

Open Vocational Education Programme (Health & Para Medical)

Certificate in Care of the Elderly  
(CCE)

1

# BASIC LIFE SCIENCES

(Subject Code-409)



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## National Institute of Open Schooling

**1**

**Certificate in Care of the Elderly  
(CCE)**

**BASIC LIFE SCIENCES**  
**(Subject Code -409)**



**NATIONAL INSTITUTE OF OPEN SCHOOLING**

**B-35, Kailash Colony, New Delhi - 110 048**

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Open Schooling Programme (Health & Family Welfare)



# Certificate in Care of the Elderly (CCCE)

## BASIC LIFE SCIENCES

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## **From the Chairman**

### *To the Learner*

Dear Learner,

Welcome to the National Institute of Open Schooling.

By enrolling with this institution, you have become a part of the family of the world's largest open school. As a learner of the National Institute of Open Schooling vocational programme, I am confident that you will enjoy studying and will benefit from this very unique School.

Before you begin reading your lessons, there are a few words of advice that I would like to share with you. We, at the National Institute of Open Schooling, are well aware that you are different from other learners. We realize that there are many of you who may have rich life experiences; you may have prior knowledge about trades and crafts that are a part of your family's legacy; you may have a sharp business sense that will make you fine entrepreneurs one day. Most importantly, you have that drive and motivation that has made you enroll with this institution which believes in the **spirit of freedom**. Yes, we are aware that you have many positive aspects to your personality, which we respect and relate to them.

During the course of your study, National Institute of Open Schooling will treat you as the manager of your own learning. This is why your course materials have been developed keeping in mind the fact that there is no teacher to "teach" you – **you are your own teacher**. Of course, if you have a problem, we have provided for a teacher at your Accredited Vocational Institution (AVI). I would advise that you should always be in touch with your AVI for collection of study materials, examination schedules, etc. You should also always attend the Personal Contact classes and Practical classes held in these study centers. These will give you the necessary Hands, on training that is so essential to master a professional course.

Studying for a vocational course is different from any other academic course. Here, while the marks obtained in the examination will indicate your grasp on your subject knowledge, your real achievement will be when you are able to apply your vocational skills in the market. I hope that this skill-based learning will help you perform your tasks better. Perhaps you could even think of starting your own business. In order to guide you in this direction, we have included a lesson on Job Opportunities/Placement. We hope that you find it useful.

The present course is on **Care of the Elderly**, which is a very important course for Care of Aged Persons. I am confident that you will enjoy studying through the open Learning System.

On behalf of NIOS, I wish you the very best for a bright and successful future.

(N. K. Ambasht)  
Chairman

*A Word with you*

Dear Learner,

Welcome to the Vocational Course, Certificate in Care of the Elderly

The Certificate course in **Care of the Elderly (CCE)** has been developed keeping in view the requirements of the competent and skilled work force to provide care to the elderly to keep them healthy and productive.

The proportion of senior citizens in our country is increasing due to betterment of medicare facilities leading to increase in average age. These senior citizens need a special kind of treatment and care. A holistic approach, taking into account all their social, psychological and physical care needs, is required. Realising these needs Certificate in Care of the Elderly has been launched. It is aimed at creating a specialized and skilled manpower for working in old age homes, geriatric wards of hospitals/nursing homes, special centres for Senior Citizens and even for a family. Doctors, Social workers, nurses and para medical & health workers, will find this course useful.

This is the first of the three subjects of this certificate course. This subject provides the fundamentals of the life sciences concerning the human beings in general and elderly in particular. With it, the subject deals community awareness for the elderly care and government sponsored support system for the elderly also.

I hope you will find this book informative, interesting and useful. If you have any point for clarification or suggestion to improve this course, please feel free to write.

Wishing you all the success

**Course Coordinator**

## From the Director

**Dear Learner,**

*In the fast expanding world of work, learning new skills has become a necessity. Learning and relearning have become essential for all. In such an environment, vocational education has assumed great importance. Vocational education, as a stream of education promotes the skill development and training of youth and directs them towards meaningful employment.*

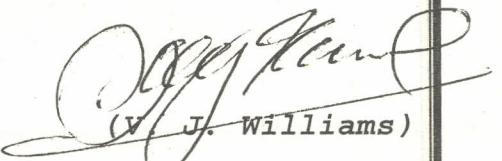
*In the formal education system, secondary and senior secondary are important terminal stages because at these stages, as per the existing policy, options are exercised to enter higher education or vocational education or world of work.*

*In keeping with the needs of learners, the National Institute of Open Schooling (NIOS) introduced Vocational Education through distance mode in 1991-92. NIOS provides quality education for all learners particularly from disadvantaged sections of society.*

*NIOS has now developed a new course in the area of Health & Paramedical, namely **Certificate Course in Care of the Elderly**. This course is being offered through open learning mode of education. The objective of this course is to train persons to take better care of the Elderly, be it at home or at old Age Homes. The course would enable a learner to understand the physical emotional and spiritual state of an Elderly person. After completing this course, we hope that learners would be able to find employment as Assistants for Elderly Care or can establish an Old Age Home.*

*We are confident that this course will prove to be beneficial to you. We look forward to any comments and suggestions from you for further improvement. Sincere efforts have been made to present the matter in a very simple and interactive manner which we hope will make it interesting and facilitate learning.*

*We wish you all the best in your future career.*

  
(V. J. Williams)  
Director (VE)

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# Certificate Course in Care of the Elderly Syllabus

## Subject-1- Basic Life Sciences

### Unit-1 Anatomy and Physiology

- 1.0 Introduction to Anatomy and Physiology
- 1.1 Anatomical terms
- 1.2 Organization of human body
- 1.3 Pleura, Pericardium and Peritoneum
- 1.4 Appendages (Appendicular portion)
- 1.5 Tissues that form building blocks of human body
- 1.6 Organs and organ systems of the human body, Integumentary system, Support and movement systems, Communication and co-ordination system, Endocrine System, Circulatory system, Respiratory system, Digestive system, Urinary system, Reproductive system, Homeostasis

### Unit-2 Health & Health Education and Basics of Nutrition

- 2.0 Meaning of food, Nutrition & Nutrients
  - 2.1 Balance diet
  - 2.2 Cooking methods
  - 2.3 Food Hygiene
  - 2.4 Health & Hygiene
    - Meaning Of Health & Hygiene
    - Definitions and Concepts of Health
  - 2.5 Dimensions of Health
    - Factors affecting Health and Components of Hygiene for Health
  - 2.6 Health Education for Active Ageing and Healthy Living
    - Health education concepts, purposes, objectives and Approaches
    - (A) Definition and meaning of Health Education
    - (B) Purposes of Health Education
-

- (C) Objectives of Health Education
- (D) Approaches to Health Education for the Elderly

Meaning of active ageing

- 2.7 Myths and Misconceptions about ageing
- 2.8 Importance of Health Education for maintenance of Health and healthy Ageing
- 2.9 Measures for maintaining good health

### **Unit 3 - Community Awareness and Government of sponsored system for the Elderly**

3.0 Meaning and Concept of community awareness

- 3.1 Factors affecting community awareness
- 3.2 Need for creating community awareness for care of the elderly
- 3.3 Purposes of creating community awareness for care of the elderly
- 3.4 Community action(s) for care of the elderly
- 3.5 Need of government support for the elderly
- 3.6 Levels of support measures to the elderly

- (A) At Individual level
- (B) At community level
- (C) At government level

3.7 Type of government support available for the elderly

Social security and social support system

Support system required for health care of the elderly

3.8 Proposed National Health Policy and Role of care provider as coordinator of support system

### **Unit-4 - Basic Psychology**

4.0 Psychology

4.1 Nature of Psychology

4.2 Need of Psychology

4.3 Basic Concepts of Psychology

- (a) Learning
- (b) Memory
- (c) Sense organs
- (d) Perception
- (e) Emotions

4.4 Personality

4.5 Adjustment

4.6 Healthy adjustment

---

## Subject - 2- Aspects of Ageing

### Unit- 1 -(A) Profile of the Elderly

#### (B) Structural and Functional Changes in Ageing

- 1.0 Ageing and the elderly
- 1.2 Age-related changes affecting the elderly
  - (A) Structural and functional changes
  - (B) Psychological changes
- 1.3 The attitude and coping behaviour of the elderly
- 1.4 Recognising diverse patterns of ageing
- 1.5 Characteristic features of ageing
- 1.6 Changes in the body of the aged and their consequence
  - (A) Visible manifestations
  - (B) Invisible manifestations
- 1.7 Health promotion and disease prevention among the elderly
  - (A) Prevention of accidents
  - (B) Promotion of physical activity
  - (C) Prevention of dietary disorders
  - (D) Promotion of social interaction

### Unit-2 (A) - The elderly, the family and the community

#### (B) - Psychology of Ageing

- 2.1 The concept of : elderly, family and community.
  - (A) The elderly
  - (B) The family
  - (C) The community
- 2.2 Characteristics of the elderly as compared to the young
  - (A) Characteristics of the elderly
  - (B) Characteristics of the young
- 2.3 Factors influencing behaviour of the elderly, the family and the community
  - (A) Conditioned reflexes
  - (B) Parental influence
  - (C) Religious factors
  - (D) Ethnic factors

- 
- (E) Cultural factors
  - (F) Economic factors
  - (G) Social pressures
  - (H) Hard mentality
  - (I) Impact of past behaviour
  - (J) Experience and training
- 2.4 Role of the family and the community in preventing abuse of the elderly
- (A) Financial abuse
  - (B) Physical abuse
  - (C) Social abuse
- 2.5 Role of the elderly towards their family and the community and the role of care providers towards the elderly, their family and the community
- 2.6 Factors affecting self-image of the elderly
- (A) Losses and their impact on self-image of the elderly
  - (B) Media and its impact on self-image of the elderly
  - (C) Cultural factors and their impact on self-image of the elderly
- 2.7 Changes in Psychological functions of elderly.
- (A) Personality
  - (B) Intelligence
  - (C) Learning and memory
  - (D) Problem - solving ability
  - (E) Perception and attention
  - (F) Motivation
- 2.8 Adjustment among the elderly
- (A) Adjustment by disengagement
  - (B) Adjustment by activities
  - (C) Adjustment as a life-long process
  - (D) Adjustment to other changes
- 2.9 Psychological Needs of the elderly and their Care

### **Unit-3 - Social, Economic, Spiritual Needs and Problems of the Elderly**

- 3.0 Major needs/problems of the elderly
- 3.1 Social and economic needs/problems of the elderly
- (A) Social needs/problems of the elderly
  - (B) Economic needs/problems of the elderly

- 
- 3.2 Assessment of Socio-Economic status of the elderly (based on the set guidelines)
  - 3.3 Role of a Care provider :
    - (A) Role in the social context
    - (B) Role in the economic context
  - 3.4 Concept of spirituality
  - 3.5 Benefits of spirituality
  - 3.6 Spiritual Needs of the elderly
  - 3.7 Role of the Care providers in meeting spiritual needs of the elderly
    - (A) Maintaining a spiritual climate
    - (B) Providing information regarding existing spiritual organisations
    - (C) Providing literature on spiritualism to the elderly
    - (D) Arranging spiritual gatherings.
    - (E) Hospice

### **Subject - 3- General Care and Specific needs of the Elderly**

#### **Unit-1- (A) Living Environment of the Elderly**

##### **(B) Special Nutritional Needs of the Elderly Individuals**

- 1.0 Meaning of Environment
  - 1.1 Types of Environment
  - 1.2 Physiological limitations in ageing and the environmental impact
  - 1.3 Considerations of environmental attributes
    - (A) Light
    - (B) Temperature
    - (C) Colour
    - (D) Floor and floor covering
    - (E) Furniture
    - (F) Sensory stimulants
    - (G) Noise control
    - (H) Bathroom
  - 1.4 Mental Health and Environment
    - (A) Important factors contributing to positive mental health of the elderly
    - (B) Factors contributing to poor mental adjustment
- Social environment

- 
- 1.5 Assessment of the living environment
  - 1.6 Role of the Care provider
  - 1.7 Structural changes
  - 1.8 Factors affecting meal planning
    - Modification of family meal
      - (A) Quantitative modification
      - (B) Modification for old people
    - Formulating diet for the elderly
      - (A) Energy needs of ageing individuals
      - (B) Prevention of degenerative diseases in the elderly
  - 1.9 Anti-oxidants in food

**Unit- 2 (A) Physical Problems of the Elderly : Assessment and Care**

**(B) Psychological Disorders of the Elderly: Assessment and Care**

- 2.0 Physical Problems
  - 2.1 Classification of Physical Problems
    - Problems of Sensory System
      - (A) Problem related to eye
      - (B) Problem related to ear
    - Problem of Musculoskeletal System
      - (A) Osteoporosis
      - (B) Osteoarthritis
    - Problems of Respiratory System
    - Problems of Cardiovascular System
      - (A) Coronary Artery Disease/Ischemic Heart Disease
      - (B) Hypertension
    - Problems of Urogenital System - Urinary Incontinence
    - Problems of Nervous System
      - (A) Cerebrovascular accident/stroke
      - (B) Parkinson's Disease
    - Problems of Integumentary System
-

- 
- (A) Skin lesions
  - (B) Pressure sores

Problems of Metabolism - Diabetes Mellitus

2.2 Psychological disorders

- (A) Depressive disorder
- (B) Anxiety disorders
- (C) Mixed anxiety depressive disorder
- (D) Dementia
- (E) Acute confusional state (Delirium)

2.3 Psychological symptoms as response to stressful events and circumstances

- (A) Events causing psychological symptoms
- (B) Psychological symptoms
- (C) Role of the care giver

**Unit-3- (A) Care in Specific Serious Conditions of the Elderly : Cancer, Diabetic Coma, Stroke and Fractures**

**(B) Care of the Bed Ridden Elderly**

3.0 Care in specific serious conditions of the Elderly

3.1 Cancer

- (A) Causes of cancer
- (B) Incidence of cancer
- (C) Signs and symptoms of cancer and warning signals
- (D) Diagnosis of cancer
- (E) Guidelines of care : steps to follow for care
- (F) Prevention of cancer
- (G) Care of the elderly who has cancer
- (H) Common questions and expectations of elderly cancer patients and their families.

3.2 Diabetic Coma

- (A) Meaning of diabetic coma
- (B) Types of diabetes
- (C) Signs and symptoms of diabetic coma
- (D) Treatment and care by health worker at home
- (E) Progress of elderly patient's condition

---

(F) Guidelines to follow during period of illness

(G) Some tips for diabetic care

3.3 Stroke

(A) Meaning of stroke

(B) Causes of stroke

(C) Signs and symptoms of stroke

(D) Types of paralysis.

(E) Objectives of care and treatment, for an elderly who has suffered a stroke

(F) Rehabilitation phase

3.4 Fractures

(A) Meaning of fractures

(B) Causes of fractures

(C) Types of fractures

(D) Signs and symptoms of fractures

(E) Objectives of immediate aid for elderly people.

(F) Care of the elderly person with fractures

(G) Improving mobility and patient rehabilitation

3.5 Meaning of Bed Ridden/Prolonged Bed Rest

3.6 Common Diseases/Conditions Requiring Prolonged Bed Rest

3.7 Assessment of Needs/Problems of the Bed Ridden

3.8 Care of the Bed Ridden Elderly

(A) Goals of Care

(B) Areas of Care

3.9 Complications of Prolonged Bed Rest in Elderly

**Unit-4-Voluntary Social and Health Services, Resources for the Care of the Elderly**

4.0 Purposes and Functions of Voluntary Social and Health Services/Resources for Care of the Elderly

4.1 Types of Voluntary Social and Health Services/Resources for Care of the elderly

4.2 Problems Frequently Faced by these Services/Resources.

4.3 Role of Care Provider in Voluntary Social and Health Services/Resources for Care of the Elderly

# CONTENTS

Lesson	Topic	Page No.
1.	Anatomy and Physiology - I	1
2.	Anatomy and Physiology - II	24
3.	Basics of Nutrition	56
4.	Health and Hygiene	77
5.	Health Education for Active Ageing and Healthy living	101
6.	Community Awareness for the Elderly Care	117
7.	Government Sponsored Support System for the Elderly	128
8.	Basic Psychology	142

# Lesson 3

## Basics of Nutrition

### STRUCTURE

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Meaning of food, nutrition & nutrients
- 3.3 Balanced diet
- 3.4 Cooking methods
- 3.5 Food hygiene
- 3.6 Summary
- 3.7 Answers to Intext Questions

### 3.0 Introduction

We all know that food plays an important role in our lives and is associated with every activity. It is one of the most important needs of our lives. In this lesson we are going to study about food, nutrition & about balanced diet and certain cooking methods used to cook the food.

### 3.1 Objectives

After reading this lesson, you will be able to :

- define nutrition & nutrients;
  - explain the concept of balanced diet;
  - discuss and list the cooking methods;
  - discuss the importance of food hygiene;
  - identify the cutlery used for the elderly;
-

## **3.2 Meaning of Food, Nutrition & Nutrients**

### **Food**

The term "food" refers to anything that we eat and drink, and which nourishes the body.

Food is essential because it contains substances which performs the functions in the body.

### **Functions of food**

There are basically 3 important functions of food.

#### **1. Social Function**

Sharing food with other person implies social acceptance. Food is also an integral part of festivals, marriages, and other functions such as child birth and even deaths.

#### **2. Psychological Functions**

All human beings have emotional needs such as need for security, love and attention. Food is a medium through which these needs are satisfied. Mother preparing child's favourite foods is an example of love and affection. Food is often served as a regard also. Similarly certain foods are associated with sickness, such as khichri and other bland foods. Sickness is unpleasant hence even the food items served in this state may therefore be associated with unpleasant feelings.

#### **3. Physiological function**

There are four physiological functions performed by food. These are as follows.

##### **1. Food provides energy**

Energy is required for all the work that we do. Energy is required for walking, eating, working and even sleeping. From where do we get this energy? Energy that we need is obtained from food that we eat.

##### **2. Food helps in body building**

Have you ever wondered how a small child grows into an adult. Our body is made up of thousand of cells, new cells are added to these to help the body grow. Food is needed for the formation of new cells. Cells have got a specific life span. Old cells die every day. New cells are formed and this repair work is done with the help of food.

##### **3. Food also provides protection from diseases**

Certain foods gives us strength to fight against disease & germs.

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#### 4. Food regulates body processes

Regulating functions refer to the role of food in controlling certain body processes, for ex. Body temperature is maintained at 98.4 degrees F or 37 degrees C. Heart beats are also maintained at 72 beats/min. Excretion of waste products from the body is also a regular process.

