

Introduction

A Introduction to Social Pharmacy

B Concept of Health

Introduction to Social Pharmacy

1 What is social pharmacy? Explain how social pharmacy helps in improving the public health.

Social Pharmacy

Definition:

- “Social pharmacy is defined as science which deals with social aspects of the profession of pharmacy”.
- “Social pharmacy is the multidisciplinary field of education and research that focuses on the role, provision, regulation and use of medicines in the society.”
- “Social pharmacy may be defined as the discipline dealing with the role of medicines from social, scientific and humanistic approach.”

Scope of Social Pharmacy/Role of Social Pharmacy in Improving Public Health

1. It covers the social, psycho-social, economic and organizational aspects of the medicines.
2. Social pharmacy enables the pharmacy profession to act and take responsibility in its full scope with the problems of pharmacy and medicines in the society.
3. Social pharmacy can assist anyone who wants to use a scientific approach to describe, explain, understand and change practice.
4. Social pharmacy offers benefits to researchers, policy-makers and pharmacists as well as other healthcare providers.
5. Social pharmacy relates with the issues in public health and social politics.

6. Social pharmacy has a strong connections to pharmacy practice.
7. Social pharmacy research is helpful to investigate questions and themes concerning pharmacy practice and medicine use.

2 Explain/Describe the role of pharmacist in public health.

“Role of Pharmacist in Public Health:

Pharmacy is an integral and essential part of healthcare system. The pharmacists are expected to perform the following roles of responsibilities for the public health:

1. He should maintain quality of medicines supplied to the patients.
2. He should record the incidence of a disease in their community.
3. He should identify the adverse drug reactions, if any and report to the authorities.
4. He should ensure that the supply of medicines is as per the laws.
5. He should ensure the medicines prescribed to the patients are suitable.
6. He should counsel the preventive aspects of various diseases to the patients.
7. He should advise the patients about how to take the medicines and answering the patient's questions with due care.
8. A pharmacist can be involved in the prevention and control of diseases in many ways, e.g. involvement in immunization programs, awareness programs, etc.
9. A pharmacist should be involved in the health education to the public regarding the topics such as exercise, health nutrition, tobacco cessation, deaddiction programmes, etc.
10. Pharmacist can work with other medical professionals to promote family planning programs, which is the today's need.

3 Write a note on “National Health Policy of India”.

National Health Policy (NHP):

- Health policy of a nation is its strategy for controlling and optimizing the social uses of its health knowledge of intended objectives.

- In 2015, the Government has announced the health policy.
- It is the third policy announcement about health policy after 1983 and 2002.

Aims/Objectives/Goals of National Health Policy:

1. To attain the highest level of health and well-being possible for every individual at any given age group.
2. The primary aim of the National Health Policy, 2015, is to inform, clarify, strengthen and prioritize the role of the government in shaping health systems in all its dimensions—investment in health, organization and financing of healthcare services, prevention of diseases and promotion of good health through cross-sectional action, access to technologies, developing human resources, building the knowledge base required for better health, financial protection strategies and regulation, and legislation for health.
3. To achieve an acceptable standard of good health of the population.
4. To ensure a more equitable access to health service across the social and geographical areas.
5. To prevent the spread of diseases and improve health of the community.
6. To provide nutritional services, particularly for the underprivileged sections.
7. It is aimed on preventive, promotive, public health and rehabilitation aspects of the healthcare.
8. To establish a dynamic health management information system to support health planning and health program implementation.

The Salient Features of the National Health Policy (NHP), 2015 are divided into 13 Sections:

1. Introduction.
2. Situation analysis.
3. Goals, principles and objectives.
4. Policy directions.
5. Human resources for health.
6. Financing of healthcare and engaging the private sector.
7. Regulatory framework.
8. Medical technologies.

9. Information and computer technology for health and health information needs.
10. Knowledge for health.
11. Governance.
12. Legal framework for healthcare and the right to health.
13. Concluding note—implementation framework and way forward.

