health vary among cultures, social classes and age groups.

This implies that health is not an ideal state and there are no international standards fixed for health. We cannot say that individuals of the same age, belonging to different countries and cultures will have the same health standards. There may be variations in weight and height of an individual belonging to different countries and socioeconomic groups but both will be healthy. We can further clarify this concept by the following example:

> A new born baby in India weighs 2.8 kg. on an average compared to 3.5 kg. in the developed countries and yet compares favourably in health.

1.2.4 Dynamics of Health

The concept of health dynamics visualizes health as a dynamic phenomenon and as a process of continuous change, i.e. the health of an individual keeps on changing and is not static. It varies within a continuum that ranges from **optimum well-being** to various levels of **dysfunction** including the state of total dysfunction, namely death. Health and sickness form a continuum ranging from total well-being to death with many intermediate stages.

You can also say that health is a dynamic quality of life rather than a static entity. No longer is the individuals thought of as being "healthy " or " unhealthy ". Individuals might function normally throughout a day with varying degrees of efficiency, depending upon the many factors which affect their state of well-being which fluctuates on a health continuum rather than remaining static at one point (see Fig. 1.2).

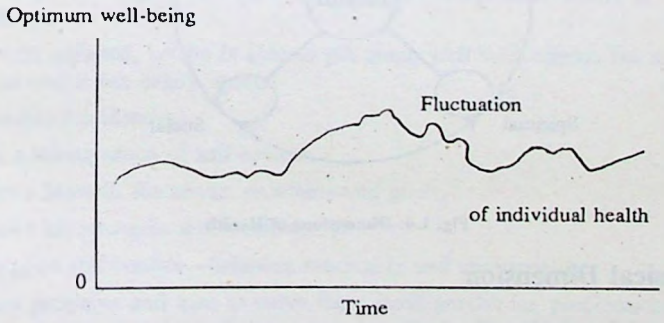

Fig. 1.2: Health continuum

Health is not merely a continuum of physical well-being or of mental, spiritual or social well-being but a combination of all four dynamically interrelated.

If you look at Fig. 1.3, you will find that health and sickness lie along a continuum. The lowest point of the scale is death and the highest point corresponds to positive health. A person may be healthy today but may fall sick tomorrow. The transition from optimum health to ill-health can also be rather gradual.

Well-being	Positive health Better health Freedom from sickness
Dysfunction	Unrecognised sickness Mild sickness Severe sickness Death

Fig. 1.3: The Health and Sickness Scale

Check Your Progress 3

i) State true or false (use T for true and F for false)

a) Standards of health vary among cultures, social classes and age groups.

b) There are no fixed international standards of health.

c) Health is static.

ii) The health of an individual keeps on changing on a ..... which ranges from optimum well-being to various levels of dysfunction.

1.3 DIMENSIONS OF HEALTH

The definition given by WHO as mentioned above (in sub-section 1.2.2) covers three dimensions of health, i.e. physical, mental and social (Fig. 1.4). But as per the advances in knowledge you can think of more dimensions which could be spiritual, emotional, vocational and political, etc. Of these we shall focus mainly on three dimensions and also the spiritual dimension.

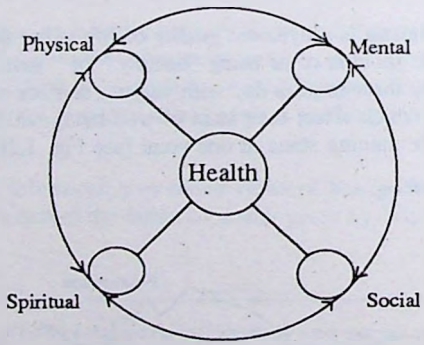

Fig. 1.4: Dimensions of Health

1.3.1 Physical Dimension

It means normal functioning of a body or we can say that it is a state of health in which every cell of the body functions at optimum level and there is a balance in functioning within organs and the systems of body. Physical health includes a good complexion, clean and healthy skin, good body maintenance, good clothing, cleanliness, good appetite, happy disposition, sound sleep, regular activity of bowels and bladder. Other signs include normal pulse rate at rest, normal blood pressure and normal exercise.

We spoke about physical health and its components, now we shall talk about assessment of physical health which includes:

— self assessment of overall health

— general observation
— clinical examination
— nutrition and dietary assessment
— biochemical and laboratory investigation.

You will know more about this under Block 2 in Family Health Care and in your courses in II year.

If you are working in a community, the overall health status of the community can be assessed by knowing the mortality rate and life expectancy of the community.

1.3.2 Mental Dimension

As we said that health is more than mere absence of illness, similarly we can say that mental health is not merely the absence of mental disease or mental illness. Mental health and physical health are interdependent. A poor mental health adversely affects the physical health and vice versa. Mental health is the ability of an individual to adjust to varied situations and to respond to varied experiences with a sense of purpose and with flexibility. Mental illness is not simply the absence of mental illness but it is the ability to find happiness and fulfillment to adjust and change and to grow throughout one's life.

Mental health is happiness; the ability

- to get along with other people
- to cope up with the demands of the world without undue stress
- to be satisfied with the sense of achievement and personal fulfillment.

Mental health has been defined as:

- a state of balance between the individual and the surrounding world
- state of harmony between the individual and the surrounding world
- state of harmony between oneself and others
- a coexistence between the realities of self, those of other people, and the environment.

Mental ill-health can lead to disturbances in physical and psychological functioning of body and may lead to illness like hypertension, peptic ulcer and bronchial asthma.

We hope you have now understood the definition of mental health. We will now explain the characteristics or attributes of a mentally healthy person.

a) A mentally healthy person is free from internal conflicts, he is not at 'War' with himself.
b) He is well adjusted, i.e. he is able to get along well with others. He accepts criticism and is not easily upset.
c) He searches for identity.
d) He has a strong sense of self esteem.
e) He knows himself, his needs, problems and goals.
f) He knows his strengths and weaknesses.
g) He has good self control—balances rationality and emotionality.
h) He faces problems and tries to solve them intelligently, i.e. problems of stress and anxiety.

1.3.3 Social Dimension

We spoke about the physical and mental dimensions. Now we come to the third dimension of health, i.e. social health. This aspect visualizes the individual as a member of a family, community and the world and focuses on the well-being of a person socially and economically.

Social well-being has been defined by J.E. Park as:

> "The quality and quantity of an individual's interpersonal ties and extent of involvement with the community."

This means that social well-being implies harmony and integration within the individual, between each individual and other members of society and between individuals and the world in which they live.

The social dimension includes practising social skills, social functioning and the ability of a person to see himself as a member of larger society.

If you try to recall the discussion on the dimensions of health, you will realize that all the three are interrelated and interdependent. We cannot take them in isolation. If an individual is physically unhealthy, this will affect his mental health as well as social health and vice versa. If physical health is affected, there will be imbalance within the individual which will affect his mental as well as social health.

1.3.4 Spiritual Dimension

You will agree that another important dimension which could be examined is the spiritual dimension. This includes a study of principles of ethics, beliefs, purpose in life and commitment to some higher being. Spiritual well-being is not in isolation from mental well-being of a person. It is now believed that spiritual values influence our behaviour and mental well-being e.g. if you do meditation, it helps to keep you free of mental worries and stresses of daily life and gives freshness and peace of mind.

To sum up the above discussion on dimension of health we can say that the individual functions as a whole or as an integrated unit with each dimension of health having an influence upon other dimensions. For instance physical illness has an effect on one's emotional well-being, spiritual state and social relationships. The psychosomatic aspects of health also illustrates dynamic interrelation among these dimensions of health. For example, an individual beset with social and emotional problem has a physical problem of high blood pressure or peptic ulcer.

All the concepts related to dimensions of health introduce us to the concept of positive health which can be stated as follows:

If an individual is in a state of well-being biologically, psychologically, socially and spiritually he is said to have positive health.

The next question is: what are the factors that affect the health of an individual? The answer to this question is given in Section 1.5, i.e. determinants or factors affecting health.

Check Your Progress 4

i) What are the main dimensions of health?

a) .....

b) .....

c) .....

d) .....

ii) Fill in the blanks:

a) Physical well-being means optimal ..... of body and there is a balance within the organs and systems of body.

b) Mental health is the ability of an individual to ..... situations.

c) Social well-being implies harmony and ..... within the individual, between individuals and other members of society.

1.4 DETERMINANTS OF HEALTH

The health of an individual is affected by factors within the individual and within the society in which he or she lives. These factors may be health promoting or deleterious. These factors are given below (Fig. 1.5).

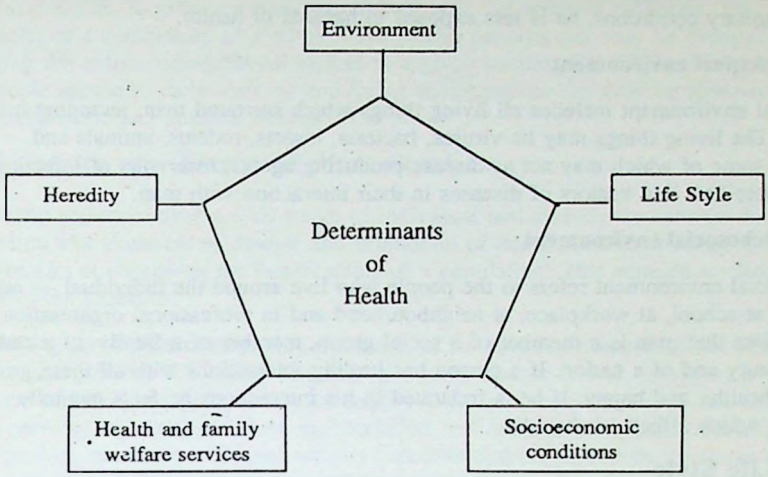

Fig.1.5: Determinants of health

- Heredity
- Environment
- Life Style
- Socioeconomic conditions
- Health and family welfare services

We shall now discuss these determinants in detail.

1.4.1 Heredity

An individual's physical and mental characteristics are inherited from his parents and these physical and mental traits of an individual are determined by genes during conception. The health of the mother, her nutritional status, the drugs she takes and the investigation she undergoes influence the health of the foetus. The genetic characteristics cannot be altered after conception and the genetic influence of the parents can lead to some genetic disorder in the child, which could be chromosomal anomalies like, haemophilia and Down's syndrome, errors of metabolism and mental retardation, etc. Thus the health status of an individual depends to some extent on his genetic constitution.

1.4.2 Environment

Environment refers to the surroundings in which an individual lives. The environment may be **internal** as well as **external**. The internal environment or microenvironment pertains to the tissues, organs and systems of the body and the harmonious relationship between them. The external environment or macroenvironment consists of all those things to which an individual is exposed after conception—such as, air, water, food, housing, etc. Environment is divided into three components: physical, biological and psychosocial; each of these have a direct impact on the physical, mental and social well-being of human beings. Now we shall have a quick look at different types of environment.

i) Physical environment

Physical environment includes housing, water, air, light, noise, excreta disposal, etc., with which man is in constant interaction. A defective physical environment continues to be a major health problem in developing countries including India.

The environmental hazards could be water pollution, air pollution, noise pollution and urbanization, etc. We shall further try to explain this with the example given below.

Consider that if a person lives in an environment where there are no sanitary drains, no proper housing, no proper disposal of refuse and excreta and no water supply. There will be fly breeding. You can now imagine the hazards that man will be exposed to in this physical environment which will affect his health. These hazards would be diarrhoea, cholera, typhoid etc. On the contrary, if he lives in a safer environment, with proper sanitary conditions, he is less exposed to hazards of health.

ii) Biological environment

Biological environment includes all living things which surround man, including man himself. The living things may be viruses, bacteria, insects, rodents, animals and plants — some of which may act as disease producing agents, reservoirs of infection, intermediate host and vectors of diseases in their interaction with man.

iii) Psychosocial environment

Psychosocial environment refers to the people who live around the individual — may be at home, at school, at workplace, at neighbourhood and in professional organisation. This implies that man is a member of a social group, member of a family, of a caste, of a community and of a nation. If a person has healthy interactions with all these groups he feels healthy and happy. If he is frustrated in his interactions he feels mentally unhappy, which affects his health.

1.4.3 Life Style

Life style refers to the way of living or the way the people live. It reflects social values, attitudes and activities of an individual. It refers to the way we behave, work, eat, rest, sleep, and perform other activities of daily living. It consists of cultural and behavioural patterns and personal habits of an individual. Life style affects the health of an individual. A healthy life style helps to promote health and a poor life style has ill effects on health. For example in India due to persistence of a poor traditional life style, there are risks of death and illness connected with lack of sanitation, poor nutrition, personal hygiene habits, customs and cultural patterns. Some life styles can promote health, e.g. adequate nutrition, enough sleep, sufficient physical activity, adequate education and employment.

Many of our health practices are those that we have learnt from our parents or have adopted at an early age. These have become so intricately woven into the fabric of our current health behaviours that to become aware of them and their possible harmful effects requires a conscious effort to examine our lives from the perspective of health. We further have to make a concerted effort to change habits which die hard, e.g. dangers of cigarette smoking are well known; every cigarette pack carries a warning that 'Cigarette smoking is dangerous to health' and also there are media campaigns to alert people to this danger; but despite this people continue to smoke.

Another factor is the quality of modern life styles which are often the source of health problems. Due to a fast moving life, man is exposed to stress and strain which are caused by pollution, poor nutrition and psychological stress.

1.4.4 Socioeconomic Conditions

The health of an individual is determined by his socioeconomic development, e.g. per capita G.N.P., education, nutrition, employment, housing and the political system of the country. We sall glance through these components to have an overview.

i) **Economic status:** This is an important factor in seeking health care as it determines the purchasing power, standards of living, life style and family size—which affects our health.

ii) **Education:** This is a major factor which influence health. Illiteracy leads to ignorance which can result in poverty, malnutrition, high infant and child mortality rates etc. Even if the health facilities are available the people, because of ignorance, will not be in a position to avail them. They also will not have healthy habits, thereby leading to ill-health.

iii) **Occupation:** This is a crucial factor which determines health. A person who is involved in some productive work or is employed will be healthy as compared to one who is unemployed; because unemployment means loss of income and inability to meet even basic needs. This can result in physical as well as mental damage.

iv) **Political system:** The health system is influenced by the political system of the country. Implementation of health technologies, choice of technology, resource allocation, manpower policy, and the degree of availability and accessibility of health services depends, to greater extent, on political will and political decisions. This affects the health of a community as a whole. Poor health patterns can only be changed by changing the entire socio-political system in a given community. The health hazards of the people related to their working and living environments can only be removed by social, economic and political actions.

1.4.5 Health and Family Welfare Services

The health services cover a wide range of individual and community services for prevention and treatment of disease and promotion of health. Health and Family Welfare Services aim at improving the health status of a population. This concept is clarified in the following example:

Immunizing the children can reduce the threat of incidence of communicable diseases like Polio, Diptheria, Whooping cough. Water-borne disease can be prevented by provision of safe and wholesome water supply to a community. Maternal and child health services will help to reduce the morbidity and mortality in women and children. If we analyze the above examples we can conclude that immunization provision of safe water, and care of pregnant women are the health and family welfare services preventing communicable disease, water-borne disease and infant and maternal mortality which is the ultimate goal of the health services.

Check Your Progress 5

i) List the various determinants of health.

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ii) Recall any situation in your social environment which has made you feel happy. Give two reasons for your happiness (use the blank space for writing the answer).

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1.5 PREREQUISITES OF HEALTH

We hope you have now got a better idea about the determinants of health i.e. what factors affect the health of an individual and the community as a whole. Having assimilated all these ideas, you are now in a better position to identify some of the prerequisites of health. These could be identified at three levels.

i) at the level of individual

ii) at the level of the environment

iii) at the level of the society

Let us elaborate each level, as follows:

i) **At the level of individual:** In order to be healthy, an individual has to

- follow hygienic practices which include cleaning and care of each body part, clothing, footwear, etc;
- take a well balanced diet;
- avoid unhealthy practices — overeating, undereating, smoking, drinking, using drugs, immoral behaviour;
- take good rest, sleep well, do active and passive exercises and select healthy recreational activities; and
- resort to preventive screening and take immunizations.

ii) **At the level of the environment:** The prerequisites for a healthy environment include:

- Sanitary housing
- Safe water supply
- Clean air
- Standard light and sound
- Safe surroundings — proper measures to avoid accidents
- Proper disposal of excreta
- Good placement of school, hospital, recreation facility, markets, parks, trees, slaughter houses, etc.
- Removal of harmful vectors.

iii) **At the level of the society:** As you know, an individual cannot be healthy, if his social environment i.e. the harmonious relationship and adjustment with his surroundings, is not good. So to enjoy positive health, an individual should seek:

- Good social relationship and working condition in the family;
- Healthy relationship and good working conditions in the workplace;
- Good social relationship with the neighbourhood; and
- Association with professional organisations.

1.6 LET US SUM UP

In this unit, we have discussed the concept of health which traditionally means the absence of disease. The definition of health by WHO which states "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease." Relative concept of health, i.e. we cannot set international standards of health and the health of an individual varies from culture to culture and country to country. We also explained dimensions of health, i.e. physical dimension which refers to the physical well-being of an individual; mental dimension refers to the ability of an individual to adjust to varied situations and act purposefully and the social dimension which relates to the relationship of an individual with the society or the people with whom he lives. If an individual experience well-being in all these dimensions, he is said to enjoy positive health. You have also learnt about the determinants of health which include: heredity—the effect of genes on the physical and physiological characters of an individual; environment, i.e. physical, biological and psychosocial environments of the individual which influences health, and his life styles or ways of living (the standards of living, i.e. eating, behaving, rest, sleep, etc.); socioeconomic conditions, i.e., level of income and education which affect the health of an individual and health services which cover individual and community services for prevention and treatment of disease. At the end, we talked of prerequisites of good health which include healthy and hygienic practices, good environmental condition and social well-being.

1.7 GLOSSARY

Adaptation	:	Change or response to stress of any kind; may be normal, self protective, or developmental.
Agent	:	Causative factor invading a susceptible host through a favourable environment to produce disease.
Bacteria	:	Single celled organism that reproduces asexually.
Culture	:	Standards for decisions on what is, what can be, how to feel, about it and how to do it.
Cultural values	:	The prevailing and persistent guides influencing, thinking and actions of people within a culture.
Gene	:	basic unit of genetic information located on the chromosome.

1.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

i) Disease

ii) a) Biomedical concept
b) Ecological concept
c) Psychosocial concept
d) Holistic concept

iii) a, b, c

iv) The holistic approach to health is achieved by understanding the whole person in a perspective that includes physical, mental, social and spiritual dimension.

Check Your Progress 2

i) Equilibrium

ii) Health is a state of complete physical, mental and social well-being and not merely and absence of disease or infirmity.

Check Your Progress 3

i) a) True
b) True
c) False

ii) Continuum

Check Your Progress 4

i) a) Physical
b) Mental
c) Social
d) Spiritual

ii) a) Functioning
b) Adjust
c) Integration

Check Your Progress 5

i) a) Heredity
b) Environment
c) Life style
d) Socioeconomic conditions
c) Health and Family Welfare Services

ii) Write your own.

UNIT 2 PRIMARY HEALTH CARE — CONCEPT AND PRINCIPLES

Structure

2.0 OBJECTIVES

In this unit you will learn about the concept of Primary Health Care (PHC) and the related principles. On completion of this unit, you should be able to:

- Discuss and explain the concept of primary health care,
- Define primary health care,
- List the elements of primary health care,
- Explain the principles of primary health care, and
- Explain and illustrate the role of a nurse in promoting primary health care.

2.1 INTRODUCTION

In Unit 1 you have learnt about the concept of health and prerequisites for good health. You were explained that health is a state of physical, mental and social well-being of an individual. It is not merely the absence of disease or infirmity. You have also understood how health is affected by many factors, like heredity, environment, ways of living, socioeconomic status, health services etc. Now you may be interested to know how an individual or community can attain these three important dimensions or aspects of health: namely, physical, mental and social well-being. The answer to this question is given in this unit i.e. by focussing on primary health care so that individual can attain a desirable level of health.

You know that during the last two decades the common slogan for health, in all countries, has been "Health For All"; and India is politically committed to achieve this goal. The Alma Ata Declaration has stated that primary health care is the strategy to achieve this goal. In this unit you will learn about the concept of primary health care, which is considered to be an essential care, which is acceptable, accessible and affordable to an individual, community and the country as a whole. You will also learn about Alma Ata Declaration and the components of primary health care. The principles of primary health care are explained in Section 2.5. At the end we will discuss the role of the nurse in promoting primary health care.

2.2 PRIMARY HEALTH CARE — THE CONCEPT

You have heard and learnt about primary health care and all of you are providing this care in the areas of your practice i.e. hospital, clinic or community setting. Before we start the discussion on this concept, you should try to decide which kind of care the nurse is providing in each of the situations described below:

- A nurse assisting a Surgeon in mitral valvotomy in a specialised institution;
- A nurse assisting a doctor while doing appendectomy in a district hospital; and
- A Female Health Worker immunizing a child at a subcentre.

If you think for a while, you will be able to realize that the female health worker is providing primary health care but the other two nurses are engaged in secondary or tertiary care.

Primary health care is now a widely disseminated concept, but most of us are still not clear as to its current meaning. We shall, therefore, try to explain how the concept of PHC has evolved.

You know when a new programme or technology in any area is implemented, it becomes imperative to evaluate its effectiveness. It is the same with health care approaches. Primary health care has evolved from re-examination and evaluation of existing health care approaches and assimilation of new experiences. The implementation of new knowledge and technology in terms of vertical programme. for eradication of disease did not achieve expected results and it was realized that there was a need for establishment of permanent health services in rural areas to deal with the day-to-day work in the control and prevention of diseases and promotion of health (see Fig. 2.1).

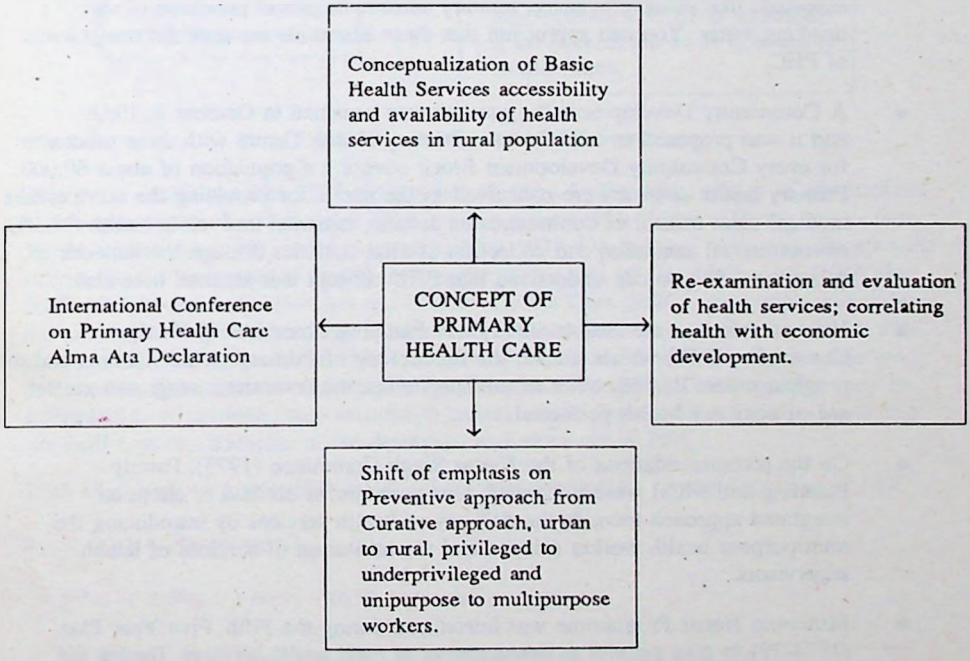

Fig. 2.1: Concept of Primary Health Care

It was realised that the world's priority health problems required development of new approaches for their solution. Hence the approach in health services was shifted from curative to a preventive approach; from urban to rural populations; from privileged to the underprivileged; from unipurpose to multipurpose workers and from vertical mass campaigns to a system of integrated health services forming a component of overall social and economic development.

Based on this, a shift in emphasis on health services to Basic Health Services Approach was conceptualised in 1970. This concept focused on increasing **accessibility** and **availability** of health services to the rural populations of developing countries. It was conceived as first level care or first contact care. Now the concept of **Basic Health Services** paved the way for **Primary Health Care;** the ideas contained in Basic Health Services were further expanded to cover **accessibility, availability, acceptability, affordability** and **appropriateness of health services.**

In May 1977, the **Thirtieth World Health Assembly** adopted a resolution in which it was decided that the main social target of Governments and of the World Health Organization in coming decades should be **"Health For All"** by the year 2000 A.D. The basis of "Health for All" strategy is the Primary Health Care. In 1978, an international conference on primary health care was held at Alma Ata in USSR jointly by WHO and UNICEF. This led to the concept of Primary Health Care. This concept of PHC was recommended by various health committees in our country starting from 1946.

We shall briefly highlight the recommendations of these committees.

If you review reports and recommendations of various committees on health you will realize that the concept of primary health care dates back to various Health Committees constituted from time to time. Among these, the Bhore Committee (1946), Mudaliar Committee (1961), Multipurpose Health Worker Scheme, Kartar Singh Committee (1974), Community Health Worker Scheme (1977), serve as milestones in the history of Primary Health Care in India. We will not go into the details of these Committees but just take a brief look at the suggestions made by each.

- The Bhore Committee, also known as Health Survey and Development Committee, besides suggesting a health system design, laid special emphasis on certain basic essentials like suitable housing, sanitary surroundings and provision of safe drinking water. You can appreciate that these essentials are now the components of PHC.

- A Community Development Programme was launched in October 2, 1952; and it was proposed to establish one Primary Health Centre with three subcentres for every Community Development Block covering a population of about 60,000. Primary health centres were conceived as the nuclei for providing the services like medical care, control of communicable disease, maternal and child health (MCH), environmental sanitation and collection of vital statistics through the network of subcentres. So you can understand that PHC concept was stressed here also.

- Next we come to the Health Survey and Planning Committee (Mudaliar Committee, 1961) which studied the functioning of Primary Health Centres and the progress made. Besides other recommendations, the committee suggested greater use of auxiliary health personnel.

- On the recommendations of the Kartar Singh Committee (1973), Family Planning and MCH were integrated. Our government decided to adopt an integrated approach towards the delivery of health services by introducing the multipurpose health worker scheme and the utilisation of services of health supervisors.

- Minimum Needs Programme was introduced during the Fifth Five Year Plan (1974-79) to give priority to development of rural health services. During the Fifth Plan, the health components consisted of: establishment of one PHC for each Community Development Block and one subcentre for every 10,000 population; making up of the deficiencies in buildings including residential quarters for PHC staff; provision of drugs and upgradation of one PHC (in every four PHCs) to 30-bedded Rural Hospital known as Community Health Centres.

Look at Fig. 2.2. You will get a clear idea about the development of PHC concept.