Now let us see what type of food we eat?

We eat a variety of food items, like roti, dal, rice, vegetables, fruits, sweets etc. If we start making the list of all the food that we eat, I am sure it will run into pages. So what can we do, to reduce this. If we examine all these items carefully, we find that these can be put together into groups. Food items are obtained from plant sources as well as animal sources.

On the basis of function they serve in the body, food can be categorised into three main groups.

- Energy Giving Foods
- Body Building Foods
- Protective Foods

#### Inter relationship of Food, Nutrition & Health

Earlier we learnt about the meaning & functions of food, now let us understand the meaning of the terms nutrition, nutrients and health.

**Nutrition** is a scientific discipline with food as a major focus. So we can say that nutrition is a study of what happens to food once it enters the mouth and thereafter. A more formal definition of nutrition can be **it is the study of processes by which the living organism ingests, utilizes the material necessary for the maintenance of its functions, growth and survival its components.**

All foods contain some essential substance which perform important functions in our body. These essential substances supplied by food, are called **Nutrients**.

These Nutrients help us to maintain our body functions for growth and to protect our body organs. There are six major nutrients found in foods. We'll study about these nutrients after a while First let us see what is health and how food, nutrition and health are inter-related?

The definition of health according to W.H.O **Health is a state of the complete physical, mental and social well being and not merely the absence of disease or infirmity.**

The health of a person depends on the type and quantity of foods he eats. Good health is essential for a person to grow and develop normally and to remain healthy throughout life. Poor nutrition influences the mental and social well being. Good nutrition is essential for good health

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**INTEXT QUESTIONS 3.1**

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1. Define the term food?

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2. What are the functions of food?

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3. List at least ten items of food that you eat.

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**Nutrients and their function**

We all know that food helps in nourishment and health of our body. The nourishment is brought about by nutrients, which are present in food.

Now let us see what are these nutrients? Nutrients are the chemical substances present in food and are required for nourishing the body.

Nutrients are of two types

**Macronutrients** which are required in large amount let us study the important macronutrients:

**A. Carbohydrates.**

Energy can be derived from **carbohydrates, fats** and **proteins** but carbohydrates are the cheapest source of energy. If there is short supply of carbohydrate and fats in the body, proteins are used for energy production. Therefore carbohydrates have to be present in proper amounts to spare proteins for body building purpose.

**Functions of carbohydrate**

- They provide us energy.
  - They are the main source of energy. Carbohydrates spare proteins for body building functions.
  - Dietary fibre or unavailable carbohydrates increases the bulk and helps in defecation.
-

### Food sources of carbohydrates

- Cereals - wheat, rice, bajra, maize etc.
- Roots & tuber - potatoes, sweet potatoes, beetroot, and tapioca
- Sugar & jaggery
- Fruits
- Leafy Vegetables

1 gm. of carbohydrates gives 4 kcal/gm of energy.  
Kcal - kilocalorie, it is a measure of energy in food.

### B. Proteins

Proteins are made up of smaller units known as amino acids. There are altogether 22 amino acids out of which 8 amino acids are those which our body cannot manufacture and are known as **essential amino acids** and has to be supplied by diet only. The rest of amino acids our body can manufacture, and are known as **non essential amino acids**.

#### Functions of Proteins

- They are required for growth maintenance and repair of tissues.
- Necessary for production of enzymes hormones, antibodies, haemoglobin etc.
- They help in clotting of blood.
- They also provide energy if necessary.

#### Food Sources of Proteins

- Pulses
- Meat, chicken, fish, eggs
- Milk, cheese, paneer, curd etc.
- Groundnuts, Soyabeans, peas.

1 gm of Protein gives 4 kcal / gm of energy.

### C. Fats & oils

Fats & oils are the concentrated source of energy in our diet. The difference between the fats & oils is that, at 20°C oils are liquid and fats are solid. Fats are made up of triglycerids which contain glycerol and fatty acid. The nature of fat is dependent upon the type of fatty acid present. Fatty acids may be saturated or unsaturated

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Saturated fatty acids are mostly solid fats.

Oils contain more of unsaturated fatty acids. Vegetable oils are rich in unsaturated fatty acids.

### Functions of fats & oils

- They provide energy.
- They reduce the use of proteins being used for energy.
- They carry fat soluble vitamins and also help in the absorption of these.
- They help to maintain body temperature.
- The layer of fat under the skins helps to conserve body heat.
- They act as a cushion to certain vital organs.

1 gm. of fats & oils give 9 kcal. of energy.

### Sources of fats

- Vegetable cooking oil, ghee, butter.
- Oil seeds, nuts
- Meat, Fish
- Whole milk, Cheese etc.

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### INTEXT QUESTIONS 3.2

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1. Name two types of nutrients

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2. How Many K cal. are provided by 1 gm. of carbohydrates protein?

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3. Groundnuts & Soyabeans are sources of Proteins — yes or not

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### Water

Water is the major constituent of our body.

It is present in all cells. It helps in the transportation of nutrients in the body.

It helps to excrete unwanted material in the form of urine.

### Micronutrients

Other important nutrients which are present in small quantities in foods, yet essential to our body are called **micronutrients**. They are minerals and vitamins and are required in very small quantities for the body.

Minerals and vitamins are called micronutrients

Let us study some of the important micronutrients.

### Vitamins

Our body contains very little quantities of vitamins, however you will be surprised to know that they are responsible for all the major functions of the body. These vitamins are of two types:

- (i) Fat soluble : A, D, E, & K
- (ii) Water soluble : B & C

Now let us study the functions and food sources of these vitamins

#### (i) Fat Soluble Vitamins

Their Functions and Sources

Name of Vitamins	Functions	Sources
Vitamin A	(i) Essential for proper functioning of eyes i.e. Dim light vision	Liver, eggs, fish liver oils Milk and its products
vegetables	(ii) Necessary for healthy skin and linings of nose, mouth, throat, eyes, ears, lungs and other organs.	Green leafy spinach. Yellow fruits and vegetable such as pumpkin, carrot, papaya, mango, refined oils and vanspati fortified with vitamin A

Vitamin D	<p>(i) Necessary for formation and maintenance of strong, healthy teeth and bones</p> <p>(ii) Helps in the proper absorption and utilisation of calcium and phosphorus in the body.</p>	<p>Exposure of skin to sunlight.</p> <p>When the body is exposed to the sun rays, a substance in the skin is converted into vitamin D and transferred to the blood stream.</p> <p>Eggs, liver, fish oils.</p> <p>Milk, butter refined oils and ghee fortified with vitamin D.</p> <p>All cereals, pulses vegetable oils etc.</p>
Vitamin E	<p>Prevents combining of oxygen with substances that would get destroyed if they did take up oxygen. Protects vitamin A from getting destroyed in this manner.</p>	<p>All cereals, pulses vegetable oils.</p>
Vitamin K	<p>Necessary for clotting of blood</p>	<p>Formed in the intestine of blood. by bacteria normally present there.</p>

### (ii) Water Soluble Vitamins : Their Functions and Sources.

Name of Vitamins	Functions	Sources
Vitamin B	<p>(i) Necessary for utilisation of carbohydrates in the body.</p> <p>(ii) Necessary for normal functioning of nervous system.</p>	<p>Liver, poultry, meat fish, eggs.</p> <p>Whole grain cereals and pulses</p> <p>Green leafy vegetables</p> <p>Milk</p>

Vitamin C	<ul style="list-style-type: none"> <li>(iii) Essential for proper growth.</li> <li>(iv) Helps body organs to function normally.</li> <li>(v) Needed for formation of red blood cells.</li> <li>(vi) Helps in digestion and makes us feel hungry.</li> <li>(i) Necessary for the formation of the substance that hold cells together.</li> <li>(ii) Needed for strong teeth and bones.</li> <li>(iii) Helps in the production of haemoglobin.</li> <li>(iv) Helps in the utilization of other nutrients in the body</li> <li>(v) Helps in fighting the disease-causing germs.</li> </ul>	<p>Fruits like amla, oranges, lemons, guava, etc.</p> <p>Green leafy vegetables, e.g. spinach, cabbage</p> <p>Sprouted pulses such as grams</p> <p>Liver</p>
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## 2. Minerals

Minerals constitute a very small amount of the total body tissues. But these are essential for many vital processes and also for the maintenance of the body. In total there are 19 minerals required by the body in various amounts.

Let us now study some of the important minerals.

**Calcium** : Calcium and phosphorous are available in sufficient quantity in curd milk, green leafy vegetable, ragi and oil seeds. Other foods also provide fair quantity of calcium.

The major function of calcium is to help in the formation of bones, blood clotting and muscular contractions.

Calcium is necessary for bone formation, blood clotting and muscular contraction.

**Iron**: Iron is required in very small quantity by the body. It is important material present in haemoglobin. Haemoglobin is present in red blood cells and is responsible for the red colour of blood. Whole grain cereals and pulses contribute iron to our body. Other sources of iron are green leafy vegetables, egg yolk, liver and meat. In our country, majority of the population, especially women and children, suffer from iron deficiency disease, called **anaemia**.

This is not because people do not consume food which are sources of iron but because the absorption and utilisation of iron is poor due to the presence of oxylates and phytates in our diets. Vitamin C and protein help in better absorption of iron. The oxylates & phytates are called **inhibitors** while vitamin C and protein are known as **enhancers**. Primary health centres are distributing iron tables to women and children to overcome anaemia.

Iron is essential for haemoglobin formation.

**Iodine** : Iodine is an important substance present in **thyroxine hormone** produced from **thyroid gland**. Thyroxine regulates various functions of the body. We get iodine from water and food. The plants which grow in soil are rich in iodine and provide iodine for us. Sea foods are rich in iodine. Iodine deficiency disease is known as **goitre** or enlargement in the neck region. Deficiency of iodine causes mental retardation in children. It has been identified in many parts of India. To avoid goitre we must have iodine rich sources in our daily meals. Iodised salt is a good source of iodine and we must use it instead of the regular salt.

Iodine is necessary for growth and development

Certain food stuffs like **cabbage, cauliflower radish, ladies fingers & certain oilseeds** contain a substance known as **goitrogens** which interfere with the body's ability to produce and use thyroxin. These goitrogens are destroyed on cooking. Therefore, The above mentioned food should be cooked before eating.

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### INTEXT QUESTIONS 3.3

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1. Classify the vitamins A, B, C, D, E and K as.

Water soluble vitamins \_\_\_\_\_

Fat soluble vitamins \_\_\_\_\_

2. Some food items are given below. In front of each, write down the vitamin/vitamins they contain:

(i) carrots .....

(ii) amla .....

(iii) cereals .....

(iv) green leafy vegetables .....

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(v) pulses .....

(vi) eggs .....

3. Some statements are given below. In front of each write down True/False

(i) When the body is exposed to heat, then vitamin C is produced in the skin. ( )

(ii) Vitamin A helps to keep our eyes health. ( )

(iii) Vitamin K plays a role in our feeling hungry. ( )

(iv) Vitamin E is necessary for clotting of blood. ( )

(v) Vitamins D are necessary for strong and healthy teeth and bones. ( )

4. Fill in the blanks:

(i) Iodized salt is a good source of.....

(ii) Calcium is necessary for.....

(iii) For absorption of iron .....and .....are necessary.

(iv) .....and.....interfere with the absorption of iron in the body.

(v) Iron is required for.....

(vi) Bones in our body are made up of.....

(vii) One of reasons for mental retardation in children is lack of .....in daily meals.

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### 3.3 Balanced Diet

Before we study about balanced diet, it is necessary to know, how much do we have to eat, to stay healthy and active, so let us first study about nutrient requirements and what are the factors affecting requirements.

#### Nutrient Requirements

Now we know that all the nutrients are required for good health. But *how much* should we eat, so that the nutritional requirements are met? There are various factors which influence the nutritional requirements of an individual. These are as follows:

Nutritional requirements are influenced by:

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- age
- height/weight
- sex
- climatic condition
- health
- occupation
- physiological condition

Indian Council of Medical Research (ICMR) after conducting a lot of research has recommended nutritional intakes for various age group. The following table shows the daily Recommended Nutritional Intakes (RDI).

In the above table have you noted that people are classified according to their activities. A **sedentary worker** means - person doing light work, as teacher, tailor, executive, retired personnel, housewife etc.

A **moderate worker** - means doing medium strength activities like, potter, agricultural labour, carpenter, cooli, driver, welder, servant, beedimaker etc. and a **heavy workers** pending maximum energy, consuming works like, stonecutter, mine workers, wood cutters, gang man etc.

In this course we will be dealing only with old age people who are mostly retired people and by and large engaged in sedentary type of work.

More over liberal margin of safety is provided in the recommended allowance to cover individual difference for needs of nutrients.

### **Balanced Diet - Meaning and concept**

In this lesson so far we have read about the nutrients, their sources and importance and also about nutritional requirements. Sometime back we raised a question - what should we eat so that our nutritional requirements are met? Do you think you can answer this question now? Yes, you are right - you should eat food items which provide your body all these nutrients. Such a meals is called a **balanced diet**. By meeting our nutritional requirements such a diet helps us in staying healthy. It also provides for storage of some amount of nutrients in the body. This helps the body to withstand short periods of low dietary intake.

A **balanced diet** is a diet which contains all types of nutrients in correct amount.

### **Characteristics of a Balanced Diet**

A balanced diet contains both plant and animal foods and fulfils following requirements:

Table - 1  
SUMMARY OF RDI FOR INDIANS (1989)

(Recommended by ICMR)

Group	Particulars	Body wt. kg.	Net energy Kcal/d	Protein g/d	Fat mg/d	Cal- cium mg/d	Iron mg/d	Vit. A Reti- mg/d	B-car- inol mg/d	Thia- min tene mg/d	Ribo- flavin mg/d	Nico- tinic mg/d	Pyri- doxin acid mg/d	Ascor- bic mg/d	Folic acid mg/d	Vit. B-12 mg/d
Man	Sedentary work		2425								1.2	1.4	16			
	Moderate work	60	2875	60	20	400	28	600	2400	1.4	1.6	18	2.0	40	100	1
	Heavy work		3800								1.6	1.9	21			
Women	Sedentary work		1875								0.9	1.1	12			
	Moderate work	50	2225	50	20	400	30	600	2400	1.1	1.3	14	2.0	40	100	1
	Heavy work		2925								1.2	1.5	16			
	Pregnant woman	50	+300	+15	30	1000	38	600	2400	+0.2	+0.2	+2	2.5	40	400	1
	Lactation															
	0-6 months		+550	+25	45	1000	30	950	3800	+0.3	+0.3	+4	2.5	80	150	1.5
	6-12 months	50	+400	+18							+0.2	+0.2	+3			
Infants	0-6 months	5.4	108/kg	205/kg.		500				55mg/kg	65mg/kg	710 mg/kg	0.125	25	0.2	
	6-12 months	8.6	98/kg	1.65/kg				350	1200	50mg/kg	60mg/kg	650/mg/kg	0.4			
Children	1-3 years	12.2	1240	22				12	400		0.6	0.7	8			
	4-6 years	19.0	1690	30	25	400	18	400	1600	0.9	1.0	11	0.9	40	02-1.0	
	7-9 years	26.9	1950	41			26	600	2400	1.0	1.2	13	1.6	60		
Boys	10-12 years	35.4	2190	54			34	600	2400	1.1	1.3	15	1.6	40	70	0.2-1.0
Girls	10-12 years	31.5	1970	57	22	600	19			1.0	1.2	1.3				
Boys	13-15 years	47.8	2450	70	22	600	41	600	2400	1.2	1.5	1.6				
Girls	13-15 years	46.7	2060	65			28			1.0	1.2	14	2.0	40	100	0.2-1.0
Boys	16-18 years	57.1	2640	78	22	500	50	600	2400	1.3	1.6	17				
Girls	16-18 years	49.9	2060	63			30			1.0	1.2	14	2.0	40	100	0.2-1.0

- meets the nutritional requirements of the particular individual.
- includes foods from all the food groups.
- contains a variety of foods.
- consists of seasonal foods.
- is economical.
- suits the taste and meets the desires of the individual eating it.

According to the Recommended Dietary Allowance (R D A) of Indians the balanced diets are worked out in a table given below:

#### BALANCED DIET FOR AN ELDERLY PERSON FOR A DAY

Foodstuffs	Quantity (raw gms.)	
	Males	Females
Cereals	350	225
Pulses	50	40
Vegetables	200	150
Green leafy vegetables	50	50
Roots and Tubers	100	100
Fruits	200	200
Milk and Milk Products	300	300
Sugar	20	20
Fats and Oils	25	20
<b>Approximate nutrients supplied</b>		
Calories	2200	1700
Protein	65 g.	50 g.
Fat	50 g.	40 g.
Calcium	1 g.	0.9 g.
Iron	38 mg.	30 mg.
Vitamin A (Retinol)	1030 g.	930 g.
Thiamin	1.96 mg.	1.45 mg.
Riboflavin	1.78 mg.	1.51 mg.

## Food Group

The knowledge of recommended dietary allowance and composition of food is necessary for the selection of an adequate diet, but if we start doing this, it will be a tedious process. Therefore it is necessary to translate the nutritional needs into kinds and amounts of food that we should eat. Such an information can then be used in everyday meal planning exercise. This is achieved by dividing/categorising all food items into various groups called **food groups**. Now let us see, what is a food group? A food group, quite simply, consists of a **number of food items sharing some common characteristics**. It can be on the basis of:

- the nutrients.
- the physiological function performed.

Let us see the two ways of classifying food into groups.

### Classification Based on Physiological Functions

In the previous lesson you have studied that food has three basic physiological functions. Can you remember these? Yes, energy giving, protection, repair and growth, protection from diseases. Foods are also classified according to their function. Now we will study the classification based on the predominant nutrients which they supply.

In our country we normally follow five food group system, which is recommended by Indian Council for Medical Research (ICMR).