National Health Policy Identifies Co-ordinated Action on Priority Areas for Improving the Environment for Health:

1. **The Swachh Bharat Abhiyan:** To reduce water and vector-borne diseases and proper disposal of solid waste.
2. **Balanced and healthy diets:** To provide fresh cooked food at Anganwadi centres to reduce malnutrition and improved food safety.
3. **Deaddiction:** To reduce the use of tobacco, alcohol, gutka, etc. by the success of 'Nasha Mukti Abhiyan'.
4. **Yatri suraksha:** To control the deaths due to rail and road traffic accidents by taking preventive measures of road and rail safety.
5. **Nirbhaya Nari:** To enforce the stringent laws against gender violence.
6. **Reduced stress and improved safety:** Actions taken on the issues of employment security and preventive measures at workplace to reduce stress and improve safety.
7. **Control on air pollution:** To control indoor and outdoor air pollution by taking suitable actions.

4 Enlist various national disease control programmes (for communicable and non-communicable diseases).

National Disease Control Programmes:

(a) For Communicable Diseases:

- (i) Integrated disease surveillance programme.
- (ii) The approach to integration.
- (iii) Control of tuberculosis.
- (iv) Control of HIV/AIDS.
- (v) Leprosy eradication.
- (vi) Vector-borne disease control.

(b) **Non-communicable diseases:**

- (i) Mental health.
- (ii) Emergency care and disaster management.
- (iii) Realizing the potential of AYUSH.

5 Write a note on Indian perspective of National Health Policy. Give the goals/objectives of National Health Policy (NHP), 2017.

 National Health Policy, 2017:

The latest National Health Policy (NHP) is effective from 2017.

• **The Major Goals of NHP, 2017:**

- (i) To attain the highest possible level of health and well-being for all at all ages, through a preventive and promotive healthcare orientation in all developmental policies.
- (ii) To increase accessibility, improving quality and lowering cost of healthcare delivery.

 The NHP Recognizes main Importance of Sustainable Developmental Goals (SDGs) Through Following Principles:

1. Professionalism, integrity and ethics.
2. Equity.
3. Affordability.
4. Universality.
5. Patient centered and quality care.
6. Accountability.
7. Inclusive partnerships.
8. Pluralism.
9. Decentralisation.
10. Dynamism and adaptiveness.

 Objectives of the National Health Policy, 2017:

The main objectives of NHP 2017 are:

- (i) Progressively achieve universal health coverage.
- (ii) Reinforcing trust in public healthcare.
- (iii) Align the growth of private healthcare sector with public health goals.

- (iv) Specific goals and objectives include:
 - Health status and programme impact.
 - Health systems performance.
 - Health system strengthening.
- (v) The NHP is integrated with following National Health Programmes:
 - RMNCH + A services
 - Child and adolescent health.
 - Interventions to address malnutrition and micronutrient deficiencies.
 - Universal immunization.
 - Communicable diseases: Control of TB, control of AIDS, leprosy eradication, vector-borne disease control
 - Non-communicable diseases: Mental health, population stabilization.

6 What are Millennium Development Goals (MDGs)? Enlist MDG. Give the objectives/importance of MDGs.

Millennium Development Goals (MDGs):

- MDGs are the goals with measurable targets and clear deadlines for improving the lives of the world's poorest people.
- To meet these goals and eradicate poverty, leaders of 189 countries signed the historic millennium declaration at the United Nations Millennium Summit in 2000.
- The target date of achievement of the goals was identified as 2015.

The following eight goals were identified by MDG:

1. To eradicate extreme poverty and hunger.
 2. To achieve universal primary education.
 3. To promote gender equality and empower women.
 4. To reduce child mortality.
 5. To improve maternal health.
 6. To combat HIV/AIDS, malaria and other diseases.
 7. To ensure environmental sustainability.
 8. To develop global partnership for development.
- Each goal has specific targets and dates for achieving those targets.
 - The eight goals were measured by 21 targets.
 - The MDG was succeeded by sustainable development goals (SDGs) in 2016.