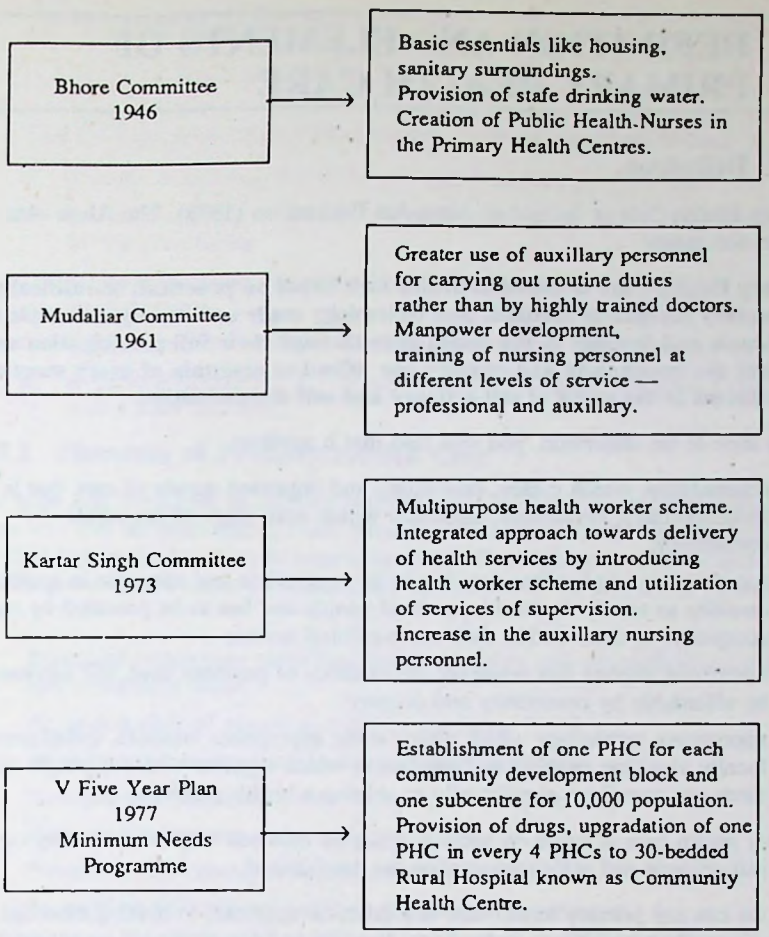

Fig. 2.2: The development of PHC concept

This clearly indicates that PHC concept has its roots in the initial stages of our national health care approach. Ultimately, after reviewing the health situation from time to time, World Health Assembly, in its meeting in May 1977 decided that in coming decades the slogan for all the countries should be to achieve the goal of 'Health for All (HFA) by 2000 AD'. It was only after that the Primary Health Care (PHC) was considered to be the strategy to achieve this goal. Later on, in 1978 an International Conference on PHC was organised at Alma Ata in USSR, jointly by WHO and UNICEF, which made many declarations in addition to defining Primary Health Care (PHC). We hope you may be interested to go through these recommendations which is given in Appendix-1 and then we shall turn our attention to the definition and elements of PHC.

With all the above concepts in mind, let us now concentrate on the definition of PHC.

Check Your Progress 1

i) What is meant by Basic Health Services?

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ii) Basic Health Service concept came in.....

iii) A conference in Alma Ata was held in Sept.....by.....

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2.3 DEFINITION AND ELEMENTS OF PRIMARY HEALTH CARE

2.3.1 Definition

Primary Health Care is defined in Alma-Ata Declaration (1978). The Alma -Ata Declaration states:

Primary Health Care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

If you look at the definition, you will find that it involves

- accessibility, which means, continuing and organised supply of care that is geographically, financially, culturally within easy reach of the whole community;
- acceptability implies that care has to be appropriate and adequate in quality and quantity to satisfy the health needs of people and has to be provided by methods acceptable to them within their socio-cultural norms;
- affordable implies that whatever the methods of payment used, the services should be affordable by community and country;
- appropriate technology which means using appropriate methods, techniques and locally available supplies and equipment which together with the people using them can contribute significantly to solving a health problem.

Primary health care is based on socially accepted methods which the country can afford. Thus self-reliance and self-determination are emphasised.

Thus we can say primary health care is a practical approach to making essential health care universally accessible to individuals, families and community in an acceptable and affordable way and with their full participation.

The significance of PHC is to have contact with members of the community for providing continuing health care in the light of national health system.

PHC focuses on promotive, preventive, curative, rehabilitative and emergency care to meet the main health problems in the community, giving special attention to the vulnerable groups such as mother and child.

So combining all these ideas of Primary Health Care, we can briefly say that PHC is based on socially accepted methods which the country can afford. Thus self-reliance and self-determination are emphasized.

Check Your Progress 2

i) Define Primary Health Care.

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ii) The key words in primary health care are

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iii) Tick (√) the appropriate PHC activities, from the list given below:

a) A nurse is assisting the doctor in mitral valvotomy.

b) A nurse is giving an intramuscular injection of antibiotic to an adult patient having pneumonia.

c) A Nurse is giving post-operative care to a patient who has undergone appendictomy.

d) A female health worker is immunizing a child at a subcentre.

e) A nurse is giving Inj. T.T. in the hospital emergency room to a child who met with a road accident.

2.3.2 Elements of Primary Health Care

We hope our discussion on concept and definition of PHC may have benefited you. Now you will be interested to know what does this Primary Health Care include or what type and what level of care is involved. The **eight essential elements or components of Primary Health Care** as outlined in the Alma-Ata Declaration are:

- Education concerning prevailing health problems and the methods of preventing and controlling them;
- Promotion of food supply and proper nutrition;
- An adequate supply of safe water and basic sanitation;
- Maternal and child health care including family planning;
- Immunization against major infectious diseases;
- Prevention and control of locally endemic disease;
- Appropriate treatment of common diseases and injuries; and
- Provision of essential drugs.

We shall only list these elements here. These are described in detail in Block 4 of this course (HS IT1, Block 4, Units 1-6).

Hope you have got the idea of the components of Primary Health Care. In order to achieve the target of Health For All (HFA), every health professional should be committed and concerned with the above care context so that he makes it a part of his daily health care practice.

Check Your Progress 3

i) Which of the above mentioned components do you think nurses have a major role to play?

ii) Select one component and give two reasons.

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To conclude, primary health care has evolved partly in the light of experience, positive and negative, gained in basic health services in a number of countries. With this understanding and definition of Primary Health Care and its elements we introduce you to the principles of Primary Health Care which are given below.

2.4 PRINCIPLES OF PRIMARY HEALTH CARE

The description and meaning of the five basic principles which provide the framework of the Primary Health Care Approach can be summarized as follows:

i) Equitable distribution of resources

ii) Manpower development

iii) Community involvement or participation

iv) Appropriate Technology

v) Intersectoral Coordination

These principles are indicated in Fig. 2.3. Let us now briefly discuss each of these principles.

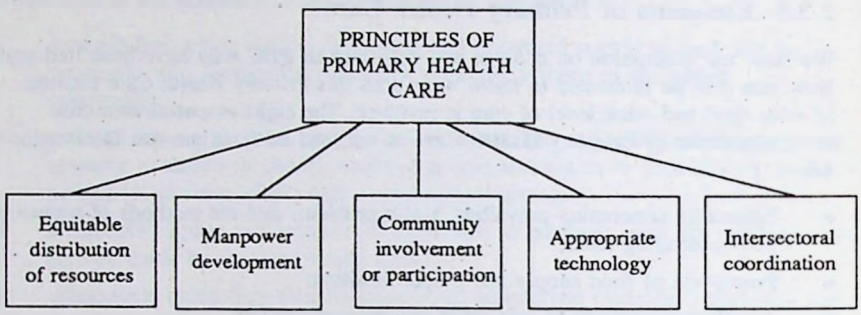

Fig. 2.3: Principles of PHC

2.4.1 Equitable Distribution of Resources

As you know, the attainment of a high level of health is the fundamental right of an individual or you can also say that all human beings have an equal right to health. You will be interested to know how people can ensure this right. The answer is that all the people of the world/country should be provided with equal opportunities to develop health to the fullest and to maintain it. So we can say that equitable distribution means that health services must be shared equally by all people irrespective of their ability to pay; and all the people—rich or poor, rural or urban—must have access to the health services.

It you look at health statistics you will find that the health situation as indicated by health status indicators, e.g. Infant Morality Rate (IMR), Maternal Mortality Rate (MMR), Birth Rate (BR), Death Rate (DR), etc. is lower in urban areas than in rural areas. Why this difference? It is because health services are mainly concentrated in cities and towns thus resulting in inequality of care for rural people. These statistics reflect how health related resources are distributed within the countries—including access to health services, education and income-earning opportunities. This is called social injustice.

The inability to receive health care services by majority of rural people and those living in urban slums is inaccessibility.

The main aim of PHC is to bridge this gap by shifting this concentrated health care system from cities or urban areas (where three quarters of health budget is spent) to the rural areas (where three quarters of people live) and bring the services as near as possible to them.

The other feature of health equity in society is health status of women and the disparity in health between genders which indicates that women suffer more from health problems than men. This is a critical indication of health inequality. What can you, as a health care provider do? You can only provide care to an individual, diseased/or healthy, irrespective of any disparity; but, in general, these facts call for explicit policies and strategies to reduce inequalities in health.

2.4.2 Manpower Development

The manpower development in the context of health includes both professional and auxilliary health personnel, members of community and supporting staff.

Primary health care, aims at mobilizing the human potential of the entire community by making use of all available resources. This can only be achieved if the individuals and families accept greater responsibility for their health.

The requirement of health manpower will vary according to the varying needs of groups of the population and desired outputs.

Primary health care focusses on:

- education and training of health workers to perform functions relevant to countries health problems,
- reorientation of health personnel,
- planning health manpower according to the needs of health system, in terms of right kind of manpower, right number, at right time and in the right place.

At the first level of contact between individual and health care system, primary health care is provided by community health workers acting as a team. These workers have to be trained and retrained so that they can play a progressive role in providing primary health care.

The second category of health personnel are traditional medical practitioners and birth attendants. They are often part of the local communities, culture and traditions and exert influence on local health practices. Therefore these indigenous practitioners need to be trained accordingly for improving health of the community.

These workers are to be trained and retrained in order to apply their technical skills to solve health problems as per social needs, guide, teach and supervise community health workers and village health guide and traditional/trained birth attendants and educate community on all matters pertaining to their health.

Lastly we can say that family members are often main providers of health care, mainly women play an important role in promoting health, thus they can contribute significantly to primary health care, especially in ensuring the application of preventive measures. Women's organization can be taught and encouraged to discuss on questions as nutrition, child care, sanitation and family planning. School teachers and adolescent girls can be trained on human sexuality and home nursing.

Similarly young people can be educated on health matters. They can be effective in carrying these messages to their homes thus promoting primary health care.

2.4.3 Community Participation

We now come to the most essential and sensitive principle of PHC, i.e. community participation. Community participation is the process by which individuals, families and communities assume the responsibility in promoting their own health and welfare. By their own health decisions, they develop the capacity to contribute to their own and the community's development. Realizing the fact that a community can become the agent of its own development, a continuous effort should be made towards the involvement of the local community in planning, implementation and maintenance of health services.

The term community involvement in health describes a process in which partnership is established between government and local communities in planning and implementation of health activities. It aims at building local self-reliance and gaining social control over primary health care infrastructure and technology. For example, one such approach which is followed in our country (India) is training of village health guides and dais. They are selected by the local community and are trained locally in the delivery of primary health care and are involved in planning the care for the community.

This concept is an essential feature of PHC. The individuals in the community know their own situation better and are motivated to solve their common problems. Thus it can be stated that involvement of community in health matters will require attainment of

capacity by individuals to appraise a situation, weigh the various possibilities and estimate what can be their own contribution.

Your contribution in community participation, as a member of the health system, is to motivate the community to learn and solve their own health problems, explain, advise and provide clear information about favourable and adverse consequences of the health interventions proposed as well as their relative cost.

Having understood the idea of community participation, you will be interested to know about the areas in which individuals, families and communities can participate. Involvement of these are:

- involvement of the community in assessment of the situation, and
- definition of the problem and setting of priorities.

Planning of the primary health care activities and subsequently cooperating fully when these activities are carried out. All these means acceptance of a high degree of responsibility by the individuals for their own health care, for example, by adopting a healthy life style, by applying principles of good nutrition and hygiene and by making use of immunization services.

2.4.4 Appropriate Technology

Appropriate technology means the technology that is scientifically or technically sound, adaptable to local needs, culturally acceptable (i.e. acceptable to those who apply it and for whom it is used) and financially feasible.

This implies that technology should be in keeping with the local culture. It must be capable of being adapted and further developed, if necessary. In addition, it should be easily understood and applicable by the community.

The Health for All target requires first and foremost scientifically sound health technol-'ogy that people can understand and accept and which the nonexpert can apply. It also implies use of cheaper, scientifically valid, acceptable and available equipments, procedures and techniques rather than those costlier and nonaffordable and nonaccessible to the community. For e.g. oral rehydration fluid, locally prepared weaning food and stand pipes rather than house to house connection, cooperative food stores.

It is socially, economically and professionally acceptable to take the technology closer to the people, consumer, wherever possible. For example, making rehydration salts, for babies available to mothers in every home is likely to be more useful than expecting the mothers to take the baby to the special centre.

We cannot afford to continue the use of sophisticated technology which is inappropriate for meeting the local health needs of people. For example, we know that expensive hospitals which are inappropriate to local needs are being built. These absorb a major part of the national budget, thereby affecting the improvement of general health services.

The concept of appropriate technology can further be explained by taking the example of ORT (oral rehydration therapy). The ORT packets, for diarrhoea, prescribed by WHO cannot be made available to each home; so the community is taught how to prepare sugar and salt solution to combat dehydration in a child with diarrhoea. With these concepts in mind, we shall discuss the principles of intersectoral coordination.

2.4.5 Intersectoral Coordination

We now come to the principle which focuses on the concept that health of an individual, family and community is affected by other sectors in addition to health sector. Let us now try to learn more about this principle.

It is now realized that health cannot be attained and/ or primary health care (PHC) cannot be provided by the health sector alone. PHC requires the support of other sectors; these sectors serve as entry points for the developments and implementation of PHC. In our country the sectors responsible for economic development, antipoverty measures, food production, water purification, sanitation, housing, environmental protection and education all contribute to health.

Development of PHC will rest on proper coordination at all levels between the health and all sectors concerned.

Declaration of Alma-Ata states that "Primary Health Care involves in addition to the health sector all related services and aspects of national and community development; in particular, agriculture, animal husbandry, food, industry, eduction, housing, public works, communication and other sectors." WHO (1978, HFA Series No. 1)

We shall now explore the importance of these related sectors in providing PHC. We shall first discuss the importance of agriculture sector, water supply, sanitation and housing, then we will talk about public works, communication and education sector and mass media. So let us begin with agriculture sector first.

Agriculture sector ensures the production of food for family consumption. Also nutritional status can be improved through programmes in agriculture, e.g. 'grow more food' and 'Kitchen garden projects'. Similarly you know that **water supply** is very important for household use. A regular supply of clean water helps to decrease mortality and morbidity, in particular among infants and children. You are aware that many diseases like cholera, typhoid, diarrhoea, viral hepatities are waterborn. **Safe disposal of wastes and excreta** also has a significant influence on health.

Housing has a positive aspect on health, provided it is properly adapted to local climatic and environmental conditions. Housing needs to be proof against insects and rodents that carry diseases.

We have so far discussed the effect of agriculture sector, water supply and sanitation and housing on primary health care, now we shall discuss about public works, communication, education sector and mass media.

Certain aspects of public works and communication are of strategic importance to primary health care. **Feeder roads** not only connect people to the market but make it easier for them to reach other villages, bringing in new ideas and also the supplies needed for health. **TV and radio communication serve** as important vehicles for learning regarding health and health practices. **Mass media** can play a supportive educational role by providing valid information on health and ways of attaining it, and depicting the benefits to be derived from improved health practices. It could help to creat awareness regarding various health programmes, i.e. family planning, immunization, growth monitoring, diarrhoeal disease and ORS etc. in the people who are isolated. We all know that various messages are carried on TV or radio, regarding FP, ORS, nutrition, diarrhoeal diseases etc.

Now we come to **educational** sector which has a vital role to play in development and operation of PHC. Community education helps people to understand their health problems, possible solutions to them and the cost of different alternatives. Instructional meterial/literature can be developed and distributed through the educational system. Associations of parents and teachers can assume certain responsibilities for primary health care activities within schools or the community: such as sanitation programmes, food for health campaigns or courses on nutrition and first aid, adult literacy programme, kitchen garden projects, courses on human sexuality and home nursing.

Check Your Progress 4

i) List the principles of Primary Health Care.

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ii) Fill in the blanks with appropriate words.

a) Equitable distribution means that health services must be..... by all people.

b) In community participation individuals, family and.....
assume..... in promoting their own health and welfare.

c) Appropriate technology means technology that is.....
sound,..... to local needs and ..... feasible.

iii) List the areas where community can be involved.

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iv) The health related sectors are:

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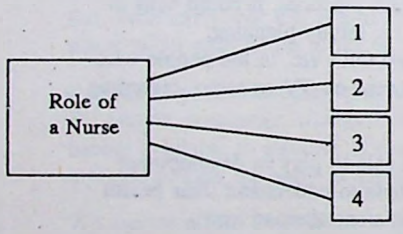
2.5 ROLE OF THE NURSE IN PROMOTING PRIMARY HEALTH CARE

Four main aspects of the Nursing Role in Primary Health Care were identified by WHO study group in their meeting in Geneva from 9-13 December, 1985 (WHO Technical Report Series No. 738). The roles identified are:



1. The Nurse as a Direct Care Provider
2. Nurse as a Teacher and Educator
3. Nurse as a Supervisor and Manager
4. Nurse as a Researcher and Evaluator

Let us now discuss each one of them for better understanding.

The Nurse as a Direct Care Provider

You as a nurse need to develop a variety of skills which you have to utilise in both clinical and community settings, in order to participate actively in providing care in relation to the components of PHC.

In the foregoing section you have already learnt about the essential eight components of primary health care. So, in order to provide and participate in such care, you have to develop a variety of clinical and community skills. It is by developing these skills that you shall be able to provide the proper nursing care to the patients, individuals, families and community. For example, if we take one of the components of PHC, i.e. control of communicable disease, your role as a direct care provider at all levels—subcentre, PHC, community centre and hospital is to identify and give immunization to children and educating the parents regarding the control of these diseases. Similarly, in providing MCH care you as a health provider not only have to examine the mothers to identify risk factors, and give T.T., but also teach them about mother craft, immunization, nutrition, rest and sleep, exercise etc.

Nurse as a Teacher and Educator

Your central concern as a nurse is promotion of health, prevention of disease and disability. This calls for your role as an educator when you have to educate the individuals and family about a healthy life style and the community on the primary prevention of ill-health as well as protective and supportive heath measures.

Your role as a teacher involves the training of other health care personnel, professional colleagues and auxiliary personnel. This brings us to the role of the nurse as supervisor and manager.

Nurse as a Supervisor and Manager

If you are engaged in providing Primary Health Care, you have to exercise some kind of leadership. Your duties in this regard include supervising other personnel in providing care, planning health service for the community in conjunction with other members of the health team and organising and administering community health services. While performing these functions you are involved in:

- assessing the health needs of the community,
- listening to the community's view on these needs,
- communicating with the community, and
- advising them accordingly.

As a community organizer, your role is to involve people in their own health care and explain the importance of cooperation of other sectors of society concerned with health e.g. housing, sanitation, agriculture, industry and education sector. So from your role as a direct care provider and teacher and educator you, as a primary health care nurse, assume the role of a manager on a wider scale.

The Nurse as a Researcher and Evaluator

Primary health care system has to be dynamic, as it deals with living human beings. Hence a nurse has to be dynamic in her services by bringing about changes and innovations in the health care provided based on facts. For this she has to be prepared to take the role of a researcher and evaluator.

This role involves monitoring, observing, analysing the health conditions, the health servics and the health care provided. For example, when an individual falls sick, then you, as primary care provider, are in a better position to determine the individual patient's health needs and to understand the problems involved in meeting these needs. With your knowledge and skills, you are able to recommend changes or innovations in primary health care services. For you to play this role effectively you need to have updated records. You will study about records in Block 2, Unit 5 of this course.

Check Your Progress 5

i) List the four main aspects of the Nurse's Role in Primary Health Care.

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2.6 LET US SUM UP

In this unit we discussed the concepts and definition of Primary Health Care. Primary Health Care is a practical approach to making essential health care universally accessible to individuals, families and community in an acceptable and affordable way and with their full participation. You also learnt that the elements of primary health care are education concerning preventing health problems, promotion of food supply and proper nutrition, adequate supply of safe water and basic sanitation, maternal and child health, immunization, treatment of common diseases and injuries, and provision of drugs and vaccine.

Principles of Primary Health Care have also been explained in detail. These are:

- equitable distribution, which means that health services must be shared equally by all people — rich or poor, rural or urban;
- manpower development;
- community participation; or the process by which individuals, families and communities assume the responsibilities in promoting their own health and welfare and take their own health decisions;
- appropriate technology which means that technology that is scientifically or technically sound adaptable to local needs, culturally acceptable and financially feasible; and
- the principle of intersectoral coordination which focuses on the concept that the health of an individual, family and community is affected by other sectors in addition to the health sector.

At the end we discussed the role of the nurse in promoting primary health care. The four roles are identified as (1) Nurse as direct care provider; (2) Nurse as teacher and educator; (3) Nurse as a supervisor and manager and (4) Nurse as a researcher and evaluator.

2.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

i) It is first level care which focuses on increasing access and availability of health services to the rural population and which is affordable.

ii) 1970

iii) September 1978

WHO and UNICEF.

Check Your Progress 2

i) Primary Health Care is essential health care based on practical, scientifically sound and socially acceptable methods and appropriate technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self reliance and self determination.

ii) Accessibility, availability, acceptability, affordability, appropriatness

iii) b, c, d, e

Check Your Progress 3

i) Maternal and Child Health Care including family welfare

Immunization against major infectious diseases.

Education concerning promotion of health and prevention of illness.

ii) Nutrition

Mothers and children form the largest group of the population (about 70 %)

Mothers and children are high risk/more vulnerable groups.

Check Your Progress 4

i) — Equitable distribution
— Manpower development
— Community participation
— Appropriate technology
— Intersectoral approach

ii) a) Shared equally by all people

b) Community, responsibility

c) Scientifically, Adaptable, Financially

iii) Assessment of situation or a problem

Definition and setting of priorities

Planning the activities for providing Primary Health Care

iv) Agriculture sector

Water supply and sanitation/public works

Housing

Communication and mass media

Education sector

Check Your Progress 5

Direct care provider

Teacher and education

Supervisor and manager

Researcher and evaluator

UNIT 3 HEALTH FOR ALL

Structure

3.0 OBJECTIVES

In this unit we shall discuss about Health For All (HFA). After studying this unit, you should be able to:

- Define Health For All,
- Discuss the meaning of Health For All,
- Describe global strategy for attaining Health For All,
- Explain the national strategy adopted to achieve the goal of Health For All,
- List the targets and achievement in Health For All, and
- Discuss the role of nursing services in support of Health For All.

3.1 INTRODUCTION

In Unit 1 we have discussed the concepts and prerequisites of health and in Unit 2 we discussed about Primary Health Care (PHC); its concept, principles, elements and role of nurses in promoting the primary health care. You have seen that primary health care is the essential care which should be easily available, acceptable, accessible and affordable to an individual and community as a whole. You have also become aware of Alma-Ata Declaration (see Appendix 1) which affirms that primary health care is considered as the basic strategy for achieving goal of Health For All by the year 2000 AD.

As you have learnt in Unit 2 that in May 1977 the thirtieth World Health Assembly adopted a resolution in which it was decided that main social target of Governments and of World Health Organization in the coming decades should be the attainment by **all people of the world by the year 2000 AD** of a level of health that will permit them to lead socially and economically productive life. This is popularly known as **Health for All by the year 2000 AD (HFA/2000)**. In this unit we shall discuss the concept, definition and meaning of Health For All. Achievement of goal of Health For All aims at restructuring of health system and reorientation and training at different categories of health workers/professionals. Fulfillment of these aims is only possible through development of an appropriate strategy. We shall discuss the global and national strategies for HFA, in Section 3.3 and focus on achievements and targets of HFA. At the end we shall discuss nursing in support of Health For All at international level and national level. As you go through this unit you are required to refer the appendices given at the end of this unit for broader perspective wherever indicated in the text.

3.2 HEALTH FOR ALL

We shall discuss about the concept and definitions of Health For All in the following subsections.

3.2.1 Concept of Health For All

As you know, there is a vast contrast in the health status of people in developed and developing countries despite of much scientific and technological advances in health care. You are also aware that most people in developed countries and elites of the developing countries including India enjoy good health, nutrition, sanitation, safe drinking water, education, income etc.

In India 80% of the population lives in rural area and urban slums in contrast to 10-20% who live in urban areas. It is only this small fraction of urban people who enjoy ready access to health services and facilities whereas the rest of the 80-85% are living in rural and urban slum areas do not have access to health services and/or facilities. Similarly if we look at health status of India as reflected by the number of indicators of health, as shown in Table 1, the need for urgently improving our health status is obvious.

The disparities in health and socio-economic conditions between rich and poor within countries and between countries, and the concern of members of WHO regarding status of health and deterioration of existing health status lead to new thinking in provision of health care in order to narrow this gap and finally eliminate it. It was also realized that the underprivileged population constituting 80% of the total population have an equal claim to their rights and privileges of health services such as:

- health care,
- protection from vaccine prevented communicable diseases (VPD) of childhood e.g. Diphtheria, Tetanus, T.B. Whooping cough, Polio etc.,
- maternal and child health care, and
- treatment and control of non-communicable disease.

So there was felt a need among health planners/administrators for evolving a health care approach that would answer the problems and needs of underprivileged. Ultimately the thirtieth World Health Assembly resolved in May 1977 that the main social target of Governments and WHO in the coming decades should be the attainment of Health For All by year 2000 AD.

Further, there are several other experiences and developments which led to the evolution of goal of 'Health For All' by the year 2000 which are as follows.

- In 1972-73 a WHO study on the development of health services concluded that there was a widespread dissatisfaction among people with their health care systems which were failing to cope with primary health care problems in countries at all stages of development.