#### Five Food Group System

Food Group	Main Nutrients
<b>1. Cereals, Grains and Products</b> Rice, wheat, ragi, bajra, maize, jowar, barley, rice flakes wheat flour.	Energy, protein, invisible fat, vitamin-B, Vitamin-B <sub>2</sub> , folic acid, fibre, iron
<b>2. Pulses or Legume</b> Bengal gram, blackgram, greengram, redgram, Lentil (whole as well as dhals), cowpea, peas rajmah, soybeans, beans etc.	Energy, protein, invisible fat, vitamin-B <sub>1</sub> , Vitamin-B <sub>2</sub> , folic acid, calcium, iron fiber
<b>3. Milk and Meat Products</b> Milk, curd, skimmed milk, cheese Meat: Chicken, liver, fish, egg, meat	Protein, fat, vitamin B <sub>2</sub> calcium  Protein, fat, vitamin B <sub>2</sub>

#### 4. Fruits and Vegetables

##### **Fruits:**

Mango, guava, tomato  
ripe papaya, orange,  
sweet lime, water melon,

Carotenoids, vitamin-C, fibre

##### **Vegetables (Green Leafy)**

Amaranth, spinach, gogu  
drumstick leaves, coriander  
leaves, mustard leaves,  
fenugreek leaves.

Carotenoids,  
vitamin B<sub>2</sub>, folic acid, calcium

##### **Other Vegetables:**

Carrots, brinjal, ladies-  
finger, capsicum, beans,  
onion, drumstick,  
cauliflower

Carotenoids, folic acid, calcium,

#### 5. Fats and Sugars

##### **Fats:**

Butter, ghee  
hydrogenated oils,  
cooking oils like ground  
nut, mustard, coconut oil

Energy, fat, essential fatty acids

##### **Sugars:**

Sugar, jaggery

Energy

### 3.4 Cooking Methods

The cooking methods can be classified on the basis of the medium used for heat transfer. Can you recall what are the medium used for cooking?

Yes, they are **oil, water & air**. Now we will study of these on the basis of medium used for cooking:

#### **Water**

Water is most commonly used medium of cooking. Boiling, Simmering and Stewing are methods in which moist heat is used. Few of the foods are also cooked by a combination of these methods.

#### **Boiling**

Food is washed, covered with adequate quantity of water and heated to boiling. The temperature of boiling water is normally 100°C. If food is boiled continuously water is evaporated quickly with the loss of heat labile nutrients. The texture of food product is also affected.

Soups, broths and dals etc. are prepared by this method.

### **Simmering**

It is a method of cooking where food is cooked by immersion in a liquid maintained below the boiling point. Milk preparation such as Kheer, kadhi etc are prepared by this way.

### **Stewing**

Stewing is similar to simmering, here food is cooked in small quantity of liquid. Most of the vegetables and meats are cooked by this way.

### **Steam**

Steaming is the method where moist heat is involved. The food is cooked in water vapour with or without pressure. Idli, dhokla etc are prepared by this way.

### **Pressure Cooking**

When steam under pressure is used the method is known as pressure cooking. In pressure cooking the ultimate cooking time is reduced and hence the loss of heat labile nutrients is also less.

Rice, dal, roots, tubers etc. are cooked by this way. Of the above methods steam cooked food are light, fluffy and easily digestible, hence best suited for all age groups.

### **Oil/fat as a medium of cooking**

#### **Panfrying or Shallow frying**

Food is cooked in a lightly greased pan i.e., dosa, omelette, pancakes, parathas etc. There the food tossed from one side to another to ensure complete cooking. Deep frying is similar to boiling. There fore it is important to choose fat & oils with high smoking temperatures or point.

Frying imparts special flavour and texture to the foods making them tender and crispy.

Food cooked by this methods are Puris, pakors, samosa, chips etc.,

#### **Air (dryheat)**

Methods where air is used as a cooking medium are:-

#### **Roasting**

Here food is cooked by dry heat without covering it. It can be on stones, or under hot coals or in hot ashes or in oven, examples are - Chapati, nan, bread, potatoes etc.

#### **Baking**

In Baking food is also cooked by dry heat in an oven or oven like appliance. Covered or uncovered containers may be used for baking bread, cakes, biscuits etc. are cooked by this method.

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## Grilling

Cooking of food by exposing it to direct heat.

examples are grilled sandwiches

There are many food products, which are made by combination of the above said methods and various cooking mediums. Hence to use the cooking method judiciously where nutrient loss is minimum.

### INTEXT QUESTION 3.4

- List 3 mediums of cooking.

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- Give any 2 examples by which food can be cooked by.

- Boiling \_\_\_\_\_
- Baking \_\_\_\_\_
- Roasting \_\_\_\_\_
- Pressure cooking \_\_\_\_\_

## 3.5 Food hygiene

Food hygiene can be defined as safe handling of food or keeping food safe and clean so that it is free from micro organism. The question arises how to ensure that the food that is being served is hygienic. To ensure hygiene of food, simple rules should follow:

### Cleanliness in the kitchen

Kitchen is the area where food is prepared and served so:-

- Keep kitchen area free from cockroach, flies, fleas, rats etc.
- Kitchen should be well lighted.
- Ensure proper drainage.
- Keep a covered dustbin in the kitchen.
- Clean kitchen clothes/dusters daily.
- Wash utensils in a clean water.

### Hygiene while handling foods

This means that while handling food or preparing food, cleanliness should be maintained. Hence follows these tips:

- Wash your hands properly before cooking.
- Store the food properly. Keep food articles in the fridge, if there is one.
- Never leave the cooked food uncovered as dust, dirt and flies can spoil the food.
- If you are suffering from cold, cough etc. do not sneeze/cough in front of the food.
- Do not poke your nose or stick your fingers when you are preparing the food.
- Cut meat etc. into smaller pieces so that it cooks well in to the middle.

### Personal Hygiene

- Always wash hands before handling of food.
- Tie your hair in the kitchen and while cooking do not touch them.
- Avoid tasting the food while cooking.
- Avoid entering the kitchen with dirty cloths or slippers and dirty feet or open hair.
- Avoid cooking when you are sick.

If special care is taken while cooking of food. There will be no chances of food contamination.

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### INTEXT QUESTION 3.5

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Fill in the blanks:

1. (i) Kitchen should be.....
- (ii) Avoid cooking when you are.....
- (iii) Utensil should be cleaned with.....
- (iv) There should be.....in the kitchen.

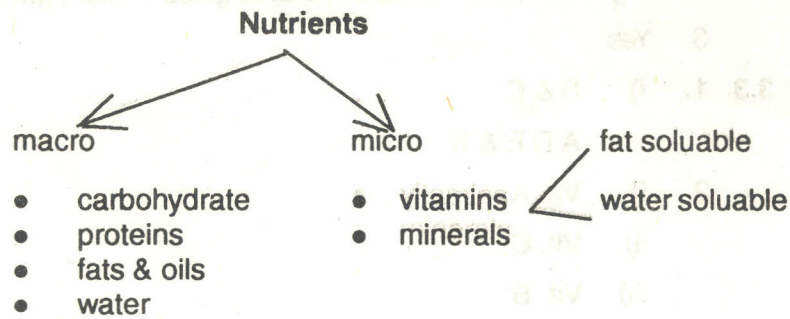
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### 3.6 Summary

In this lesson you have learnt the meaning of food, nutrition nutrient and the type of nutrient. You have also learnt the various functions of food and the food groups. In the end we have stressed upon the maintenance of food hygiene

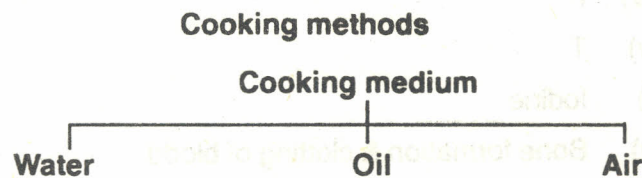
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and personal hygiene while handling food in order to prevent food contamination.



### Food groups

- cereal grains group
- pulses or Legume group
- milk & meat products
- fruits & vegetables
- fats & sugars



### Hygiene

- personal
- kitchen
- while handling food.

## 3.7 Answers to Intext Questions

- 3.1
1. The term 'food' refers to anything that we eat and drink, and which nourishes the body.
  2. Social function, Psychological function and Physiological function.
  3. Cereals-wheat, rice, bajra, maize etc.

Roots & tuber - potatoes, sweet potatoes, beetroot, and tapioca

Sugar & jaggery

Fruits

Leafy Vegetables

- 3.2** 1. (i) Macronutrients (ii) Micronutrients  
 2. 1 gm of Protein or carbohydrates gives 4 kcal / gm of energy.  
 3. Yes

- 3.3** 1. i) B & C  
 A D E & K  
 2. i) Vit. A  
 ii) Vit. C  
 iii) Vit. B  
 iv) Vit. B & C  
 v) Vit. B  
 vi) Vit. B

3. i) F  
 ii) T  
 iii) F  
 iv) F  
 v) T

4. i) Iodine  
 ii) Bone formation & clotting of blood  
 iii) Vit. C & Protein  
 iv) Oxalates & Phytates  
 v) Haemoglobin formation  
 vi) Calcium and phosphorus  
 vii) Iodine

- 3.4** 1. i) Oil, Water and air  
 2. i) Soups & Dals  
 ii) Bread & Biscuits  
 iii) Chapati & Potatoes  
 iv) Rice & roots

- 3.5** 1. i) Well lighted  
 ii) Sick  
 iii) Clean water  
 iv) A Covered dustbin

# Lesson 4

## Health & Hygiene

### STRUCTURE

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Meaning of Health & Hygiene
- 4.3 Definition and Concepts of Health
- 4.4 Dimensions of Health
- 4.5 Factors affecting the Health
- 4.6 Components of Health for Hygiene
- 4.7 Summery
- 4.8 Glossary
- 4.9 Answers to In-text Questions

#### 4.0 Introduction

Health & Hygiene have become public issues in today's world. There are lots of programme shown on TV, related with Health & Hygiene. You will find many health-related topics in books, magazines & newspapers. To some extent, people have become aware of the importance of the Health & Hygiene. If we are asked to choose between health and money, most likely we will choose health. Many of us do not know exactly what are the characteristics of healthy person? But everyone wants healthy body with bright eyes, firms muscles and that on top of the world feeling. These are the signs of a healthy person. Many people think that health is merely the absence of illness. It is important to know what good health is before beginning to work with healthy

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people & as well as sick people. You can understand illness only after learning what constitutes physical & mental well being and how health & hygiene are inter-related and go together. In this lesson you will learn about the health & hygiene.

### 4.1 Objectives

After reading this lesson, you will be able to:

- explain the meaning of the term health and hygiene and its relatedness.
- explain the definition & concept of health
- list and explain the various dimensions of health
- discuss basic conditions necessary for good health
- identify various determinants/factors affecting health
- discuss the important components of hygiene and healthy living

### 4.2 Meaning of Health & Hygiene

**Health is a state of well being.** Today health is considered more than a basic human right, it has become a matter of public concern, national priority and political action. Good health is an essential condition for a purposeful existence. It leads to joyful living. It enables us to perform at our best as individuals, as part of families, as communities and nation. If the people are healthy they are more likely to be happy. Good health is not only freedom from sickness and disease, but it is more than just that. It means freedom from anxiety and from social and psychological tensions.

The word hygiene is derived from 'Hygiea' the Goddess of health. **Hygiene is defined as the science of health and includes all factors which contribute to health.** The aims of hygiene are to preserve health and also improve it allowing man to live in a healthy relationship with environment. Hygiene includes **personal cleanliness, cleanliness in eating & drinking, cleanliness in the home & public sanitation.** In brief, hygiene is the science of health and its preservation.

Hygiene is the science of health and its Preservation

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#### INTEXT QUESTION - 4.1

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Fill in the blanks:

- i) Health is a state of \_\_\_\_\_
  - ii) \_\_\_\_\_ is an essential condition for a purposeful existence.
-

- iii) If the people are healthy, they are more likely to be \_\_\_\_\_
- iv) The aims of hygiene are to preserve \_\_\_\_\_ and also \_\_\_\_\_ it.
- v) Hygiene is the science of \_\_\_\_\_ and its \_\_\_\_\_.

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### 4.3 Definition and Concept of Health

#### Definition of Health

"Health" is one of those terms which most people find it difficult to define. Therefore, many definitions of health have been offered from time to time. Different people have different perception of health. Some feel, that when an individual is free from any disease or sickness 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. You will be able to understand better meaning of health if you go through the following definitions.

Health is defined as:

- a) The condition of being sound in body, or mind or spirit, especially freedom from physical disease or pain (webster).
- b) Soundness of body or mind; that condition in which its functions are fully and efficiently discharged. (oxford English dictionary).
- c) A condition or Quality of the human organism expresses the adequate functioning of the organism in given condition-genetic and environmental.

The above mentioned definitions gives 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:

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

In brief this statement of definition include the ability to lead a "socially and economical productive life".

### Concept of Health

#### A) Basic concept of Health

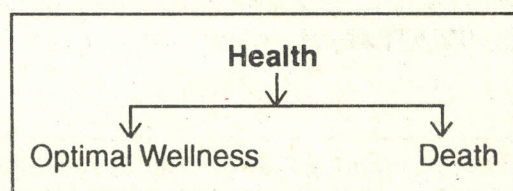
It includes four basic concepts:

- i) Health
- ii) Stress
- iii) Rehabilitation
- iv) Health Resources

#### i) Health

Health is a continually changing phenomenon;

- Moves on a continuum between optimal wellness (where potential is maximized and used with purpose) and death



- Change in health may be gradual or abrupt
  - Level of health which is attained by an individual depends on his adaptive capabilities and genetic and enviornmental factors.
  - Health fluctuates throughout life cycle and varies among individuals
  - Individuals may or may not be aware of change
-

- Person's position on the continuum is determined by
  - a) Ability to adapt and adjust
  - b) Level of adaptation and adjustment
  - c) Ability to carry out social, family and job responsibilities.

## ii) Stress

Stresses affect physical, emotional and social health;

- Stresses may be **internal** or **external**
- Stress can be beneficial or harmful to life. Sometime little tension (stress) is essential to life. e.g. before appearing in examination, student feel tension. And this tension makes them more active, alert and helps them to prepare for Examination. Too much stress is not good as it makes them too nervous or tense and because of too much anxiety/ tension they are not able to concentrate & work properly.
- Sources of stress vary widely for different individuals and within the same individual at different time
- Tolerance of stress varies with each individual.
- Stress may be;

### **Physical**

thermal - e.g. a variation in temperature either makes person active or inactive.

Acoustial - this is related with sound/noise e.g. too much sound is irritating to the individual.

### **Chemical gas**

hormonal nutritional.

### **Microbiological**

Viral, bacterial.

### **Physiological**

this is related with hypo or hyper function of the glands.

### **Developmental**

genetic - Some people are too tall & some are dwarf

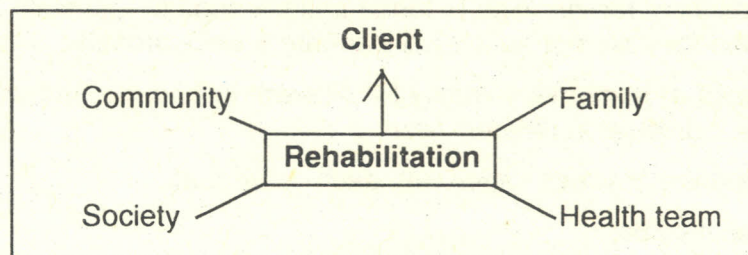
### **Psychological**

relate with person's self-image. e.g. if a person gets burn on his face or may be he has lost both hands in an accident this make him very upset & his self image is threatene. It also depends on how he values himself.

Whether he feels worthy having inferiority complex.

iii) **Rehabilitation:** Rehabilitation assists people in attaining their maximum level of wellness on the continuum;

- Rehabilitation particularly is concerned with establishing function or function that is lost while at the same time expanding, maintaining and supporting the limited remaining functions.
- Immediate or potential needs exhibited in all health problems.
- The client is the primary rehabilitator professional health team members only assist the client and family with the process of self-rehabilitation.
- Rehabilitation is not an isolated process it involves the client family health team, community and society.



- Rehabilitation is concerned with all levels of **prevention: Primary, Secondary and Tertiary.**
- Health problems that cause disabilities are socially significant due to economic cost and loss and the distress of personal suffering.

iv) **Health Resources:**

Availability of health resources is a very important factor for people's health. Ability to maintain and return to a level of health is influenced by the availability of health resources.

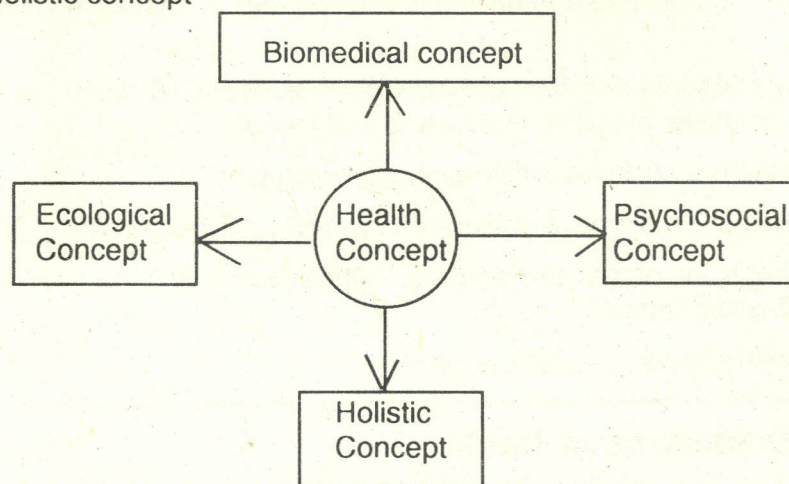
**B) Changing Concept of Health**

Concept of health is changing in a world of continuous change. Every individual and communities have their own concept of health which has some relationship with their culture. The oldest concept of health is 'absence of disease'. It is only during the past few decades the health is conceived as a fundamental human right and a world wide social goal. Health means Quality of life and is an integral part of development, Health involves individuals, state and international responsibility. 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, specialist, health administrators, ecologists etc.) which give varied view on the concept 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 concept of health is given below.

There are 4 - types of changing concepts :

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



*Fig:-1 Changing Concept of Health*

- i) **Biomedical Concept:** This concept stresses the germ theory i.e. **disease or ill health is caused due to disease causing organism.** The individual was considered to be healthy only if he was free from disease. 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, accident, drug abuse, mental illness environmental pollution etc. This concept needs to be changed.
- ii) **Ecological concept** - This concept 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, eg. Environmental pollution caused by deforestation and urbanisation resulting imbalance between man and environment thus affecting his health.
- iii) **Psychosocial concept:** According to this concept health is influenced by **social, psychological, cultural, economic & political factors.**

- iv) **Holistic Concept:** This concept is a synthesis of all the concepts mentioned above. According to this concept the emphasis, **political, environmental and bio-medical influence** on health. It sees the well being of a person as a whole in the context of his total environment. 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 a sound Environment.