7 What do you mean by sustainable development goals (SDGs)? Mention/enlist various 17 SDGs.

Sustainable Development Goals (SDGs):

- The sustainable development goals (SDGs) are known as global goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet and ensure that by 2030, all people enjoy peace and prosperity.
- The heads of state and government and high representatives, in September 2015 at meeting in USA decided on sustainable development goals (SDGs).
- The 17 SDGs are integrated and they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.
- SDGs or global goals are the collection of 17 interlinked global goals designed to be a “Blueprint to achieve a better and more sustainable future for all”.

The 17 sustainable development goals (SDGs) are:

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improve nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all, at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.

13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

8 What do you mean by FIP? Give the FIP development goals.

International Pharmaceutical Federation (FIP) Development Goals:

Definition of FIP:

- FIP is the Global Federation of National Associations of Pharmacists and Pharmaceutical Scientists.
- FIP, with its headquarter in the Netherlands, is an International Organization of pharmacy professionals.
- This framework can also be a basis for investment in pharmacy healthcare by government agencies and finding authorities and for national planning and delivery of policy initiatives.
- The FIP development goals are a key resource for transforming the pharmacy profession over the next decade globally, regionally and nationally.
- 21 FIP development goals have been identified and each one of them is marked with workforce (W), practice (P) and science (S) components.
- The work on FIP development goals started in 2016 and the final document has been provided in 2020.

The 21 FIP development goals are:

1. Academic capacity.
2. Early career training strategy.
3. Quality assurance.

4. Advanced and specialist development.
5. Competency development.
6. Leadership development.
7. Advancing integrated services.
8. Working with others.
9. Continuing professional development strategies.
10. Equity and equality.
11. Impact and outcomes.
12. Pharmacy intelligence.
13. Policy development.
14. Medicines expertise.
15. People-centered care.
16. Communicable diseases.
17. Antimicrobial stewardship.
18. Access to medicines, devices and services.
19. Patient safety.
20. Digital health.
21. Sustainability in pharmacy.

B

Concept of Health

1 Define the term “health”.

☞ **According to World Health Organization (WHO) the Term Health is Defined as:**

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

2 Mention various dimensions/types/aspects of health.

☞ **The Concept of Health Refers to Many Aspects or Dimensions such as:**

- Physical health or physical dimension.
- Mental health or mental dimension.
- Social health or social dimension.
- Spiritual health or spiritual dimension.
- Emotional health or emotional dimension.
- Vocational health or vocational dimension.

3 Describe in brief about physical health.

☞ **Physical Health**

It is defined as “a state in which every cell and every organ is functioning at optimum capacity and in perfect harmony with the rest of the body”.

- It refers to the perfect functioning of the body.
- It indicates that all body organs are structurally and functionally in a normal state and there is a perfect coordination between the organs and the systems.

- The signs of physical health in an individual are as follows:
 - A good complexion – Sound sleep
 - Clean skin – Regular activity of bowel and bladder
 - Bright eyes – Smooth and easy coordinated movements
 - Lustrous hair – Body weight, pulse rate, BP, etc. are all in normal limits
 - Not too fat – A sweet breath
 - Good appetite
- The physical health can be assessed by clinical examination, nutrition and biomedical and laboratory investigations

4 What is mental health? State major types of mental disorders.

Mental Health

Mental health has been defined as “a state of balance between the individual and the surrounding world including environment and a state of harmony between oneself and others”.

Types of Mental Disorders/Diseases

- Psychosis: It is the psychic condition which involves marked impairment of behaviour with a serious inability to think.
- Neurosis: This term is used to denote less severe form of psychosis.
- Schizophrenia: It is psychic condition characterized by disturbed thinking and emotional withdrawal from surrounding.
- Depression: It is a common psychiatric disorders characterized by a feeling of misery, apathy, hopelessness, ugliness, loss of appetite, insomnia, anorexia, alteration in moods and activities, etc.