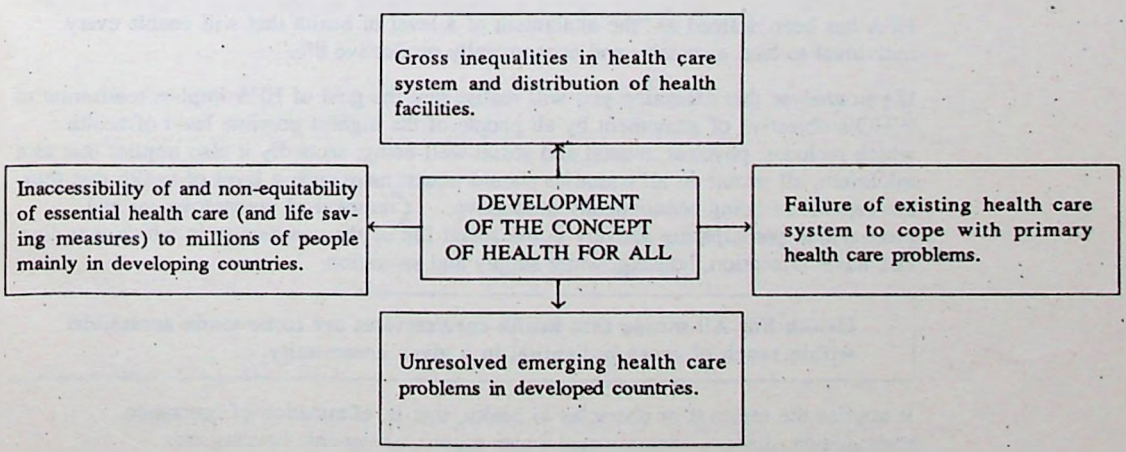

Fig. 3.1: Diagrammatic Representation of the Development of the Concept of Health For All (HFA)

- In developed countries, health care system despite their expensive and impressive infrastructure and highly specialized technologies, the emerging health problems of people are not being solved. The principal reason for this discrepancy is that new health problems require completely new approaches which emphasize individual self-reliance and commitment to good health.
- Similarly most of the developing countries including India face major problems with control of infectious disease, provision of safe water and basic sanitation services, the provision of care during pregnancy and delivery and elevating standard of living to a 'minimum acceptable level'.
- In the rural areas and rapidly expanding urban areas million of people still remain without access to essential health care and life saving measures.

All the above concepts led to a continuing discussion of how health care system should evolve and how WHO could best support countries struggling to improve their health systems.

Expressing the ideas that were dominating the International discussion during 1960s and early 1970s the World Health Assembly (WHA) decided in a ground breaking resolution in 1977 that "main social targets of governments and WHO in the coming decades should be the attainment of all citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life" with the adoption of this resolution the HFA movement was born and the slogan was created.

With this concept in mind we shall discuss next the definition and meaning of Health For All, after examining your memory.

Check Your Progress 1

i) The approach to achieve the goal of Health For All by the year 2000 is

a) Hospital Care
b) Technological Development
c) Primary Health Care
d) Research

ii) The basis for evolution of Health For All concept includes

a) .....
b) .....
c) .....
d) .....
e) .....

3.2.2 Definition and Meaning for Health For All (HFA)

HFA has been defined as "the attainment of a level of health that will enable every individual to lead a socially and economically productive life."

If you analyse this definition you will realise that the goal of HFA implies realization of WHO's objective of attainment by all people of the highest possible level of health which includes, physical, mental and social well-being; secondly it also implies that as a minimum, all people in all countries should atleast have such a level of health that they are capable of being economically productive, (removal of unemployment and poverty)and participating actively in the social life of the community in which they live i.e., have education, housing, water supply and sanitation.

Health For All means that health care/services are to be made accessible/ within reach of every individual in a given community.

It implies the removal of obstacles to health, that is, elimination of ignorance, malnutrition, disease, contaminated water supply, unhygienic housing etc.

"Health For All" is a holistic concept. It calls for efforts in education, agriculture, industry, housing or communication first, as much as in public health and medicine. It symbolizes the determination of countries of the world to provide an acceptable level of healthful living to all people.

It is an expression of the feeling for social justice from all those who suffer inequity in health care services.

It is intended to draw attention to the importance of health, to a serious search for new ways of solving the problems of health and to help mobilize all available resources for health.

To have a correct perception of the meaning of "Health For All" you should be convinced that HFA does not mean that as of the year 2000, we shall all be free of disease and disability.

Health for all means that health is to be brought within the reach of every one in a given country including the remotest part of a country and the poorest members of the society. By health is meant not just the availability of health services but a personal well-being and a state of health that enables a person to lead a socially and economically productive life.

"Health For All" means that health should be regarded as an objective of economic development and not merely as one of the means of attaining it.

- Health begins at home, in school and in work place.
- People will use better approaches for preventing disease and alleviating unavoidable illness and disability.
- There will be an even distribution among the population of whatever health resources are available.
- That the essential health care will be accessible to all individuals and families, in an acceptable and affordable way and with their full involvement.

The achievement of the Health For All goal, calls for dramatic changes, a social revolution in health development. It aims at bringing about the change in the mentality of people, restructuring of health system, and reorientation and training of health workers/professionals. So, to bring about these changes the practical shape to the slogan of HFA could be given only through development as a strategy. You will learn about these strategies for Health For All in Section 3.3.

Check Your Progress 2

i) Fill in the blanks:

Health For All concept focuses on health care services brought within the reach of every individual in a given .....

ii) Obstacles to the goal of health include:

.....

.....

.....

iii) Health For All calls the efforts in:

.....

.....

.....

iv) Define the goal of HFA.

.....

.....

.....

3.3 STRATEGY FOR HEALTH FOR ALL

As you have seen in Unit 2, Alma-Ata conference called on all governments to formulate national policies, strategies and plans of action and set down the principles of Primary Health Care which is the basis of "Health For All" strategy.

In 1981, global strategy of HFA was evolved by WHO through consultations with countries, regions and at the global level. That strategy defines the broad lines of action to be undertaken at policy and operational levels, nationally and internationally, both in the health sector and in other social and economic sectors.

This was followed by individual countries developing their own strategies for achieving HFA and synthesis of national strategies for developing regional strategies.

Let us discuss the global and national strategies in the following sub-sections.

3.3.1 Global Strategy

The global strategy for Health For All is based on the following fundamental principles.

- Health is a fundamental human right and a worldwide social goal
- The existing gross inequality in the health strategies is of common concern to all countries and must be drastically reduced
- People have the right and the duty to participate individually and collectively in the planning and implementation of their health care
- Governments have a responsibility for the health of their people
- Countries must become self-reliant in health matters.

Health is an integral part of the overall development of the countries. Energy generated by improved health should be channelled into sustaining development of a country. Better use must be made of the world's resources to promote health and development and this will help to promote world peace and prevent conflict among nations.

3.3.2 National Strategy for Health For All by 2000 AD

Alma-Ata declaration (as you have seen in Appendix-1) and India's commitment to HFA by 2000 AD resulted in the formulation of National Health Policy.

- The Government of India convened a national conference in February 1980 to discuss the national strategies and action plan to achieve Health For All.
- In July 1980 the Planning Commission of India appointed a working group on Health For All to evolve national strategies for implementation of health care programmes to move towards the goal for Health For All by 2000 AD and to suggest suitable indicators to monitor the progress achieved from time to time. The working group submitted its report in 1981 which was accepted by the Government of India.

Thus a National Health Policy was evolved by Government of India in August 1983, which commits the government and people of India to achieve the goal of Health For All by 2000 AD. We shall briefly highlight the health strategies in health policy (for details of health policy refer Appendix-2).

The policy lays stress on the preventive, promotive, public health and rehabilitation aspects of health care and points to the need of establishing comprehensive primary health care services to reach the population in the remotest ares of the country.

The health policy in India has the following key elements:

- Creation of a greater awareness of health problems in the community and means to solve these by the communities,
- Supply of safe drinking water and basic sanitation using technologies that the people can afford,
- Reduction of existing imbalance in health services by concentrating more on the rural health infrastructure,

- Establishment of a dynamic health management information system to support health planning and health programme implementation,
- Provision of legislative support to health protection and promotion,
- Concerted actions to combat widespread malnutrition,
- Research into alternative methods of health care delivery and low-cost health technologies, and
- Greater coordination of different systems of medicine.

The health strategies include restructuring the health infrastructure developing health manpower and research development.

WHO has established 12 global indicators as the basic point of reference to assess the progress towards Health For All. (These are discussed in Unit-5.) The National Health Policy has laid down specific goals with respect to various health indicators to be achieved by different dates 1990 to 2000 AD. (These are given in Table 1.) The most important indicators to achieve HFA are:

i) Reduction of Infant Mortality Rate from the present level of 87 to below 60 by 2000 AD

ii) To raise the life expectancy at birth from present level of 58 years to 64 by 2000 AD

iii) To reduce the crude death rate from the present level of 10.4 to 9 by 2000 AD

iv) To reduce the crude birth rate from present level of 27 to 21 by 2000 AD

v) To achieve a net reproduction rate of 1 by 2000 AD

vi) To provide potable water to the entire rural population by 2000.

Table-1
National Health Policy Goals for Health and Family Welfare Programmes

S. No.	Index	Existing level	Targets	
			1990	2000 AD
1	2	3	4	5
1.	Crude Birth Rate	32.0 (1987)	27.0	21.0
2.	Crude Death Rate	10.8 (1987)	10.4	9.0
3.	Infant Mortality Rate	95.0 (1987)	87	Below 60
4.	Perinatal Mortality Rate	53.8 (1985)		30-35
5.	Maternal Mortality Rate, MMR	4-5 (1976)	2-3	Below 2
6.	Pre-school Child (1-5 yrs) Mortality Rate	24 (1976-77)	15-20	10
7.	Life expectancy at birth (yrs)*	58.1 M (1986-91) 59.1 F (1986-91)	57.6 M 57.1 F	64 yrs M 64 yrs F
8.	Percentage effective couple protection	39.9 (March 1988)	42.0	60.0
9.	Net Reproduction Rate	1.48 (1981)	1.17	1.00
10.	Natural Growth Rate (Annual)	2.12 (1987)	1.56	1.20
11.	Family size	4.4 (1975)		2.3
12.	Percentage of deliveries by trained birth attendants	40-50 (1988)	80	100
13.	Pregnant mothers receiving ante-natal care (%)	60 (1988)	60-75	100
14.	Immunization Status, percentage coverage			
	a. TT (pregnant mothers)	86.6	100	100
	b. TT (School Children 10 years)	88.7	100	100

Contd..

	c. TT (School Children 16 years)	86.5	100	100
	d. DPT (Children below 3 yrs)**	96.0	85	85
	e. Polio (infants)***	83.5	70	85
	f. BCG (infants)****	94.3	80	85
	g. DT (New school entrants 5-6 yrs)*****	87.5	85	85
	h. Typhoid (New school entrants 5-6 yrs)	62.6	85	85
15.	Leprosy: percentage of disease arrested cases out of those detected******	20(1988-89)	60	80
16.	TB: percentage of disease arrested cases out of those detected	62 (1987-88)	75	90
17.	Blindness, incidence of (%)	1.4 (1987-88)	0.7	0.3

* When the health policy was formulated, life expectancy was 52.6 for males and 51.6 for females.

** Coverage was 25% when the Health Policy was drafted.

*** Coverage was 5% when the Health Policy was drafted.

**** Coverage was 65% when the Health Policy was drafted.

***** Coverage was 20% when the Health Policy was drafted.

****** Implies the no. of cases cured after 1983, expressed as a proportion of the total estimated 4 million cases.

Note: (1) The Planning Commission set the following goals in addition to the above

	1985	1990	2000
Birth weight below 2500g	25%	18%	10%
Vitamin A distribution coverage	50%	50%	50%

You must be aware that during the sixth and seventh Five Year Plans, steps were already undertaken to implement the strategies outlined in National Health Policy. Some of these are:

a) to establish one health subcentre for every 5,000 rural population (3,000 in tribal and hilly areas) with one male and female health worker

b) to establish one primary health centre for every 30,000 rural population (20,000 in hilly and tribal areas)

c) to establish Community Health Centres (CHC) each serving a population of one lakh

d) to train Village Health Guides (VHG) selected by the community for every village or 1,000 rural population

e) to train traditional birth attendants (TBA) or dais in each village

f) training of various categories of health personnel, e.g., multipurpose workers (MPW).

These schemes are expected to ensure the availability of adequate infrastructure and medical and paramedical manpower to take us nearer the goal of universal provision of Primary Health Care as envisaged in the National Health Policy.

Activity

Mention the rates in numbers against each indicator given below as per the latest Health Statistics Report of your state

i) Infant mortality rate .....

ii) Maternal mortality rate .....

iii) Birth rate .....

iv) Death rate .....

v) Literacy rate .....

vi) Population .....

Check Your Progress 3

Fill in the blanks:

i) The basic strategy to achieve health for all is .....

ii) Ministry of Health and Family Welfare (India) formulated National Health Policy to achieve goal of HFA in .....

iii) The most important indicators to monitor progress towards Health For All are:

.....

.....

.....

.....

With the above background we shall now focus our attention on nursing in support of Health For All in the following section.

3.4 NURSING IN SUPPORT OF HEALTH FOR ALL

We shall begin with the development of the role of nursing in support of Health For All.

In 1979, WHO and International Council of Nurses (ICN) conducted a workshop in Nairobi on the role of nursing in Primary Health Care for leaders of Nurses Associations in which the commitment of the nursing profession to the goal of attaining Health For All by 2000 was formally confirmed. Subsequently, National Nurses Association planned their own strategies in relation to their own National Health Policies. The Trained Nurses Association of India (TNAI) also participated in this exercise.

In 1981, an informal meeting was convened in Geneva by WHO on 16-20 November to consider the role of nursing in contributing to the achievement of the goal of HFA/2000 through Primary Health Care.

Strategies and actions proposed for change at international and national level are discussed in the following sub-sections.

3.4.1 Strategies and Action Proposed at International Level

Five basic strategies have been proposed by the WHO-ICN meeting by Nurses which are listed below. (See Fig. 1.)

i) the development in each country of a corps of nurses that is well informed about health care and ready to bring necessary changes in the nursing system

ii) the inclusion of nursing personnel at all levels of policy making and administration so that the profession can contribute to determining the action plan

iii) the involvement of nurses, and the use of their skills, in initiating or extending primary health care

iv) fundamental changes at all levels of nursing education (basic, post-basic and continuing) to ensure that the priority needs of population are functionally integrated into the education and into nursing practice

v) research into nursing administration practice, and education, that will demonstrate nursing's contribution to primary health care.

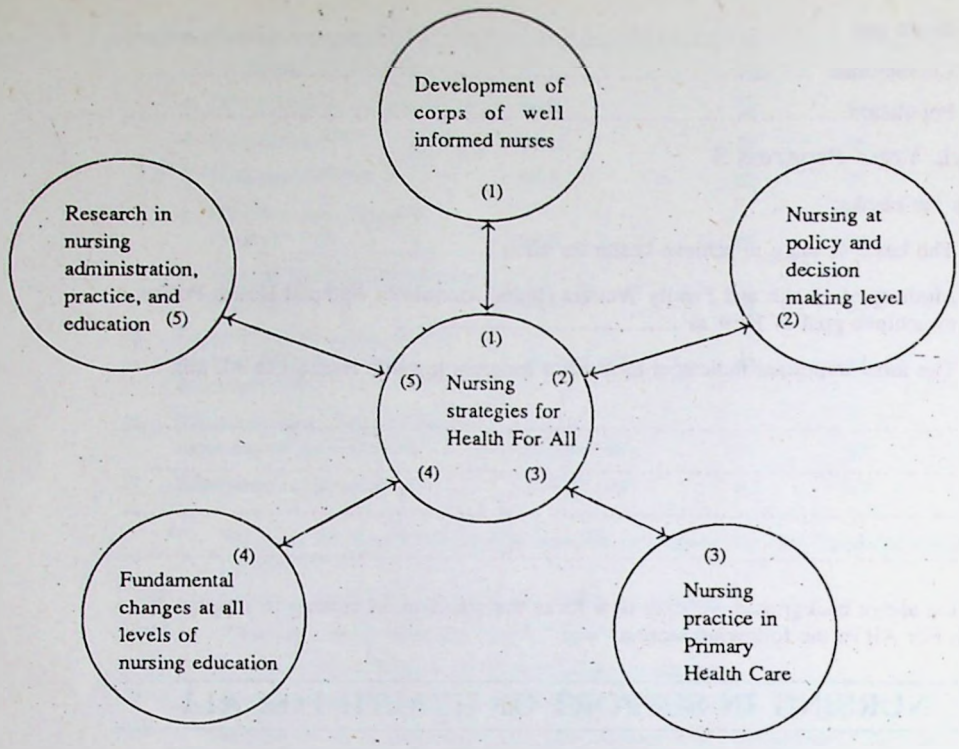

Fig. 1: Five strategies for change adapted by National Nurses Associations for their role in HFA through PHC

We have listed the strategies for change. We shall now learn about the actions proposed for each strategy as given below.

i) **Development of corps of well-informed Nurses**

This will require

a) arranging and developing a series of international, national and regional workshops or other meetings, that would bring together small groups of key nurses for orientation and guidance in planning for primary health care in their own country. The purpose of these workshops would be!

- To help the nurses to understand the thrust of PHC nationally and internationally
- To interpret needs of these countries in their struggle for HFA/2000 and enable them to develop over all nursing plans of action at local, regional, and national level, taking into account local needs and resources
- To establish the regional support system and lines of communication between and among countries for sharing plans, exchanging methodologies and report on the progress as the plan is further developed and put into effect.

b) Develop texts, guides and communication aids, which will include review of current publications related to PHC and production of specific material on nursing in PHC.

ii) **Nursing at policy and decision making levels**

- This will require planning and implementing training programmes and continuing educational programmes that will orient nurses and train them in administration and management techniques, political and legislative processes, and help them to analyse existing legislation and enable them to develop action programmes to bring about necessary changes.
- Creation of administrative post in nursing at all levels of Government. This can be accomplished through coordinated efforts of national nursing associations.

- Establishing a system for collection and compilation of information, on the supply and training of nurses as per the needs of community.

iii) Nursing practice and primary health care

This calls for preparing and educating the nurses to assume responsibility for the provision of first level care in the community. This can be achieved by

- conducting workshops, seminars and other continuing or in-service education programmes,
- encouraging the Nurses to practice Primary Health Care.
- providing facilities like housing, attractive remuneration and opportunity for continued learning to the public health nurses working at the periphery.
- making efforts to close the existing gap between nursing education and nursing services.

iv) Fundamental changes at all levels of nursing education

This will require the administrative support from the national and local government in order to change the system of nursing education.

This change involves reorientation in basic nursing education, post-basic nursing education and organizing continuing education programmes.

Basic Nursing Education

This will include

- Change of curriculum for current systems of nursing education and practice, and
- Formulating strategies for bringing about a change in basic nursing education from emphasis on care of sick individuals in hospitals to community based nursing education.

Post-basic Nursing Education

This will involve

- Preparation of nurses for leadership roles in administration for supervisory posts in organizations and agencies at all levels of health care planning and management, and for teaching post in primary health care.
- Preparation of nurse researchers who can conduct or direct investigations into Primary Health Care (PHC) issues as well as encourage systemic inquiry into questions related to community based nursing practice.

Continuing Education

This involves:

Organising workshops, seminars and in-service programmes to enable nurses to acquire additional knowledge and skills related to PHC.

v) Research in nursing administration, practice and education for primary health care

This needs inclusion of research skills in all the nursing education programmes and continuing education programmes. Nurses at all levels should develop an enquiring and problem solving attitude for working towards the goal of PHC.

Priority should be given to research into

- the design and evaluation of programmes in which nurses provide primary health care, and
- study of problems that arise from the nursing in primary health care field.

Government and intersectoral support should be sought for proposals that will enable nurse to initiate and/or collaborate with others in research methods and design for Primary Health Care (PHC).

Develop projects to demonstrate usefulness of research findings in nursing practice.

You may have got a good idea of our discussion about nursing strategies and actions proposed in support of health for all. Before moving to the next subsection, have a look at a brief summary of what you have learnt in the above subsection from the following Table 2.

Table 2: Strategies and Action Proposed

Strategies	Action proposed
i) Develop a corps of nurses that is well informed about PHC and ready to bring necessary changes in the nursing system	• Arrange series of workshops. • Develop texts, guides and communication slide. • Planning training programme
ii) Inclusion of nursing personnel at all levels of policy making & administration so that the profession can contribute to determine the action to be taken	• Orient nurses in political and legislative processes • Creation of administrative positions in nursing at all levels of Government • Establishing systems for of information on the supply training of nurses as per the community needs
iii) Involvement of nurses and the use of their skills in initiating & extending PHC	• Preparation of nurses to assume responsibility for the provision of first level care in the community • Encourage nurses for the practice of PHC • Provide facilities for nurses working at periphery • Utilize approaches to close the gap between nursing education & nursing services
iv) Fundamental changes at all levels of nursing education to ensure that the priority needs of population are functionally integrated into education and into nursing practice	• Obtain administrative support • Reorientation in basic nursing education • Reorientation in post-basic nursing education • Organizing continuing education
v) Research into nursing administration, practice & education that will demonstrate the need for nursing's contribution to PHC, clarify the implications and evaluate the results	• Include research in postgraduate programme • Find Government and intersectoral support • Develop projects to demonstrate usefulness of research in nursing practice

3.4.2 Strategies and Actions Proposed at National Level

We discussed the strategies proposed by International Council of Nurses. Now we shall turn our attention towards the action taken by our National Nursing Associations (TNAI) in this regard.

A Conference on Primary Health Care was held by the TNAI in 1979 at Chandigarh, to propose various actions in support of health for all by nurses.

The nurses resolved and recommended to reorient and restructure various nursing education programmes towards primary health care and also upgrading nursing education to university level academic programme to prepare nurses who can provide primary health care. The major resolutions and recommendations made in the conference are:

i) **Resolutions adopted**

- The association to organize continuing education programme for nurses at national, state and city level, on Primary Health Care.
- The Public Health Nurses of the association to plan regional workshops and give directions to implement Primary Health Care in a coordinated way.

- The student nurses of the association to organize school health services and MCH Clinics in selected rural areas of slums and practice meeting the Primary Health Care needs of the family and community while they are still under training.
- The nurses association to take action for reserving two thirds of the posts of health supervisors created at the district, subdivisional and at the block levels, for registered nurses-midwives to practice primary health care.
- To urge Central and State Governments to create positions for registered nurses at the block level and above.
- To urge the State Governments to create posts at the State Directorate of Health Services, as is the pattern in West Bengal to strengthen Primary Health Care at state level.

ii) **Recommendations**

- Period of clinical practice for students in public health field be increased to **six months** from **three months.**
- Teachers in the nursing school/college to be reoriented to the Primary Health Care concept.
- The reorientation course be at least of three months duration.
- There should be more nurse administrations at the state and central directorate of health services.
- That more posts should be created at the district and block Primary Health Centre, and sub-centre level for general nurses-midwives (GNM).

3.5 LET US SUM UP

You have studied the concept and definition of health for all by the year 2000 AD. This implies "attainment of a level of health that will enable every individual to lead a socially and economically productive life." This concept has emerged out of the fact that existing health care approach was not able to solve the health problems mainly in developing countries including India and there is gross inequality in health service distribution within a country and among countries. You have also learnt about the global strategy which defines the broad lines of action to be undertaken at policy and operating levels, nationally and internationally. This focuses on that 1) health a fundamental human right, 2) reduction of gross inequalities in health status, 3) participation of people in their own care, and 4) self-reliance of communities in health matters.

We have focussed our discussion on national strategy that resulted in the formulation of national health policy in 1983 with laid down specific targets and goals to be achieved by the year 2000 AD. This is to be considered in relation to various health indicators like, infant mortality rate, maternal mortality rate, immunization, safe water supply and demographic data like crude death rate, and birth rate and net reproductive rate. At the end of the discussion we have appraised you of the role of nurse in support of health for all where we have discussed the strategies and actions proposed for achieving the goal.

These are

1) Development of corps of well-informed Nurses
2) Nurses at policy and decision making devels
3) Nursing practice and primary health care
4) Fundamental changes at all levels of nursing education
5) Research in nursing administration, practice and education for primary health care.

Finally we have talked about the actions taken by National Nursing Associations and Organizations for achieving the goal of Health For All where we focussed on recommendations and resolutions passed by our National Nursing Association. The main recommendation and resolution was to restructure and reorient the nursing education system as a whole towards PHC and HFA.

3.6 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

i) c

ii) a) cause of death and disease
b) nutritional status
c) water supply and sanitation
d) literacy and economic situation
e) demographic trends

Check Your Progress 2

i) community

ii) poverty; malnutrition; ignorance; disease; contaminated water supply; poor housing; etc.

iii) agriculture, industry, education, housing and communication

iv) the attainment of a level of health that will enable every individual to lead a socially and economically productive life.

Check Your Progress 3

i) Primary Health Care

ii) 1982

iii) Infant mortality rate (IMR)
Maternal mortality rate (MMR)
Crude death rate (CDR)
Crude birth rate (CBR)
Net reproductive rate (NRR)
Life expectancy

UNIT 4 ORGANIZATION OF HEALTH SYSTEM BASED ON PRIMARY HEALTH CARE

Structure

4.0 OBJECTIVES

In this Unit you will learn about organisation of Health System based on Primary Health Care (PHC). After studying this unit you should be able to:

- Define the health system,
- List the characteristics of health system,
- Describe the organizational structure of health system, at Central, State and District levels, and
- Explain the health system infrastructure based on Primary Health Care.

4.1 INTRODUCTION

In Unit 1 you revised and reviewed the concept of health which is "a complete state of physical, mental and social well-being and not merely the absence of disease or infirmity." (WHO 1946). Second Unit dealt with concepts and principles of Primary Health Care. In Unit 3 you have learnt that in 1977 thirtieth World Health Assembly decided that main target of governments and WHO in the coming decades should be to achieve goal of Health For All by the year 2000 AD.

In this Unit we shall discuss the definition and essential characteristics of health system. Health system intends to develop its own health care delivery system independent of the Central Government.

We shall also focus our attention on health system infrastructure at Central, State and District levels. And at the end we shall introduce you to the health care system/ infrastructure based on Primary Health Care which mainly focuses on rural health services.

Let us begin with the definition and characteristics of health system.

4.2 MEANING AND CHARACTERISTICS OF HEALTH SYSTEM

Health system can be broadly defined as coherent whole of many interrelated component parts, both sectoral and inter-sectoral, as well as community itself, which produces a combined effect on the health of the population. Health system should consist of coordinated parts extending to the home, the work place, the school and community.

If you try to understand the above definition you will be interested to learn that what are interrelated component parts. **The components of health system** include **concepts** (e.g. health and disease), **ideas** (e.g. equity coverage, effectiveness, efficiency, impact), **objects** (e.g. hospitals, health centres, health programmes) and **persons** (e.g. providers and consumers). Together these form a unified whole in which all the components interact to support or control one another. Of all these components discussed here we shall mainly highlight the objects and persons (health system infrastrucure).

The health system aims at delivering the health services to the beneficiaries. It constitutes the management sector and involves organisational matters, and also in allocating resources, translating policies into services, evaluation and health education.

The aim of health system is **health development** which includes continuous and progressive improvement of the health status of a population, i.e. community.

Health system encompasses promotive, preventive, curative and rehabilitative aspects and also caters care of the extremely disabled and incurable.

Hope you have now understood the meaning of health system as discussed above. We shall now turn our attention towards the essential characteristics of the health system as given below.

These characteristics/principles are applicable to all health system based on primary health care.