#### INTEX QUESTIONS - 4.2

Encircle 'T' against the statement that are true and 'F' against those that are False.

- i) The complete definition of health given by W.H.O. is "Health is a state of complete, physical, mental and well being". ( )
- ii) Health is a continually changing phenomenon. ( )
- iii) Physical, emotional & social stresses will not affect health. ( )
- iv) Client is the primary rehabilitator in the process of self-rehabilitation. ( )
- v) Health means no quality of life. ( )

#### 4.4 Dimensions of Health

Health is multidimensional. The W.H.O. definition includes three specific dimension; physical, mental and social. There are other dimensions also which may affect health such as spiritual, emotional, vocational and political:

- i) Physical Dimension  
ii) Mental Dimension  
iii) Social Dimension  
iv) Spiritual Dimension  
v) Emotional Dimension  
vi) Vocational Dimension

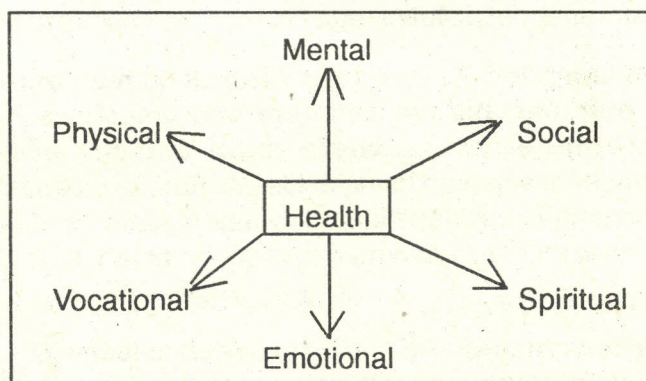


Fig.2 Dimensions of Health

### **i) Physical Dimension**

Physical dimension relates with the physical health of an individual and perfect functioning of his body. The signs of physical health in an individual are; a clean skin, bright eyes, lustrous hairs, not too fat, a good appetite, sound sleep, regular activity of bowels & bladder etc. In a healthy person all the organs of the body function normally and all the special senses are intact, the resting pulse rate, blood pressure and exercise tolerance are all within the range of "normality" for individual's age & sex.

In the para above you have learnt about physical health and its components, given below are some of the methods of assessment of physical health:

- Self-assessment of overall health
- General observation
- Clinical Examination
- Nutrition and dietary assessment
- Biochemical and laboratory investigation

### **ii) Mental Dimension**

Mental dimension relates with the good mental health of an individual who has the ability to respond to different types of life experiences with flexibility and sense of purpose. Mental health and physical health are interdependent. A poor mental health adversely affects the physical health and vice versa. Mental health is happiness; the ability

- to get along with other people
- to cope up with 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 harmony between the individual and the surrounding world
- state of harmony between oneself and the others.

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 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 & weakness
- g) He has good self control-balances rationality and emotionality.
- h) He faces problems and tries to solve them intelligently i.e. problem of stress and anxiety.

Positive mental health is must for good health.

### **iii) Social Dimension**

We spoke about the physical and mental dimension of health. Now we come to the third dimension of health, i.e. social health. This aspect visualizes the individuals 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 intergration 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 skill, (i.e. ability of a person to communicate and maintain interpersonal relationship within the society), social functioning and the ability of a person to see himself as a member of larger society.

If an individuals 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.

### **iv) Spiritual dimension**

Spiritual dimension 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 mental worries and stresses of daily life and gives freshness and peace of mind.

Spiritual dimension play a very impotant role in health & disease. It is well known fact that when a person from suffers from painful injury or trauma, he/she starts praying to God for their health problem and expects solution/ recovery from illness, injury/trauma.

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Proponents of holistic health believe that serious consideration to spiritual dimension should be given as it plays a very important role in health & illness.

#### v) Emotional dimension

Emotional dimension is also very important aspect. Emotional health relates to the "feeling" of a person. It is very important for a person to remain emotionally balanced in time of crisis. A person should be able to control his anger & excitement in certain situations. Emotionally healthy person will be able to cope up with stress and anxiety well than the emotionally disturbed person.

#### vi) Vocational Dimension

Vocational dimension is very important factor as vocational work plays an important role in promoting both physical and mental health specially when work is fully adapted to human goals, capacities and limitations. Physical work improves physical capacity of a person and he is able to achieve his goal. This gives him feeling of satisfaction, self-realization and also enhances his self-esteem.

Vocational dimension is very important specially when individuals suddenly lose their job or faced with mandatory retirement. For many people vocational dimension is source of income & success in their life.

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 dimension. For instance physical illness has an effect on one's emotional well-being, spiritual state and social relationship.

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.

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#### INTEXT QUESTIONS 4.3

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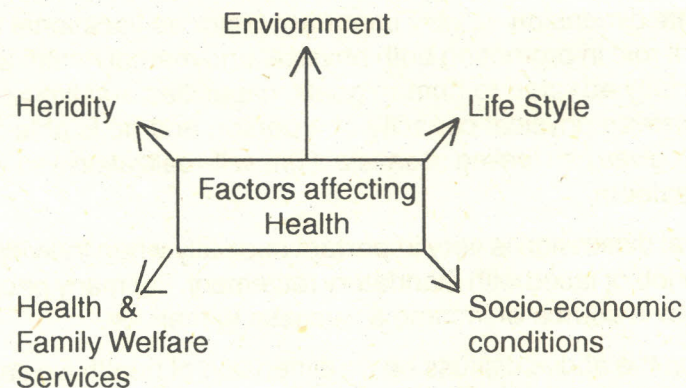
Fill in the blanks:

- i) Physical dimension relates with the \_\_\_\_\_ of an individual
  - ii) A mentally healthy person is free from \_\_\_\_\_ conflicts.
  - iii) Social dimension includes practicing \_\_\_\_\_ skill.
  - iv) Spiritual values influence our \_\_\_\_\_ and \_\_\_\_\_ well being.
-

- v) Emotionally healthy person will be able to open up with \_\_\_\_\_ and \_\_\_\_\_.
- vi) Vocational work plays important role in promoting both \_\_\_\_\_ and \_\_\_\_\_ health.

#### 4.5 Factors Affecting Health

Man, in the process of living, constantly interacts with his environment. Therefore, if any of the environmental element is not conducive to his well being, it may cause a disease. Diseases can also arise from improper functioning of the organs of the body. In general the factors affecting a person's health can be divided as follows:



- (i) Heridity
- (ii) Enviornment
- (iii) Life style
- (iv) Socio-economic conditions
- (v) Health & Family Welfare Services

We shall now discuss these factors of determinants in detail;

##### (i) Heridity

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 all child, which could be chromosomal abnormalities like haemophilia and Down's syndrome and mental retardation etc. Thus the health status of an individual depends to some extent on his genetic constitution.

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## (ii) Environment

Environment refers to the surroundings in which an individual lives. The environment may be **internal** as well as **external**. The internal environment or micro-environment pertains to the tissues, organs and systems of the body and the harmonious relationship between them. The external environment or macro environment consists of all those things to which and 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 are interlinked and have a direct impact on the physical, mental and social well-being of human beings. Let us discuss these 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 examples 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. Definitely, there will be insects & 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) Psycho-social environment

Psycho-social 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 community and of a nation. If a person has interaction with all these groups he feels healthy and happy. If he is frustrated in his interactions he feels mentally unhappy, which affects his health.

### (iv) Life Styles

Life styles refers to the **way of living**. It reflects **social values, attitudes**

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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 behavioral 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, custom and cultural patterns. Some life style 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. It requires a conscious effort to examine our life and become aware of harmful practices, constant effort is required to change the 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 modern life style which is often the source of health problems. Due to a fast moving life, man is exposed to stress & strain which are caused by pollution, poor nutrition & psychological stress.

#### (v) Social Economic conditions

Socio-economic conditions play a very important role in influencing human health. A person's **education, nutrition, employment and housing** all depend on his socio-economic status. Socio-economic status of individual is determined by per capita income of family member. Besides this there are some other factors which also determine the socio-economic status of the individual such as:

- (i) **Economic-status** is an important factor in seeking health care as it determines purchasing power, standard of living & life style which affects our health.
- (ii) **Education** is a major factor which influences health. Illiteracy leads to ignorance which can result in poverty, malnutrition 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** 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 unemployed means loss of income and inability to meet even basic needs. This can result in physical as well as mental damage.
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## 4.6 Important components of Hygiene for Healthy living

Health and hygiene go together. Personal cleanliness or personal hygiene and public cleanliness or sanitation are both inter-related. The aims of hygiene are to preserve health and also improve it, allowing man to live in a healthy relationship with the environment. To maintain a healthy environment one must consider the following aspects:

- (i) Personal hygiene
- (ii) Cleanliness in eating and drinking
- (iii) Cleanliness in the home
- (iv) Public sanitation
- (v) Habits of the people in locality

### (i) Personal hygiene

Personal hygiene is an important component of total health. It is the first step in prevention of diseases. Health habits form the basis of this step. This consists of simple things like; care of different parts of the body such as **skin, hair, teeth, eyes ear, hands, feet and rest, sleep, exercise, posture and recreation** etc. A description of these is given below:

#### (a) Care of skin

Skin is one of the vital organ of the body. It protects the body from many disease agents. It is sensitive to touch, heat, cold, pain and pressure. Skin plays an important part in maintaining body temperature. It is also an excretory organ. Sweat glands in the skin help to remove the waste products of the body. Therefore, it is very important to take good care of the skin by:

- **Daily baths-keep:** your body clean, bathe regularly. Washing the skin by taking a regular bath cleans the breeding ground of various microbes which survive in the folds of the skin especially in areas where there is high humidity due to perspiration such as in covered area e.g. axilla & groin. Change underclothes everyday which prevent the breeding of microbes. Taking a bath daily and especially after hard work or sweating helps prevent skin infections, dandruff, pimples & ringworm etc. Periodical oil massage followed by bath is very relaxing & helpful.
  - **Balanced diet:** The daily diet of a person should be well balanced to promote the health of the skin. It should contain carbohydrates, proteins fats, minerals & vitamins.
  - **Mosquito net:** The skin is the portal entry to certain communicable diseases such as malaria and filaria through insect
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bites. The use of the mosquito net is very essential to protect skin from insects.

- **Protective clothing:** People working in industries and factories, with acid and alkalies and other chemicals should use protective clothes.

#### (b) Care of the hair

The care of the hair consists of daily **combing, regular washing with soap & shampoo etc. Massaging** the scalp stimulates the blood flow and improves the nutrition of the hair. Good scalp hygiene prevents skin infections such as scabies, lice infestation, ringworm & dandruff etc. The hair needs proper nutrition. Deficiencies in diet, physical and mental stresses of various kinds may lead to premature greying of hair, breaking or falling of hair.

#### (c) Care of Teeth

Good oral hygiene implies sound teeth and healthy gums. Teeth are essential not only for food appearance and clear speech. The two most common dental ailments are dental caries (tooth decay) and gum disease or pyorrhoea (pockets of pus around the teeth). Excessive intake of sugar, sweets, cakes, chocolates and biscuits promotes dental caries. Soft & sticky foods that adhere to the teeth produce more decay. Therefore, their intake should be reduced. Intakes of fruits and vegetables reduce the chances of dental caries.

The habit of chewing betel leaves and tobacco is an important cause of bad oral hygiene in India. Cancer of lips and oral cavity are potential hazards of smoking and tobacco chewing. Teeth should be cleaned at least twice a day clean/brush your teeth in the morning & before sleeping at night and also wash/rinse your mouth after each meal. Cleaning/brushing of teeth prevents dental caries which is a common problem leading to weak teeth & gums.

The toothbrush is the best method for removal of food particles and dental plaque (soft proteinous material around the 'neck' of teeth). Daily use of the toothbrush with tooth paste or powder is ideal for cleaning the teeth. A vertical and circular brushing technique is advised. The tongue should be scraped or brushed. A dental check up twice a year is essential for diagnosis and treatment of dental ailments.

#### (d) Care of the eyes

Good eye-sight is essential for the proper development of all the facilities of the individual. Conditions which affect the eyes are:

- Infection (conjunctivitis, trachoma, styes)

- Injuries
- Malnutrition
- Short-sightedness, long sightedness
- Cataract & glaucoma etc.

All these condition can lead to visual disorders & blindness. These visual disorders and blindness are preventable through:

- Good personal hygiene
- Balanced diet
- Control of flies
- Health education
- Exercises
- Early diagnosis and treatment.

**(e) Care of the ears**

The ears is an important sense organ of the body responsible for hearing and body equilibrium. The ear is liable to infection and injury. Care of the ears is very important as infections of nose and throat readily spread to the middle ear and cause inflammation, a condition known as otitis media. This occurs more frequently in children than in adults. The commonest sign & symptoms which suggest ear disease are earache, ear-discharge and foreign bodies in the ear. The care of the ear comprises:

- Keeping the ear clean
- Removal of excessive wax carefully
- Preventing water entering the ear while taking a bath
- Protection of the ear from exposure to loud noise
- Preventing and treating all nose & throat infections
- Teaching goods habits, e.g. not to put pencils, match sticks, and other foreign bodies into the ear for cleaning or scratching.

**(f) Care of the hands**

Hands and nails pick up dirt and bacteria easily because they come in contact with a number of things. Therefore, they should be kept clean at all times. Hands should be washed especially before and after eating food and after defecation or urination. This is best done with soap & water. Disease agent such as Typhoid bacilli may be directly conveyed

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into the mouth if the hands are contaminated. Since the nail collect a good deal of dirt, they should be cut short and kept clean by gently scrubbing with nail brush. The habit of biting nails and putting fingers in the nose or ear is unhygienic and should be discouraged.

**(g) Care of the feet**

The feet must get the same attention as the rest of the body. Do not go barefoot because Hook worm enter the body through the soles of the feet and can cause severe anaemia walking bare foot is unhygienic. Special care must be taken in the selection of shoes, shoes must be broad-toed, and not tight fitting. Socks should be clean & dry, not too tight or constricting. Avoid cut bruises after bath dry feet properly special attention should be given in the finger area's which need to be dried up nicely to prevent cracks & infection.

**(h) Rest & Sleep**

- Rest & Sleep are essential for the maintenance of health. During sleep, the body and mind are relaxed, repaired & growth take place, fatigue disappears.
- The amount of sleep required varies with age, sex, environment and the nature of work one does. An adult need approximately 7-9 hours of sleep.

***Tips for good sleep***

- Use flat bed and it should not sag in the middle.
- One pillow is Quite sufficient, do not use too many pillows.
- During sleep, the face should not be covered
- The room should be well ventilated
- Lamp, candles and charcoal fire should not be burning in the room.
- Cultivate regular sleeping habits. Early to bed and early to rise keeps one healthy, wealthy and wise.
- Drug to induce sleep should be a avoided.

**(i) Exercise**

Exercise is the basis of physical fitness and has the following uses:

- It tones up the muscle
- Improve blood circulation & strength of the heart.
- Ventilates the lungs
- Stimulates appetite.

- Promotes excretion of body wastes.
- Facilitates relaxation and sleep and provides an outlet for emotional tension.

Fat people can reduce their weight by regular exercise will depend upon the age and physical condition of the person. A young person can indulge in vigorous exercise. After the age of 30 it is not wise to indulge in vigorous exercise. For the elderly, morning and evening walks on level ground are the safest and easiest forms of exercise. Regularity in exercise is important. Exercise should not lead to physical exhaustion or fatigue. Yoga is very good as it tones up the muscles of the body and trains the mind to relax.

#### **(j) Elimination**

Proper functioning of the bowels is essential for the maintenance for the of optimum health. Elimination takes place via lungs, skin, kidney intestinal in the form of carbondioxide ( $\text{Co}_2$ ), sweat, urine and faeces or stool respectively. The faeces if not excreted daily, accumulates in the pelvic colon, resulting in gas formation, constipation (passage of unduly, dry, hard stools). Constipation is best avoided by the following methods:

- Eating foods containing roughage's such as green leafy vegetables & fruits which stimulates the intestinal movement.
- Intake of more water or fluids.
- Physical exercise which tone up abdominal and intestinal muscles.
- Forming regular habits of defecation (act of passing stool).

#### **(ii) Cleanliness in Eating, drinking & Air**

Fruits and vegetables brought from the market generally carry micro-organism, egg of worms and harmful chemicals such as pesticides adhering to their skin. It is advisable to wash them with clean water and store them in a clean, cool and fly-proof place. Do not let flies and other insects sit or crawl on food. They carry germs and spread diseases. Do not leave food particles or dirty dishes lying around, as these attract files. Always eat food that is kept covered. Eat meat only when it is cooked well. Do not eat food that is old or smells bad.

It is advisable to boil and filter water before drinking unless you are sure that it is clean and free from bactria. Many water borne diseases are spread by bathing or washing clothes and utensils in a pond or river where the water is infected with bacteria. This should therefore be avoided. Keep food & drinking water in clean utensils & keep them covered.

Pure air is also vital for good health. Air pollution is by dust, chimney smoke, industrial fumes and exhaust from motor vehicles. Breathing polluted air

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causes chronic respiratory disease, asthma etc. It is well established that tobacco smokers face a higher risk of cancer and heart diseases.

Use of smokless chulhas and well ventilated places for work and living are some preventive measures that one should keep in mind.

### **(iii) Cleanliness in the Home**

- Keep the house always clean from dust, flies & cobwebs.
- Wipe it with wet cloth everyday or alternate days.
- Wash house atleast once a week.
- Dusting of house hold articles should be done frequently.
- Keep the things in organised way.
- Do not put garbage here & there. Put it in covered dust bin.
- Toilet & bathroom should be cleaned every day.
- Have meshes on your door& windows to keep out flies, insects & mosquitoes.

### **(iv) Public Sanitation**

- Keep the surrounding of the house clean
- Burn all garbage and decayed substances.
- The garbage which can not be burned should be buried in a special pit or place far away from house and drinking water sources.
- Do not defecate or throw garbage near the water source or at open places.
- Use proper latrines for defecation
- Do not allow water to stagnate to prevent breeding of microbes.
- Spray insecticides on garbage heaps, stagnant water and other dirty places.
- Kitchen garbage and other refuse should be put in dustbins.
- Closed drains should be constructed.
- Keep wells and public water taps clean.
- Put a fence or wall around the water source so that animals do not contaminate it.

