



Ethiopian TVET-System



Health Extension Service

Level III

Based on Jan.2018G.C Occupational Standard

**Module Title: Preventing and Controlling
Common non- Communicable Diseases**

TTLM Code: HLT HES3 TTLM 0919V1

This module includes the following Learning Guides

**LG30: Educate the community on healthy life style and early
detection of disease**

**LG31: Screen and refer clients requiring further investigation and
management**

**LG32: Follow up cases and promote community based
rehabilitation**



Instruction Sheet	LG30: Educate the community on healthy life style and early detection of disease
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This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Introduction to non-communicable disease.
- Carrying out Community diagnosis based on the standard procedure.
- developing plan
- providing health education on
- Reporting Activities

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Prepare IEC materials and provide health education
- Carry out community diagnosis based on the standard procedure
- Develop plan based on the identified gaps from the community assessment
- Methods are selected based on the problem identified
- Report activity and follow up based on the recommended format

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”, and sheet 5
4. Accomplish the “Self-check 1, Self-check t 2, Self-check 3 and Self-check 4” , self check 5
5. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1
6. Do the “LAP test” **in page – 24** (if you are ready)

**Information Sheet-1**

Introduction to non-communicable disease

1.1. Concept of non-communicable disease

- A non-communicable disease (NCD) is a disease that is not transmissible directly from one person to another.
- The significant progress in tackling the major communicable diseases, however, can potentially be spoiled by the steady rise in the burden non-communicable disease within Ethiopia, and elsewhere in the developing world.
- As deaths from infection decline and people live longer, so their vulnerability to the chronic non-communicable diseases of old age increases.
- Despite the high global burden of mortality and morbidity from non-communicable diseases (NCDs), the response has not been strong. Sixty-three per cent (63%) of global deaths in 2008 (i.e. 36 million of the 57 million global deaths) resulted from NCDs, principally cardiovascular diseases and diabetes, cancers and chronic respiratory diseases. Nearly 80% (28 million) of these deaths occurred in low- and middle income countries.
- A survey conducted by the World Health Organization (WHO) in 2000 suggested that a key inadequacy in addressing NCDs was the lack of capacity in national health ministry's (Also increasing across the world are the numbers of deaths and injuries from traffic accidents and violence: over 90% of the 1.3 million traffic-related deaths and 20-30 million serious injuries from collisions with a vehicle occur in developing countries;
- the poorer parts of the world are also disproportionately affected by injuries requiring emergency care as a result of other accidents and interpersonal violence.
- Mental health conditions are also responsible for high levels of mortality and disability, accounting for 8.8% of the deaths and 16.6% of the total burden of disease in low- and middle income countries.
- Taking these trends into consideration, the Ethiopian Federal Ministry of Health has included this Module on Non-Communicable Diseases, Emergency Care



and Mental Health in the education and training of its Health Extension service providers.

Self-Check -1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Non-communicable disease is a disease is transmissible directly from one person to another
 - A. True
 - B. False
2. The burden of non communicable disease is increasing in developing countries
 - A. True
 - B. False

Note: Satisfactory rating 2 points

Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information Sheet-2	Preparing IEC materials and providing health education
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1.1. Concepts of IEC materials: are materials used at changing or reinforcing health-related behaviors in a target audience, concerning a specific problem and within a pre-defined period of time, through communication methods and principles. Common teaching materials in health education include all materials that are used as teaching aids to support the communication process and bring desired effects on the audience. These are important aids needed to make easy or facilitate the health education teaching-learning process. And they can be broadly classified into four categories:

2.1. Printed materials, visual materials, audio and audio-visual materials.

2.1.1. Printed materials---Examples of printed materials include posters, leaflets and flipcharts

- Posters-- A poster is a large sheet of paper with words and pictures or symbols that put across a message. It is widely used by commercial firms for advertising products, but can also be used for preventive purposes. Since a poster consists of pictures or symbols and words, it communicates health messages both to literate and illiterate people. They should be posted where many people can see them when passing by - market areas, meeting halls, etc.
- Purpose of posters
 - ✓ To give information and advice
 - ✓ To give directions and instructions (prevention strategies)
 - ✓ To announce important events and programs
- **Leaflets**--these teaching materials are prepared with a simple language containing both short sentences and illustrations (pictures or simple drawings). Leaflets are more appropriate for those you can read. Some people are too shy to ask an advice so that they simply pick-up a leaflet and read it. Leaflets are also reminders and are helpful for some sensitive health education like health education on sexuality. Although, they need educational experience written words have the advantage to be distributed to the audience so that they read and understand them at their convenient times.

- **Flipchart**--A flipchart is made up of a small number of posters that are meant to be shown one after the other. In this way, several steps or aspects of a central topic can be presented



Figure 2.1: health extension using flip chart (A) and poster (B)

2.2. Visual materials: Visual materials are something seen (apart from written words) E.g. poster. Visual materials are one of the strongest methods of communicating health education messages, especially where literacy is low amongst the population.

2.2.1. Photographs or picture and other real objects are immediate and powerful where people can see and even touch them.

2.3. Audio materials: As the name indicates it is anything that can be heard such as the spoken word (health talk) or music. Radio and audio cassettes are good examples of audio aids. Health talks are the most commonly used audio teaching methods. Health talks have been, and remain, the most common way to share health knowledge and facts.