- The system should encompass the entire population on the basis of equality and responsibility. It should include components from the health sector and from other sectors, whose interrelated actions contribute to health (e.g. education sector, public works, animal husbandry and agriculture sector etc). Health is a subject of overall socioeconomic mileu of the community.
- Primary health care, consisting of at least the essential elements included in the declaration of Alma-Ata should be delivered at the first point of contact between individuals and health system. (See Unit 2, Section 2, for reference of essential elements of PHC.)
- At intermediate levels more complex problems should be dealt with and more skilled and specialized care as well as logistic support should be provided.
- Better trained staff, i.e., supervisory staff, should provide continuing education/ training to primary health care workers, as well as guide the public of different communities and community health workers on practical problems arising in connection with all aspects of primary health care.
- The central level should coordinate all parts of the system and provide planning and management expertise. It should also provide highly specialized care, teaching for specialized staff, the staffing of such institutions (as central laboratories), and central logistic and financial support.

If you think deeply for a while and analyse what does these above mentioned characteristics indicate? These clearly indicate that health system is not a separate entity. It includes components and actions not only from the health sector but also from other health related sectors such as agriculture, education, environment, animal husbandry communication etc., at various levels (central, intermediate and local). We shall discuss this in the following sections.

Check Your Progress 1

i) Fill in the blanks:

a) Health system is defined as coherent whole of many ..... parts, both sectoral and ..... as well as community itself.

b) Health system aims at ..... the health services.

c) Health system constitutes management sector and involves ..... matters.

d) The aim of health system is health .....

ii) List the characteristics of health system.

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4.3 STRUCTURAL ORGANIZATION OF HEALTH SYSTEM

You know that health system in India is organized at three levels. i.e. Central level, State level and District level.

Let us begin with organization at Central level.

4.3.1 Organization at Central Level

The official "organs" of the health system at the national level consist of :

i) The Ministry of Health and Family Welfare (MHFW);

ii) The Directorate General of Health Services (DGHS); and

iii) The Central Council of Health and Family Welfare.

We shall talk of the organization and functions of each one of them.

i) Ministry of Health and Family Welfare

Organization

The Union Ministry of Health and Family Welfare is headed by a Cabinet Minister, a Minister of State and a Deputy Health Minister. These are political appointments. Currently, the Union Health Ministry has two broad departments:

- Department of Health, and
- Department of Family Welfare.

The Health Department is headed by a Secretary to the Government of India as its executive head who is an IAS officer and is assisted by joint secretaries, deputy secretaries and a large administrative staff. The Department of Family Welfare was created in 1966 within the Ministry of Health and Family Welfare. The Secretary to the Govt. of India in the Ministry of Health and Family Welfare is in overall charge of the Department of Family Welfare. He is assisted by an Additional Secretary & Commissioner (Family Welfare), and one Joint Secretary.

Functions

The functions of the Union Health Ministry are set out in the Seventh Schedule of Article 246 of the Constitution of India under (a) the Union List and (b) the Concurrent list.

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Functions

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Health is basically a State subject, though policy planning and decision making are at Centre level and responsibility for execution/implementation of the health programmes lies with the State and Union Territories. At present India has 25 full-fledged States and 7 Union Territories.

a) **Union List:** The functions given in the Union List are:

- Administration of central institutes such as the All India Institute of Hygiene and Public Health, Calcutta; National Institute for the Control of Communicable Diseases, Delhi etc.,
- Promotion of research through apex research bodies (ICMR) and other bodies,
- **REGULATION AND DEVELOPMENT OF MEDICAL, PHARMACEUTICAL, DENTAL AND NURSING EDUCATIONAL AND PROFESSIONAL INSTITUTIONS,**
- Establishment and maintenance of drug standards,
- Census and collection and publication of other statistical data,
- Immigration and emigration,
- Regulation of labour and the working of mines and oil fields,
- Coordination with States and with other ministries for promotion of health, and
- International health.

b) **Concurrent List:** The functions listed under the concurrent list are the responsibility of both the Union and State Governments. The Centre and the States have simultaneous powers of legislation; the powers of the state are restricted to the framework of such legislation as may be undertaken by the Centre. The concurrent list includes:

- Prevention of extension of communicable diseases from one unit to another
- Prevention of adulteration of foodstuffs
- Control of drugs and poisons
- Vital statistics
- Labour welfare
- Ports other than major
- Economic and social planning, and
- Population control and family planning.

ii) Directorate General of Health Services

Organization

The Director General of Health Services is the principal adviser to the Union Government in both medical and public health matters. He is assisted by an Additional Director General of Health Services, a team of deputies and a large administrative staff. The Directorate comprises three main units, e.g., medical care and hospitals, public health and general administration.

Functions

The specific functions of Directorate General of Health Services (DGHS) are the organization and administration of:

- International health relations and quarantine
- Control of drugs standards
- Medical stores depots
- Post graduate training
- Medical Education
- Medical Research
- National Health Programmes

- Central Health Education Bureau
- Health intelligence
- National Medical Library

We shall now highlight the specific functions of DGHS covered in each area of the above mentioned list of functions.

International health relations and quarantine

- Direct control of all the major ports of country like Calcutta, Visakhapatnam, Madras, Cochin, Bombay and Kandla and international air ports (Bombay-Santacruz, Calcutta-Dum Dum, Madras-Meenambakkam, Tiruchirapalli, Delhi-Palam).
- Undertaking all the matters relating to the obtaining of assistance from international agencies and coordination of their activities in the country.

Control of drugs standard

Functions of DGHS under this are:

- Lay down and enforce drugs standards and control the manufacture and distribution of drugs through both central and state government offices.
- Test the quality of imported drugs as per Drugs Act (1940).

Medical stores depots

- Union Government runs medical stores depots at Bombay, Madras, Calcutta, Karnal, Gauhati and Hyderabad. The functions undertaken by these depots are: Supply the civil medical requirements of the Central Government and of the various state Governments. Handle supplies from foreign agencies.

Post-graduate training

- Administration of national institutes which provide training to different categories of health personnel. Some of these institutes are All India Institute of Mental Health at Bangalore, RAK College of Nursing at Delhi, National Tuberculosis Institute at Bangalore, National Institute of Communicable Diseases at Delhi, Central Institute of Health and Family Welfare at Delhi, etc.

Medical education

- DGHS is directly in charge of Medical Colleges like the Lady Hardinge, the Maulana Azad, and the JIPMER at Pondicherry, and Goa.
- Guiding and supporting of other medical colleges in the country.

Medical Research

- Organization and financing of Medical Research in the country through the Indian Council of Medical Research (ICMR). The Council performs following functions in Medical Research
- Aiding, promoting and coordinating scientific research on human diseases, their causation, prevention and cure. The research work is carried through several permanent research institutes such as Cancer Research Institute at Bombay, Tuberculosis Chemotherapy Centre at Madras, Virus Research Centre at Poona, National Institute of Nutrition at Hyderabad etc.

National Health Programmes

- The Central Directorate plays a very important part in planning, guiding and coordinating at all the national health programmes like malaria eradication, control of tuberculosis, filaria, leprosy, sexually transmitted disease (STD) etc. in the country.

Central Health Education Bureau (CHEB)

- Preparation of education material for creating health awareness among people

- Offering training courses in health education to different categories of health workers.

Health Intelligence

- Administration of Central Bureau of Health Intelligence which performs the functions like collection, compilation, analysis, evaluation and dissemination of all information on health statistics for the nation as a whole
- Disseminate epidemic intelligence to states and international bodies.

National Medical Library

- Earlier (i.e. before 1966) this Library was called Central Medical Library of Directorate General of Health Services.
- The function of this Library is to help in advancement of medical health and related sciences by collection, dissemination and exchange of information.

iii) Central Council of Health

The Central Council of Health was set up by a Presidential Order on 9 August, 1952 under Article 263 of the Constitution of India. The council was set up for promoting coordinated and concerted action between the Centre and the States in the implementation of all the programmes and measures pertaining to the health of the nation. The Union Health Minister is the Chairman and the State Health Ministers are its members.

Functions

The functions of the Central Council of Health are:

- To consider and recommend broad guidelines of policy matters concerning health in all its aspects such as the provision of remedial and preventive care, environmental hygiene, nutrition, health education and the promotion of facilities for training and research.
- To make proposals for legislation in fields of activity relating to medical and public health matters and to lay down the pattern of development for the country as a whole.
- To make recommendations to the Central Government regarding distribution of available grants-in-aid for health purposes to the States and to review periodically the work accomplished in different areas through the utilisation of these grants-in-aid.
- To establish any organization invested with appropriate functions for promoting and maintaining cooperation between the Central and States health administrations.

Check Your Progress 2

Fill in the blanks:

i) The official organising health system at the national level consists of

a) .....

b) .....

c) .....

ii) Director General of Health Services is the advisor to the ..... in both medical and public health matters.

iii) Central Council of Health was set up for promoting coordinated and concerted action between ..... and ..... in the implementation of all the programmes and measures pertaining to the ..... of the nation.

So far we discussed the organisation at Central level. Now we shall turn our attention to the organisation at State level.

4.3.2 State Level

At present there are 25 States in India and as many types of health administration. In all the States, the management sector comprises the i) Ministry of Health, and ii) Directorate of Health.

i) State Ministry of Health

Organization

The State Ministry of Health is headed by a Minister of Health and Family Welfare. The Health Secretariate is the official organ of the State Ministry of Health and is headed by a Secretary who is assisted by Deputy Secretaries, Under Secretaries and a large administrative staff. The Secretary is a senior officer of the Indian Administrative Service.

ii) State Health Directorate

The Director of Health Services (known in some States as Director of Medical and Health Services) is the chief technical advisor to the State Government on all matters relating to medical and public health. He is also responsible to the organization and direction of all health activities.

The Director of Health and Family Welfare is assisted by a suitable number of deputies and assistants. The Deputy and Assistant Directors of Health may be of two types, regional and functional. The Regional Directors inspect all the branches of public health within their jurisdiction, irrespective of their speciality. The Functional Directors are usually specialists in a particular branch of public health such as mother and child health, family planning, nutrition, tuberculosis, leprosy, health education etc.

Functions

The state has the responsibility of administration for all the health services operating within its jurisdiction. The responsibility of state includes, provision of medical care, preventive health services and pilgrimages within the state. These are functions included in state list.

Check Your Progress 3

i) Fill in the blanks:

Director of Health Services is the chief ..... to the State Government on all matters relating to ..... and .....

Activity 1

Identify the organization structure of health and family welfare in your state and present it diagrammatically.

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Hope you have understood the organization of health system at Central and State level. Now we shall discuss the organisation at district level.

4.3.3 District Level

The principal unit of administration in India is the district under a Collector. There are more that 430 districts in India. Within each district again, there are 6 types of administrative areas:

1) Sub-Divisions
2) Tehsils (Taluka)
3) Villages
4) Municipalities and Corporations
5) Community Development Blocks
6) Panchayats

Most districts in India are divided into two or more sub-divisions, each in charge of an Assistant Collector or Sub-Collector. Each division is again divided into tehsils (Taluka), in charge of a Tehsildar. A Tehsil usually comprises urban and rural areas. Urban areas are divided into Municipalities/Corporations depending on the population which is headed by Chairman/Mayors. The community development blocks are headed by Block Development officers and Panchayats are the local bodies.

Health Organisation at District Level

Since "Health" is a State subject, there is no uniform "model" of a district health organization in India, each State has developed its own pattern to suit its policy and convenience.

Under the Multi-purpose Workers Scheme, it has been suggested to the States to have an integrated set-up at the district level by having a Chief Medical Officer (CMO) with three Deputy CMOs (existing Civil Surgeons, District Health Officers and District Family Welfare Officers), each of the Deputy CMOs being incharge of one-third of the district for all the Health, Family Welfare and MCH programmes. The recent working group on Health for All by 2000 AD, appointed by the Planning Commission, recommended that the District Hospitals should be converted into District Health Centres, each centre monitoring all preventive, promotive and curative services of **one million** population. It has been recommended that the district set up should be reorganised on the basis of the number of primary health centres it comprises.

Community Health Centres

Community health centres have been established by upgrading few of the primary health centre. Each community health centre covers a population of **one lakh** (one in each community development block) with 30 beds with specialists in surgery, medicine, obstetrics and gynaecology, and paediatrics with X-ray and laboratory facilities. For strengthening preventive and promotive aspects of health care, a new non-medical post called community health officer has been created at each community health centre. The community health officer is selected from amongst the supervisory category of staff at the PHC and district level with minimum of 7 years experience in rural health programmes. Some states have not accepted this scheme and have opted for a second medical officer.

The specialists at the community health centre may refer a patient directly to the state level hospital or the nearest/ appropriate Medical College Hospital, as may be necessary, without the patient having to go first to the sub-divisional or district hospital.

Check Your Progress 4

Fill in the blanks:

i) Health officer incharge of district is called .....

ii) The functions of Deputy Chief Medical Officer are:

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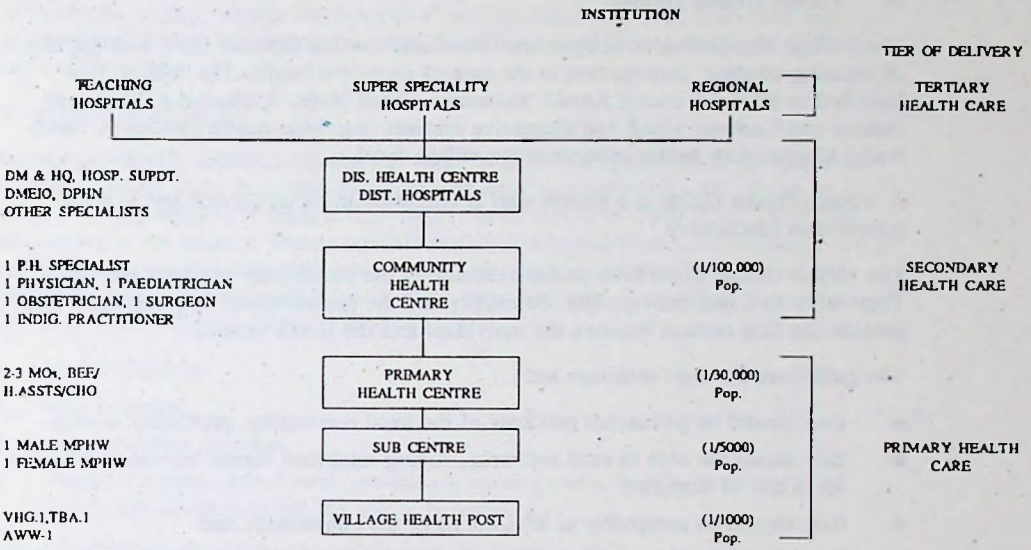
Before we discuss the infrastructure of health system based on Primary Health Care let us have a look at the illustration given below. This will give you an overview of health

care delivery system at three levels of health care i.e. primary, secondary and tertiary levels. As you know a full range of primary health care (first level contact of individual, family and community health system) are being rendered through the agency of primary health centres.

Secondary Health Care is being provided through the establishment of Community Health Centres (upgraded primary health centres covering a population of 1 per 100,000) sub-divisional and district hospitals where all basic speciality services are being made available.

Tertiary care is being provided at Regional Hospitals, Teaching Hospitals and super speciality hospitals where super speciality services including sophisticated diagnosis, specialized therapeutic and rehabilitative services are available.



The present nursing structure since Independence is not well organised and it has remained stagnat. In order to keep the desired pace with the expansion of the health services in the country, a memorandum was submitted to the high power committee on Nurses and nursing profession by the Trained Nurses Association of India, on behalf of the nurses in India, to improve the organisational structure and nursing services (see Appendix 3).

4.4 STRUCTURAL ORGANIZATION OF HEALTH SYSTEM BASED ON PRIMARY HEALTH CARE

As a signatory to the Alma-Ata Declaration, the Government of India is committed to achieve the goal of Health for All through primary health care approach. Keeping in view the goal of "Health for All" by 2000 AD, the National Health Policy has laid down a plan of action for reorienting and shaping the existing rural health infrastructure within the framework of Sixth (1980-88) and Seventh (1985-90) Five Year Plans. The establishment of primary health centres in our country in 1952 under the Community Development Programme has been a valuable national asset in our efforts to increase the outreach of our health system based on primary health care.

The rural health infrastructure is based on a 3 tier system of services, provided at three levels

i) Village level
ii) Subcentre level
iii) Primary Health Centre level

We shall discuss organization of health system at all the three levels as given below. Let us begin with health organization at village level.

4.4.1 Village Level

One of the basic aims of primary health care is universal coverage and equitable distribution of health resources. That is, health care must be available and accessible to rural areas, and that everyone should have access to it. Based on this aim, the health organization at village level includes the following:

a) Village Health Guides

b) Local Dais

c) Anganwadi Workers

a) Village Health Guides

The Village Health Guides Scheme was introduced on 2nd October 1977 with the idea of securing peoples' participation in the care of their own health. The scheme was launched in all states except Kerala, Karnataka, Tamil Nadu, Arunachal Pradesh and Jammu and Kashmir which had alternative systems (e.g. Mini-health Centres in Tamil Nadu) of providing health services at the village level.

A Village Health Guide is a person who is interested in social service and is not a government functionary.

The Health Guides come from and are chosen by the community in which they work. They serve as a link between the community and the governmental infrastructure. They provide the first contact between the individual and the health system.

The guidelines for their selection are:

- they should be permanent residents of the local community, preferably women
- they should be able to read and write, having minimum formal education at least up to the VI Standard
- they should be acceptable to all sections of the community, and
- they should be able to spare at least 2 to 3 hours every day for community health work.

After selection, the Health Guides undergo a short training in primary health care. The training is arranged in the nearest primary health centre, subcentre of any other suitable place for the duration of 200 hours, spread over a period of 3 months. During the training period, they receive a stipend.

On completion of training, they receive a training manual and a kit of simple medicines belonging to the modern and traditional system of medicine in vogue in that part of the country they belong.

Broadly the duties assigned to health guides include

- treatment of minor ailments and provide first aid,
- mother and child health including family planning, and
- health education and sanitation.

The manual or guidebook gives them detailed information about medical care of common illnesses — of what they can and cannot do. In practical terms, they know exactly what should be done when confronted with a situation. They are already aware when they should begin treatment by themselves and when they should refer the patient immediately to the nearest health centre.

b) Local Dais

Under the Rural Health Scheme based on the principle of "placing people's health in people's hands" (Shrivastav Committee, 1975) is an extensive programme to train all categories of local dais (Traditional Birth Attendents (TBA)) in the country to improve their knowledge in the elementary concepts of maternal and child health and sterilization, besides obstetric skills. The training is for 30 working days. Each dai is

paid a stipend of Rs 300 during her training period. Training is given at the PHC, subcentre or MCH centre for 2 days in a week, and on the remaining four days of the week they accompany the Health Worker (Female) (HW (F)) to the villages preferably in the dai's own area. During her training each dai is required to conduct at least 2 deliveries under the guidance and supervision of the HW(F), ANM or Health Assistant (F). The emphasis during training is on asepsis so that home deliveries are conducted under safe hygienic conditions thereby reducing the maternal and infant mortality.

After successful completion of training, each dai is provided with a delivery kit and a certificate. She is entitled to receive an amount of Rs.2 per delivery provided the case is registered with the subcentre/PHC. To each infant registered by her, she will receive Rs 3. These dais are also expected to play a vital role in propagating small-family norm since they are more acceptable to the community. Although the national target is to train one local dai in each village, the Seventh Five Year Plan's objective is to train all untrained dais practising in the rural areas. Total number of dais trained from 1974 to date is 5.44 lakhs.

c) Anganwadi Worker

Anganwadi literally means a courtyard. Under the ICDS (integrated child development services) scheme, there is an anganwadi worker for a population of 1000. There are about 100 such workers in each ICDS project. As of date over 1600 ICDS blocks are functioning in the country. The anganwadi worker is selected from the community she is expected to serve. She undergoes training in various aspects of health, nutrition, and child development for 4 months. She is a part-time worker and is paid an honorarium for the services rendered. These services include

- health check up
- immunization,
- supplementary nutrition,
- health education (non-formal, pre-school, nursing mothers, other women (15-45 years) and children below the age of 6 years).

Alongwith Village Health Guides, the anganwadi workers are the community's primary link with the health services and all other services for young children.

4.4.2 Sub-Centre Level

The subcentre is the peripheral outpost of the existing health delivery system in rural areas. They are being established on the basis of one subcentre for every 5000 population in general and one each in every 3000 population in hilly, tribal and backward areas. As of date 102,160 subcentres have been established in the country. The total requirement is estimated to be 1.38 lakhs.

Each subcentre is manned by one male and one female health workers. At present the functions of a subcentre are limited to mother and child health, family planning and immunisation. The job responsibilities of HW(F) and HA(F) are given in Appendix 4.

It is proposed to extend the facilities at all subcentre for IUD insertion, and simple laboratory investigations like routine examination of urine for albumin and sugar. The work at subcentres is supervised by male and female health assistants. According to the revised norm, one female HA will supervise the work of 6 female HWs.

4.4.3 Primary Health Centre Level

All of us are now aware about the concept of Primary Health Centre (PHC) and we hope you all must had an opportunity to work or visit PHC. The Bhore Committee in 1946 gave the concept of a primary health centre as a basic health unit, to provide, as close to the people as possible, an integrated curative and preventive and promotive aspects of health care to the rural population with emphasis on preventive and promotive aspects of health care.

The Bhore Committee aimed at having a health centre to serve a population of 10,000 to 20,000 with 6 medical officers, 6 public health nurses and other supporting staff. But

in view of the limited resources, the Bhore Committee's recommendations could not be fully implemented, even after a lapse of 40 years.

The primary health centre and its subcentres have been visualized as the proper infrastructure to provide health services to the rural population and to achieve goal of HFA. The Declaration of Alma-Ata Conference in 1978 setting the goal of Health for All by 2000 AD for health services focuses on the new approach to health care delivery system which is based on a new philosophy of equity, and a new approach, the primary health care approach. The National Health Policy (1983) proposed reorganization of primary health centres on the basis of one PHC for every 30,000 rural population in the plains, and one PHC for every 20,000 population in hilly, tribal and backward areas for more effective coverage.

Functions of the PHC

The functions of the primary health centre in India cover all the essential elements of primary health care as outlined in the Alma-Ata Declaration. They are:

1) Medical care
2) MCH including family planning
3) Safe water supply and basic sanitation
4) Prevention and control of locally endemic diseases
5) Collection and reporting of vital statistics
6) Education about health and nutrition
7) National Health Programmes like Malaria, Filaria, Leprosy, Tuberculosis, STD, AIDS etc.
8) Referral services
9) Training of health guides, health workers, local dais and health assistants
10) Basic laboratory services

It is proposed to equip the primary health centres with facilities for selected surgical procedures (e.g. vasectomy, tubectomy, MTP and minor surgical procedures) and for paediatric care. In order to reorient medical education towards the needs of the country and community care, three primary health centres have been attached to each of the 106 medical colleges.

Staffing pattern

At present in each community development block, there is one PHC which covers 100,000 or more population. By the year 1990, one PHC is envisaged for every 30,000 population. In the new set-up each PHC will have the following staff:

At the PHC Level

Medical officer	1
Block Extension Educator (BEE)	1
Health Assistant (male)	1
Health Assistant (female)	1
Supporting staff (e.g. compounder, driver, lab. technician, ancillary staff)	

At the Subcentre

Health worker (male)	1
Health worker (female)	1

4.4.4 Referral System

In foregoing sections you got a good idea about the organisation of health system in our country. We shall now talk about referral system.

A good referral system is an essential component of health care system. Referrals are used to provide access to health care for clients in need. In referral, the cases beyond

the competence of a particular institution such as subcentre, primary health centre etc. are transferred to the higher level institution (see Fig. 4.1).

The objective of referral service is to identify contact people within agencies and to facilitate easy movement of referred cases so that they are not lost in the system.

The nurse's responsibility is to act as liaison person dealing with the proper community or medical resources on behalf of the client. The points to be kept in mind while referring the client are:

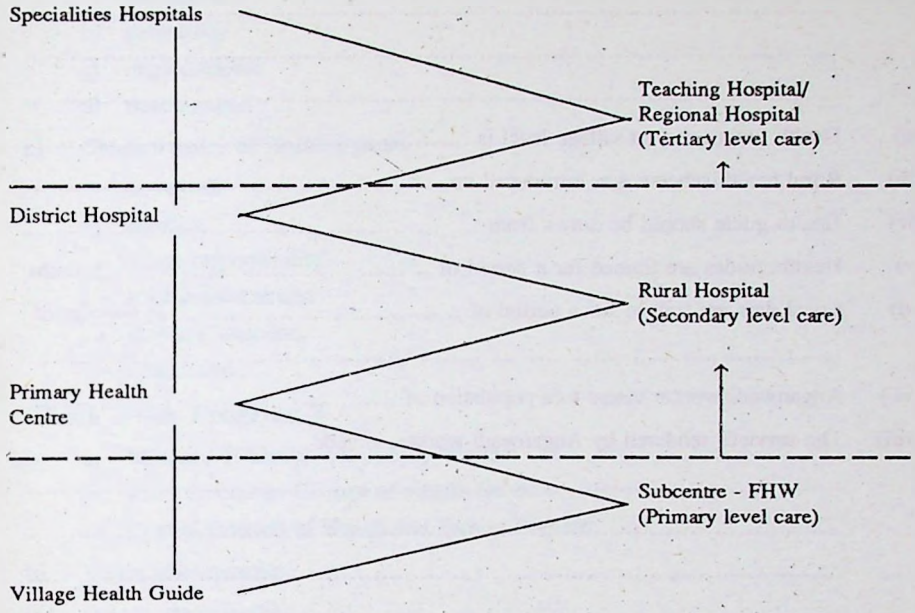


Fig. 4.1: PHC Referral system

It is important to determine the efficiency and the cost effectiveness of a service for example how quickly is the referral made?

Does referral system ease the clients flow?

Does it lessen the cost and time spent seeking treatment for the patient?

An effective referral service is based on best on networking relationship built through meetings, informal gatherings and telephone conversations. It is also important that all the health personnel working in various levels of health institutions be instructed to use the referral system.

The clients who need to be referred are grouped into three categories.

According to J.E. Park and K. Park, these categories are:

Category 1	:	Fatal condition; life cannot be saved even with treatment
Category 2	:	Serious conditions; life can be saved but only with immediate treatment.
Category 3	:	Minor conditions; life is not threatened and referral can be safely delayed

For referring the patients you as a health worker has to prepare **Reference slips containing following information.**

Patient's address and Identification number

Present complaint

Treatment given, if any

Reasons for referral

Name and designation of Person making the referral

Name of PHC making the reference ·

Date and time of reference

Check Your Progress 5

Fill in the blanks:

i) The health system in rural area is organized at the following levels

.....

.....

.....

ii) Health functionary at village level is .....

iii) Rural health scheme was introduced on .....

iv) Health guide should be drawn from .....

v) Health guides are trained for a period of .....months

vi) Local dais are trained for a period of ..... in concept of

.....

vii) Anganwadi worker caters to a population of .....

viii) The services rendered by Anganwadi worker, include

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4.5 LET US SUM UP

We have discussed about the organization of health system. Health system is defined as coherent whole of many interrelated component parts, both sectoral and intersectoral as well as community itself, which produces a combined effect on the health of the population. Health system is organized at three levels: centre, state and district level. At the central level official organs are, Ministry of Health and Family Welfare, Directorate General of Health Services (DGHS) and Central Council of Health and Family Welfare. The union ministry of Health is headed by a cabinet minister, a minister of state and a deputy health minister and it has two departments i.e. department of health and department of family welfare. These departments are headed by secretary to the Government of India with an additional secretary for family welfare department.