### **(v) Habits of the people in the locality**

Unclean personal habits of individual make it difficult to maintain a healthy environment. You may be clean, eat balanced food and have a happy atmosphere at home, but if your neighbour dumps garbage in the open, if the water supply is not clean or if the pond where you take bath is infected

by disease producing organism, you may not be able to stay healthy. Unhygienic personal habits can thus create health problems for you and the whole locality. People living in locality should practice good habits such as:

- Smoking of cigarettes, drug addiction and alcoholism etc. should be discouraged in the family & neighbourhood.
- Avoid bad eating habits (food fads)
- Avoid sneezing or coughing without covering your mouth
- Do not play loud music at ate hours.
- Do not contaminate drinking water by bathing or by washing clothes just near the wells ponds and rivers etc.
- Avoid risk exercises immediately before or after a meal.
- Do not spit or throw rubbish on gound/roads.

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#### INTEXT QUESTION - 4.5

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Fill in the blank

1. i) Brushing of teeth everyday in morming and before sleeping prevents.....
- ii) Changing the underclothes everyday prevents breeding of.....
- iii) By having meshes on door & windows you can keep out .....&.....&.....
- iv) Always wash your hand before & after..... and after .....
- v) Keep nials..... & .....

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#### 4.7 Summary

In this lesson we have disussed the meaning & concept of health & hygine and how they are interrelated & important for individual & community. We also explained different dimensions of health such as physical, mental social, spiritual, emotional & vocational. You have also learnt about the factors which affects the health of an individual. You have also come to know about the important components of hygiene which is needed for healthy living.

#### 4.8 Glossary

- Change : Partial or complete opacity of the crystalline lens causing blindness. The common cause is old age.
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- Chromosomal Anomalies : Any part of chromosome existing in an abnormal form, structure or location.
  - Concepts : Something conceived in the mind or an abstract idea generalized form particular instances.
  - Determinants : Something that determine or conditions.
  - Dimension : Extension in one direction.
  - Ecological : Something relating to ecology which is a branch of science concerned with the interrelationship of organisms & their environment.
  - Glaucoma : A disuse of the eye marked by increased interocular tensions.
  - Hemophila : A sex linked hereditary disease characterized by a prolonged coagulation time and abuormal bleeding.
  - Heredity : Transmission from one's ancestors.
  - Holistic : Emphasizing the organic or functional relation between parts and wholes.
  - Internal Conflicts : Internal disagreement or collision.
  - Long Sightedness : The condition of the refractive media of eye, in which with suspended accommodation the focus of parallel rays of light is behind the retina.
  - Mental Retardation : A delay academic progress of one's mind due to failure to promote.
  - Malnutrition : Faulty or inadequate nutrition.
  - Short Sightedness : An optical defect due to too great lugs of the attire-posterior daintier of the lens, where by the focal image is formed in font of ratina.

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#### 4.9 Answer to Intext Questions

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- 4.1 i) Well-being  
ii) Good health  
iii) Happy  
iv) Health, improve  
v) Health, preservation
- 4.2 i) False  
ii) True  
iii) False  
iv) True  
v) False
-

**4.3** Fill in the blanks:

- i) Physical health
- ii) internal
- iii) Social
- iv) Behaviour, mental
- v) Strees, anxiety
- vi) Physical, mental

**4.4** Fill in the blanks

- i) Parents
- ii) Conception
- iii) Microenviornment, macroenviornment
- iv) Physical
  - biological
  - psychosocial
- v) Man
- vi) Living
- vii) Health
- viii) Individual, community
- ix) Health
- x) Distributed, accessible

**4.5**

- i) dental carries
  - ii) microbes
  - iii) flies, insects, mosquitoes
  - iv) food, defecation
  - v) short, clean
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# Lesson 5

## Health Education for Active Ageing and Healthy Living

### STRUCTURE

- 5.0 Introduction
- 5.1 Objectives
- 5.2 Health education concepts, purposes objectives and approaches
  - (A) Definition and meaning of health education
  - (B) Purposes of health education
  - (C) Objectives of health education
  - (D) Approaches to health education for the elderly
- 5.3 Meaning of active ageing
- 5.4 Myths and Misconceptions about ageing
- 5.5 Importance of health education for maintenance of health and healthy ageing
- 5.6 Measures for maintaining good health
- 5.7 Summary
- 5.8 Answers to Intext Questions

### 5.0 Introduction

Old age is not a disease but a manifestation of various structural and functional changes which take place in any living organism with advancement of age.

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In the previous lessons you have learnt about various changes which may interfere with the health of the elderly. Some of these develop into chronic diseases making the elderly disabled and incapacitated. The elderly then can no longer manage their own lives, and need the care and support of others. However if the elderly and his/her family have the right information and advice for maintaining good health, the disabilities caused by chronic diseases can be prevented or at least delayed till late.

By maintaining a healthy life style, the elderly can be motivated to live a better quality of life and enjoy a healthy and happy state of **existence** for as long as they live.

In this lesson you will learn some of the key measurers/tips which you as care provider can convey to the elderly and their family to ensure a healthy ageing process and healthy living.

### **5.1 Objectives**

After reading this lesson, you will be able to :

- define health education and explain its meaning;
- state the purposes of health education in general and the objectives of health education in particular to an elderly and his/her family;
- describe myths and facts related to ageing and the elderly;
- list approaches in health education;
- state the points to be considered while providing health education;
- explain the meaning of active ageing;
- discuss the importance of health education for maintaining health and active ageing;
- enumerate the measures/tips for maintaining and promoting health during old age;

### **5.2 Health Education, Concepts, Objectives and Purposes**

Before we explain the meaning of active and healthy ageing and healthy living, let us understand the concept of health education and its importance in bringing about a change in the knowledge, attitude and behaviour of the people to assume greater responsibilities to promote and maintain their own as well as their family's and society's health.

#### **(A) Definition and meaning of health education**

**Health education is a process that informs, motivates and helps people to adopt and maintain healthy practices and life styles for prevention**

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**of diseases and promotion of health.** It is expected that exposure to the knowledge through health education will remove the barriers of **ignorance, prejudices and misconceptions** people may have about health and disease. Health education also motivates people to make appropriate changes in their ways of living

**(B) Purposes of health education**

- (i) To help people to understand that health is the most valuable possession of life.
- (ii) Develop a sense of responsibility for the improvement of their own health as well as of the family and the community.
- (iii) Develop knowledge, attitudes and skills on health matters to enable the people to adopt appropriate life styles.
- (iv) To know and utilise the available health resources.
- (v) To be motivated to maintain health by own efforts and enjoy fulfilment in life

**(C) Objectives of health education**

- (i) To motivate the elderly to change their habits and life styles which are harmful to their health and to adopt those practices and measures which will keep them **healthy, active and productive** for as long as they live.
- (ii) To encourage participation of the family and society in providing appropriate care to the elderly with an understanding of the limitation an elderly may have due to the ageing process and chronic diseases and disabilities.
- (iii) To help the elderly and his family to overcome the wrong beliefs about ageing and create a positive attitude and acceptance of ageing.

**(D) Approaches to health education for the elderly**

- (i) While looking after on elderly at home or in any other setting like old age home, hospitals, etc.
- (ii) By working with the families, groups of the elderly and the community.
- (iii) By a mass approach in a group of large number of people.

**(E) Points to remember while providing health education (7 golden rules)**

- Build up rapport with the elderly and his/her family to gain their co-operation.
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- Show courtesy and respect to all the members of the family especially to the elders.
- Assess the need for health education and appropriate opportunity to convey the health message and demonstrate wherever required
- Help and guide the people to do things and carefully listen to others' point of view before advising.
- Try to help the elderly / family to face and solve their own problems and do not make decisions for them but help them to arrive at a decision on their own.
- Avoid argument, don't be rude, be flexible and be prepared to change the topic according to the individual's needs, feelings, sensitivity and reactions.
- Do not promise anything which is not in your power.

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**INTEXT QUESTIONS 5.1**

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(A) Fill in the blanks:

(a) Purposes of health education are:

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(b) Objectives of health education to elderly/family are:

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(c) Seven 'Golden Rules' to be observed while providing health education are:

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(B) State the meaning of health education in your own words.

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### 5.3 Meaning of Active Ageing

Let us review the definition of health, which you have learnt in Module I, Lesson 3 on 'Health and Hygiene', According to WHO, "Health is a state of physical, mental social and spiritual well-being and not merely the absence of disease or infirmity." This concept of health applies to all the phases of life, i.e., from birth to old age. Health is vital to maintain well-being and quality of life for all the living organisms, as long as they live.

In the previous lessons you have learnt that ageing is a natural, continuous and life long process. It is inevitable. It is believed that all living organisms start to age even before they are born, that is, from the time of conception, we all are ageing every day of our life and we continue to do so throughout our life time.

Active ageing means:

- Retention of physical, physiological, psychological and social fitness to lead a life in as much the same way, especially into later years as younger people.
- It means being mobile, coping well with physical, mental, social and spiritual activities of daily life.
- Enjoying sound and fulfilling life.
- Being productive and contributing to the family, society and the nation.

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#### INTEXT QUESTIONS 5.2

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1. State the definition of health by WHO.

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2. Active ageing means:

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### 5.4 Myths and Misconceptions about Ageing

You may probably be aware that the year 1999 had been declared by the United Nations General Assembly as the International Year of Older

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Persons. The theme Active Ageing Makes the Difference was introduced to encourage people of all ages to take steps to ensure greater health and well-being in later life for themselves as well as for others. There are many wrong beliefs about ageing, which need to be clarified in the minds of the people, to ensure proper care of the elderly. In this section of the lesson, we shall discuss some of these myths and misconceptions about ageing.

**Myth I:** Advancing age at or after 60 years is normally considered to be decline in physical and mental health and becomes a limiting factor for older persons.

**Fact:** We need to remember that the onset of severe debilitating conditions in 75-80% of people does not occur until late in life, may be at 80-85 years of age. It is only the minority of old people, mostly the very old and chronically sick who are unable to look after themselves and need care. It is also generally assumed that mental health also declines with old age and older people are encouraged to say "My mind is not so sharp as it was" or it is too much for me to think about it at my age." We agree to it to gain sympathy of the family and friends. We also try to offer the elderly the help which they may not need and make them dependent unnecessarily and lower their self-esteem.

#### What is required

- acknowledging older people as a valuable resource because of their rich experiences of life
- enabling the older people to be active participants in the family and society activities. Providing adequate health care, information and facilities for health promotion.
- advising the elderly to take a well balanced diet and to maintain adequate physical activity and avoid smoking and alcohol.

**Myth II:** Men and women age the same way.

**Fact :** Men and women age differently. First of all women live longer than men, which is due to biological reasons. Women are not weaker sex: rather they have much more resilience than men at all ages. However longer life does not mean healthy life. There are different patterns of illness in men and women. Because of the long life, women suffer more from the chronic health problems associated with age such as diabetes, osteoporosis, arthritis. These health problems have an impact on their mobility and in maintaining social contacts and the overall effect on quality of life. Men are more likely to suffer from diseases like hypertension, heart diseases and stroke. But later for women also these

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diseases become major causes of death. In men smoking and alcohol consumption result in higher levels of death from lung cancer. Other causes such as accidents, violence, pneumonia and sudden heart failure are also linked with alcohol and smoking.

#### **What is required**

- an improved quality of life for both women and men
- more equal distribution of work, caring and leisure activities between men and women throughout the life course
- educating boys and girls to understand and avoid gender discrimination
- removing or overcoming the problems of gender discrimination in all aspects of life including pay, education and access to health care
- maintaining a proper life style by avoiding addiction of drugs, smoking and alcohol consumption
- maintaining physical activity by regular exercises.

#### **Myth III: Older people are frail**

**Fact :** Far from being frail, old people remain physically fit, well into later life. They are able to carry out the task of daily living quite well and also play an active part in social and community life. In other words, they maintain a high 'functional capacity'.

*Maintaining maximum functional capacity is as important for older people as freedom from disease*

The capacity of our biological system increases during the first few years of life, reaches its maximum in early adulthood and declines thereafter. How fast that decline comes is determined by external factors, such as smoking, alcohol consumption, diet, exercise and social class. However this decline caused by external factors is reversible at any age. Stopping of smoking and increase in the level of physical fitness, for example, can reduce the risk of developing heart diseases in later life. In the cases of those who are disabled, improvements can be made by adopting healthy life styles and thus reduce the progression of disability.

Many of the chronic diseases which reduce the functional capacity of an elderly are due to unhealthy life style. Some social factors such as poverty, poor education, harmful living and working conditions also reduce functional capacity in later life and thus lead to dependency particularly for the small minority of people who suffer from loss of mental function and confusion

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**What is required**

- educating the people about the benefits of a healthy life style
- by the government banning the sales and advertising of tobacco and alcohol
- ensuring access to health care and rehabilitation for older people
- maintaining maximum activity and health in later life

**Myth IV :** Older people have nothing to contribute and are an economic burden

**Fact :** The truth is that older people make a lot of contribution to their families and the society. Even if elderly people have retired and are not doing a paid work, they contribute substantially by doing unpaid work such as looking after the grandchildren besides looking after their own children and sometimes their own aged parents or relatives. In the rural areas people continue to work in the fields until they are unable to do so which is very late in life. This type of responsibility is not without stress and strain but is done out of concern, affection and the expectation of receiving while providing. Experienced older workers are needed to be employed to ensure the productivity and stability.

It is important that older people are enabled to work for as long as they desire and in no way age should prevent them from getting a job and other benefits. In fact, age should be recognised and rewarded.

- It is important to value what older people have to offer.
  - We should support the contributions that older people make to the nation, society and the family
  - We should enable older people to participate in the voluntary activities.
  - We should provide access to health care to all which is vital to help people to regain work capacity and to ensure that children grow up into healthy and adults adopt a life style that tackles health problems from the very start, enabling people to grow old without disabilities of chronic diseases.
  - The government should promote income security policies to provide adequate income protection for older people through reliable public or private pension arrangements.
  - We should eliminate age discrimination and gender in the work place.
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## 5.5 Importance of Health Education for Maintenance of Health and Healthy Ageing

In the previous section of this lesson you have learnt that there are many wrong beliefs about ageing and the elderly. You must have also understood that the health of the elderly can be maintained by taking appropriate actions even during the remaining life course. This will contribute towards the maintenance of an optimum and a desirable level of health. Therefore your role as a care provider is to provide informations and health education to the elderly and their families which they can follow to prevent disorders and disabilities in old age and remain socially active and productive.

- Health education is a powerful tool for teaching the elderly for maintaining a healthy life style by adopting appropriate self care practices. Self caring is an important practice to maintain health. All of us know the importance of self care practices but we do not follow them regularly.
- Some elderly may completely lack the knowledge and motivation to carry out these practices. As a care provider, your task is to teach the benefits of self care practices and motivate them to perform these regularly.
- Besides the self care practices, it is necessary for you to provide the elderly and his/her family the necessary information on available health facilities which are affordable and accessible to them. In the next section you will learn some of the tips/measures, which you can use to educate the elderly and their families for maintaining good health

## 5.6 Tips/Measures for Maintaing Good Health

These are simple messages and can be followed easily by the elderly, but they will need encouragement from you and the family as the care providers.

- (i) **Personal cleanliness:** such as regular brushing of the teeth in the morning and before sleeping and gargling the mouth after every meal. Proper care of the dentures. Frequent washing of hands, taking daily bath and wearing clean and loosely fitting clothes according to the weather are important. It is necessary to keep the nails of the hand and feet short and clean and to prevent any injury to the feet by wearing appropriate footwear.
- (ii) **Exercises:** Regular physical exercise is very important unless it is not advised by the doctor. Exercises are important to:
  - maintain the body weight,
  - maintain or improve mobility,

- encourage heart and lungs to work efficiently,
- prevent osteoporosis (bone damage),
- have a general sense of well being.

Exercises should be gradually introduced into the daily routine, so that it does not become a compulsion but a pleasure. About 20 minutes of brisk walk every day would improve the general health. Some physical exercises improve suppleness, some increase physical strength and stamina, which help in an active and independent life.

There are some organization which teach exercises to the elderly as per their age and physical fitness. If these facilities are not available, it is always better to consult your doctor.

**(iii) Nutrition:** Eating is one of the greatest pastimes which is more than just to maintain the body. Food can be an enjoyment when eaten in a good company. When the food smells and tastes good it encourages appetite. Emotional upsets, worry and anxiety, depression and bereavement can have a negative effect on the appetite and reduce enjoyment of food.

You have learnt about the importance of food and nutrition for maintaining health in Lesson-3 of Module 1. For the elderly a general principle of intake of adequate and nutritive food must be followed.

- The elderly who are over-weight should avoid sugar and fats especially those suffering from diabetes and heart diseases. Salt should be reduced for those suffering from high blood pressure.
  - Dietary fibre intake should be increased to maintain regular bowel movements and well being. There should be an overall increase in fluids intake in the form of water, milk, butter milk, juices, tea, coffee, etc., and aerated drinks should be avoided
  - Adequate intake of fresh and seasonal vegetables and fruits should be included in the diet.
  - Proper cooking to preserve nutritive value of food should be used. Fried and fatty food should be avoided.
  - The soft food should be encouraged in case the elderly is not able to chew.
  - Prolonged fasting and over-eating should be avoided. Last meal should be eaten at least 2-3 hours before sleeping. One should follow on appropriate schedule for meals
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70% of the diet should be from the carbohydrate group, i.e., fruit, vegetable, grains, pulses, barley and wheat.

10-15% should be from proteins.

10% should be from fat.