5 Write a note on mental health.

Mental Health:

“It is a state of balance between the individual and the surrounding world including environment and a state of harmony between oneself and others.”

- Mental health refers to mind of the individual.
- It is always said that healthy mind resides in healthy body.
- Therefore, physical and mental components of health are indivisible.
- Mental health is an ability of individual to adjust with the environment and the surrounding world.

Characteristics/Signs of Mentally Healthy Person

- He is free from internal conflicts.
- He is well adjusted with surrounding.
- He searches for identity.
- He knows himself, his needs, problems and goals.
- He has a good self-control.
- He faces problems and tries to solve them intelligently.

6 Write a brief about “social health”.

Social Health

It has been defined as “a quantity and quality of an individual inter-personalities and the extent of involvement with the community.

- Man is a social animal, he cannot live individually, he will have to depend on each other to fulfil his basic needs.
- Thus the social health implies harmony and integration within the individual and members of the society and the world in which they live.
- The social health considers the individual as a member of society and his health status in relation to socioeconomic conditions of the social group in which he lives.

7 Write a short note on “spiritual health/holistic health”.

Spiritual Health

It is concerned with spirit or soul which directs the person towards right things and keeps away from bad habits.

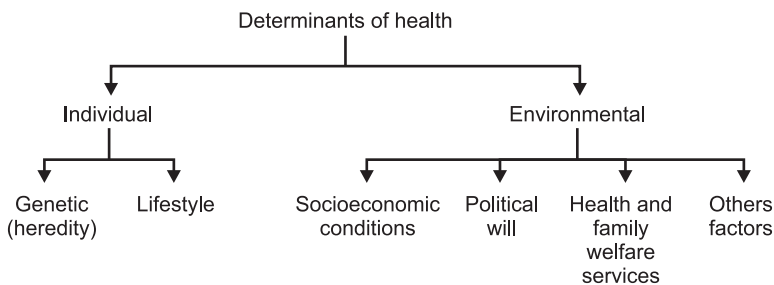
- Spiritual health plays a role in health and disease.
- Spiritual health refers to that part of the individual which reaches out and strives from meaning and purpose in life.

- Spiritual health may determine or influence individual's physiology and psychology.
- The body is always guided by soul, if the spiritual health is sound, the bad thinking is always controlled by inner soul.
- All religions are concerned mainly about the spiritual welfare.
- Spiritual health is the supernatural power that contributes to the health of an individual.
- Spiritual component of health is necessary to follow the rules and regulations in daily life.
- To do prayers in the morning and evening is healthy sign of spiritual health.

8 Discuss various variables/determinants/factors which govern the health of an individual.

Determinants of Health

“The factors which influence the health of the individual and external environment or society where he lives are called determinants of health.”



Individual

- *Genetic (heredity)*: The state of health depends upon genetic constituent of man. Genes play a very important role in the health and development of child. Many diseases are hereditary, e.g. hemophilia and sickle cell anemia, diabetes occurs in the next generations which affect the health.
- *Lifestyle*: The lifestyle is the way people live. Lifestyle of an individual plays a great role in health. Many health problems are associated with lifestyle changes or personal habits such

as smoking, alcoholism, etc. Some lifestyles can promote the health which include care of body, bathing, washing, care of teeth, hair, nail, adequate sleep, nutrition. Thus there is an association between health and lifestyle of an individual.

Environment/Surrounding Factors

- *Socioeconomic conditions*: These conditions influence human health. The economic status, purchasing power, education, occupation, family size, quality of life affect the health status of an individual in many ways.
- *Political will*: The health is also related to country's political system. A political system oriented towards social development promotes good health.