At state level the health sector comprises the state ministry of Health and Family Welfare and Directorate of Health. State ministry of health is headed by a state minister of health and family welfare and secretary assisted by number of deputy secretaries and under secretaries. At the directorate level Director of Health and Medical Education is the chief technical adviser to the state government on all matters related to medicine and public health. At the district level, Chief Medical Officer (CMO) is head of district health services with three deputy chief medical officers. Lastly we discussed about the organisation of health infrastructure based on primary health care, which mainly focuses on rural health services.

These services are organized on three levels i.e. village level, subcentre level and primary health centre level. At village level the main functionary is village health guide, subcentre is manned by one male and one female health worker (HWF and HWM) and

at the primary health centre level Medical Officer is the head assisted by the medical officers, health assistants and other staff.

4.6 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

i) a) interrelated
intersectoral
b) delivering
c) organisational
d) development

ii) Characteristics of Health System
— serves all
— equality
— prime responsibility
— intersectoral action
— essential elements
— specialized

Check Your Progress 2

i) a) Ministry of Health and Family Welfare
b) The Directorate General of Health Services
c) Central Council of Health and Family Welfare

ii) Union Governments

iii) Centre, state, health.

Check Your Progress 3

i) Technical adviser, medicine and public health

Check Your Progress 4

i) Chief Medical Officer

ii) Deputy CMO in charge of 1/3 district for health, Family Welfare and MCH programme.

Check Your Progress 5

i) Village level
Sub-centre level
Primary health centre level

ii) Village Health Guide

iii) 2 October, 1977

iv) Community they serve

v) three

vi) 30 days
maternal and child health and sterilization and obstetric skills.

vii) 1000

viii) Health check up
Immunization
Supplementary nutrition
Non-formal pre-school education
Referral services

UNIT 5 HEALTH CARE RESOURCES AND MONITORING AND EVALUATION OF HEALTH SERVICES

Structure

5.0 OBJECTIVES

After completing this unit you should be able to:

- Describe the measures to develop human resources for health,
- Find and explain ways of ensuring community involvement to be adopted by the ministry of health,
- Describe the whole gamut of health manpower, including international agencies engaged in delivery of national health care service,
- Explain the action required to develop monitoring and evaluation process as part of managerial process for national health development.

5.1 INTRODUCTION

In Unit 5 you have learnt the organization of health system based on primary health care and the action required to promote and support it, which are the main thrusts of the

global strategy of Health For All. Inseparable parts of the strategy are the actions required to generate and mobilize all possible human and financial resources and development of suitable monitoring and evaluation process. Resources are needed to meet the many health needs of a community. No nation, however rich, has enough resources to meet all the needs or all aspects of health care of its citizens. Therefore an assessment of the available resources, their proper allocation and efficient utilization are important considerations for providing efficient health care services. The basic resources for providing health care are Man, Money and Material which you will learn in the following broad categories:

i) Human Resources

ii) Money and Material Resources.

5.2 HUMAN RESOURCES DEVELOPMENT

The strategy seeks to involve not only the health personnel but also many other personnel from various sectors as human resources. Primary health care has to mobilize human potential of the entire community. This is possible on condition that individuals and families accept greater responsibility for their own health. People need to be involved in deciding on the health system required by them and the health technology acceptable to them, in delivering a part of national health programme. This is to be achieved through SELF CARE and FAMILY CARE and involvement in joint action for health. Health manpower constitutes a major part in human resources, so it is explained in further details.

5.2.1 Strategy and Definition

The term "health manpower" includes both professional (Doctors & Nurses) and auxilliary health personnel (ANM, MPW, TBA, Lab.Techn.) who are needed to provide the health care. An auxilliary is defined by WHO as "technical worker in a certain field with less than full professional training". Health manpower requirements of a country are based on

i) health needs and demands of the populations: The health needs in turn are based on the health situation and health problems and aspirations of the people.

ii) desired outputs: preventive, promotive, curative or rehabilitative; control or eradication.

5.2.2 Sector-wise Distribution

The health care system is intended to deliver the health care services. It constitutes the management sector and involves organizational matters. It operates in the context of the socioeconomic and political framework of the country. In India, it is represented by five major sectors or agencies which differ from each other by the health technology applied and by the source of funds for operation. These are:

i) **Public Sector**

a) Primary health centres
Sub-centres
Anganwadis

b) Hospitals/health centres
Community health centre
Rural hospitals
District hospitals/health centre
Specialist hospitals
Teaching hospitals

c) Health Insurance Schemes
Employees State Insurance
Central Government Health Scheme

d) Other agencies
Defence services
Railways

ii) **Private Sector**

a) Private hospitals, polyclinics, Nursing Homes, and Dispensaries
b) General Practitioners and Clinics

ii) **Indigenous Systems of Medicine**

a) Ayurveda and Siddha
b) Unani and Tibbi
c) Homoeopathy
d) Unregistered practitioners (Naturopathy)

iii) **Voluntary Health Agencies & Non-governmental Organizations**

a) Indian Red Cross Society
b) The Hind Kusht Nivaran Sangh
c) Indian Council for Child Welfare
d) Tuberculosis Association of India
e) Bharat Sevak Samaj
f) Central Social Welfare Board
g) The Kasturba Memorial Fund
h) Family Planning Association of India
i) All India Women's Conference
j) The All India Blind Relief Society
k) Professional Bodies—The Indian Medical Association (IMA), All India Dental Association (IDA) and Trained Nurses Association of India (TNAI)
l) Missionary Bodies—VHAI, CMAI, Ramakrishna Mission
m) Individuals: Jamked in Maharashtra, Dhenabandhu in Tamil Nadu and Community Cell in Karnataka
n) International Agencies—Ford Foundation, CARE (Co-operative for American Relief Everywhere) WHO, ODA of various countries like UK, Japan, UNICEF, UNDP, UNFPA.

5.2.3 Rural-Urban Distribution

You have now learned about the sectorwise distribution of health manpower which does not give the real picture of available manpower according to geographical area. When we analyse them between rural and urban area we can observe the gross maldistribution of health manpower. Studies in India have shown that there is a concentration of doctors and nurses (up to 80 per cent) in urban areas where only 20 per cent of population live. This maldistribution is chiefly attributing to absence of amenities in rural areas, lack of job satisfaction, professional isolation, lack of rural experience and inability to adjust to rural life by the professional doctors and nurses.

5.2.4 Planning and Ratio in Relation to Population

Health manpower planning is an important aspect of community health planning. It is based on series of accepted ratios such as doctor-population ratio, nurse-population ratio, bed-population ratio, etc. For your understanding of the depth of the problem of the availability of health manpower in the state, a set of data sheets from various government publications is given for your ready reference. See Appendices 5-14.

5.2.5 International Action and the Role of WHO

International action will include the following:

i) Information will be collected and used internationally by the WHO regarding people and groups throughout the world who could provide individual or group support to countries on various aspects of their strategies;

ii) UNESCO, in its worldwide literacy programme will be requested to use health information with a view to providing basic understanding of nutritional and health needs and of prevention and control of common health problems;

iii) WHO will engage in technical cooperation with its member states and promote such cooperation among them to ensure the maximum mobilization and development of personnel for health;

iv) WHO will ensure the involvement of other UN organizations like UNDP, UNFPA, International non-governmental and voluntary organisations by identifying specific tasks in which they can engage;

v) WHO will promote dialogue between developing and developed countries to prevent brain drain of health personnel.

Check Your Progress 1

Outline the five major sectors where the health manpower are engaged.

a) .....

b) .....

c) .....

d) .....

e) .....

ii) Briefly describe the role of WHO in mobilising human resources.

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5.3 FINANCIAL AND MATERIAL RESOURCES

Financial and material resources are as essential as human resources for the successful implementation of the strategy. It involves efficient use of existing resources and making provision for the additional resources. Plan outlay on medical, public health including water supply and sanitation and family welfare during the Seventh Five Year Plan was only Rs. 3392.9 crore which is 1.9% of the total plan budget (see Table 1). You may observe from the table that the budget allocation for health sector has been steadily decreasing from the First Five Year Plan through the Seventh Five Year Plan.

Table 1: Expenditure on Health Sector During the Different Plans

Period	Expenditure (Rs. in Crore)	Percentage of expenditure on health to expenditure on total public sector
First Five Year Plan 1951-56	65.2	3.3
Second Five Year Plan 1956-61	140.8	3.0
Third Five Year Plan 1961-66	225.9	2.6
Annual Plans 1966-69	140.2	2.1
Fourth Five Year Plan 1969-74	335.5	2.1
Fifth Five Year Plan 1974-79	760.8	1.9
Sixth Five Year Plan 1980-85	1821.1	1.9
Seventh Five Year Plan 1985-90	3392.9	1.9

Source: Health Information, India-1988, Central Bureau of Health Intelligence, Ministry of Health and Family Welfare, Government of India, New Delhi, 1988.

As the available financial resources is meagre, there is a need to allot proportionate funds to each section considering their priorities and risk group (see Table 2).

Table 2 : Seventh Plan Outlays—Health Sector

(Rs. in crore)

	Programme	Central schemes	Centrally sponsored programmes	States/UTs	Total
1)	Minimum Needs Programmes/ Rural Health		33.0	1063.4	1096.4
2)	Control of Communicable Diseases	16.5	521.5	474.7	1012.7
3)	Hospitals and Dispensaries	65.8			
4)	Medical Education and Training	75.5			
5)	ICMR	100.0			
6)	Indian Systems of Medicine and Homeopathy	40.0	3.3	957.5	1283.9
7)	ESI	41.8			
8)	Other programmes	41.8			
	Total	339.6	557.8	2495.6	3392.9

Source : Seventh Five Year Plan, 1985-90, Vol. II, Government of India, Planning Commission, New Delhi, 1985.

5.3.1 Financial Resources and GNP

Money is an important resource for providing health services. Scarcity of money affects all parts of the health delivery system. In most developed countries, Government expenditure for health lies between 6 to 12 per cent of Gross National Product (GNP). In under-developed countries it is less than 1 per cent of the GNP and it seldom exceeds 2 per cent of the GNP. To make matter worse, much of the spending is for services that reach only a small fraction of the population.

To achieve Health For All, WHO has set as a goal the expenditure of 5 per cent of each country's GNP on health care. At present India is spending about 3 per cent of GNP on health and family welfare development.

5.3.2 Priority in Financial Allocation

Since money and material are always scarce resources they must be put to the most effective use, with an eye for maximum output of results on minimum investment. Since deaths from preventable diseases such as whooping cough, measles, tuberculosis, tetanus, diptheria, malnutrition frequently occur in developing countries, the case is strong for

investing resources on preventing these diseases rather than spending money on multiplying prestigious medical institutions and other high cost medical establishments which caters for a small percentage of the sick citizens absorbing a large portion of the national health budget. **Management techniques** such as **cost-effectiveness** and **cost-benefit analysis** are now being used for allocation of resources in the field of community health.

5.3.3 Review Distribution and Reallocation of Health Budget

i) Review of the allocation of health budget to primary health care at peripheral, intermediate and central levels in urban and rural areas and to specific underserved groups;

ii) Reallocation of the existing resources or any additional resources for providing primary health care to underserved population groups;

iii) Analysis of the needs, in terms of costs and material, for appropriate health technology and establishment of health infrastructure;

iv) Consideration of cost effectiveness of different technologies, of various health programmes, to find alternate ways of organising the health system in relation to the cost.

5.3.4 Estimate the Financial Needs and Secure Additional Funds

i) Estimation of the magnitude of total financial and material needs to implement the strategy;

ii) Consideration of alternative ways of financing the health system including the possible use of social security funds; e.g. ESI, CGHS;

iii) Identifying activities that might attract external grant or loans; e.g Leprosy control, child survival and Safe Motherhood, Universal Immunization, AIDS control;

iv) Encouraging governments (in developing countries) to request for grants and loans from other sources such as external banks, bilateral and multilateral agencies; e.g. World Bank; Rockfeller Foundation, CARE, Redd Barna, ODA of UK or Japan, Ford Foundation;

v) In developed countries, to influence concerned agencies to provide grants and loans for the strategy; e.g., various religious organisations;

vi) Presentation to their government a masterplan which outlines the use of all financial and material resources including direct and indirect financing e.g. local community resources in terms of available manpower, material and money, individual payments for service and the use of external loans and grants.

5.3.5 International Action and the Role of WHO

To mobilise financial resources, WHO's action will consist of the following:

i) ensure the exchange of information on alternative ways of financing health systems;

ii) estimate the order of magnitude of financial needs for the strategy;

iii) promotion and development of methodology for and support cost-benefit and cost-effectiveness studies on health systems and technology;

iv) strengthen developing countries' capacities, on request, to prepare proposals for funding from external sources for health;

v) use its mechanisms to identify needs and facilitate mobilisation of funds as well as transfers between countries;

vi) establishment and coordination of activities of 'global health for all'. Resources group representation countries, intergovernmental, bilateral and multilateral agencies and foundations, as well as nongovernmental organisations, working together to rationalise the transfer of resources for 'Health for All' and to mobilise additional funds, if necessary.

Check Your Progress 2

i) Tick either True or False against the following statements:

National budget for health sector is:

a) Mainly spent to build urban oriented prestigious curative institution T/F

b) Directed to supply wholesome water and sewage system to the rural population T/F

c) 5% of GNP which is recommended by WHO to achieve health for all T/F

d) At present it is only 3% of GNP T/F

ii) State in 5 lines regarding the international action for mobilising financial and material resources.

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5.4 MONITORING AND EVALUATION

You have learnt all about health service resource in terms of **Manpower, Money and Material distributed** through out the country from centre to peripheral level. All these resources are allocated for **Specified Programme or Task with Definite Goal.**

In order to know the progress in implementation of any strategy, and to evaluate the effectiveness in improving the health status of the people it is essential to set up a process of **monitoring and evaluation.** Success of any programme depends on constant monitoring of its different activities by guidance of an inbuilt predetermined systems of monitoring and evaluation right at the stage of its inception. Monitoring process as well as evaluation are complementary to each other to observe and assess the progress of a planned programme.

We will now explain the process of monitoring and evaluation in the following sub-section.

5.4.1 Definition and Importance of Monitoring

Monitoring, we may define as the **day-to-day follow-up of activities** during their implementation stage, to ensure that they are **proceeding as planned and are on schedule. It is a continuous process of observing, recording, and reporting on the activities of the organization or project. Monitoring, thus, consists of keeping track of the course of activities and identifying deviations and taking corrective action if deviations occur.**

5.4.2 Monitoring Vs Surveillance

Definition of monitoring which you have learned is often taken as similar to that of **surveillance.** But in public health practice during the past 25 years they have taken on rather specific some what different meaning.

i) **Monitoring**

Monitoring is "the performance and analysis of routine measurements aimed at detecting changes in the environment or health status of populations." Thus we have monitoring of an air pollution, water quality, growth and nutritional status of children etc. It also refers to the **measurement of performance** of an ongoing **health service** or a **health professional,** or of the extent to which patients comply with or adhere to advice from health professionals.

In management, monitoring refers to the continuous overseeing of activities to ensure that they are proceeding according to plan. **It keeps track of performance of health staff, utilization of supplies and equipments, and the money spent in relation to the resources available so that if anything goes wrong immediate corrective measures can be taken.**

ii) **Surveillance**

Surveillance is defined in many ways. According to one interpretation, surveillance means to watch over with great attention and authority of the minute details in a situation. **Surveillance is also defined as the continuous scrutiny of the factors that determine the occurrence and distribution of disease and other conditions of ill-health.** Surveillance programmes can assume any character and dimension—thus we have epidemiological surveillance, demographic surveillance, nutritional surveillance etc:

The main objectives of surveillance are:

a) **to provide information about new and changing trends in the health status of a population,** e.g. morbidity, mortality, nutritional status or other indicators of environmental hazards, etc.

b) **to provide feedback which may be expected to modify the policy and the system itself and lead to redefinition of objectives,** and

c) **to provide timely warning of public health disasters so that interventions can be mobilized.**

According to the above definitions, monitoring becomes one specific and essential part of the broader concept embraced by surveillance. Monitoring requires careful planning and the use of standardized procedures and methods of data collection, but can then be carried out over extended periods of time by technicians and automated instrumentation. **Surveillance, in contrast, requires professional analysis and sophisticated judgement of data leading to recommendations for control activities.**

5.4.3 Evaluation

It is to note that both monitoring and surveillance process are only to check the deviation of any programme or activities from its aim till it reaches to the goal in terms of its resources. These tools fails to assess the programme achievement at its different level of implementation which is done by process of evaluation.

The purpose of evaluation is to assess the achievement of the stated objectives of a programme, its adequacy, its efficiency and its acceptance by all parties involved. While monitoring is confined to day-to-day ongoing operations, **evaluation is mostly concerned with the final outcome and with factors associated with it.** Good planning will have a built-in evaluation to measure the performance and effectiveness and for feed-back to correct specific deficiencies.

Evaluation is the process by which results are compared with the intended objectives, or more simply the assessment of how well a programme is performing. Evaluation should always be considered during the planning and implementation stages of a programme or activity. Evaluation may be crucial in identifying the health benefits derived (impact on morbidity, mortality, squelae, patient satisfaction). Evaluation can be useful in identifying performance difficulties. Evaluation studies may also be carried out to generate information for other purposes, e.g., to attract attention to a problem, extension of control activities, training and patient management, etc.

The **reasons** for evaluation are as follows:

Health services have become complex. There has been a growing concern about their functioning both in the developed and developing countries. Questions are raised about the quality of medical care, utilization and coverage of health services, benefits to community health in terms of morbidity and mortality reduction and improvement in the health status of the recipients of care. An evaluation study addresses itself to these issues.

5.4.4 Elements of Evaluation Process

Evaluation is perhaps the most difficult task in the whole area of health services. The components of the evaluation process are:

a) **Relevance**: Relevance or requisiteness relates to the appropriateness of the service, whether it is needed at all. If there is no need, the service can hardly be of any value. For example, vaccination against smallpox is now irrelevant because the disease no longer exists in the world.

b) **Adequacy**: It implies that sufficient attention has been paid to certain previously determined courses of action. For example, the staff allocated to a certain programme may be described as inadequate if sufficient attention was not paid to the quantum of work-load and targets to be achieved.

c) **Accessibility**: It is the proportion of the given population that can be expected to use a specified, facility, service, etc. The barriers to accessibility may be physical (e.g., distance, travel, time); economic (e.g. travel cost, fee charged); or social and cultural (e.g., caste or language barrier).

d) **Acceptability**: The service provided may be accessible, but not acceptable to all, e.g., male sterilization, screening for cervical or rectal cancer, insertion of copper T if the professional worker is male/female as the case may be.

e) **Effectiveness**: It is the extent to which the underlying problem is prevented or alleviated. Thus it measures the **degree of attainment of the predetermined objectives and targets of the programme, service or institution** — expressed, if possible, in terms of **health benefits, problem reduction** or **an improvement of an unsatisfactory health situation.** The ultimate measures of the effectiveness will be the reduction in morbidity and mortality rates.

f) **Efficiency**: It is a measure of how well resources, money, men, material and time are utilized to achieve a given effectiveness. The following examples will illustrate: the number of immunizations provided in an year as compared to with an accepted norm using cotton and gauze to clean the windows or chairs; during personal work on project time, a medical officer who cannot speak the language of the client of a professional nurse who cannot insert a copper T or health personnel proceeding on long leave with no replacement.

(g) **Impact**: It is an expression of the overall effect of a programme services or institution, on health status and socioeconomic development. For example, as a result of malaria control in India, not only the incidence of malaria dropped down but all aspects of life—agricultural, industrial and social—showed an improvement If the target of 100 per cent immunization has been reached, it must also lead to reduction in the incidence or elimination of vaccine preventable diseases. If the target of village water supply has been reached, it must also lead to a reduction in the incidence of diarrhoea diseases.

Planning and evaluation must be viewed as a continuous interactive process, leading to continual modification both of objectives and plans. Successful evaluation may also depend upon whether the means of evaluation were built into the design of the programme before it was implemented.

5.4.5 General Steps of Evaluation

The basic steps involved are as follows:

— Determine what is to be evaluated
— Establish standards and criteria
— Plan the methodology to be applied
— Gather information
— Analyse the results
— Take action
— Re-evaluate

Determine what is to be evaluated

Generally speaking, there are three types of evaluation:

a) **Evaluation of "structure":** This is evaluation of whether facilities, equipment, manpower and organization meet a standard accepted by experts as good.

b) **Evaluation of "process":** The processes of medical care include the problems of recognition, diagnostic procedures, treatment and clinical management, care and prevention. The way in which the various activities of the programme is carried out is evaluated by comparing with a predetermined standard. An objective and systematic way of evaluating the physician (or nurse) performance is known as "Medical (or nursing) Audit"

c) **Evaluation of "outcome":** This is concerned with the end results, that is, whether persons using health services experience measurable benefits such as improved survival or reduced disability. The traditional outcome components are **the "5 Ds" of ill-health, viz. disease, death, disability, discomfort and dissatisfaction.**

Establishment of standards and criteria

Standards and criteria must be established to determine how well the desired objectives have been attained. Naturally such standards are a prerequisite for evaluation. Standards and criteria must be developed in accordance with the focus of evaluation—

i) **Structural criteria:** e.g., physical facilities and equipment;

ii) **Process criteria:** e.g. every prenatal mother must receive 6 check-ups; every laboratory technician must examine 100 blood smears, etc;

iii) **Outcome criteria:** e.g., an alterations in patient health status (cured, dead, disabled); or a change in behaviour resulting from health care (satisfaction, dissatisfaction); or the educational process (e.g., cessation of smoking, acceptance of a small family norm), etc.

Planning the methodology

A format in keeping with the purpose of evaluation must be prepared for gathering information desired. Standards and criteria must be included at the planning stage.

Gathering information

Evaluation requires collection of data or information. The type of information required may include political, cultural, economic, environmental and administrative factors influencing the health situation as well as mortality and morbidity statistics. It may also concern health and related socioeconomic policies, plans and programmes as well as the extent, scope and use of health systems, services and institutions. The amount of data required will depend on the purpose and use of the evaluation.

Analysis of results

The analysis and interpretation of data and feedback to all individuals concerned should take place within the shortest time feasible, once information has been gathered. In addition, opportunities should be provided for discussing the evaluation results with all concerned.

Taking action

For evaluation to be truly productive, emphasis should be placed on actions—actions designed to support, strengthen or otherwise modify the services involved. This may also call for shifting priorities, revising objectives, or development of new programmes or services to meet previously unidentified needs.

Re-evaluation

Evaluation is an ongoing process aimed mainly at rendering health activities more relevant, more efficient and more effective.

5.4.6 Evaluation of Health Services

Randomized controlled trials have been extended to assess the effectiveness and efficiency of health services. Often, choices have to be made between alternative policies of health care delivery. The necessity of choice arises from the fact that resources are limited, and priorities must be set for the implementation of a large number of activities which could contribute to the welfare of the society. An excellent example of such an evaluation is the controlled trials in the chemotherapy of tuberculosis in India, which demonstrated that "domiciliary treatment" of pulmonary tuberculosis was as effective as the more costlier "hospital or sanatorium" treatment. The results of the study have gained international acceptance and ushered in a new era—the era of "domiciliary treatment" in the treatment of tuberculosis.

More recently, multiphasic screening which has achieved great popularity in some countries, was evaluated by a randomized vast outlay of resources required to mount a national programme of multiphasic screening in UK. Another example is that related to studies which have shown that many of the health care delivery tasks traditionally performed by physicians can be performed by nurses and other paramedical workers, thus saving physician's time for other essential tasks. These studies are also labelled as "health services research" studies.

Check Your Progress 3

i) Tick either True or False against the following statements:

Monitoring of any programme is

a) Keeping track of course of activities T/F

b) Providing information about recent trends in disease pattern T/F

c) Identifying deviation and taking corrective action, if needed T/F

d) Day-to-day follow up activities during implementation T/F

ii) List all the seven steps involved in evaluation process in chronological order.

a) .....

b) .....

c) .....

d) .....

e) .....

f) .....

g) .....

5.5 INDICATORS OF HEALTH MONITORING AND EVALUATION

Now you have imbibed all about the process of monitoring and evaluation of Health Services implemented to uplift the health of the people. The level of health has to be measured in some units as kilogram for weight and meter for height. For this purpose we have different **health indicators to measure the qualitative and quantitative variables in health.**

A question that is often raised is, how healthy is a given community? Indicators are required not only to measure the health status of a community, but also to compare the health status of one country with that of another, for assessment of health care needs; for allocation of scarce resources; and for monitoring and evaluation of health services, activities and programmes. Indicators help to measure the extent to which the objectives and targets of a programme are being attained.

As the name suggests, indicators are only an indication of a given situation or a reflection of that situation. In WHO's guidelines for health programme evaluation,

indicators are defined as variables which help to measure changes. Often they are used particularly when these changes cannot be measured sequentially over time, they can **indicate direction and speed of change** and serve to compare different areas or groups of people at the **same moment in time.**

5.5.1 Characteristics of Indicators

Indicators have been given scientific respectability; for example, ideal indicators:

a) should be **valid**, i.e., they should actually measure what they are supposed to measure;

b) should be **realiable** and **objective**, i.e., the answers should be the same if measured by different people in similar circumstances;

c) should be **sensitive**, i.e., they should be sensitive to changes in the situation concerned; and

d) should be **specific**, i.e., they should reflect changes only in the situation concerned.

But in real life there are few indicators that comply with all these criteria. Measurement of health is far from simple.

5.5.2 Broad Classification of Indicators in Health Measurement

As all of you have learnt that health is multidimensional in nature and each dimension is influenced by numerous factors, some known and many unknown. Therefore no single indicator can measure the health of people. **It must be conceived in terms of a profile employing many indicators like:**

Mortality indicators

Morbidity indicators

Disability (rates) indicators

Nutritional status indicators

Health care delivery indicators

Utilization (rates) indicators

Indicators of social and mental health

Environmental indicators

Socioeconomic indicators

Health policy indicators

Indicators of quality of life

Other indicators for specific situations

We shall now study the same in detail for better understanding.

Mortality indicators

There are many measurements involved.

a) **Crude death rate:** This is considered a fair indicator of the comparative health of the people. **Crude death rate is defined as the number of deaths per 1000 population per year in a given community.** It indicates the rate at which people are dying. Strictly speaking, health should not be measured by the number of deaths that occur in a community. But in many countries, the crude death rate is the only available indicator of health. When used for international comparison, the usefulness of the crude death rate is restricted because it is influenced by the age-sex composition of the population. Although not a perfect measure of health status, a decrease in death rate provides a good tool for assessing the overall health improvement in a population. Reducing the number of deaths in the population is an obvious goal of medicine and health care, and success or failure to do so is a measure of a nation's commitment to better health. In 1991 the crude death rate for India is 9.8 per thousand population. You could see the statewise estimation in Appendix 5.

b) **Expectation of life:** Life expectancy at birth is **"the average number of years that will be lived by those born alive into a population if the current age-specific**

mortality rates persist". Life expectancy at birth is highly influenced by the infant mortality rate where that is high. Life expectancy at the age of 1 excludes the influence of infant mortality, and life expectancy at the age of 5 excludes the influence of child mortality. Life expectancy at birth is used most frequently. It is estimated for both sexes separately. It indicates an increase in the health status.