- (iv) **Regular health check-ups:** These are essential for special functions like vision, mobility, hearing, memory and mastication. These should be done regularly together with a check on **body weight, blood pressure, blood sugar** and cholesterol level at regular intervals. Any abnormal features like lump in breast, change in bowel habits, unusual bleeding must be reported. If the elderly is wearing dentures, ensure that they fit properly to prevent soreness and ulcers of mouth and gums. If there is problem in hearing, it is necessary to provide hearing aids. As a care provider you should regularly give information on organized health screening programmes and about illnesses and age related health problems.
- (v) **Maintaining an adequate sleeping pattern:** A sound sleep for 6-8 hours is essential for health. This can be achieved by avoiding to have frequent naps in between during the day, by being active and involving oneself in social interaction and participation in physical activity. It is important to maintain an **appropriate balance of work and relaxation activities** and engaging in activities which create positive outlook in life. The elderly especially those having neck and back problems should avoid the use of very soft and thick mattresses or pillows.
- (vi) **Local recreation centres:** such as senior citizens clubs, parks, library, etc. give the elderly a feeling of belongingness. Income generating activities for both male or female elderly can be encouraged like **caring for children at home participating in community development** programmes, **social work** (voluntary), **management of day care centres**. However involvement in these activities will depend upon the functional capacity and capability of the elderly. Participating in **spiritual activities** provides a lot of satisfaction, happiness and relaxation to a majority of the elderly which is very good for maintaining good mental health. **Meditation and yoga** also have preventive, promotive, curative and rehabilitative values in the life of the elderly. You can introduce the elderly to these practices. Some of these include breath holding (*Paranayama*), **mental exercises** (meditation), **physical postures** (asanas) These are very stimulating and cleansing techniques.
- (vii) **Moderation in the use of alcohol and tobacco:** Drinking alcohol is probably the most acceptable and seemingly dangerous habit. Alcohol:
- prevents absorption of essential vitamins
-

- can depress the mood, despite the expectation that it will cheer up a person
- causes heat loss in cold weather

The elderly people with specific health problems, or those taking certain medications should not take alcohol at all. If the elderly is addicted and cannot give up the habit of drinking, he should reduce the number of drinks as well as the quantity or strength of the drinks. He should check with his doctor whether he should drink at all and if allowed what should be within limits. Similarly the use of tobacco should also be reduced. Giving up smoking is very difficult if a person is used to smoking for a long time. Many people need support to help them get over these addictions. As a care provider you may help to get them the information on these 'support groups'. Sharing the experiences with others and realising the benefits of giving up smoking and drinking will help the elderly to overcome this health problem.

**(viii) Medication and drug usage:** Self-medication is dangerous. Older people on the whole tend to agree and follow what the doctor has prescribed without questioning. Sometimes an older person with a number of ailments is seen by different doctors and is prescribed something from each of them. It is not surprising that quite a sizeable collection of pills /tablets may soon be collected. This situation is very common, and could lead to a lot of dangerous consequences, for example:

- Each of the medicines prescribed by the doctor may have a number of side-effects. In themselves these may not be particularly dangerous but in combination with other tablets these could produce unwanted reactions.
- If several doctors have prescribed tablets, it is possible that each doctor does not know what others have prescribed. While singly they may have prescribed the correct dosage, yet too many similar tablets could lead to overdose.
- When the elderly are faced with taking a number of tablets, they may decide not to take them. This could lead to omitting of an essential medicine.
- When there are too many tablets looking alike in front of the elderly which are confusing he may end up taking a wrong medicine.

Each of these examples is the result of polymedication (means many medicines). This is not in the best interest of the elderly. The best way to prevent polymedication is that the elderly must tell his doctor about the medicines he/she is taking or better

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show these to the doctor, so that he can review the case and give medicines according to the need which is much safer. If the elderly is unsure about the medicine that he is going to take or if the medicine is having reaction on him, get advice from the doctor

educate the elderly about the dangers of self-medication and taking too many medicines, which may not have been advised by the doctor.

- The elderly should not take any medicines which are prescribed for others, may be for the same ailment.
- All medicines have expiry dates. This must be checked as it could do more harm than good to take these medicines that are past this date.

As a care provider you must know some of the signs suggesting that an elderly is taking too many medicines, which will disturb the chemical balance in the body. These signs are given below:

- *Confusion can result due to chemical imbalance in the body*
- *Nausea, giddiness, headache, blurred vision and abdominal pains are some of the most common drug side-effects. The elderly should see the doctor if any of these signs or symptoms are experienced.*
- *Different pills in the same container can also contribute towards the elderly taking wrong medicines. Consult the doctor who has prescribed the drugs.*

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### INTEXT QUESTIONS 5.3

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1. List the health practices an elderly should adopt to maintain and promote sound health.

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2. Regular health check-ups are important for early detection and treatment to prevent the illnesses and disabilities. List some of the check-ups which an elderly needs to be more careful about.

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3. Write three dangers of self-medications and over-medication.

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4. List the signs/symptoms an elderly may have due to wrong or over-medication

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### 5.7 Summary

There are many ways by which people of all ages tend to maintain their own health and well-being. By the time they have reached their later years certain habits are formed. Some of the good habits need to be continued but some habits need to be modified and changed. In old age due to changes in the body the elderly person becomes more vulnerable to the various health problems. Therefore, following correct self care practices and healthy life style is important for maintaining good health.

In this lesson you have learnt the meaning of active ageing and importance of health education for maintenance of health. You have also learnt the various measures an elderly can adopt to promote and maintain his health and how to prevent dangers of over medication.

As a care provider, you need to know the health education areas for the elderly and the family so that the family can co-operate in providing the right type of care to the elderly.

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### 5.8 Answers to Intext Questions

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- 5.1 (A) (a) (i) Health is the most important possession of life.  
(ii) Develop a sense of responsibility for improvement of the own health as well as health of the family and the community.
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(iii) Develop knowledge attitude and skills on health matters to enable people to adopt an appropriate life style.

(b) (i) Motivate the elderly to change harmful health habits and adopt healthy habits for healthful living.

Or

Encourage the family's and the community's participation in the appropriate care of the elderly.

Or

Help the elderly and the family to overcome the wrong beliefs about ageing and develop a positive attitude towards the elderly.

(c) (i) Build rapport with the elderly and the family.

(ii) Show courtesy.

(iii) Assess the needs and problems.

(iv) Help and guide people to do things.

(v) Listen carefully.

(vi) Avoid arguments.

(vii) Do not promise anything what you cannot do.

(B) Write yourself.

5.2 1. Health is a state of physical, mental, social and spiritual well being and not merely the absence of disease or infirmity.

2. Retention of physical, physiological, psychological and social fitness and lead a life in as much the same way as the young people.

5.3 1. (i) Personal cleanliness.

(ii) Regular exercises.

(iii) Nutrition.

(iv) Regular health check-ups.

(v) Adequate sleep.

(vi) Recreation.

(vii) Moderation on use of alcohol and tobacco.

(viii) Medication and drug usage.

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2.
    - (i) Wrong medication.
    - (ii) Confusion resulting out of chemical imbalance in the body due to over-dosage or omitting the dose.
  3.
    - (i) Vision, hearing, mobility.
    - (ii) Body weight.
    - (iii) Blood pressure, blood sugar, blood cholesterol.
    - (iv) Heart and lungs.
    - (v) Lump in breasts in females.
    - (vi) Dental check-up.
  4. Nausea, giddiness, vomiting, headache, blurred vision.
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# Lesson 6

## Community Awareness for the Elderly Care

### STRUCTURE

- 6.0 Introduction
- 6.1 Objectives
- 6.2 Meaning and concept of community awareness
- 6.3 Factors affecting community awareness
- 6.4 Need for creating community awareness for care of the elderly
- 6.5 Purposes of creating community awareness for care of the elderly
- 6.6 Community action(s) for care of the elderly
- 6.7 Summary
- 6.8 Glossary
- 6.9 Answers to Intext Questions

### 6.0 Introduction

Ageing is a natural, continuous and **inevitable** process. Old people have a right to health care and to enjoy old age. The year 1999 had been declared by the United Nations General Assembly as the International Year of Older People. But unfortunately, the elderly are usually **discriminated** in society on account of their age, sex, social and economic status, etc. The **major** threats that have an **impact** on the elderly are:- **poverty, malnutrition: Chronic diseases, disabilities, social isolation and abuse.** It is fundamental to remove these threats in order to improve their overall health.

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nature of the health problems of a particular community, the citizens expect the community to assume responsibility for dealing with them. Before attempting to handle these health and related problems, the community needs to have adequate and proper information about these, to render effective services. This is what is referred to as '**community awareness**'.

*The community is responsible for health promotion of all individuals residing in that community, especially of the elderly as they are more vulnerable.*

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### INTEXT QUESTIONS 6.1

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1. Define community awareness.

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2. Fill in the blanks:

- a) In today's society, no one individual is totally.....
- b) The community in which an individual lives, accepts a responsibility for her/his health promotion, in order to..... the individual's own efforts.
- c) The elderly are more.....as compared to the others in the society, in so far as self care practices are concerned.

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### 6.3 Factors Affecting Community Awareness

There are many factors which influence/impact on community awareness. These are discussed below:

**(a) Interests and priorities**

The community members usually give attention to those problem areas which are of interest to them and which they consider to be more important than the rest.

**(b) Literacy level**

The educational status of the community members shall determine the extent of their understanding of a particular problem.

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**(c) Social stratification**

The distribution in a particular community especially with regard to religion, status etc. shall determine the extent of recognition of social problems by the community members.

**(d) Social status of the elderly in the community**

The extent of respect and trust accorded to the elderly by the community members shall also influence their awareness of the related problems of the elderly.

**(e) Political set-up**

The political labelling in a community shall affect the kind and nature of care provided to the different categories of community members, viz., the young or the old the males or the females, etc.

**(f) Local participatory institutions**

Other voluntary institutions within the community can also have a great influence in creating community awareness on certain issues of care within that community.

**(g) Health service structure**

The health services organization, their distribution, the kind and nature of these health care services, etc., within the community can also influence the extent of awareness regarding elderly care among the community members.

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**INTEXT QUESTIONS 6.2**

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1. State any four factors which affect community awareness.

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**6.4 Need for Creating Community Awareness for Care of the Elderly**

When the society in which the elderly live holds negative views about ageing, the elderly themselves are likely to have negative perceptions of themselves and their social roles. If not corrected, this can lead to a further deterioration of the health as well as social status of the elderly. A

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few reasons accounting for these negative perceptions are discussed below:

- (a) The elderly as well as their families usually consider ill-health as a natural phenomenon in old age.
- (b) Families usually ignore the needs of the elderly, unless they get very sick.
- (c) The disintegrating family ties, the fast pace of life, increasing costs and limited resources lead the youngsters of today to view the elderly as a social burden.
- (d) Health professionals usually focus their attention and care on children and young adults and remain unaware of the special needs of the elderly.
- (e) In planning of health care, priority is given by the decision-makers to care of infants and young children.

Besides, the health care of the elderly is usually compromised, due to:

- limited government resources;
- limited family resources; and
- lack of competent medical facilities to take care of the elderly.

You will learn in detail about elderly care undertaken in the government and voluntary sectors, in Lessons 3 and 4 of this Module.

The above issues indicate that the elderly do not obtain adequate and appropriate care, either in the health or other fields. If we are to have healthy and socially productive elderly, we need to focus attention on creating awareness among the community about their needs and making due efforts to meet these needs.

*Health needs are usually accorded low priority because of*

- *limited government resources;*
- *limited family resources; and*
- *lack of competent medical aid for them.*

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### INTEXT QUESTIONS 6.3

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1. List reasons for holding negative perceptions of the elderly.
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- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_
- (d) \_\_\_\_\_

2. Fill in the blanks

- (a) In old age ill health is regarded as.....
- (b) Health care services usually focus their attention on the needs of..... and.....
- (c) We need to provide care to our elderly, in order to make them..... and.....
- (d) Usually the health needs of the elderly are accorded low priority because of limited.....and.....resources and lack of ..... for them.

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### 6.5 Purposes of Creating Community Awareness Care of the Elderly

The purposes of creating community awareness for care of the elderly are:

- (a) To realise the need for elderly care;
- (b) To become familiar with the needs and problems of the elderly in the community;
- (c) To participate in planning, organising and implementing programmes for the elderly care in their community.
- (d) To help the elderly to develop a feeling of belongingness in the social context i.e.:
  - enhance their self care abilities by giving them a feeling of responsibility for their own health care; and
  - prevent their problems from turning to limiting complications.
- (e) To benefit from the knowledge and experience of the elderly, in solving social and other problems, if any, within the community.

### 6.6 Community Action(s) for Care of the Elderly

The community can adopt various measures to provide care to the elderly. Any service rendered to the elderly must take care of the following aspects:

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- (a) The services should be need-based.
- (b) The services can be organised on a community basis and made easily accessible to the elderly, as well as affordable to them.
- (c) The community members may themselves contribute to the planning and operation of these services.
- (d) The community may evolve strategies to influence policy-makers into taking suitable actions for elderly care.
- (e) The community must stress on creating respect for the elderly within their families as well as within the society.
- (f) The community can work cohesively, eliminating the general conflicts within the community, towards the benefit of the elderly.

**Social welfare groups and non-governmental organizations can support the care of the elderly by: providing food and shelter, health care services, certain aids and suitable equipments to overcome their disabilities and impairments such as hearing aids, walking aids, etc., as well as providing other welfare services to them.**

*Motivation is the keystone to community action.*

For adequate provision of elderly care, you as a care provider shall be required to motivate:

- the community in which the elderly live, especially the local leaders and other influential people;
  - the family members of the elderly; and
  - the elderly themselves.
- (g) Information can be imparted to the elderly regarding **Old Age Pensions** or other monetary schemes which provide financial assistance to them.
  - (h) Information can also be imparted to the elderly regarding welfare services available for them. Special attention is required for the care of those elderly who are poor and are bedridden.
  - (i) Involvement of the elderly in community affairs. Usually, the elderly are regarded as a social burden and are thus isolated from the main activities of the community. An increase in urbanization and inflation has seen to this, as you have already learnt in Lesson 5 of Module 2. It is usually **overlooked** that the elderly can contribute significantly to community affairs, if they are given the opportunity to do so. Their social interaction with others in the community will help them in
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overcoming their feelings of depression and loneliness and also, make use of their expertise and experience in a useful manner.

- (j) The community itself can take care of the elderly, especially the poor and those who are very sick. In case of those elderly who are active, they can be motivated to take care of themselves as well as take care of the other needy elderly in the family and in the community.
- (k) For the active elderly, attending day care centres provides the right opportunity to maintain contact with other elderly persons in the community. This will help them gain more information on the various benefit and other schemes which they can avail from different resources like the community, the government and the non-government sector. These day care centres shall have health workers teaching them about how to take care of their own health, especially any **impairment** that they might be suffering from. Also, the elderly who are sick can be referred to, by the health worker in these centres, for the required medical aid.
- (l) The community can have **volunteers** (who are community members, usually from the younger age group) who can spend some time every day for performing voluntary social work for the elderly. With adequate training, these volunteers can be of great help to the elderly, especially those who are physically or mentally handicapped. Thus, the community can care for the elderly by providing the support and services which they need, to be able to live as independently as possible in their own homes or in home-like settings within the community.

*Active involvement of the elderly in community affairs, can help in two ways:*

- *give the elderly the feeling of being wanted and useful to the community; and*
- *utilise their experience and expertise in a manner which is beneficial to the community.*

*Motivation is the keystone to community action for elderly care.*

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#### INTEXT QUESTIONS 6.4

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1. List any three purposes of creating community awareness for care of the elderly.
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2. List any two ways by which the community can provide care to the elderly.
    - (i) \_\_\_\_\_
    - (ii) \_\_\_\_\_
  3. Fill in the blanks with appropriate terms:
    - (a) Motivation is the ..... to providing care to the elderly.
    - (b) For adequate provision of care to the elderly, motivation is needed of....., ..... and .....
    - (c) The non-governmental organizations can help the elderly by providing suitable..... and ..... to overcome their disabilities.
    - (d) The community can utilise the..... and..... of the elderly in a useful manner.

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## 6.7 Summary

Elderly people, in other words, senior citizens, of our country are richly **endowed** with experience of life and have enormous potential and a capacity to lead. They should form an active part of the normal stream of life and the society. Their isolation shall mean depriving our nation of a vital **resource**. The responsibility of their involvement and utilisation of their potentials lies with their family members and the community at large. Creating community awareness about their needs/problems and their timely **rehabilitation** shall go a long way in enhancing the overall growth of our community and the nation as well as providing endless happiness for all.

In this lesson, you have learnt the concept of community awareness and factors affecting it. Also, the need for and purposes of creating community awareness were highlighted. The community action(s) needed for elderly care were also outlined.

## 6.8 Glossary

1. Discriminated - differentiated.
  2. Democracy - a system of government by the whole population, usually through elected representatives.
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3. Self-sufficient - independent
4. Supplement - a thing or part added to remedy deficiencies
5. Lobbying - a body of persons seeking to influence legislators or other influential persons on behalf of a particular interest.
6. Envisage - to have a mental picture of a thing or condition not yet existing, especially as desirable.
7. Cohesively - act or condition of sticking together.
8. Impairment - damage or weakening.
9. Expertise - an expert opinion.
10. Endowed - to provide a person with talent, ability, etc.
11. Resource - the means available to achieve an end.

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## 6.9 Answers to Intext Questions

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- 6.1 1. Proper information about the health and other problems within the community, in order to render effective services by this community, is referred to as 'community awareness'.
2. (a) self - sufficient  
(b) supplement  
(c) vulnerable
- 6.2. 1. (a) Interests and priorities  
(b) Literacy level  
(c) Social status of the elderly  
(d) Health service structure
- 6.3 1. (a) The elderly as well as their families regard ill-health as a natural phenomenon in old age.  
(b) Families usually ignore the needs of the elderly unless they get very sick.  
(c) The elderly are frequently viewed as a social burden.  
(d) The health professionals usually focus their attention and care on children and young adults
2. (a) Natural  
(b) Children, young adults  
(c) Healthy, socially productive
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- (d) Government, family, competent medical aid
- 6.4 1. (a) To realise the need for elderly care
- (b) To become familiar with the problems and needs of the community.
- (c) To benefit from the knowledge and experience of the elderly, in solving problems within the community.
2. (i) The services can be made easily accessible and affordable to the elderly.
- (ii) The community can help evolve strategies to influence policy makers into taking suitable action for elderly care.
3. (a) Keystone
- (b) The elderly, their family members, the community.
- (c) Aids, equipment
- (d) Experience, expertise
-

## **Lesson 7**

# **Government Sponsored Support System for the Elderly**

### **STRUCTURE**

- 7.0 Introduction
- 7.1 Objectives
- 7.2 Need of government support for the elderly
- 7.3 Levels of support measures to the elderly
  - (A) At Individual level
  - (B) At community level
  - (C) At government level
- 7.4 Type of government support available for the elderly
- 7.5 Social security and social support system
- 7.6 Support system required for health care of the elderly
- 7.7 Proposed National Health Policy
- 7.8 Role of care provider as coordinator of support system
- 7.9 Summary
- 7.10 Answers to Intext Questions

### **7.0 Introduction**

There is continuous increase in the number of old people in the country. According to the 1991 Census, 56.7 million people were above the age of 60 years i.e. 6.7 percent of the total population. This increase is due to the

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increasing life span of human beings. Ageing leads to a variety of disabilities, chronic diseases mental and emotional disorders which require intervention not only by the family but also by the community and the government. The government intervention all the more necessary because of widespread poverty and suffering. There fore there is a need to have a national policy for the elderly to improve their health and general status.