The poor people living in slums, lacking good hygienic conditions are the targets of disease agents. The people in rural areas who do not have access to health services should be taken into consideration while framing the health policies by the political parties because it ultimately affects the health status of these communities.

- *Health and family welfare services*: It covers personal and community services for the prevention, treatment of disease and promotion of health.

The purpose of health services is to improve health status. It includes services like immunization, safe water supply, care of pregnant woman and children, treatment of sterility, framing "small family norm", etc. For these activities "primary health centres" are good places of operation.

- *Other factors*: Other factors contributing to the health-derived policies such as employment, opportunities, education, rural developments, etc.

9 What do you mean by "indicators of health"? Give the characteristics of an ideal indicator.

Indicators of Health

Health indicators are the factors used to measure the health status of community as well as to find out how far a given person is healthy.

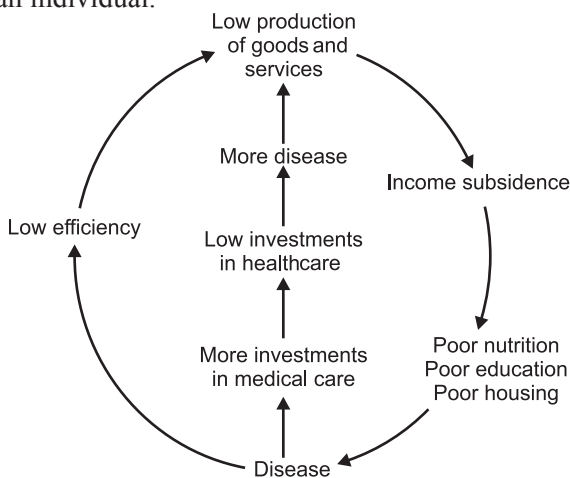
Characteristics of an Ideal Health Indicator

- It should be valid.
- It should be reliable.
- It should be sensitive.
- It should be specific.
- It should be feasible.
- It should be relevant.

10 Write a note on “economic cycle of disease”.

☞ The health of an individual depends on the socioeconomic factors which are governed by set rules of regulations framed and accepted by the society in which he lives.

Therefore, poor economic status, poor nutrition, poor education, poor housing are major root causes of the diseases and affect health status of an individual.



Economic cycle of disease

11 Enlist various indicators of health (classify indicators of health).

☞ Indicators of Health are Classified as:

- Mortality indicators.
- Morbidity indicators.
- Disability indicators.
- Nutritional status indicators.

- Healthcare delivery indicators.
- Utilization indicators.
- Indicators of social and mental health.
- Environmental indicators.
- Socioeconomic indicators.
- Health policy indicators.
- Quality of life indicators.
- Other indicators such as sanitation indicator.

12 Write a note on mortality indicators (death rate).

- Mortality rate means death rate.
- Mortality rate of children of any country is the direct indicator for judging the state of development of the country.
- A high mortality rate of children in a country indicates that the country is undeveloped.
- Mortality indicators may be classified as:
 - i. *Crude death rate*: It is defined as number of deaths per 1000 population per year in a given community.
 - It indicates the rate at which the people are dying.
 - ii. *Expectation of life*: Expectancy of life at birth is the average number of years likely to be lived by a person if current age specific mortality rates are applied.
 - If the expectation of life increases it indicates improvement in the health status and socioeconomic development.
 - To achieve expectancy of life at birth, 60 years is the target for “health for all” by 2000 AD.
 - iii. *Infant mortality rate*: It is the rate of deaths under 1 year of age in a given year to total number of live birth in same year.
 - iv. *Child 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.
 - v. *Maternal mortality rate*: It is the proportion of total deaths occurring in the women of reproductive age.

13 What do you mean by morbidity indicators?

 **Morbidity Indicators give Information Regarding the Disease Situations in the Community.**

- The morbidity rate (disease rate) is the number of cases of a disease found to occur in a stated number of population.