Life expectancy is a good indicator of socio-economic development in general. As an indicator of long-term survival, it can be considered as a positive health indicator. It has been adopted as a global health indicator. A minimum life expectancy at birth of 60 years is the goal of health for all by 2000 AD. For India life expectancy is 62.8 for urban and 53.7 in rural areas at present.

c) **Infant mortality rate:** Infant mortality rate (IMR) is the ratio of deaths under 1 year of age in a given year to the total number of live births in the same year; usually expressed as **a rate per 1000 live births.** It is one of the most universally accepted indicators of health status not only of infants, but also of whole populations and of the socioeconomic conditions under which they live. In addition, the infant mortality rate is a sensitive indicator of the availability, utilization and effectiveness of health care, particularly **perinatal care.** The global strategy of health for all has suggested an infant mortality rate not more than 50 per 1000 live births by 2000 AD. In 1991 the IMR in India is 80 per thousand live births. You may study in detail the IMR for your state in Appendix 5.

d) **Child mortality rate:** Another indicator related to the overall health status is the early childhood (1-4 years) mortality rate. It is defined as the **number of deaths at ages 1-4 years in a given year, per 1000 children in that age group at the mid-point of the year concerned.** It thus excludes infant mortality. In India the CMR is 18.2 for urban and 39.4 in rural area at present.

Apart from its correlation with inadequate MCH services, it is also related to insufficient nutrition, low coverage by immunization and adverse environmental exposure and other exogenous agents.

Mortality indicators represent the traditional measures of health status. Even today they are probably the most often used indirect indicators of health. As infectious diseases have been brought under control, mortality rates have declined to very low levels in many countries. Consequently mortality indicators are losing the sensitivity as health indicators in developed countries. However mortality indicators continue to be used as the starting point in health status evaluation.

Morbidity indicators

To describe health in terms of mortality rates only is misleading. This is because, mortality indicators do not reveal the burden of ill-health in a community, as for example mental illness, rheumatoid arthritis. Therefore morbidity indicators are used to supplement mortality data to describe the developing countries than in the developed countries. The child mortality rate may be as much as 250 times higher. This indicates the magnitude of the gap and the room for improvement in the health status of developing and developed countries.

Maternal (puerperal) mortality rate: Maternal (puerperal) mortality accounts for the greatest proportion of **deaths among women of reproductive age** in most of the developing world, although its importance is not always evident from official statistics. There are enormous variations in maternal mortality according to country level of socioeconomic status. At present in India the MMR is 3-4 per ten thousand deliveries against our national target of below 2 per ten thousand by 2000 AD.

Disease-specific mortality: Mortality rates can be computed for specific diseases. As countries begin to extricate themselves from the burden of communicable diseases, a number of other indicators such as deaths from cancer, cardiovascular diseases, accidents, diabetes etc. have emerged as measures of specific disease problems. Morbidity statistics have also their own drawback. They tend to overlook a large number of conditions which are subclinics, inapparent, that is, the hidden part of the iceberg of disease.

The following morbidity rates are used for assessing ill-health in community:

i) incidence and prevalence
ii) notification rates
iii) attendance rates at out-patient departments, health centres, etc.
iv) admission, readmission and discharge rates
v) duration of stay in hospital, and
vi) spells of sickness or absence from work or school

Nutritional status indicators

Nutritional status is a positive health indicator. Three nutritional status indicators are considered important as indicators of health status. They are:

a) anthropometric measurements of preschool children, e.g., weight and height, mid-arm circumference;
b) heights (and sometimes weights) of children at school entry; and
c) prevalence of low birth weight (less than 2.5 kg.)

Health care delivery indicators

The frequently used indicators of health care delivery are:

a) Doctor-population ratio
b) Nurse-population ratio
c) Population-bed ratio
d) Population per health centre/subcentre
e) Population per traditional birth attendant (TBA)

These indicators reflect the equity of distribution of health resources in different parts of the country, and of the provision of health care.

Utilization rates

In order to obtain additional information on health status the extent of use of health services is often investigated. Utilization of services—or actual coverage—is expressed as the proportion of people in need of a service who actually receive it in a given period, usually a year. It is argued that utilization rates give some indication of the care needed by a population, and therefore, the health status of the population. In other words, a relationship exists between utilization of health care services and health needs and status. Health care utilization is also affected by factors such as availability and accessibility of health services and the attitude of an individual towards his health and the health care system. A few examples of utilization rates are given below :

a) proportion of infants who are "fully immunized" against the 6 preventable diseases through extended programme of immunization (EPI)
b) proportion of pregnant women who receive antenatal care, or have their deliveries supervised by a trained birth attendant
c) percentage of the population using the various methods of family planning
d) bed-occupancy rate (i.e., average daily in-patient census/average number of beds)
e) average number of patients using the sub-center clinics
f) average number of people using the anganwadi centers.

The above list is neither exhaustive nor all-inclusive. The list can be expanded depending upon the services provided. These indicators direct attention away from the biological aspects of disease in a population towards the discharge of social responsibility for the organization in delivery of health care services.

Indicators of social and mental health

As long as valid positive indicators of social and mental health are scarce, it is necessary to use indirect measures, viz, indicators of social and mental pathology. These

include suicide, homicide, other acts of violence and other crime; road traffic accidents, juvenile delinquency; alcohol and drug abuse; smoking; consumption of tranquilizers; obesity, etc. To these may be added family violence, battered-baby and battered-wife syndromes and neglected and abandoned youth in the neighbourhood. These social indicators provide a guide to social action for improving the health of the people.

Environmental indicators

Environmental indictors reflect the quality of physical and biological environment in which diseases occur and in which the people live. They include indicators relating to pollution of air and water, radiation, solid wastes, noise, exposure to toxic substances in food or drink. Among these, the most useful indicators are those measuring the proportion of population having access to safe water and sanitation facilities, as for example, percentage of households with safe water in the home or within 15 minutes walking distance from a water standpoint or protected well, adequate sanitary facilities in the home or immediate vicinity.

Socioeconomic indicators

These indicators do not directly measure health. Nevertheless, they are of great importance in the interpretation of the indicators of health care.

These include:

a) rate of population increase

b) per capita GNP

c) level of unemployment

d) dependency ratio

e) literacy rates, especially female literacy rates

f) family size

g) housing; the number of persons per room

h) per capita "calorie" availability

Other indicator series

a) Social indicators: Social indicators, as defined by the United Nations Statistical Office, have been divided into 12 categories: population, family formation, families and households, learning and educational services, earning activities, distribution of income, consumption, and accumulation, social security and welfare services, health services and nutrition, housing and its environment, public order and safety, time use, leisure and culture, social stratification and mobility.

b) Basic needs indicators: Basic needs indicators are used by ILO. Those mentioned in "Basic needs performance" include calorie consumption; access to water; life expectancy; deaths due to disease; illiteracy, doctors and nurses per population; rooms per person; GNP per capita.

c) Health For All indicators: For monitoring progress towards the goal of health for all by 2000 AD, the WHO has listed the following four categories of indicators.

   — Health policy indicators
   — Social and economic indicators releated to health
   — Indication for the provision of health care
   — Health status indicators.

5.5.3 Details of Indicators Selected for Monitoring Progress Towards Health For All

a) Health policy indicators:

   — political commitment to health for all
   — resource allocation
   — the degree of equity of distribution of health services
   — community involvement
   — organizational framework and managerial process

b) Social and economic indicators related to health:

- rate of population increase
- GNP or GDP
- income distribution
- work conditions
- adult literacy rate
- housing
- food availability

c) Indicators for the provision of health care:

- availability
- accessibility
- utilization
- quality of care

d) Health status indicators:

- low birth weight (Percentage)
- nutritional status and psychosocial development of child
- infant mortality rate
- child mortality rate (1-4 years)
- life expectancy at birth
- maternal mortality rate
- disease specific mortality
- morbidity—incidence and prevalence
- disability prevalence

Check Your Progress 4

Situation: In the year 1992 an urban community 'A' is inhabited by one lakh people having birth rate of 40 per 1000 population have evidenced with 320 unfortunate children who could not see their 1st birthday.

i) Calculate the total number of live births in the community and calculate the infant mortality rate of the above community 'A'.

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ii) List five health care delivery indicators.

a) .....

b) .....

c) .....

d) .....

e) .....

5.6 LET US SUM UP

In this unit, you have learnt that for the successful implementation of the strategy of Health For All. Actions to generate and mobilize resources are required. Three types of resources namely, human resources and financial and material resources, are required. All human resources, including community involvement, existing auxilliary health workers, professional and traditional health workers, will be mobilized for their active participation in primary health care. Necessary reorientation and training will be given to the health workers. For the best use of material and financial resources, ministries of health will ensure redistribution and reallocation of health budget for primary health care. Financial needs will be assessed and efforts at the national and international levels will be made to mobilize and secure additional funds for this purpose. International transfer of resources from developed to developing countries will be rationalized and, if necessary, these transfers will be increased.

Monitoring and evaluation are the essential parts of the strategy. To monitor progress during implementation and to evaluate its effect, a suitable monitoring and evaluation process will be set up. Indicators at the national level such as health indicators for the provision of health care and health status indicators will be used. At the global level evaluation will be based on the number of countries in which certain indicators comply with predetermined norms. These are : endorsement of policy at the highest official level, availability of primary health to the whole population, equitable distribution of resources, life expectancy at birth over 60 years, literacy rate over 70%, and infant mortality rate below 50 per 1000 live births. At the international level, WHO's mechanisms will be used for reporting on progress and assessing the impact of the strategy.

5.7 GLOSSARY

Health resources : all the means available for a health system's operation, including manpower, money, materials, buildings, equipment, supplies, skills, knowledge and technology and operational time.

Health status : the general term for the state of health of an individual, group or population measured against accepted standards at a point of time.

Evaluation : is the systematic assessment of the achievement of the stated objectives in terms of its relevance, adequacy, progress, efficiency, effectiveness and impact of a health programme. It gives a feedback to correct deficiencies.

Relevance : a programme is relevant if it answers the needs and social and health policies and priorities it has been designed to meet.

Adequacy : a programme is adequate if it is proportionate to requirements.

Efficiency : a programme is efficient if the effort expended on it is as good as possible in relation to the resources devoted to it.

Effectiveness : it is effective if the results obtained conform with the objectives and targets for reducing the extent of the problem or improving an unsatisfactory situation.

Impact : it is the overall effect on health status and socioeconomic development.

Cost benefit : is the relationship between the cost of an activity and the benefits that accrue from it.

Cost effectiveness : is the relationship between cost and the extent to which a programme or other activity is contributing to the attainment of the objectives and targets for reducing the problem or improving an unsatisfactory situation.

5.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

i) a) Public sector
b) Private sector
c) Voluntary agencies
d) Indegenous medicine
e) International agencies

ii) a) engage in technical cooperation with its Member States to ensure the maximum mobilization and development of personnel for health;
b) organize the collation and international use of information regarding people and groups who can provide support to the strategy;
c) promote dialogues between developing and developed countries to prevent the brain-drain of health personnel.

Check Your Progress 2

i) a) True b) False c) False d) True

ii) WHO will ensure exchange of information on alternate ways of financing health systems. It will estimate the order of magnitude of financial needs for the strategy: Support developing countries on request in preparing proposals for external funding for health, and will work together with other multilateral and bilateral agencies, foundations and 'Health For All' Resources group to rationalize international transfer of resources.

Check Your Progress 3

i) a) True b) False c) False d) True

ii) a) Identification of problem
b) Establishment of standard and criteria
c) Plan the methodology to be applied
d) Gather information
e) Analyse the results
f) Take action
g) Re-evaluate

Check Your Progress 4

i) Total Live birth of Community A = Birth Rate x population

$$= \frac{40}{1000} \times 10{,}0000 = 4000$$

$$\text{IMR} = \frac{\text{Deaths of children under 1 yrs}}{\text{Total Live birth in same year}} \times 1000$$

$$\text{IMR of Community A} = \frac{320}{4000} \times 1000$$

$$= 80 \text{ per } 1000$$

ii) a) Doctor-population ratio
b) Nurse-population ratio
c) Population-bed ratio
d) Population per health centre/subcentre
e) Population per traditional birth attendant.

APPENDIX 1

ALMA-ATA DECLARATION

You know that the attainment of health for all by the year 2000 was the central issue of the International Conference on Primary Health Care, held at Alma-Ata in September 1978. The Declaration of Alma-Ata is reproduced here in full.

DECLARATION OF ALMA-ATA

The International Conference on Primary Health Care meeting in Alma-Ata this twelfth day of September in the year Nineteen hundred and seventy-eight, expressing the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world, hereby makes the following Declaration:

I

The Conference strongly reaffirms that health, which is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important worldwide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.

II

The existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.

III

Economic and social development, based on a New International Economic Order, is of basic importance to the fullest attainment of health for all and to the reduction of the gap between the health status of the developing and developed countries. The promotion and protection of the health of the people is essential to sustained economic and social development and contributes to a better quality of life and to world peace.

IV

The people have the right and duty to participate individually and collectively in the planning and implementation of their health care.

V

Government have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organisations and the whole world community in the coming decades should be the attainment by all people of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice.

VI

Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

VII

Primary health care:

1) reflects and evolves from the economic conditions and sociocultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;

2) addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;

3) includes atleast: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning, immunization against the major infectious diseases, prevention and control of locally endemic diseases, appropriate treatment of common diseases and injuries; and provision of essential drugs;

4) involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular, agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors;

5) requires and promotes maximum community and individual self-reliance and participation in the planning, organisation, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops, through appropriate education, the ability of communities to participate;

6) should be sustained by integrated, functional and mutually-supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;

7) relies, at local and referral levels, on health workers, including physicians, nurses, mid-wives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

VIII

All governments should formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in coordination with other sectors. To this end, it will be necessary to exercise political will, to mobilize the country's resources and to use available external resources rationally.

IX

All countries should cooperate in a spirit of partnership and service to ensure primary health care for all people since the attainment of health by people in any one country directly concerns and benefits every other country. In this context the joint WHO/UNICEF report on primary health care constitutes a solid basis for the further development and operation of primary health care throughout the world.

X

An acceptable level of health for all the people of the world by the year 2000 can be attained through a fuller and better use of the world's resources, a considerable part of which is now spent on armaments and military conflicts. A genuine policy of independence, peace, detente and disarmament could and should release additional resources that could well be devoted to peaceful aims and in particular to the acceleration of social and economic development of which primary health care, as an essential part, should be allotted its proper share.

APPENDIX 2

HEALTH POLICY

The Government of India adopted a National Health Policy in August 1983. An abridged para-wise description of the policy is given below:

Para 1: Indroductory

The Constitution directs the state to regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health among its primary duties. It is felt that an integrated, comprehensive approach towards the future development of medical education, research and health services requires to be established to serve the actual health needs and priorities of the country. It is in this context that the need has been felt to evolve a National Health Policy.

Para 2: Our heritage

"India has a rich heritage of medical and health sciences. The approach of our ancient medical systems was of a holistic nature."

Para 3: Progress achieved

Since Independence, considerable progress has been achieved, especially in reference to smallpox, plague and cholera. Mortality has decreased from 27.4 to 14.8 and life expectancy at birth has increased from 32.7 to over 52.

Para 4: The existing picture

The demographic and health picture of the country constitutes a cause for serious and urgent concern, with special reference to the following:

i) High rate of population growth

ii) High mortality rates for women, children and infants

iii) Malnutrition

iv) High prevalence of communicable and noncommunicable diseases, especially diarrheal diseases, leprosy, tuberculosis and blindness

v) Poor access of rural population to potable water supply (31%) and basic sanitation (0.5%)

vi) Poverty

vii) Ignorance

viii) Almost wholesale adoption of health manpower development policies based on the Western Models, resulting in the development of a cultural gap between the people and the personnel providing care

ix) Establishment of curative centres based upon Western models, which are inappropriate and irrelevant to the real needs of our people and their socio-economic condition

x) Emphasis on hospital-based, cure oriented approach and neglect of preventive, promotive, public health and rehabilitative aspects of health care

xi) Failure to involve the community in the identification of health needs and priorities, as well as in implementation and management of various health related programmes.

Para 5: Need for evolving a health policy—the revised 20 point programme

India is committed to attaining the goal of "Health for all by the year 2000 AD" through the universal provision of comprehensive primary health care services. The attainment of this goal requires a thorough overhaul of existing approaches to the education and training of medical and health personnel and the reorganisation of the health services infrastructures. Furthermore, considering the large variety of inputs into health, it is necessary to secure the complete integration of all plans for health and human development with the overall national socio-economic development process, specially in the more closely health related sectors, e.g., drugs and pharmaceuticals, agriculture and food production, rural development, education and social welfare,

housing, water supply and sanitation, prevention of food adulteration, maintenance of prescribed standards in the manufacture and sale of drugs and the conservation of the environment. In sum, the contours of the National Health Policy have to be evolved within a fully integrated planning framework which seeks to provide universal, comprehensive primary health care services, relevant to the actual needs and priorities of the community at a cost which the people can afford, ensuring that the planning and implementation of the various health programmes is through the organised involvement and participation of the community, adequately utilising the services being rendered by private voluntary organisations active in the health sector.

It is also necessary to ensure that the pattern of development of the health services infrastructure in the future fully takes into account the revised 20 Point Programme. The said programme attributes very high priority: promotion of family planning as a peoples' programme on a voluntary basis; substantial augmentation and provision of primary health care facilities on a universal basis; control of leprosy, TB and blindness; acceleration of welfare programmes for women and children; nutrition programmes for pregnant women, nursing mothers and children, especially in the tribal, hill and backward areas. The programme also places high emphasis on the supply of drinking water to all problem villages, improvements in the housing and environments of the weaker sections of society; increased production of essential food items; integrated rural development; spread of universal elementary education, expansion of the public distribution system, etc.

Para 6: Population stabilisation

Improvement in health status of people cannot be achieved without achieving success in "securing the small family norm, through voluntray efforts and moving towards the goal of population stabilisation. It is necessary to enunciate, separately, a National Population Policy".

Para 7: Medical and health education

"The effective delivery of health care services would depend very largely on the nature of education, training and appropriate orientation towards community health of all categories of medical and health personnel and their capacity to function as an integrated team. Towards this end, it is necessary to formulate, separately, a National Medical and Health Education Policy which:

i) sets out the changes required to be brought about in the curricular contents and training programme of medical and health personnel, at various levels of functioning
ii) takes into account the need for establishing the extremely essential interrelations between functionaries of various grades
iii) provides guidelines for the production of health personnel on the basis of realistically assessed manpower requirements
iv) seeks to resolve the existing sharp regional imbalances in their availability
v) ensures that personnel at all levels are socially motivated towards the rendering of community health services."

Para 8: Need for providing primary health care with special emphasis on the preventive, promotive and rehabilitative aspects

There is disproportionate emphasis on the establishment of curative centres, the large majority of which are located in the urban areas of the country. It is urgently necessary to restructure the health services within the following broad approach:

1) A well dispersed network of comprehensive primary health care services with the organised support of **volunteers, auxilliaries, para-medics and adequately trained multi-purpose workers.** Services of private voluntary organisations active in the health field require to be utilised an integrated manner.

2) The establishment of the primary health care approach would involve large scale transfer of knowledge, simple skills and technologies to Health Volunteers selected by the communities and enjoying their confidence. The quality of training of these **health guides/workers** would be of crucial importance to the success of this approach.

3) The success of the decentralised primary health care system would depend vitally on the organised building up of individual self-reliance and effective community participation; on the provision of organised back up support of the secondary and tertiary levels of the health care services, providing adequate logistical and technical assistance.

4) The decentralisation of services would require the establishment of a well worked out referral system to provide adequate expertise nearest to the community.

5) It is necessary to establish a nation-wide chain of sanitary-cum-epidemiological stations. The location and functioning of these stations may be between the primary and secondary levels of the hierarchical structure, depending upon the local situations and other relevant considerations. Each such station would require to have suitably trained staff equipped to identify, plan and provide preventive, promotive and mental health care services. It would be beneficial depending up on the local situations, to establish such stations at the Primary Health Centres. The district health organisation should have, as an integral part of its set up, a well organised epidemiological unit to coordinate and superintend the functioning of the field stations. These stations would participate in the integrated action plans to eradicate and control diseases, besides tackling specific local environmental health problems.

6) The location of curative centres should be related to the populations they serve, keeping in view the densities of population, distances, topography and transport connections. These centres should function within the recommended referral system. To maximise utilisation of available resources, new and additional curative centres should be established only in exceptional cases, the basic attempt being towards the upgradation of existing facilities. Expenditure or curative centres should be reduced as much as possible.

7) With a view to reducing governmental expenditure and fully utilising untapped resources, planned programmes may be devised, related to the local requirements and potentials, to encourage the establishment of practice by private medical professional, increased investment by non-governmental agencies in establishing curative centres and by offering organised logistical, financial and technical support to voluntary agencies in the health field.

8) While the major focus of governmental efforts would be upon primary health care and public health services, speciality and superspeciality services also need to be provided. To reduce governmental expenditures involved in the establishment of such centres, planned efforts should be made to encourage private investments in such fields so that the majority of such centres, within the governmental set up, can provide adequate care and treatment to those entitled to free care, the affluent sectors being looked after by the paying clinics.

9) Special, well-coordinated programmes should be launched to provide mental health care as well as medical care and the physical and social rehabilitation of those who are mentally retarded, deaf, blind, physically disabled, infirm and the aged. Also, suitably organised programmes would require to be launched to ensure the prevention of various disabilities.

10) In the establishment of the reorganised services, the first priority should be accorded to provide services to those residing in the tribal, hill and backward areas as well as to endemic disease affected populations and the vulnerable sections of the society.

11) In the reorganised health services scheme, efforts should be made to ensure adequate mobility of personnel at all levels of functioning.

12) In the various approaches, set out in (1) to (11) above, organised efforts would require to be made to fully utilise and assist in the enlargement of the services being provided by private voluntary organisations active in the health field.

Para 9: Re-orientation of the existing health personnel

A dynamic process of change and innovation is required to be brought about in the entire approach to health manpower development, ensuring the emergence of fully integrated bands of workers functioning within the 'Health Team' approach.

Para 10: Private practice by governmental functionaries

It is desirable for the States to take steps to phase out the system of private practice by medical personnel in government service, providing at the same time for payment of appropriate compensatory non-practising allowance.

Para 11: Practitioners of indigenous and other systems of medicine and their role in health care

The country has a large stock of health manpower comprising private practitioners in various systems, for example, Ayurveda, Unani, Sidha, Homeopathy, Yoga, Naturopathy, etc. This resource has not so far been adequately utilised. The practitioners of these various systems enjoy high local acceptance and respect and consequently exert considerable influence on health beliefs and practices. It is, therefore, necessary to initiate organised measures to enable each of these various systems of medicine and health care to develop in accordance with its genius. Simultaneously, planned efforts should be made to dovetail the functioning of the practitioners of these various systems and integrate their services, at the appropriate levels, within specified areas of responsibility and functioning, in the overall health care delivery system, specially in regard to the preventive, promotive and public health objectives. Well considered steps would also require to be launched to move towards a meaningful, phased integration of the indigenous and the modern systems.

Para 12: Problems requiring urgent attention

i) **Nutrition:** Adequate nutrition for all segments of the population through a well developed distribution system, specially in the rural areas and urban slums should be ensured. The overall strategy would necessarily involve organised efforts at improving the purchasing power of the poorer sections of the society. Schemes like employment guarantee scheme to which the government is committed, could yield optimal results. Measures should be taken to improve dietary practices and to promote breast feeding. Supplementary feeding programmes directed to the vulnerable sections of the population should be arranged in chronically malnourished communities.

ii) **Prevention of food adulteration and maintenance of the quality of drugs**

iii) **Water supply and sanitation:** The provision of safe drinking water and sanitary disposal of waste waters, human and animal wastes, both in urban and rural areas, must constitute an integrated package.

iv) **Environmental protection:** It would be necessary to ensure against the haphazard exploitation of resources which cause ecological disturbances leading to fresh health hazards. Environmental appraisal procedure must be developed and strictly applied in according clearance to the various industrial and developmental projects.

v) **Immunisation programme**

vi) **Maternal and child health services:** A vicious relationship exists between high birth rates and high infant mortality, contributing to the desire for more children. The highest priority would, therefore, require to be devoted to efforts of launching special programmes for the improvement of maternal and child health, with a special focus on the less privileged sections of society. While efforts should continue at providing refresher training and orientation to the traditional birth attendants, schemes and programmes should be launched to ensure that progressively all deliveries are conducted by **competently trained persons.**

vii) **School health programme**

viii) **Occupational health services:** There is urgent need for launching well-considered schemes to prevent and treat diseases and injuries arising from occupational hazards, not only in the various industries but also in the comparatively unorganised sectors like agriculture.

Para 13: Health education

The recommended efforts, on various fronts, would bear only marginal results unless nationwide health education programmes, backed by appropriate communication strategies, are launched to provide health information in easily understandable form, to motivate the development of an attitude for healthy living. The public health education

programmes should be supplemented by health, nutrition and population education programmes in all educational institutions at various levels. Simultaneously, efforts would require to be made to promote universal education, specially adult and family education, without which the various efforts to organse preventive and promotive health activities, family planning and improved maternal and child health cannot bear fruit.

Para 14: Management information system

Appropriate decision making and programme planning in the health and related fields is not possible without establishing an effective health information system.

Para 15: Medical industry

The country has built up sound technological and manufacturing capability in the field of drugs, vaccines bio-medical equipments etc. The available know-how requires to be adequately exploited to increase the production of essential and life saving drugs and vaccines of proven quality to fully meet the national requirements, specially in regard to the national programmes to combat Malaria, TB, Leprosy, Blindless, Diarrhoeal diseases etc. The production of the essential, life saving drugs under their generic names and the adoption of economical packaging practices would considerably reduce the unit cost of medicines, bringing them within the reach of the poorer sections of society, besides, significantly reducing the expenditure being incurred by the governmental organisation on the purchase of drugs. In view of the low cost of indigenous and herbal medicines, organised efforts may be launched to establish herbal gardens, producing drugs of certified quality and making them easily available.

The practitioners of the modern medical system rely heavily on diagnostic aids involving extensive use of costly, sophisticated bio-medical equipment. Effective mechanisms should be established to identify essential equipments required for extensive use and to promote and enlarge their indigenous manufacture, for such devices being readily available, at reasonable prices, for use at the health care centres.

Para 16: Health insurance

It would be necessary to devise well considered health insurance schemes, on a Statewise basis, for mobilising additional resources for health promotion and ensuring that the community shares the cost of the services, in keeping with its paying capacity.