## **7.1 Objectives**

After reading this lesson, you will be able to :

- explain the need for government support for the elderly
- describe the types of support and levels of support
- identify the types of Government support available
- list the support system required for health care of the elderly
- develop awareness to the proposed plan for a National Policy for Elderly
- describe the role of care provider in coordinating and utilising the support provided by these agencies for the welfare of the elderly

## **7.2 Your Need for Support System for Elderly**

Industrialization and urbanization in developing countries have resulted in nuclear families due to migration of young adults to cities and the such for employment, with the result that the joint family system is gradually disintegrating because of social, economic and industrial revolution and modernization. The parents are usually left to themselves in their native villages and small towns and even in cities. They feel lonely, neglected, insecure and handicapped physically, mentally, emotionally and socially.

Even when old parents live with their married son or daughter they do not get proper and adequate attention and care because of fast and busy life style and attitude of their son or daughter and pervading socio-economic conditions. This problem gets aggravated because of the small family size.

Keeping in view this situation of elderly people it becomes essential that any future programme for development should focus on full range of support services which would meet the needs of the elderly fully and adequately. It should include the following services.

- Adequate financial and social security
  - Health education (including preparation for retirement)
  - In-home services and nursing homes for the elderly
  - Adult day care programmes
  - Recreation services
-

- Special transportation services
- Special facilities at public places or offices

These support services should be properly co-ordinated and accessible to the people. Distance and cost should not interfere with the availability of services. The Indian Constitution recognises the duties of the government towards its citizens including the aged. According to the Article 41 of the constitution "state shall, with in the limit of its economic capacity and development, make an effective provision to securing right to work, to education and to public assistance in cases of old age, sickness, disabled and cases of unemployment."

A small proportion of the aged in India are covered by somewhat adequate welfare programmes. Increasing problems of the aged arising as a result of demographic trends and emerging process of social change together attract attention towards problems and needs of the aged.

#### **Problems and needs related to health**

1. Physical changes or deterioration
2. Vulnerability to acute or chronic diseases
3. Disabilities of vision and hearing
4. Nutritional problems

#### **Problems and needs related to psychosocial aspects**

1. Problem of economic security
2. Housing
3. Social isolation
4. Changing family dynamics
5. Lack of respect or neglect

#### **General observations**

- Uniform pattern of structure
- Need to have consistency with objectives and content.
- The target group in question needs to be consulted.
- Need to include the National Policy for the Elderly which is being considered by the Government in brief.
- Organization of topics needs to be clustered

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#### **INTEXT QUESTIONS 7.1**

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1. Why support for the elderly is needed?
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2. What type of services should be included for old age support services?

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### 7.3 Levels of Support Measures to Elderly

Support to the elderly may be considered at three levels.

- Individual level
- Community level
- Government level

#### (A) At individual level

1. The elderly should have a sense of active ageing and a general feeling of satisfaction.
2. The elderly must try to feel as independent as possible.
3. The elderly must maintain maximum degree of physical, mental and social vigour of which he or she is capable.
4. The elderly must cultivate interests/hobbies to keep himself occupied and spend leisure time comfortably.
5. The elderly must plan his post-retirement life well in advance with special emphasis on investment of financial assets to ensure regular income and economic independence.
6. The elderly must seek health care services on time and take good nutrition.
7. The family should support the elderly in the process of active ageing.

#### (B) At community level

1. In urban areas, community centres in residential colonies can be the nucleus for age care activities.
  2. Voluntary or social welfare organizations can also organise age care centres. These centres can have facilities for day care, health education facilities, library and can provide meals on wheels like catering services.
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3. Youth must be motivated towards active involvement in the elderly.
4. Needs of elderly people must be identified to provide necessary support.
5. Trained and motivated staff should provide primary health care to the elderly.
6. Community must be made aware of the needs for care of the elderly in terms of providing social, economic and safety support.

**(C) At government level**

At the government level action may be taken keeping in mind the needs and problems of the elderly

1. As the population of the elderly is on constant increase the government should lay down uniform social security schemes for them in all the states. The financial assistance given to them should be periodically reviewed on account of escalating cost of living. The administrative procedure for such grants and pension benefits should be simplified. It should be ensured that programmes launched by the government are properly implemented at the grassroots level by the authorities concerned to meet the desired needs of the elderly.
  2. Senior citizens should be provided facilities in public-dealing offices such as railways, post offices, banks, municipal offices, insurance companies and estate offices. Court cases, insurance claim, retirement benefits and property tax cases should be settled on a priority basis.
  3. Government should make specific and adequate provisions for welfare schemes in the annual budget which should be formulated and implemented for the benefit of the aged directly by the government or non-governmental organizations. Non-governmental organizations have advantages like:
    - effective administrative machinery,
    - personalised services,
    - flexibility in approach to implement services,
    - concern for human problems.
    - establishment of age homes or hostels.
  4. In most of the metro cities and big towns to start with infrastructure facilities like day care centres with medical clinic, library-cum-reading room and entertainment facilities can be started. Such homes are needed for people who have no family support for one reason or the other. These facilities may be provided on payment basis which is reasonable in view of their limited savings.
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5. Government should encourage non-governmental voluntary organizations, religious or other charitable trusts to construct such homes or hostels and also day care centres for which land should be allotted to them with substantial financial support or subsidy given for constructing.
  6. Free homes for the destitute aged should also be constructed by the local authorities within their won territories.
  7. Concessions should be given to all elderly persons, may be all those who are above the age of 65 years. for travel in trains, local buses, hospitalisation and for special hospital charges, for lab tests, x-ray and other investigations.
  8. Old age economic benefit and general scheme for old age pension on the lines of social security schemes as prevalent in many other countries should be introduced. Old age pension should be available as per the rules and not subject to any recommendation of any political or other person to avoid the misuse and favour and discrimination.
  9. The government should have a policy to ensure the benefit of pension to all retired persons, both in government as well as in private organizations. Employers should have the obligation to continue to provide medical facilities to their retired employees. Necessary legislative measures may have to be adopted for this purpose.
  10. The concept of part-time employment should be introduced for retired people both in government and private organisations to keep the persons occupied, active and economically sound.
    - (i) Primary health care services for the aged should be strengthened by introducing mobile vans or clinics on wheels for providing basic health care services to them in their residential localities.
    - (ii) Counselling and health education can be a part of primary health care and involvement of non-governmental voluntary organizations in this field is useful and economical.
    - (iii) OPD facilities and special geriatric wards should be set up in all good hospitals for general and specialized Care and treatment.
  12. Special insurance scheme for old age pension for which premium should be substantially low should be for all categories of people so that more people are attracted towards it.
  13. Separate and independent welfare boards for formulating policies and programmers for the care of the aged should be set up both at national and international levels. Voluntary organizations in this field should be adequately represented in such boards.
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### INTEXT QUESTIONS 7.2

1. What are the problems and needs related to health of the elderly?
2. What support services can be considered at the individual level?

## 7.4 Types of Government Support Available for the Elderly

To provide adequate means of livelihood, the Government of India have framed certain social security measures with regard to 'old' age. The following provisions were made by the Government of India.

**Pensions:** All the civil servants, irrespective of their class and status whether belonging to State or Central Government on attaining the age of super annuation are entitled to pension. Government servants or employees after putting in 20 years of service can also take premature retirement and get the benefit of pension.

**Provident Fund:** Under this scheme employers and employees both contribute to the fund which along with interest accumulated is given to employees on retirement.

**Payment of Gratuity:** All establishments employing 10 or more persons are required to pay gratuity to every employee who has put in a minimum of 5 yrs. of continuous service. The gratuity is paid at the rate of 15 day's wages including dearness allowance for every year of service.

**Central Government Health Scheme:** This scheme was introduced in 1954 with an aim to provide medical facility not only to employees but also to their families including dependents. Offer is given to retired civil servants to join this scheme. At some places this facility is also extended to general public.

**Old Age Assistance Scheme:** Barring few States most of the States Government have started old age assistance schemes which were initiated in 1957. In this scheme all people who are without any source of income are provided financial assistance after attaining certain age.

The Government of India attaches considerable importance to the role of non-governmental organizations in extending social welfare services in the country. As such non-government organizations are associated at different stages of planning and implementation of social welfare programmes. They are financially assisted to implement the various schemes, provided technical know-how and other infrastructure facilities are there. In the area of the welfare of the aged non-governmental organizations have been playing a pioneering role in providing services and meeting their welfare needs. After the World Assembly on Ageing, the number of non-governmental organizations are on the increase. The Government of India has been granting financial assistance to a number of organizations to provide services, like training of 'age care' personnel, mobile medicare, supplementary feeding and health care of the aged, dissemination of information on planning for retirement and setting up old age homes.

By and large in India we do not have old age homes. Few of the municipal run old age homes in the metropolitan cities like Delhi are there or some old age homes are run by charitable or voluntary agencies.

At religious places philanthropic people, charitable trusts and saints have constructed ashrams. Many old people after playing their useful role and having enjoyed the comforts of life, on attainment of old age live in Ashrams till the end. Most of their time and energy are spent in performance of religious activities.

## 7.5 Social Security and Social Support System

In the organised sector of economy there are comparatively better social security provisions. In government service, retired employees are eligible for pensions, gratuity, leave encashment and provident fund. The retirement benefits are liberalized from time to time, including payment of pensions to the family in the event of death of the employee while in service and relief to neutralize price increase. Measures like Central Government Employees Compulsory Insurance Scheme, assuring payments on retirement or death and also general provident fund deposit linked insurance payment have been introduced by the Government of India.

In the industrial sector certain retirement benefits are available to employees under the employee's provident fund and miscellaneous provident fund schemes, employees family pension schemes:

**State Governments welfare schemes:** Old age pension schemes of the nature of public assistance are in operation in all states and U.Ts. in India keeping in mind the goal of a welfare state. The eligibility criteria under these schemes vary from state to state. By and large it is allowed to the destitute old above the age of sixty. Old age pensions are given to those with no other source of income or with nominal income which is inadequate for survival and also with no one to support.

A number of elderly persons are physically fit and can contribute in a number of activities. There are several kinds of part-time jobs which are not liked by the young and they can be usefully taken up by the aged. Such concept can ease economic situation for the aged and will also give opportunity to remain engaged in some activity.

*Family support system:* The society has an obligation to the aged. Social scientists need to have a deep and serious thinking on the revival of a revised form of joint family system which is suitable to the changed times and is oriented to the needs and challenges of the present modernised society and socio-economic system. It could be that a revised version of joint family system would minimize the disadvantages of old joint family system and capitalize on its advantages. The aged could live in the joint family and the members of the family, institutions, the society and the government could make joint efforts to bring happiness and satisfaction in the lives of the senior citizens.

It is observed that the elderly living in joint families are better adjusted and vulnerability to mental illness is also less. Proportion of the elderly living alone is fortunately low in our country. The prevailing joint family system should be continued and encouraged.

Even though the Government of India is trying to improve welfare measures for the aged, there remains a basic question as to how long and how well these welfare measures could solve the problem. The best option could be to strengthen the family system and try to motivate the family members to take care of the aged. This would not only help to improve the situation for the aged but also keep intact our traditional and cultural values. In families where an atmosphere of love and compassion prevails elderly people get their due to a great extent. This chance is very high in a joint family set up.

## **7.6 Support System Required for Health Care of the Elderly**

Aim of health care of the elderly should be:

- (a) to sustain their independence, safety, comfort, contentment in their own homes and to support them by all necessary means for as long as possible.
- (b) to offer alternative residential accommodation to those who by reason of age, infirmity, lack of proper home, or other reasons are in need of care and attention.
- (c) to provide hospital accommodation for these who by any reason of physical or mental health are in need of skilled medical and nursing attention.

In order to formulate an effective programme of strategies the following guidelines are suggested.

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- (a) Understand health needs of the elderly. One must measure their health status. Major emphasis should be on preventive services then curative services.
  - (b) Keep in mind the definition of health given by W.H.O. Different elements of health have to be considered.
  - (c) Keep in view our social system and culture. The aged feel better in their own home surroundings. More community-centred services need to be organized.
  - (d) Medical and social services should be integrated.

#### **Types of support system for health care**

The Government of India had been giving priority to 'Health for All by 2000 AD' Policy makers and administrators need to consider the issue of providing services to elderly who require health and personal care like children. So there is a need for:

- Primary health care services for the elderly; exercise and fitness programme.
- Establishing special separate geriatric wards in hospital
- Personnel trained for geriatric care
- Mobile geriatric health care centres to cater to the large number of the elderly.
- Subsidized medical care for the elderly since many rural families cannot support or bear the cost of medical care.
- Health insurance schemes in rural areas
- Participation of voluntary organizations
- Organizing of health activities for the elderly by the elderly by organized groups with medical officers' cooperation.
- Health camps can be organised, for example:
  - Eye camp
  - Heart check-up camp
  - Diabetes control camp

These services may be organised at the community level by participation of members of the community, voluntary organizations or primary health care services.

List some of the resources or government sponsored facilities in your area.

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## 7.7 The Proposed National Health Policy

The aged are the nation's precious asset. They have contributed their youth for the progress and development of the nation. Their cultural and socio-economic contributions are valuable to society and the country. It should be recognised.

It is the responsibility of the state towards senior citizens. Suggested National Policy on Aging also recommends to provide full economic and social security irrespective of their sex or creed so as to enable them to enjoy total well being. In order to fulfil these objectives the state shall strive to pursue both developmental and humanitarian measures and in particular the following:

1. All senior citizens should be covered by comprehensive health programmes.
2. The strategy for the health care programmes shall be preventive and early diagnosis of the diseases to be done and an integrated health care system with the primary health care should be there.
3. 'Health for All' strategy should have special component of plan for the aged.
4. In extending needed health care, all efforts should be made towards utilization of available indigenous practices for the care of the aged.
5. The role of the family which is fundamental to the unity of society and which links generations shall be recognised, maintained and strengthened and protected in accordance with the cultural heritage of the society.
6. Health education of the aged population, before they really become aged, about the diseases which develop due to normal wear and tear in the body with advancing age, methods of early detection and prevention of secondary complications of chronic ailments.
7. Provision of adequate and well equipped health services for the treatment of such diseases and their complications. This can be incorporated in the three tier system of health services at primary health centres and district hospitals in the form of small rehabilitation centre and tertiary centre in the form of full-fledged department of rehabilitation.
8. Proper formulation and planning about economic security of aged persons in the form of
  - adequate old age pension according to increasing cost of index.
  - improvement in the post-retirement pension scheme according to increasing cost-index.
  - Provision of opportunities to elderly persons about the utilization of their potential and experiences for national uplift.

- Legislative security to elder persons so that they are not left out by the family.
- Incorporation of philanthrops and voluntary workers in various schemes and plans for care of elderly persons.
- Senior citizens should be given priority for the protection and relief in times of distress or natural calamities.

### 7.8 Role of Care Provider as Coordinator of Support System

As a care provider to elderly you can:

- recognise the limitations or problems of the elderly;
- become familiar with community resources and government sponsored support system.
- assist elderly persons by providing information and giving guidance and direction for contacting appropriate agencies;
- help elderly persons in using community based programmes which can meet older person's needs;
- encourage pre-retirement planning and counselling about living arrangement and use of government or social support;
- encourage the elderly to use their potentiality in planning and organising services for the elderly;
- Impart health education related to health maintenance and nutrition and old age sick-ness;
- Participate in activities organized in the community for the welfare of the aged.

#### INTEXT QUESTIONS 7.3

1. List the support system required related to health of the elderly.

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2. Explain the role of care provider in the support system of the elderly.

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## 7.9 Summary

In this lesson we have learnt about why government support and voluntary agencies support is essential for elderly. We have also learnt about different government facilities which are available to elderly. Since national policy is being framed we have also discussed what all aspects can be covered for framing national policy for elderly. With all this you will be able to contribute as a care provider for elderly at home or at old age homes.

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## 7.10 Answers to Intext Questions

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- 7.1 1.
  - ageing leads to chronic diseases
  - disabilities due to ageing or diseases
  - mental and emotional disorders
  - due to industrialisation and urbanization
  - aged in the family are left unattended due to busy life of children and attitude of children towards parents. This leads to physical, mental and emotional insecurity. Support services will help in meeting needs of elderly.
2. Type of services to be included in old age support services.
- comprehensive health care
  - adequate financial and social security
  - health education
  - care of sick elderly
  - redirection services
  - special transport facilities
  - special facilities in public places
  - homes for elderly
- 7.2 1.
  - problems due to physical changes
  - vulnerability to acute or chronic illness
  - disabilities in vision and hearing and other things.
  - nutritional problems
2.
  - Elderly should have sense of active ageing
  - Elderly should have facilities to spend their time properly.
  - Post-retirement life should be planned in advance in for regular income by proper investment of funds.
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- should have access to health education regarding health maintenance, nutrition and prevention of old age sickness
- family should support the elderly in the process of active ageing.

7.3 1. Types of support system related to health care are

- safety, comfort and contentment in their homes.
- facilities for hospitalization in physical or mental ill health conditions.
- primary health care services.
- mobile health care clinics
- health insurance schemes.
- organizing health compassion clinics.

2. Role of care provider in support system for the elderly

- recognise the limitations of the elderly.
  - become familiar with community and government-sponsored schemes
  - assist the elderly in providing services and giving guidance
  - encourage the elderly to use these services
  - Impart health education related to nutrition and health maintenance
  - participate in activities organised for old age.
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## **Lesson 8**

### **Basic Psychology**

#### **STRUCTURE**

- 8.0 Introduction
- 8.1 Objectives
- 8.2 Psychology and its need
- 8.3 Basic Concepts of Psychology
  - (a) Learning
  - (b) Memory
  - (c) Sense organs
  - (d) Perception
  - (e) Emotions
- 8.4 Personality
- 8.5 Adjustment
- 8.6 Healthy adjustment
- 8.7 Summary
- 8.8 Glossary
- 8.9 Answers to In text Questions

#### **8.0 Introduction**

It is a remarkable thing that although we all belong to the human race but no two persons are alike. All of us are different in physical structure, mental capability, behaviour and feeling. How can this wide variety of individual differences be studied? Is there any subject which can facilitate the study of these individual differences.

Psychology, as a subject, is the scientific study of human behaviour and

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experiences. The behaviour is affected by various dimensions. In this lesson we are going to learn about the nature of psychology and its various aspects.

### 8.1 Objectives

After reading this lesson, you will be able to :

- define and explain the meaning & nature of Psychology.
- explain basic concepts in psychology like learning, memory, sensation, perception, motivation and emotion.
- explain personality and individual difference.
- define and explain the importance of adjustment in human life.