- Morbidity indicators are used for assessing ill-health in the community which is not judged by mortality indicators.
- Morbidity indicators include:
 - i. Incidence and prevalence rate.
 - ii. Epidemiological studies.
 - iii. Admission, readmission and discharge rates in hospitals.
 - iv. Stay duration in hospitals.
 - v. Absence from school or work.
 - vi. OPD attendance.

14 Write a note on “concept of disease”.

 **The Term “Disease” is Defined by Many Ways:**

- Disease is a physiological or psychological dysfunction.
- Disease is any deviation from normal state of complete physical, mental or social well-being.
- Disease is a condition of the body or some part or organ of the body in which its functions are disturbed.
- The WHO has not defined the disease because disease has many shades (spectrum of disease) ranging from subclinical cases to severe illness.

15 Write a note on “natural history of disease”.

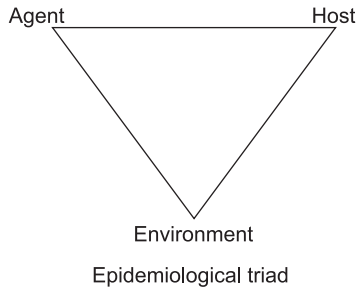
 The term natural history of disease signifies the way in which a disease evolves over time from the earliest stage of pathogenesis phase to its termination as recovery, disability or death in the absence of treatment or prevention.

Disease results from a complex interaction between person, an agent (disease agent) and the environment.

Natural history of disease consists of two phases:

- i. *Prepathogenesis phase*: It is the phase at which causative agent exists in the environment. In this phase, the man is exposed to the risk of disease.

The causative factors of disease may be classified as agent, host and environment. These three factors are referred to as epidemiological triad.



ii. *Pathogenesis phase*

- This phase starts with the entry of the agent into the human host.
- The time interval from the entry of agent in the host to the appearance of disease is termed incubation period.
- During this period the agent multiplies in the host's tissues without producing symptoms of disease.
- The incubation period is followed by pathological changes in the form of early and late pathogenesis.

16 Define the term “disease agent”. Classify various disease agents.

Disease Agent

Disease agent is a substance living or nonliving or a force tangible or intangible the excessive presence or relative lack of which is the immediate cause of a particular disease.

The disease agents are classified as:

- i. *Biological agents*: These are micro-organisms including bacteria, viruses, fungi, protozoa.
- ii. *Nutrient agents*: These include proteins, fats, carbohydrates, vitamins, minerals and water.
- iii. *Physical agents*: These include heat, cold, humidity, radiation, electricity, pressure, sound.

iv. *Chemical agents*:

- Endogenous, e.g. urea, bilirubin, uric acid, cholesterol.
- Exogenous, e.g. pollens, fumes, gases, insecticides.

v. *Mechanical agents*: Vibration, chronic friction and other mechanical forces can lead to trauma.

vi. Absence or insufficiency or excess factors necessary for health may be the cause of disease, e.g. hormones, enzymes.

vii. *Social agents*: These include poverty, smoking, alcohol, unhealthy lifestyles.

17 Explain the “concepts of prevention of diseases”.

☞ The concept of prevention of diseases includes following three levels:

Primary Prevention

Primary prevention can be defined as action taken prior to the onset of disease, which removes the possibility that disease will ever occur.

- i. Primary prevention is exercised to promote general health and well-being and quality of life of the people.
- ii. The concept of primary prevention is now being applied to the prevention of chronic disease like hypertension, cancer.
- iii. Primary prevention is the safest and low cost way of prevention of disease.

Secondary Prevention

Secondary prevention can be defined as “actions which are taken to half the progress of a disease at its early stage and to prevent complications.

- i. Secondary prevention arrests the disease process by early diagnosis and treatment.
- ii. Secondary prevention is an important tool in the control of transmission of diseases.
- iii. The health programs of government are usually at the level of secondary prevention.
- iv. It is often more expensive and less effective than primary prevention.