Para 17: Medical legislation

It is necessary to urgently review all existing legislation and work towards a unified, comprehensive legislation in the health field, enforceable all over the country.

Para 18: Medical research

Special attention should be paid to:

i) containment and eradication of the existing, widely prevalent diseases

ii) translation of available know-how into simple, low cost, appropriate technologies

iii) applied operational research for improving cost effective delivery of health services

iv) more effective treatment and preventive procedures for blindness, leprosy and TB

v) contraceptive research, and

vi) nutrition research.

Para 19: Inter-sectoral cooperation

It is necessary to secure inter-sectoral coordination of the various efforts in the fields of health and family planning, medical education and research, drugs and pharmaceutical, agriculture and food, water supply and drainage, housing, education and socal welfare and rural develipment.

Para 20: Monitoring and review of progress

It would be of crucial importance to monitor and periodically review the success of the efforts made and the results achieved in reference to the goals.

Comments about national health policy

The Health Policy is a valuable document and provides a clear framework for national health planning. However, it has been criticised on the following gounds.

i) The policy talks of poverty alleviation, (e.g., through the minimum needs programme), as a necessary precondition for Health For All. However, the policy does not speak even once about social justice (in health and in other fields such as land reforms and wages), which is an essential prerequisite for Health For All.

ii) No definite programme has been suggested for promoting community participation in health.

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ii) No definite programme has been suggested for promoting community participation in health.

APPENDIX 3

Memorandum Submitted to the High Power Committee on Nurses and Nursing Profession by the Trained Nurses' Association of India on Behalf of Nurses in India*

Section-VI
The Nursing Structure

The existing nursing structure, organised after Independence, has remained somewhat stagnant. It has neither grown nor developed to keep the desired pace with the expansion of the health services in the country. Despite health survey committees, recommendations in 1946 and 1954 scarce attention has been paid to improvement in the nursing profession suggested by these committees. This is so because of the subordinate status of the profession and the implementation power of these resting with the non-nurse administrators. Though there has been some upgradation in nursing education, increase in nursing positions and creation of these at the Health Directorates at the Centre and in the State Governments, these developments have not surfaced much in terms of availability of improved nursing care to the masses. Obviously, this is so because of the isolation of nurses from the planning process and the decision making machinery of the government.

What we see today is that the valuable contribution of the nursing profession is greatly undermined. Non-nurse health planners fail to appreciate the significant contribution of the nursing profession to the protection and promotion of health of the people. They fail to recognise the underdeveloped and undeveloped leadership potentials of the Nursing profession. Instead of giving this established health care profession its due place in the system it has purposefully neglected and lowered the profession to such an extent that nurses at any level have no autonomy to function independently and pursue the profession in pace with the trends in health care system.

The growth and development of health services and health manpower over the period of nearly seven five year plans reveals the lopsided development in various categories of health professionals.

In view of the present position in Nursing, nurses at various levels are so placed in the organisational set-up that their involvement in policy formaulation is not possible. Specially at the Centre the highest positions in Nursing are merely advisory. There is hardly any coordination of Nursing Service, Education and community care. Even in the State Health Directorates, each position is attached with a medical person rather than with nurses. In such an isolated situation the Nursing profession has remained fragmented and underdeveloped with the result that Nursing positions are often abolished than expanded and mostly filled on an adhoc basis. Hardly any efforts are made to fill these positions and prepare Nursing leaders.

Nursing is a profession and a distinct service in its own right. It is equipped with necessary competence required to be responsible and accountable to the Nursing components in providing health care to the people as colleagues with other health professionals.

Therefore, it is essential that Nursing components of the health care be directed by nurses themselves. We have nurses with professional background of Ph.D. level available in the country to take up such leading positions. The Association recommends the following organisational structure for equipping nurses with the needed authority and support to function effectively:

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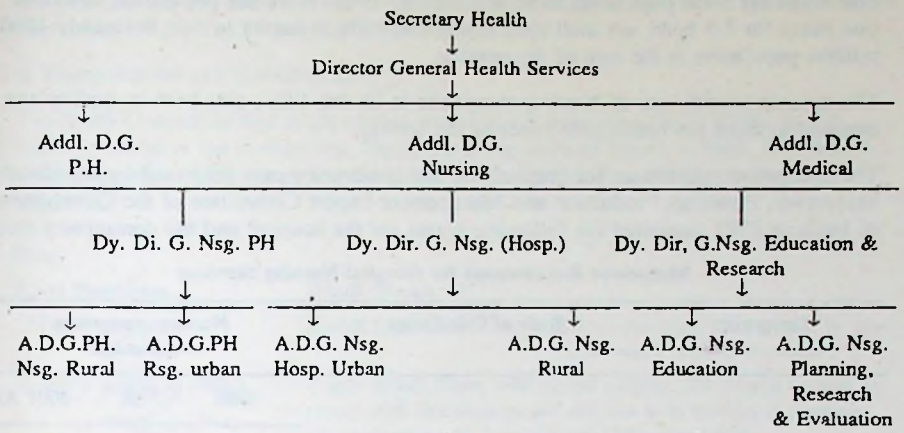
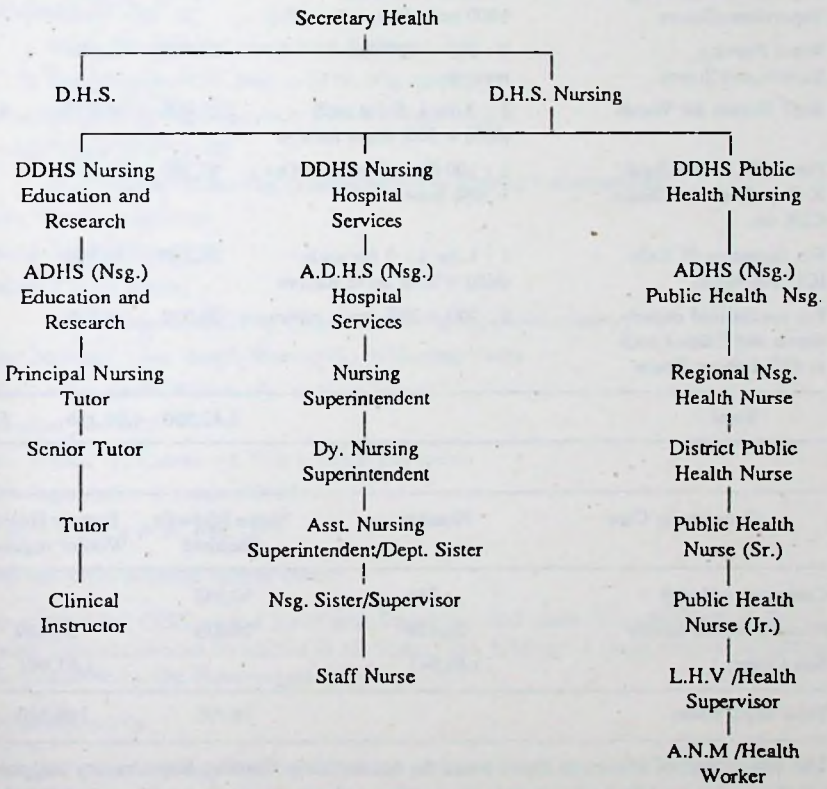
* As in Govt. of India, Report of High Power Committee on Nursing and Nursing Profession. P 110-113.

Organisational Structure of Nursing at Central Level



Organisational Structure of Nursing at State Level



A similar organisational structure is suggested for the Railways, Municipal Corporations, Institutions under Ministries other than Health Ministry and Major Central Undertakings, etc.

Staffing Norms

The Nursing manpower requirement from the very beginning of health planning has remained neglected with the result that nurses are in short supply to keep pace with developments. The Government of India conducted a number of health surveys by important Committees before and after Independence. These were Bhore Committee (1946), Mudaliar Committee (1961), Kartar Singh Committee (1974), Shrivastava Committee (1975) and some others. While these committees mostly concentrated their attention on the development of Medical Education, very little was done in the sphere of Nursing Manpower development.

The Bhore Committee in 1946 recommended one qualified nurse for 500 populatio and one ANM for 5000 population to be achieved by 1971. With this population ratio and one nurse for 1:5 beds, we shall need nearly two million nurses to care for nearly 1000 million population at the turn of the century.

The present growth rate of Nursing manpower in on the dificit side both in quality and quantity to meet the health care needs of the society.

The Manpower requirment for hospital and and community care projected by the Health Manpower, Planning, Production and Management Expert Committee of the Government of India in 1987 suggested the following norms for the hospital and the community care.

Manpower Requirement for Hospital Nursing Services

Categories	Basis of Calculation	Nursing manpower requirement		
		1986	1991	2001 AD
Nursing Superintendent	1: 200 beds	2,500	3,051	4,955
Deputy Nursing Supdts.	1 : 300 beds	1,700	2,034	3,003
Departmental Nursing Supervisors/Sisters	7 : 1000 + 1/Addl. 1000 beds (991 + 7 + 991)	4,080	4,880	7,928
Ward Nursing Supervisors/Sisters	8 : 200 + 30% leave reserve	26,520	31,730	51,532
Staff Nurses for Wards	1 : 3 (or 1 :9 for each shift) + 30% leave reserve	2,21,000	2,64,427	4,29,432
For OPD, Blood Bank, X-Ray, Diabetic Clinics, CSR etc.	1 : 100 Opt. (1 bed : 5 Opt.) + 30% leave reserve	33,160	39,664	64,415
For Intensive (8 Beds ICU/200 beds)	1 : 1 (or 1 : 3 for each shift) + 30% leave reserve	26,520	31,730	31,530
For specialized departments and Clinics such as OT, Labour Room	8 : 200 + 30% leave reserve	26,520	31,730	51,530
Total		3,42,050	4,09,246	6,64,623

Community Care	Number	Nurse Midwife Required	Female Health Worker required
Community Health	743	52,052	—
Primary Health Center	26,439	26,439	26,439
Sub Centre	1,61,941	–	1,61,941
Total requirement		78,491	188,380

The placement of nurses in these areas do not indicate Nursing Supervisory support necessary for quality performance. Especially at the community health centre level, there should be at least one public health nurse to supervise the work of 7 nurse midwives. At the sub-centre level also, all categories of personnel are only auxiliaries like Health Workers, Health Assistants, Health Guides and Traditional Birth Attendants. There is need for some one to coordinate their work and assist them in case of any difficulty. One nurse midwife as incharge of sub-centre is important. Community nurses required to function at the block, district, zone, state and at the central levels are equally important.

As per INC statistics of 87 we have hardly 2,299 nurses qualified till 1987. With the present rate, 8,992 nurses per annum would add up barely to 7,04 nurses. The projected requirements will need facilities to produce nearly 4 lacs more nurses.

The Association also feels that these projections are based merely on the basis of bed allotment to hospitals. But in actual situation the patient census is usually on under

statement of the actual number of patients. More nurses are required to look after the extra patients in the corridors and on the floor. Obviously, under such a situation nurses' time in looking after the patients is greatly increased.

A Blueprint for the Community

The Bajaj Committee had made certain useful recommendations with regard to the staffing norms in the community. These are being outlined below in brief, and should be kept in mind while preparing the blueprint for the Community Health Nursing care structure.

Every		
2,500 Population	Health Worker (F) : 1	
10,000 Population	Health Supervisor : 1	The Health Supervisor should be given CGN course in phased manner.
30,000 Population (PHC)	Public Health Nurse with special training. She should be able to: screen high risk mothers and children with nutritional problems, etc., independently, help Medical Officer Incharge.	

1,00,000 (*Community Health Centre)*

Nursing Officer (PH) Gr. III

(Gazetted Class-II Junior)

Post equivalent to Departmental Sister

Qualification: B.Sc. Nsg. or M.Sc. Nsg. preferred

Assistant District Nursing Supervisor: 2 Posts in each District.

(Nursing Officer (PH) Gr. II)

Qualification: M.Sc, Nsg. (Equivalent to Dy. Nursing Superintendent)

District Nursing Supervisor

(Nursing Officer (PH) Gr. I)

(Gazetted Class I Senior)

Qualification: M.Sc. Nsg. (Equivalent to Nursing Superintendent)

Career Mobility from Health Worker (F) to Nursing Cadre

S.S.L.C. + 2 = Health Worker (F)

(Equivalent to PUC)

Health Worker (F) Course + 1 Year = Health Supervisor

Health Supervisor + 1 year = G.N.M.

G.N.M. + 2 yrs. = B.Sc. Nsg. (PC)

There onwards in usual further course.

More centres for CGN course for Health Supervisor and more Post-certificate B.Sc. Nursing Courses should be started in all States. The funding of these courses should be made available by the Government of India.

A Vital Necessity

As pointed out elsewhere Nursing functions performed by a qualified Nurse, Auxiliary Nurse Midwife and even a student are not generally demarcated and specified in the hospital setting. Under the circumstances, qualified nurses are replaced by auxiliaries and students, thus contributing to unsafe and poor nursing care. Therefore, the Association finds it vitally necessary that Nursing functions of all categories of Nursing personnel be studied, specified and clearly demarcated. Nurses' manpower should accordingly be organised to share these functions.

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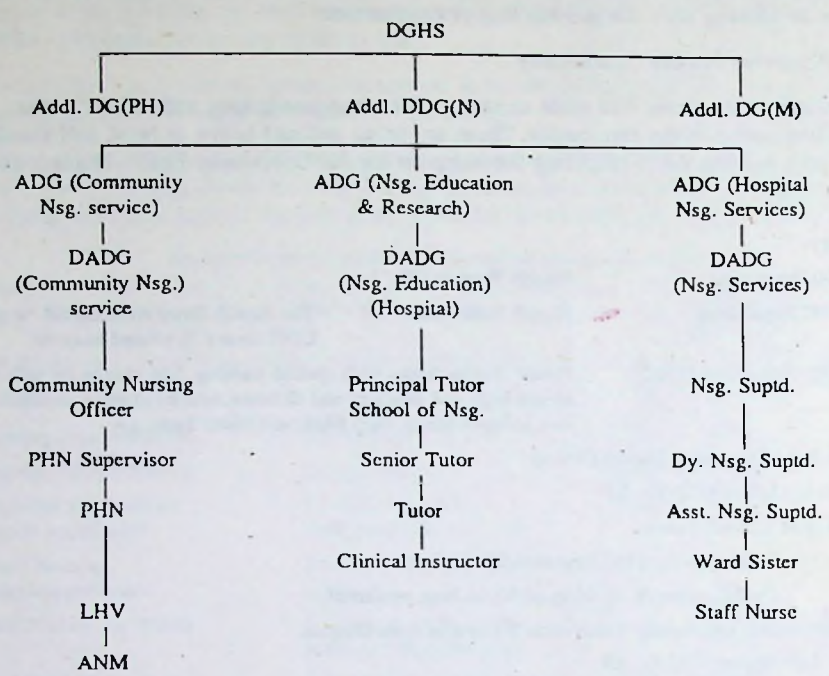
Recommended Organisational set-up at the Directorate General of Health Services and the Institutions Under the Central Government

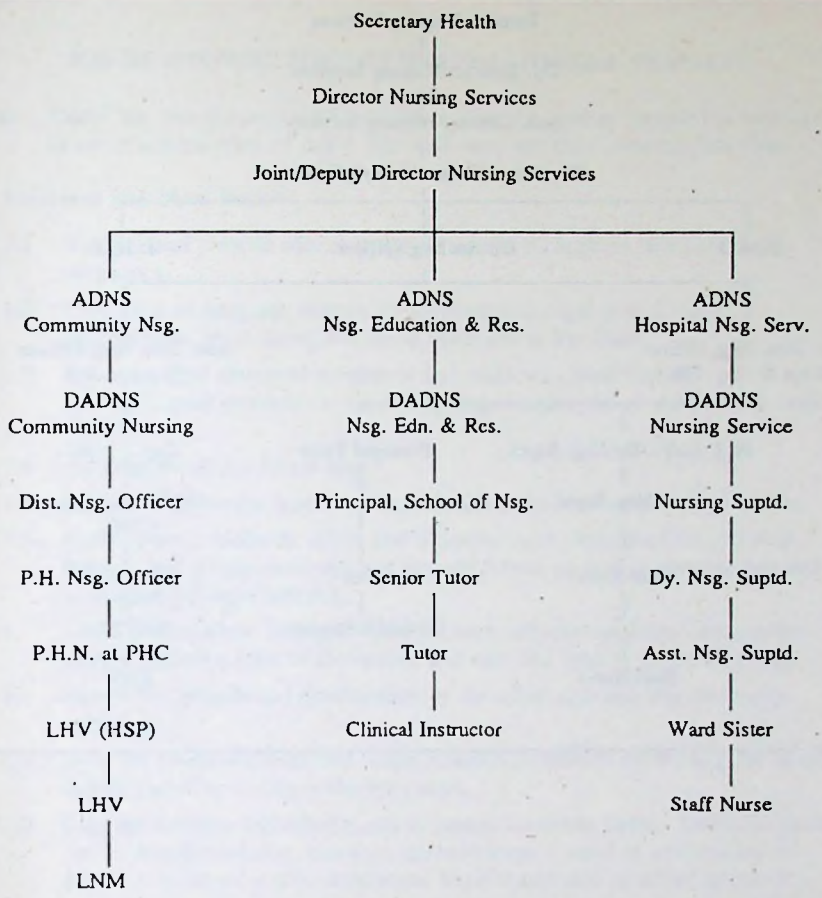


Note:

a) The positions up to the DADG level are proposed to be at the office of the Directorate General of Health Services, positions below the level of DADG are to exist at the Institutions governed by the Central Government.

b) The Principal, College of Nursing, will be equal to the rank of ADG(N) and will be eligible for promotion to the post of DDG(N)/Addl. DG(N). The salary scales and structure of the staff of Colleges of Nursing will be as per norms of the Indian Nursing Council and the UGC.

Recommended Organisational set-up at State/Union Territory Level



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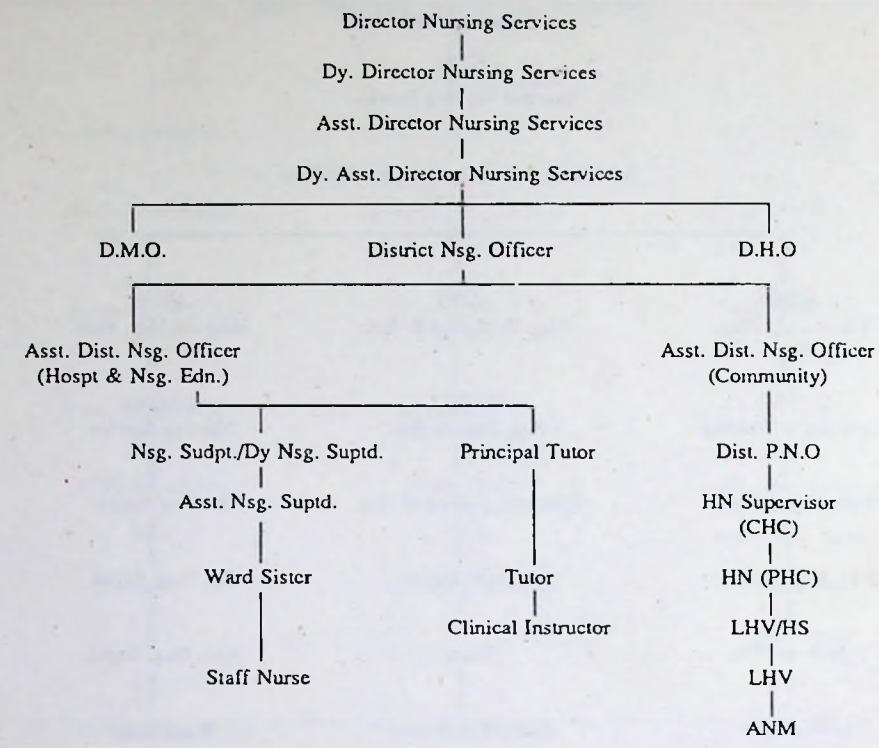
Recommended Organisational set-up at the District Level



APPENDIX 4

JOB RESPONSIBILITIES OF HEALTH WORKER (FEMALE)

Note: Under the multipurpose workers scheme, a health worker (female) is expected to cover a population of 5,000. She will carry out the following functions:

1. Maternal and child health

1.1 Register and provide care to pregnant women throughout the period of pregnancy.

1.2 Test urine of pregnant women for albumen and sugar and estimate haemoglobin level during her home visits and at the clinic.

1.3 Refer cases of abnormal pregnancy and cases with medical and gynaecological problems to the health assistant (female) or the primary health centre.

1.4 Conduct deliveries in her area.

1.5 Supervise deliveries conducted by dais and assist them whenever called in.

1.6 Refer cases of difficult labour and newborns with abnormalities and help them to get institutional care and provide follow-up care to patients referred to or discharged from hospital.

1.7 Make at least three postnatal visits for each delivery conducted and render advice regarding care of the mother and care and feeding of the newborn.

1.8 Assess the growth and development of the infant and take any necessary action.

1.9 Help the medical officer and health assistant (female)in conducting MCH and family planning clinics at the sub-centre.

1.10 Educate mothers individually and in groups for better family health including MCH, family planning, nutrition, immunization, control of communicable diseases, personal and environmental hygiene and care of minor ailments.

2 Family planning

2.1 Utilize the information from the Eligible Couple Register for the family planning programme.

2.2 Spread the message of family planning to the couples and motivate them for family planning individually and in groups.

2.3 Distribute conventional contraceptives to the couples, provide facilities and help the prospective acceptors in getting family planning services, if necessary, by accompanying them or arranging for the dais to accompany them to hospital.

2.4 Provide follow-up services to female family planning adopters, identify side-effects, give treatment on the spot for side-effects and minor complaints and refer those cases that need attention by the physician to the PHC/hospital.

2.5 Establish female depot holders, help the health assistant (female) in training them, and providing a continuous supply of conventional contraceptives to the depot holders.

2.6 Build rapport with acceptors, village leaders, dais and others and utilize them for promoting family welfare programmes.

2.7 Identify woman leaders and help the health assistant (female) to train them.

2.8 Participate in *mahila mandal* meetings and utilize gatherings for educating women in family welfare programmes.

3. Medical termination of pregnancy

3.1 Identify the women requiring help for medical termination of pregnancy and refer them to the nearest approved institution.

3.2 Educate the community of the availability of services for medical termination of pregnancy.

4. Nutrition

4.1 Identify cases of malnutrition among infants and young children (0 to 5 years), give the necessary treatment and advice and refer serious cases to the PHC.

4.2 Distribute iron and folic acid tablets as prescribed to pregnant and nursing mothers, infants and young children (0 to 5 years) and family planning acceptors.

4.3 Administer vitamin 'A' solution as prescribed to children from 1 to 5 years.

4.4 Educate the community about nutritious diet for mothers and children.

5. Communicable diseases

5.1 Identify cases of notifiable diseases, i.e. cholera, plague, poliomyelitis, and persons with continued fever or prolonged cough, or spitting of blood, which she comes across during her home visits and notify the health worker (male) about them.

6. Immunization

6.1 Immunize pregnant women with tetanus toxoid.

6.2 Administer BCG vaccination to all newborn infants, and DPT vaccination, oral poliomyelitis vaccine (where available) and BCG vaccine (if not given at birth) to all infants (0 to 1 year).

7. Dai training

7.1 List dais in the intensive and twilight areas and involve them in promoting family welfare.

7.2 Help the health assistant (female) in the training programme of dais. (Also refer to 1.5 regarding supervision of dais.)

8. Vital events

8.1 Record births and deaths occurring in the births and deaths register and report them to the health worker (male).

9. Record keeping

9.1 Register (a) pregnant women from three months of pregnancy onwards; (b) infants zero to one year of age; and (c) women aged 15 to 44 years through systematic home visits and at the clinic.

9.2 Maintain the prenatal and maternity records and child care records.

9.3 Assist the health worker (male) in preparing the Eligible Couple Register and maintaining it uptodate.

9.4 Prepare and submit the prescribed periodical reports in time to the health assistant (female).

9.5 Prepare and maintain maps and charts for her area and utilize them for planning her work.

10. Primary medical care

10.1 Provide treatment for minor ailments, provide first aid for accidents and emergencies, and refer cases beyond her competence to the primary health centre or nearest hospital.

11. Team activities

11.1 Attend and participate in staff meetings at primary health centre/community development block or both.

Job Responsibilities of Health Assistant (Female)

Note: Under the multipurpose workers scheme, a health assistant (female) is expected to cover a population of 20,000 in which there are four subcentres, each with one health worker (female). However, in future she may cover one PHC with six sub-centres having 5,000 population each.

The health assistant (female) will carry out the following functions:

1. Supervision and guidance

1.1 Supervise and guide the health worker (female) in the delivery of health care services to the community.

1.2 Strengthen the knowledge and skills of the health worker (female).

1.3 Help the health worker (female) in improving her skills in working in the community.

1.4 Help and guide the health worker (female) in planning and organising her programme of activities.

1.5 Visit each sub-centre at least once a week on a fixed day to observe and guide the health worker (female) in her day-to-day activities.

1.6 Assess periodically the progress of work of the health worker (female), and submit an assessment report to the medical officer of the primary health centre.

1.7 Carry out supervisory home visits in the area of the health worker (female).

2. Team work

2.1 Help the health worker to work as part of the health team.

2.2 Coordinate her activities with those of the health assistant (male) and other health personnel including the dias.

2.3 Coordinate the health activities in her area with the activities of workers of other departments and agencies, and attend meetings at block level.

2.4 Conduct regular staff meetings with the health workers in coordination with the health assistant (male).

2.5 Attend staff meetings at the primary health centre.

2.6 Assist the medical officers of the primary health centre in the organisation of the different health services in the area.

2.7 Participate as a member of the health team in mass camps and campaigns in health programmes.

3. Supplies, equipment and maintenance of sub-centre

3.1 In collaboration with the health assistant (male), check at regular intervals the stores available at the sub-centre and help in the procurement of supplies and equipment.

3.2 Check that the drugs at the sub-centre are properly stored and that the equipment is well maintained.

3.3 Ensure that the health worker (female) maintains her general kit and midwifery kit in the proper way.

3.4 Ensure that the sub-centres is kept clean and is properly maintained.

4. Records and reports

4.1 Scrutinize the maintenance of records by the health worker (female) and guide her in their proper maintenance.

4.2 Maintain the prescribed records and prepare the necessary reports.

4.3 Review reports received from the health workers (female), consolidate them, and submit periodical reports to the medical officer of the primary health centre.

5. Training

5.1 Organise and conduct training for dais with the assistance of the health worker (female).

6. Maternal and child health

6.1 Conduct weekly MCH clinics at each sub-centre with the assistance of the health worker (female).

6.2 Respond to calls from the health worker (female) and trained dais, and from the health worker (male) and render necessary help.

7. Family welfare and medical termination of pregnancy

7.1 Conduct weekly family welfare clinics (alongwith the MCH clinics) at each sub-centre with the assistance of the health worker (female).

7.2 Personally motivate resistant cases for family planning.

7.3 Provide information on the availability of services for medical termination of pregnancy and refer suitable cases to the approved institutions.