### 8.2 Psychology

**To start with the definition of Psychology, "It is the scientific study of behaviour and mental processes."** Today psychology is considered as a science as well as a profession. The explanation for calling it a science is that as it is subject through which various aspects of human behaviours is studied only proved scientific methods are used to understand the causes of the behavioural phenomena.

In its growing stage psychology was influenced by philosophy and natural sciences. During 19<sup>th</sup> century it acquire its original position of an independent subject. In the course of its growth, psychology expanded in many directions. Being a subject, which studies the human behavior, it has covered almost all areas of human life.

As said earlier, the psychologist uses certain scientific procedures and tools to collect information and draw inferences about human behavior. There are various methods through which information is collected like :

#### 1. Observation

Observation is a systematic and deliberate study of spontaneous occurrences at the time of the occurrences. It can be done in two ways:

**Participant observation** - when the experimenter gets mixed with the subjects and then note down their behaviour.

**Non participant** - when the experimenter observes from distance without participating in the group.

#### 2. Case study

Case study is a detailed compilation of data about a single person.

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### 3. Psychological tests

Various Psychological tests have been constructed which have been tested for their reliability and validity. They have standardized norms which means they are applicable to people under normal consequences. Some of these tests are aptitude tests, intelligences testes etc.

### 4. Interview

When data is collected by talking or by interviewing the subject. The interview can be structured and open ended in nature.

### 5. Experimental method

With the help of experimental method data is collected under conditions which are controlled and can vary. The experimental methods have certain steps such as forming the hypotheses, some control of experiment, verifying the hypotheses, interpretation of data etc.

The human life passes through many stages. It cannot be studied in a single phases. To facilitate better understanding towards life, various branches of psychology exist. Some are:

#### Branches of Psychology

- (a) Experimental and Cognitive
- (b) Developmental Psychology
- (c) Social Psychology
- (d) Educational and School Psychology
- (e) Counseling Psychology
- (f) Military Psychology
- (g) Clinical Psychology
- (h) Health Psychology
- (i) Industrial Psychology
- (j) Environmental Psychology

#### Need of Psychology

Up till now you must have felt that almost all branches of human life has been touched by Psychology. The question here arises, what is the need of studying psychology? Now lets take an example of a good student, Shyam who is not able to do well in the exams. There may be various reasons for not faring well in the exams.

- May not have place or time to study
  - May not be physically well
  - May have some other important things, for which he was not able to study and do well in the exams.
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A lay person may not be able to reason out all these aspects, whereas a trained care provider can help out Shyam in resolving his problems.

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### INTEXT QUESTIONS 8.1

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1. Define Psychology.

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2. What are the various methods for collecting data?

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3. Name any five branches of Psychology.

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### 8.3 Basic Concepts of Psychology

Psychology can be defined as the science of behavior and mental processes. Human behavior comprises of many aspects. In this unit you will study about these aspects. Let take learning as the first aspect.

#### (A) Learning

It is a culture that when we meet any elder people, we wish them in appropriate way but have you ever seen an infant greeting an elder person? No. The question here arises that how does a child learn to behave properly in a social setting. It is through learning. As man lives in a society so from childhood one learns to behave in a proper way in the social setting. As human being, we behave in wide varieties which all comes from learning. Learning is the key to understand how human behave. Learning can be defined as "The process by which any relatively permanent change in behaviour occur as a result of practice and / or experiences. The learning in itself is a process and the major element of this process is the stimulus, organism and response.

You might be interested to know what is a stimulus? Stimulus can be any object/event/or condition that causes response. For example when you are walking down the road and suddenly it starts raining you prefer to go and take shelter. Now in this case rain is the stimulus which makes

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you, the organism, to respond (take shelter) like classical conditioning, Operant conditioning, insight learning, trial and error, verbal and social learning. Ivan P. Pavlov was a Russian physiologist who was the proponent of classical conditioning. Famous psychologist B. F. Skinner gave the concept of Operant conditioning. The central concept of operant conditioning is that behavior which is reinforced is likely to be repeated. The concept of Trial and error learning was given by E.L. Thorndike. It was found that a motivated subject shows various responses to overcome obstacle and attain the goal Learning.

### **(B) Memory**

Have you ever thought that what makes you able to remember your friend's name or pieces of poetry or names of medicines? It is our memory system. Our memory is a dynamic system. We can retain information for a long period and use it whenever necessary. The memory is an active mental system. It receives, encodes, modifies, retains and retrieves information. You must be wondering that something's we remember very quickly where as there are many things, which we forget.

This distinction in retaining information happens because the memory system comprises of three interrelated subsystems namely:

- Sensory Memory
- Short term Memory
- Long term Memory

Lets study about these in brief.:

#### **Sensory Memory**

It is the type of memory that occurs within the senses while it is being transmitted to the brains. The clear image lasts for about  $\frac{1}{2}$  a second.

#### **Short term Memory and Long Term Memory**

We receive sensory stimulation all the time but we attend only few of them. This selective process is possible on the basis of attention. Through this selective attention the information enters the Short Term Memory. In STM the information is held for few seconds and encoded which further sends the information to Long Term Memory. The LTM has very large capacity to retain information.

Let us make a comparison between Long Term Memory and Short Term Memory.

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Characteristics	Short Term Memory	Long Term Memory
Capacity	Limited, up to 7 items	Unlimited
Duration	Usually up to 30s But varies under situation	Come range from days to a life time.
Type of information	Visual images, sounds Words, Sentences	meaning verbal material life events.
Causes of forgetting	Displacement of old Information by new	Interfere, inadequate organisations of material.

Thus you can see that memory is an indispensable part of human organism. Can you suggest some measures of Enhancing memory. Let me tell you some.

- (a) Organization
- (b) Concentration
- (c) Method of Loci
- (d) Recording

After memory now let's move to know more about our sense organs :-

### (C) Sense Organs

The most remarkable characteristics of the organism is the possession of different sense organs. The sense organs are our windows to collect information from the external world 10 different senses in human beings has been ideated. These are:

- (i) Vision (Eye)
- (ii) Audition (Ear)
- (iii) Tactile (Touch and Pressure)
- (iv) Temperature (Heat and Cold)
- (v) Taste (Tongue)
- (vi) Smell (Nose)
- (vii) Kinesthesia (Skeletal Movement)
- (viii) Vestibular: (Located in the inner ear, signal the rotation of head)
- (ix) Proprioception : Information about the movement of our body parts and their position inspace.

The specific sense organ transforms the physical energy (information) into neural signals and transmits to the brain. This message is decoded and processed with leads to perception.

You can know the details of these sense organs in the lesson on

Physiology and Anatomy. In our life we see so many things but do we remember all of them? No, we attend only those stimuli which have a purpose. In other words our perception is very selective and purposive in nature.

#### **(D) Perception**

Perception can be defined as "The process of selecting, organizing and interpreting sensory data into usable mental representations of the world" Lets find out the factors that help in perception of objects like:

- (a) Figure and Background : The figure and its background has an important relationship. If the figure and its background are not well defined then our attention will shift.
- (b) Proximity: Objects which are close tend to be seen as a group.
- (c) Similarity : Stimuli, the ones that are alike tends to be grouped together.
- (d) Direction : When the stimuli fall along a straight line or a curve, they will tend to be grouped together.
- (e) Closure : We have a tendency to complete the incomplete figures. We perceive them as wholes and smoothen the edges.
- (f) Past experience : Our past experience also help us in perceiving pictures/objects. Other than these factors there some other related factors. These are the various types of constancy which result due to experience like.
  - (i) Shape constancy
  - (ii) Size constancy – Like from distance aero plane may look small but we know that it is large in size.
  - (iii) Colour constancy – We will always perceive coal as black, even if we see it in dark.
  - (iv) Location Constancy

Our perception is also affected by many illusions. An illusion is a false impression of the environment. For example in dark we might mistake a rope as snake etc. Illusion may be caused due to many factors like:

- Physical conditions of the sense organs.
- Sensitivity of the receptors
- Limitation of the receptors
- Past learning
- Attitude and mental set at the time of the stimulus.
- Emotional state of the person.

One more important factor which affects our attention and perception is motivation. If we are not motivated we will not learn.

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It happens with most of us that during sorrow we are not able to control our tear. Why does it happen? It is because we, human beings, are emotional by nature. What is emotion and what are the psychological factors behind emotion? Let's find out in this section.

### (E) Emotion

The word emotion is derived from the Latin word 'emovere' which means stir up, agitate, excite or move. Emotion can be defined as feelings or affective responses that result from physiological arousal, thoughts and belief, subjective evaluation and bodily expression. Each emotion, which we experience, has three basic components. These are :-

- (i) Cognitive Component : The thought and beliefs that determine the type and intensity of emotional response.
- (ii) Physiological Component : When you experience an emotion, there is a change in the bodily responses such as increase in pulse rate, heart beat, blood pressure etc.
- (iii) Behavioural component : The various type of emotional responses and expressions which occur during an emotional state.

Now you may be interested to know the physiological basis of emotion. Some organs are closely related to emotional experiences, through almost all internal organs get affected by the emotional state. The organs which are closely related are hypothalamus, Autonomic Nervous system (ANS) and adrenal glands. These organs, when affected, bring about change in the person. These changes can be put under three headings i.e.

- (a) Physical change
- (b) Physiological change
- (c) Psychological change

It will be interesting for us to know some general characteristics of emotions. We will study about them one by one :

- (1) An emotion is experienced when any of the basic need is not satisfied.
- (2) Physical change is experienced under our emotion.
- (3) Thinking capacity, reasoning, memory and other psychological activities get affected by emotion.
- (4) Tremendous amount of energy is released by the body to face the critical situation.
- (5) Learning and maturation play an important role in development and expression of emotion.

- (6) An increased performance may take place when emotions experienced but if heightened and prolonged more will decrease it.

Often we see that some individuals are very good in expressing their emotion or they seem to be very transparent in showing their feelings where as in some cases persons can cover their emotions. It all depends upon the personality of an individual how he/she behaves. Personality we sometimes refer to be outlook of the person and sometime by the behavior. But does personality limits its meaning to this only. Let us find out.

#### **8.4 Personality**

One of the most widely accepted definition of personality is that its an individuals relatively stable and enduring pattern of thoughts, feelings and actions. When psychologists talk about personality-they refer to important behavioral or dispositional characteristics which distinguish one individual from another. Various psychologists have analyzed personality in different was. Some of the important contributors in this field are Freud, Alder, Jung, and Horney. Freud's theory is known as the Psycho analytic theory of Personality. The psychololytic or psychodynamic theory of personality attempt to explain individual difference by examining how unconscious mental forces interplay with thoughts, feeling and behaviour.

Psychologists who specialize in the study of personality are interested in-

- Scientifically measuring personality, and
- Explaining how those difference come about.

Some basic psychological assessment methods used by psychologists are interviewing and observation. But these two methods can only be conducted by professionally trained person. Other than those two methods objective tests have also been developed. Name of one such tests is MMPI (Minnesota Multiphastic personality Inventory, 16 P.F. Eysenck personality Inventory projective tests are also used to asses personality. These projective tests are totally or partially unstructured and are useful in finding out the inner aspects of the individuals. Some projective tests are Rorschach Ink Blot Test, Thematic Apperception Test (AT), Sentence completion Test etc.

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**INTEXT QUESTIONS 8.2**

1. Name the three basic components of emotion.

2. Define perception

3. Define personality

We have been talking about the different aspects of human behaviour. A very interesting domain of the human life is adjustment which is a necessary characteristic to be able to live peacefully in this world.

**8.5 Adjustment**

Adjustment can be called as a process of reducing strains and coping with the circumstances in any situation. You adjust when you cannot change the condition to suit your needs or demands. In various situation like home family, emotional social and workplace, adjustment as needed. Let us discuss these various aspects.

**(i) Home/Family**

A home consists of family which means parents and children, at the least. There could be also grandparents living in the family. Each member in the home has his/her own needs, demands and ways of living at home and doing things. However, you may not find it agreeable to accept the other ways. This results in clashes, and questions, of who must adjust and how much. Accepting certain things about others and giving up some of your own insistence helps to get along smoothly. This is adjusting with home and family. This also includes marital adjustment where the husband and wife adjust with each other. An example would

be that the wife wakes her husband to get up early in the morning and help her. She has to prepare and pack and food and get ready her children for school. IF her husband is not ready to wake up early and help her, then adjustment is not good.

### **(ii) Emotional**

Emotional adjustment is also called personal adjustment. This refers to how intensely you experience and express emotions, both positive and negative. For example, do you get angry quickly, and stay angry for short/long time? Do you express your anger by shouting at the person or bang doors, throw things? Do you get pleased with things easily and express it. Experiencing negative emotions and sorting them out, experiencing joy, love and pleasure and sharing it with the concerned person is healthy. Similarly, allowing others to express their emotions, discussing them with the persons and helping to sort them out (when their experiences are distressing) involves adjustment with emotional experiences.

For example, if you have lost a family member, you have to adjust and learn to live with the loss which may take quite a while.

### **(iii) Social**

Adjusting with others in the society is social adjustment. Who others are not family members, but people whom you meet in social situations. In Social conditions you get to meet with a variety of people. For instance, at a party you meet your friends and sometimes their families too. Can you get along well with them or is there an unpleasant experience often? If it is the former then your adjustment is good. If it is the latter, then you are not well adjusted socially and are dissatisfied about your relationship with others. This may be because you insist on others behaving in a manner desirable to you; you also cannot tolerate others doing things or saying things their way. So if you believe in a give-and-take relation with the others your adjustment will improve.

### **(iv) Occupational**

You, along with other employees, work and spend about eight hours daily at the workplace. Here you work alone and sometimes with others in a team. In the process you experience satisfaction or dissatisfaction at the job. This is because of your expectations regarding the work environment being met or not, respectively. (e.g.)my workplace must always be pleasant; colleagues must always do what I tell them to do for me; I must not be asked to do a lot of work, etc.)

In your workplace, you may find people who may or may not work

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adequately and you end up doing a lot more than others. Or your boss may not be satisfied with your work. These conditions cause you distress, that is, you have not adjusted with your occupation/work as adequately, make efforts to get along with your colleagues to reach the largest goal set.

### 8.6 Healthy adjustment

Adequate adjustment is achieved by a person who has a healthy self concept. Self-concept is what one thinks about oneself, how one perceives oneself. A healthy self-concept involves being realistic in evaluating oneself instead of rating oneself negatively or positively all the time or having too high expectations about oneself. If what you think of yourself and what the reality do not match well, then adequate adjustment is not achieved. Therefore a well-adjusted person's self-concept and his/her experiences overlap to a great extent.

Poor adjustment is seen when the person acts out his/her frustrations, because he/she things of himself/herself as someone who must get what he/she wants. Poorly adjusted people cannot get along with others both at home and outside. This leads to using unhealthy ways of coping (called defense mechanisms) with situations : they may deny what they really feel (denial), or say that the situation/event is not worth working for (rationalization) or complain that the others cannot/do not adjust at all (Projection). These defense mechanisms are unhealthy because they prevent the person from confronting reality and accepting it.

### INTEXT QUESTIONS 8.3

Fill in the blanks with appropriate words :

- (i) Adjustment is a process of reducing ..... and ..... with situation.
- (ii) When husband and wife adjust with each other's demands, we call it .....
- (iii) Personal adjustment is also called as .....
- (iv) Your maintaining the relationship with your co-workers, boss and subordinates is called .....

### 8.7 Summary

- Psychology scientific study of behavior and mental process
- Various methods are used for collecting data in psychology like observation, case study, interview, Psychological tests etc.

- Psychology has branched out in all the areas which affect human life like physiological, developmental, industrial, environmental.
- Learning is one of the basic concept in psychology. It can be defined as the process by which any permanent change in behaviour occurs as a result of practice experience.
- Our memory is a dynamic active mental system. The three interrelated subsystems are sensory memory, short term memory and long term memory. These differ in terms of capacity, duration and types of information.
- Our sense organs are our windows to the world. There are 10 sense organs identified in human beings.
- The human being is identified by the emotional behaviour. The emotion consists of three components the cognitive, physiological and behavioural component.
- Adjustment is a process of reducing strains and coping with the circumstances in any situation. Adjustment has to be carried out in different spheres of life like family, social occupational etc.

### 8.8 Glossary

**Cognition** processes of perception, memory, thinking, reasoning, using language and learning

**Emotion** It is stirred up state of feeling or affective reactions of an individual

**Physiological Changes** in body occurring due to physiological components

**Stimulus** The influences which the environment exercises.

**Behaviour** Anything a person or animal does, feels, thinks and experience.

**Learning** A relatively permanent change in behaviour. Extensive property is one whose value depends upon size of the system. For example mass volume, weight, heat capacity

**Response** Any behaviour of organism in reaction to a stimulus

**Sensation** The process of receiving and transmitting raw sensory data from the external and internal environment.

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**8.9 Answers to In text Questions**

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- 8.1
1. Psychology is the scientific study of behavior and mental processes
  2. Observation, interview, case study psychological tests
  3. Clinical, counseling, military, social, environmental
- 8.2
1. The basic components of emotion is –
    - (i) the cognitive component
    - (ii) the physiological component
    - (iii) behavioural component.
- 8.3
1. The process of selecting, organizing and interpreting sensory data into useful mental representations of the world is known as perception.
  2. Personality is an individuals relatively stable and enduring pattern of thoughts, feelings and actions. Freud, Jung, Adler Horney etc are some know psychologists of this areas.
- 8.4
1. Strains, coping
  2. Marital adjustment
  3. Emotional adjustment
  4. Occupational adjustment
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## FUNDAMENTAL DUTIES

### Part IV A (Article 51 A)

It shall be the duty of every citizen of India -

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

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The success of open learning and distance education very much depends upon the harnessing of the new and latest technology. The emerging Internet and Web technology help in effective dissemination of knowledge breaking all geographical boundaries. The web-site is a dynamic source of latest information and is also electronic information guide. The contents in the **NOS** web site are open to all.

The learners can have an access to NOS web-site at the following address:

**<http://www.nos.org>**

Clicking this site address will bring the user to NOS Home Page that will further guide them to visit different information pages of **NOS**. NOS is also developing a school network through Internet known as **Indian Open Schooling Network (IOSN)**. The network will provide a common communication platform for learners and educators. NOS is offering **Certificate in Computer Applications (CCA)** through selected AVI. This course is also offered through Internet on NOS Web-Site.

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