Tertiary Prevention

Tertiary prevention can be defined as “all measures available to reduce or limit impairments and disabilities, minimise sufferings caused by existing departures from good health and to promote the patients adjustment to irremediable conditions”.

Tertiary prevention includes disability prevention and rehabilitation of the patients.

18 What is intervention? What are various modes of intervention?

Intervention

Any measure taken to intervene or interrupt the natural sequence of a disease is termed intervention.

Intervention includes treatment, education, help or social support.

The modes of intervention are:

- i. *Health promotion*: Health promotion is intended to strengthen the host by improving the general health and quality of life of individual and communities.
The important interventions for health promotion are:
 - Health education
 - Environmental modifications
 - Nutritional intervention
 - Lifestyle and behavioural changes.
- ii. *Specific protection*: It includes specific immunization, use of specific nutrients, protection against accidents, etc.
- iii. *Early diagnosis and treatment*: Early detection and treatment are the main interventions of disease control.
- iv. *Disability limitation*: The objective at this level is to control the disease process by appropriate treatment to limit the disability and further complications.
Disease → Impairment → Disability → Handicap
- v. *Rehabilitation*: It is defined as “the combined and coordinated use of medical, social, educational and vocational measures for training and retraining the individual to the highest possible level of functional ability”. The important areas of rehabilitation are as follows:

- Medical rehabilitation: Restoration of function.
- Vocational: Restoration of the capacity to earn a livelihood.
- Social: Restoration of family and social relationship.
- Psychological: Restoration of personal dignity and confidence.

19 Define the terms:

- 👉 (a) **Health education:** Health education is an educating the public in general, individually or in masses communicating information given by experts on health aspects, diseases, drug abuses, etc. so that people lead healthy life in all dimensions of human health as covered by WHO in the interest of public welfare.
- (b) **Community pharmacy:** A community pharmacy is a healthcare facility that provide pharmaceutical services to the community and dispenses medicine and typically involves a role of pharmacists.

20 Define “indicators of health”. Explain various indicators of health.

👉 **Indicators of Health**

“Health indicators are the factors used to measure the health status of community as well as to find out how far a given person is healthy.”

Assessing the health status of a community helps to:

- (a) Identify the healthcare needs of society.
- (b) Utilize, needs and success of available health services.
- (c) Frame and implement better health policies to improve health status.

Following are the indicators of health:

1. Mortality Indicators:

- Mortality rate means death rate.
- Mortality rates are the indirect measures of health.
- Determining mortality rates in different age groups in a community, e.g. infant mortality, child mortality, maternal mortality indicate the health status of that community.

2. Morbidity Indicators:

- Morbidity indicators give information regarding the disease situations in the community.

- The morbidity indicators include epidemiological studies that determine incidence and prevalence of disease and statistical data showing notification of disease, number of admissions in the hospital.

3. Disability indicators:

- Disability means persons may remain disabled for sometime or lifelong on recovery from disease or illness.
- Disability rates are determined from limitations of morbidity and limitations of activity.

4. Healthcare delivery indicators:

- Doctors–population ratio, population–bed ratio, population–health center ratio are used as indicator of health.
- Health services utilization may give the indication of health status.

5. Sanitation indicators:

- The term sanitation covers care of food, water, disposal excreta and regulation of environment.
- The percentage of population with safe water, and sanitary facilities and measurement of air, water and noise pollution are indicators used to measure health status.

6. Socioeconomic indicators:

- The population growth rate, per capita income, level of unemployment, literacy rates, etc are indicators of socioeconomic health status of the community.
- Social and mental health problems (e.g. suicide, violence, alcoholism, drug abuse) in a given community gives the indication about social and mental health.

7. Quality of life indicators:

- Health status can be measured by describing the quality of life of the individual and whole community in which he lives.
- Defining quality of life is difficult.
- The physical quality of life can be determined from infant mortality, life expectancy at age one to five and literacy.