7.4 Guide the health worker (female) in establishing female depot holders for the distribution of conventional contraceptives and train the depot holders with the assistance of the health worker (female).

8. Nutrition

8.1 Identify cases of malnutrition among infants and young children (zero to five years). give the necessary treatment and advice and refer serious cases to the primary health centre.

9. Immunization

9.1 Supervise the immunization of all pregnant women, and infants (zero to one year).

10. Primary medical care

10.1 Provide treatment for minor ailments, provide first aid for accidents and emergencies and refer cases beyond her competence to the primary health centre or nearest hospital.

10.2 Attend to cases referred by the health workers and refer cases beyond her competence to the primary health centre or nearest hospital.

11. Health education

11.1 Carry out educational activities for MCH, family planning, nutrition and immunization with the assistance of the health worker (female).

11.2 Arrange group meetings with readers and involve them in spreading the message for various health programmes.

11.3 Organize and conduct training of woman leaders with the assistance of health worker (female).

11.4 Organize and utilize *mahila mandals*, teachers and other women in the community in the family welfare programmes.

APPENDIX 5

1991 POPULATION DATA SHEET

India/State/UT	Population (in 000)	Annual exponential growth rate (%)		Literary Rate)	C.B.R (Crude Birth Rate)	C.D.R (Crude Death Rate)	Natural Increase (CBR-CDR)	I.M.R (Infant Mortality Rate)	T.F.R (Total Fertility Rate)
		1981-91	1971-81	Female					
1	2	3	4	5	6	7	8	9	10
INDIA	846303	2.14	2.22	39.29	29.3	9.8	19.5	80.00	3.9
States									
Andhra Pradesh	66508	2.17	2.10	32.72	26.0	9.7	16.3	73.0	3.1
Arunachal Pradesh	865	3.14	3.04	29.69	30.9	13.5	17.4	NA	NA
Assam	22414	2.17	2.12	43.03	30.9	11.5	19.4	81.0	3.4
Bihar	86374	2.11	2.17	22.89	30.5	9.8	20.7	69.0	5.1
Goa	1170	1.49	2.37	67.09	16.8	7.5	9.3	NA	NA
Gujarat	41310	1.92	2.46	48.64	27.5	8.5	19.0	69.0	3.6
Haryana	16464	2.42	2.55	40.47	33.1	8.2	24.9	68.0	4.4
Himachal Pradesh	5171	1.89	2.15	52.13	28.4	8.9	19.5	75.0	3.2
J & K	7719	2.54	2.58	—	—	—	—	—	3.3
Karnataka	44977	1.92	2.39	44.34	26.8	9.0	17.8	77.0	3.3
Kerala	29098	1.34	1.77	86.13	18.1	6.0	12.1	17.0	2.0
Madhya Pradesh	66181	2.38	2.27	28.85	35.8	13.8	22.0	122.0	4.7
Maharashtra	78937	2.29	2.21	52.32	26.2	8.2	18.0	60.0	3.4
Manipur	1837	2.57	2.83	47.60	19.6	5.5	14.1	NA	NA
Meghalaya	1775	2.84	2.80	44.85	32.4	8.8	23.6	NA	NA
Mizoram	690	3.34	3.99	78.60	NA	NA	NA	NA	NA
Nagaland	1209	4.45	4.09	54.75	18.5	3.3	15.2	NA	NA
Orissa	31660	1.83	1.85	34.68	28.8	12.7	16.1	126.0	3.6
Punjab	20282	1.89	2.16	50.41	28.6	8.0	20.6	53.0	3.3
Rajasthan	44006	2.50	2.87	20.44	34.3	9.8	24.5	77.0	4.7
Sikkim	406	2.51	4.14	46.69	26.5	8.8	17.7	NA	NA
Tamil Nadu	55859	1.43	1.63	51.33	20.7	8.8	11.9	57.0	2.5
Tripura	2757	2.95	2.79	49.65	24.4	7.6	16.8	NA	NA
Uttar Pradesh	139112	2.27	2.29	25.31	35.1	11.1	24.0	93.0	5.2
West Bengal	68078	2.21	2.10	46.56	26.7	8.1	18.6	70.0	3.3
Union Territories									
A&N Islands	281	3.97	4.98	65.46	19.9	5.7	14.2	NA	NA
Chandigarh	642	3.52	5.67	72.34	14.1	4.0	10.1	NA	NA
D&N Haveli	138	2.89	3.38	26.98	30.4	11.4	19.0	NA	NA
Daman & Diu	102	2.52	2.32	59.40	27.8	9.0	18.8	NA	NA
Delhi	9421	4.15	4.29	66.99	24.1	6.0	18.1	NA	NA
Lakshadweep	52	2.51	2.37	72.89	27.1	4.7	22.4	NA	NA
Pondicherry	808	2.90	2.50	65.63	18.9	6.4	12.5	NA	NA

Information under cols. 2 to 6 is as per 1991 Census Data Sheet.

Information under cols. 6 to 9 is as per SRS provisional estimates for 1991.

Information under cols. 10 is as per SRS estimates for 1989.

NA - Not available.

APPENDIX 6

Dais Training Programme: Statement I

Sl. No.	State/UT	Estimated No. of Untrained Dais as on 1.4.1989	Dais trained as on 1.4.89 since 1974	Target for 1989-90	Dais trained during 1989-90 (April 89-Dec 89)	Total Dais trained as on 31-12-1989 since 1974	Period up to which information relates
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	3045	44835	1000	INR	44835 **	31.3.87
2.	Arunachal Pradesh ***	Nil	286	Nil	106	392	31.12.89
3.	Assam	500	12275	250	1704	13979	31.12.89
4.	Bihar	INR	56029	500	INR	56029	31.3.85
5.	Goa	Nil	178	Nil	Nil	178	31.12.89
6.	Gujarat	3672	30841 uc	750	841	31682	31.12.89
7.	Haryana	500	11568	250	90	11658	31.12.89
8.	Himachal Pradesh	INR	9399	50	NIL	9399	31.12.89
9.	J & K	INR	4244	500	INR	4244	31.3.85
10.	Karnataka	6634	36500 uc	1750	863	37363 uc	31.12.89
11.	Kerala ****	Nil	2906	Nil	Nil	2906	31.12.89
12.	Madhya Pradesh	INR	43383	1000	12	43395	30.9.89
13.	Maharashtra	5000	47480 uc	500	29	47509	31.12.89
14.	Manipur	INR	1259	25	INR	1259	30.6.88
15.	Meghalaya	Nil	1137	Nil	INR	1137	31.3.87
16.	Mizoram	50	900	5	INR	900	31.3.89
17.	Nagaland	Nil	Nil	Nil	Nil	Nil	31.12.89
18.	Orissa	40000	34817	750	5	34822	30.9.89
19.	Punjab	600	22213	Nil	Nil	22213	30.9.89
20.	Rajasthan	7856	19889	300	7	19896	30.9.89
21.	Sikkim	INR	254	Nil	Nil	254	31.12.89
22.	Tamil Nadu	13782	35986	250	58	36044	30.9.89
23.	Tripura	NIL	1427	50	NIL	1427	31.12.89
24.	Uttar Pradesh	Nil	141809	1000	883	142692	31.12.89
25.	West Bengal	INR	25274	1000	INR	25274	31.3.85
26.	A & N Islands	150	104	25	22	126	31.12.89
27.	Chandigarh	165	367	20	26	393	31.12.89
28.	D & N Haveli	Nil	238	Nil	INR	238 UC	31.12.88
29.	Daman & Diu	*	*	*	*	*	
30.	Delhi	INR	180	20	INR	180	30.9.87
31.	Lakshadweep	INR	21	NIL	NIL	21	30.9.89
32.	Pondicherry	25	397	5	10	407	31.12.89
	Total	81979	586196	10000	4656	590852	

Notes:
- INR = Information not received.
- **** = Dias training programme has since been stopped from 1980 onwards in Kerala State
- *** = No system of traditional Dais is practised in Arunachal Pradesh.
- uc = Under clarification
- ** = Figures taken from status Report on Primary Health Care received in meeting held in Jan.1988.
  The number of trained dais prior to 1974 was 43,500 which is not included in the above statement.
- * = Information include in Goa (figures are provisional)

APPENDIX 7

Villages Covered under Village Health Guide (VHG) Scheme & No. of Village Health Committees (VHGs) Functioning as on 31.12.89

Sl. No.	State/UT	No. of Inhabited Villages	No.of villages having VGH committees	No.of villages covered under VHG Sch.	Period up to which information relates to
1	2	3	4	5	6
1.	Andhra Pradesh	27379	22022	22022	31.3.87
2.	Arunachal Pradesh	3257	11200	11200	31.12.89
3.	Assam ***	21955	11200	11200	31.12.89
4.	Bihar	67546	INR	INR	31.3.85
5.	Goa, Daman & Diu	412	Nil	Nii	31.12.89
6.	Gujarat	18111	Nil	18111	31.12.89
7.	Haryana	6745	2448	6745	31.12.89
8.	Himachal Pradesh	16807	1054	16807	31.12.89
9.	J & K **	6477 @	—	—	—
10.	Karnataka	27028	Nil	14656	30.6.89
11.	Kerala **	1362	—	—	—
12.	Madhya Pradesh	76603	51309	70000	30.9.89
13.	Maharashtra	39354	25667	39354	31.12.89
14.	Manipur	2082	2082	2082	30.6.88
15.	Meghalaya	4874	4000	4000	31.3.87
16.	Mizoram	737	737	737	31.3.89
17.	Nagaland	1112	40	540	31.12.89
18.	Orissa	50887	21969	23297	30.9.89
19.	Punjab	12138	6862	12138	30.9.89
20.	Rajasthan	34968	1923 *	21000 *	30.9.89
21.	Sikkim	440	7	240	31.12.89
22.	Tamil Nadu **	15831	—	—	—
23.	Tripura	4727	148	39	31.12.89
24.	Uttar Pradesh	112568	35775	35775	31.12.89
25.	West Bengal	38024	3305 $	38000	31.3.85
26.	A & N Islands	491	7	286	31.12.89
27.	Chandigarh	22	22	Nil	31.12.89
28.	D & N Haveli	72	Nil	71	31.3.89
29.	Delhi	214	Nil	72	30.9.87
30.	Lakshadweep	7	7	7	30.6.89
31.	Pondicherry	292	Nil	292	31.12.89
	Total	592522	190584	337471	

Note :

INR = Information not received.

*** = The 1981 census could not be held due to disturbed conditions in Assam, so the figures are as per 1971 census.

@ = Figures excluded for these areas which are under unlawful occupation of Pakistan, China where census could not be taken up by States Govt.

$ = This figure relates to the existing Health Committee and Villages Panchayats.

** = Alternative Health Guide Scheme is functioning in these States.

* = Information relates to the period 30.9.87
(Figures are provisional)

APPENDIX 8

Health Man Power Working in Rural Areas

Sl. No.	State/UT	Health Workers(Male)			Health Workers Female/ANM			Pharmacists			Period upto which information relates to
		S	P	V	S	P	V	S	P	V	
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra Pradesh	8050	7095	955	7027	6277	750	957	506	451	31.3.87
2.	Arunachal Pradesh	155	155	Nil	155	155	Nil	188	188	Nil	31.12.89
3.	Assam	3313	3313	Nil	4706	3592	1114	801	801	Nil	31.3.89
4.	Bihar	1761	1761	Nil	10041	7541	2500	1249	1249	Nil	31.3.85
5.	Goa	153	118	35	146	140	6	9	9	Nil	31.12.89
6.	Gujarat	5280	4461	819	6351	5323	1028	1073	732	341	30.9.89
7.	Haryana	2519	2131	388	2628	2505	123	440	404	36	31.12.89
8.	Himachal Pradesh	1225	1225	Nil	1734	1693	41	464	437	27	31.12.89
9.	J & K	381	377	4	696	381	315	72	72	Nil	31.3.85
10.	Karnataka	5498	4762	736	9221	8443	778	1758 uc	1437 uc	321	30.6.89
11.	Kerala	3400	3176 &	224	4449	4144	305	802	780	22	31.12.89
12.	Madhya Pradesh	9736	9328	408	11916	11148	768	465	435	30	30.9.89
13.	Maharashtra	8189	7967@@	222	11381	11185	196	2515	2242	273	31.12.89
14.	Manipur	338	338	Nil	673	640	33	219	226	7 +	31.12.88
15.	Meghalaya	357	357	Nil	383	340	43	90	71	19	31.3.87
16.	Mizoram	371	326	45	375	372	3	65	63	2	31.3.89
17.	Nagaland	210	210	Nil	210	134	76	135	135	Nil	31.12.89
18.	Orissa	4592	4223	369	5051	4887	164	948	878	70	31.12.89
19.	Punjab	2803	2386	417	3630	3592	38	1854	1610	244	30.9.89
20.	Rajasthan	3761	3420	341	7841	6860	981	2375	2355	20	30.9.89
21.	Sikkim	Nil @	Nil @	Nil	295	283	12	Nil	Nil	Nil	31.12.89
22.	Tamil Nadu	4561	3852	709	8558	8172	386	1417	1417	Nil	30.9.89
23.	Tripura	502	365	137	381	378	3	166	182	16 +	31.12.89
24.	Uttar Pradesh	11547 **	11363 **	184	23645	23645	Nil	2228	2228	Nil	31.12.89
25.	West Bengal	9070	9070	Nil	6283	6353	70 +	1223	1100	123	31.3.85
26.	A & N Islands	Nil	Nil	Nil	74	74	Nil	72	72	Nil	31.12.89
27.	Chandigarh	8	8	Nil	14	14	Nil	7	7	Nil	31.12.89
28.	D & N Haveli	21	15	6	30	25	5	9	9	Nil	31.12.89
29.	Daman & Diu	*	*	*	*	*	*	*	*	*	31.3.89
30.	Delhi	200	192	8	102	89	13	12	11	1	30.9.87
31.	Lakshadweep	NIL	Nil	Nil	9	9	Nil	12	12	Nil	30.9.89
32.	Pondicherry	77	77	Nil	161	161	Nil	40	40	Nil	31.12.89
	Total	88078	82071	6007	128166	118555	9611	21665	19708	1957	

Note: uc = under clarification
@ = MPW Scheme is not implemented in Sikim
** = Figures relates to the period ending 31.3.85
* = Separate information not available included in Goa
& = Revised figures received from Kerala
@@ = Revised figures received from Maharashtra state
+ = Exceeding the No. sanctioned
S = Sanctioned Number
P = Number in position
V = Vacant posts
(Figures are provisional)

APPENDIX 9

Health Manpower Working in Rural Areas

Sl. No.	State/UT	LAB.Technicians			Nurse-Midwives			Period upto which information relates to
		S	P	V	S	P	V	
1	2	3	4	5	6	7	8	9
1.	Andhra Pradesh	851	480	371	610	480	130	31.3.87
2.	Arunachal Pradesh	39	39	Nil	26	26	Nil	31.12.89
3.	Assam	286	286	Nil	35 **	38	3 +	31.3.89
4.	Bihar	636	636	Nil	INR	INR	INR	31.3.85
5.	Goa, Daman & Diu	21	20	1	15	14	1	31.12.89
6.	Gujarat	858	656	202	987	536	451	31.12.89
7.	Haryana	549	437	112	2415	2293	122	31.12.89
8.	Himachal Pradesh	528	484	44	512 @	484	28	31.12.89
9.	J & K	43	43	Nil	214	214	NIL	31.3.89
10.	Karnataka	695	344	351	465	317	148	30.6.89
11.	Kerala	253	234	19	438	429	9	31.12.89
12.	Madhya Pradesh	505	470	35	INR	INR	INR	30.9.89
13.	Maharashtra	1205	1082	123	2028	1779	249	31.12.89
14.	Manipur	19	9	10	89	89	Nil	31.3.89
15.	Meghalaya	23	15	8	118	110	8	31.3.87
16.	Mizoram	30	28	2	291	291	Nil	31.3.89
17.	Nagaland	31	26	5	20	20	Nil	31.12.89
18.	Orissa	416	416	Nil	2457	1920	537	31.3.89
19.	Punjab	832	703	129	674	460	214	30.9.89
20.	Rajasthan	898	685	213	INR	INR	INR	30.9.89
21.	Sikkim	20	7	13	Nil	Nil	Nil	31.12.89
22.	Tamil Nadu	594	594	Nil	886	886	Nil	30.6.89
23.	Tripura	25	38	13 +	125	125	Nil	30.9.89
24.	Uttar Pradesh	899	869	30	259 *	259 *	Nil	31.12.89
25.	West Bengal	439	350	89	1981	1964	17	31.3.85
26.	A & N Islands	49 uc	49	Nil	38	38	Nil	31.12.89
27.	Chandigarh	6	6	Nil	1	1	Nil	31.12.89
28.	D & N Haveli	4	4	Nil	3	3	Nil	31.3.89
29.	Delhi	30	28	2	17	16	1	30.9.87
30.	Lakshadweep	11	11	Nil	19	17	2	30.9.89
31.	Pondicherry	19	19	Nil	14	14	Nil	31.12.89
	Total	10814	9068	1746	14737	12823	1914	

Note : INR = Information not received
* = Sanctioned and in position as on 31.3.85
** = Figures relates to the period ending 31.3.86
@ = Figure relates to the period ending 31.12.87
\+ = Exceeding the No. sanctioned.
uc = Under clarification
(Figures are provisional)

APPENDIX 10

Number of recognised training centres for different courses in the state nursing councils and board of examinations during the year 1988

Sl No.	Name of the State Nursing Council and Board of Examination	Number of recognised training centres for different courses in						
		General Nursing		Mid-wifery	A.N.M/ HW	Health Visitor	Health-Super-visors	H.V.to qualify as a PH Nurse
		Men	Women					
1	2	3	4	5	6	7	8	9
1.	Andhra Pradesh	—	58	58	119	—	—	—
2.	Assam	4	20	20	20	1	—	—
3.	Bihar	—	21	14	35	—	1	—
4.	Gujarat	—	20	12	35	2	—	—
5.	Haryana	1	6	4	9	—	1	1
6.	Himachal Pradesh	—	4	4	8	—	1	—
7.	Kerala	—	50	50	18	—	—	—
8.	Mahakoshal	—	18	18	37	—	—	—
9.	Maharashtra	—	47	40	33	—	—	—
10.	Madras	—	24	22	18	3	—	—
11.	Karnataka	—	30	31	21	4	—	—
12.	Orissa	—	5	5	19	1	—	1
13.	Punjab	3	26	21	13	1	—	—
14.	Rajasthan	12	9	8	27	3	—	—
15.	Uttar Pradesh	—	22	13	48	—	4	—
16.	West Bengal	—	22	22	28	—	6	—
17.	Mid India Board	3	8	8	4	—	—	—
18.	A.F.M.S. Examination Board	—	8	18	—	—	—	—
	Total	23	398	368	490	15	13	2

Source: Indian Nursing Council
Govt. of India, *'Health Information India-1990'* Ministry of Health and Family Welfare DGHS, Central Bureau of Health Intelligence, New Delhi. Nov, 1990.

APPENDIX 11

Number of Registered General Nursing Midwfery, Auxiliary Nurses, Midwives and Health Visitors as on 31.12.1988

Sl. No.	Name of the State Nursing Council and Examination Boards	Total Number of Qualified Personnel Entered in the State Register upto 31st December, 1988			
		General Nursing	Midwifery	Auxilliary Nurse-Midwives/Health Workers	Health Visitors
		Men	Women		
1	2	3	4	5	6
1.	Andhra Pradesh	492	13919	12809	1205
2.	Assam	158	2112	2054	46
3.	Bihar	54	8829	7501	1509
4.	Gujarat	402	11728	5220	794
5.	Haryana	115	3046	3511	162
6.	Himachal Pradesh	106	807	1274	137
7.	Karnataka	—	23401	20707	3787
8.	Kerala	315	19729	4078	315
9.	Mahakoshal	800	21461	13406	574
10.	Maharashtra	1505	36021	10469	546
11.	Madras	1019	35002	6228	1161
12.	Orissa	4125	7662	500	110
13.	Punjab	1265	20406	8534	1830
14.	Rajasthan	—	8076	10111	322
15.	Uttar Pradesh	553	10315	10809	2734
16.	West Bengal	381	11601	15712	585
17.	Mid India Board	.....Non Registering Body.....			
18.	South India Board	.....do.....			
19.	A.F.M.S. Examination Board	.....do.....			
	Total	11290	234115	132923	15817
	Grand total	245405		132923	15817

AFMS = Armed Forces Medical Services
* Sex-wise break-up not available.
Source: Indian Nursing Council

APPENDIX 12

Level of Achievement of Some Norms All India Position as on 31.12.1989

Sl. No.	Parameters/indicators	National Norms	Norms achieved/ established (Approximate)
1	2	3	4
1.	Population covered by a Sub-centre	3000-5000 Pop.	4851
2.	Population covered by a PHC	20,000-30,000 Pop.	30540
3	Population covered by a Community Health Centre	About 1 lakh Pop.	3.53 Lakhs
4.	No. of sub centres for each PHC	6 Sub-centres	6.3 Sub-Centres
5.	No. of Primary Health Centres for each Community Health Centre	4 PHCs	11.5 PHCs
6.	Trained Village Health Guide	One for each Village/1000 Population	1.38 Villages/ 1291 Population
7.	Trained Dai	Atleast one for each village	1.00 Villages 1009 Population
8.	Population served by health Workers(Male and Female)	M: 3000-5000 F: 3000-5000	7219 4998
9.	Ratio of HA(M):HW(M)	1:6	1:3.4
10.	Ratio of HA(F):HW(F)	1:6	1:6.8
11.	Average Area covered by a Sub-Centre		25.73 Sq.km.
12.	Average Area covered by a PHC	—	162.01 Sq.km.
13.	Average Area covered by a CHC	—	1872.09 Sq.km.
14.	Max. radial distance covered by a Sub-Centre (in Km)		2.86 Km
15.	Max-radial distance covered by a PHC (in km.)		7.18 Km
16.	Max. radial distance covered by a CHC (in km.)		24.41 Km

APPENDIX 13

Manpower Requirement for Hospital Nursing Services

Sl. No.	Categories	Basic of Calculation	Nursing manpower requirement		
			1986	1991	2001
1.	Nursing Suptds.	1 : 200 beds	2500	3051	4955
2.	Dy. Nursing Suptds.	1 : 300 beds	1700	2034	3003
3.	Departmental Nursing	7 : 1000+1 addl. 1000 beds (991 X 7 – 991)	4080	4880	7928
4.	Ward Nursing Supervisors/Sisters	8 : 200 – 30% leave reserve	26520	31730	51532
5.	Staff Nurse for wards	1 : 3 (or 1 : 9 for each shift)-30% leave reserve	221000	264427	429432
6.	For OPD, Blood Bank, X-ray, Diabetic clinics, CSR, etc.	1: 100 Opt. (1 : 5 Opt.) + 30% leave reserve	33160	39664	64415
7.	For intensive units (8 beds ICU/200 beds	1 : 1 (1 : 3 for each shift) + 30% leave reserve)	26520	31730	51530
8.	For specialised deptts & clinics, OT, Labour room	8 : 200 + 30% leave reserve	26520	31730	51530
	Total		342050	409246	664623

Nursing Manpower Requirements for Community Nursing Services

Projected population 991,479,200 (medium assumption)
Rural population 742,609,400

Infrastructure requirements by 2000 AD

Community Health Centre	7436	100000	
Primary Health Services	26439		
30,000 population for plain area		Plain area	21482
20,000 population for difficult area		Difficult area	4957
Subcentres	163941		
5000 population for plain area		Plain area	128892
3000 population for difficult area		Difficult area	33049

Manpower requirement by 2000 AD

	Nurse Midwives	ANM	FH Supervisor
Primary Health Centres	26,439	26,439	
Community Health Centre	52,052		
	78,491	188,380	40,485

In addition to the above, 78491 Traditional Birth Attendents will be required.

As per the norms reccommended, the Nursing Manpower requirement by 2000 AD will be:

Urban Area

(Hospital Nursing Services)—Nurse Midwives 664623

Rural Area

Sub-cetres ANM/F.H. Worker	323882
Health Supervisor	107960
Primary Health Centres P.H. Nurse	26439
Community Health Centres Nurse Midwives	26439
Public Health Nursing Supervisor	7,436
Nurse Midwives	52,052
Distric Public Health Nursing Officer	900

Total Nursing personnel for Urban & Rural Nursing Services

Nurse Midwives	P.H.N.	Health Supervisor	AHM/HW
664623	26439	107960	323882
26439	7436		
52052	900		
743114	34875		

Source: Report of the High Power Committee on Nursing & Nursing Profession, Govt. of India, Ministry of Health & Family Welfare, New Delhi, 1989.

APPENDIX 14

Health Manpower in Rural Areas as on 31.12.89

	Category	No. sanctioned	No. in position	% Vacant
1.	Surgeons	624	435	30.3
2.	Obst. & Gynaecologists	562	337	40.0
3.	Physicians	555	470	15.3
4.	Paediatricians	444	276	37.8
5.	Doctors at PHCs	23619	19487	17.5
6.	Third Medical Officer under VHG Scheme	4511	2902	35.7
7.	Block Extension Educators	6076	5569	8.3
8.	Health Assistants (Male)	27297	24400	10.6
9.	Health Workers (Male)	88078	82071	6.8
10.	Health Assistants (Female)/LHV	21773	17316	20.5
11.	Health Workers (Female)/ANMs	128166	118555	7.5
12.	Pharmacists	21665	19708	9.0
13.	Lab. Technicians	10814	9068	16.1
14.	Nurse Mid-wives	14737	12823	13.0
Actual total of categories (1)-(4)		S = 2801	P = 2158	22.9 % Vacant

Source: Government of India, Rural Health Statistics, Dec.1989, Ministry of Health and Family Welfare, DGHS, Rural Health Division, Dec. 1989.

LIST OF WORK CENTRES

Sl.No.	Name of College	Hospital/Medical College
1.	College of Nursing	B.J.Medical College New Civil Hospital Ahmedabad - 380016
2.	College of Nursing	Fort, Bangalore - 560002
3.	College of Nursing	K.L.V. Society Belgaum
4.	Institute of Nursing Education	J.J. Group of Hospitals Bombay - 400008
5.	College of Nursing	Armed Forces Medical College Pune - 411040
6.	College of Nursing	S.S.K.M. Hospital Calcutta - 700020
7.	College of Nursing	Medical College Hospital Guwahati - 781001
8.	College of Nursing	Nizam's Institute of Medical Sciences, Hyderabad
9.	College of Nursing	Indore - 452001
10.	College of Nursing	Jaipur - 302004
11.	College of Nursing	G.S.V. Medical College Hospital Kanpur - 208002
12.	College of Nursing	Christian Medical College Ludhiana - 141008
13.	College of Nursing	Sri Ramakrishna Institue of Para- Medical Sciences, Coimbatore
14.	R.A.K. College of Nursing	Andrews Ganj, New Delhi - 110024
15.	S.J. Hospital	Ansari Nagar, New Delhi - 110029
16.	College of Nursing	Medical College Hospital Trivandrum - 695011
17.	College of Nursing	Kottyam, Kerala

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