2.3.1. In preparing a health talk, consider the following points:

- Know the group: their interests and needs
- Select single and simple topic: e.g. Nutrition is too big as a topic. Thus, select subtopic such as breast-feeding, weaning diet etc.



- Have corrected and up-to- date information.
- Limit the points to only main once.
- Write down what you will say, use examples, proverbs and stories to help emphasize points.
- Make use of visual aids.
- Practice your whole talk
- Make the talk as short as possible - usually 15-20 minutes talk and 15 minutes discussion.

2.4. Audio-visual materials

- They combine both seeing and listening. These materials include TV, films or videos which provide a wide range of interest and can convey messages with high motivational appeal.

2.5. The selection of the teaching methods and materials depends on the type of the message, the purpose of message, the people addressed (the target audience), availability of resources (materials) and skills.

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Information Sheet-3	Using standard procedures for community diagnosis
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3.1. Concepts of community diagnosis:

- Community - a group of people sharing common needs, interests, resources and environments
- Community diagnosis is a systematic and comprehensive population-based assessment, policy development, and assurance. Performed through partnering with representatives of the people, setting priority for primary prevention and Intervention to create conditions for health.

- ✓ Data collection
- ✓ Data analysis
- ✓ Prioritizing problems
- ✓ Developing an action plan.
- ✓ Implementation

3.1.1. Data collection

- Discussion with community members about their main health problems
- Reviewing records of the health services utilized by the community
- Undertaking a community survey or a small-scale project
- Observing the risks to health present in the community

3.1.2. Data analysis

Data analysis refers to categorizing the whole of the data you collected into groups so as to make meaning out of it. For instance you can assess the magnitude of a disease by calculating its prevalence and its incidence from the numbers of cases you recorded and the number of people in the population in your community.



- Prevalence refers to the total number of cases existing in the population at a point in time, or during a given period (e.g. a particular month or year). The number of cases can be more usefully analyzed by calculating the prevalence rate in the community: to do this you divide the total number of cases you recorded in a given period into the total number of people in the population. The result is expressed 'per 1,000 population' in a community as small as a kebele.
- Incidence refers only to the number of new cases of a disease occurring in a given period. The incidence rate is calculated by dividing the total number of new cases of the disease in a certain period of time into the total number of people in the population, and is expressed as 'per 1,000 population'.

3.1.3. Prioritizing health problems

- Prioritizing refers to putting health problems in order of their importance. The factors that you should consider in prioritizing are:
 - ✓ The magnitude of the problem: e.g. how many cases are occurring over what period of time?
 - ✓ The severity of the problem: how high is the risk of serious illness, disability or death?
 - ✓ The feasibility of addressing the problem: are the prevention and control measures effective, available and affordable by the community?
 - ✓ The level of concern of the community and the government about the problem.
- Health problems which have a high magnitude and severity, which can be easily solved, and are major concerns of the community and the government, are given the highest priority.

3.1.4. Action plan

- An action plan sets out the ways in which you will implement the interventions required to prevent and control the disease. It contains a

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list of the objectives and corresponding interventions to be carried out, and specifies the responsible bodies who will be involved. It also identifies the time and any equipment needed to implement the interventions.

- Once you have prepared an action plan you should submit it for discussion with your supervisor and other officials in the woreda Health Office to get their approval.
- Then implement the work according to your plan. Now that you have learned the basic concepts and methods relating to communicable diseases in general, it is time for you to move on to consider the diagnosis, treatment, prevention and control of specific diseases.

- Advantage of community diagnosis
 - ✓ It is one of the method used to identifying the health problem in the community
 - ✓ Uses as baseline information for decision making for intervention
 - ✓ It forms base line information for further comparison purpose
 - ✓ To set priority for intervention
 - ✓ To identify resources for intervention
 - ✓ To implement intervention with full community participation



Self-Check -3	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. A group of people sharing common needs, interests, resources and environments
A. Community C. Population
B. Team D. community diagnosis
2. The first step of community diagnosis
A. Data collection C. priority setting
B. Data analysis D. preparing action plan

Note: Satisfactory rating 2 points

Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information Sheet-4.	Developing plan
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4.1. Planning: is the process of defining community health problems, Identifying needs and resources, establishing priority goals, and setting out the administrative action needed to reach those goals. After performing community diagnosis and priority setting, planning continuous

- Priority setting includes:
 - ✓ Magnitude of the problem; it answers the question of how many of the community was affected by that health problem.
 - ✓ Severity of the health problem; it answers number of death or admission because of that health problem.
 - ✓ Community concern; is to mean that what is the health felt of the community? What is the need of the community?
 - ✓ Government concern; is similarly to mean that what is the need of the government to be solved for that community first.



Self-Check -4	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. The process of defining community health problems, Identifying needs and resources, establishing priority goals.
 - A. Community diagnosis C. Outcome identification
 - B. Planning D. Assessment

2. From priority setting criteria which one answers the question of how many of the community was affected by that health problem
 - A. Magnitude C. Severity
 - B. Community concern D. government concern

Note: Satisfactory rating 2 points

Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____

Short Answer Questions



Information sheet 5	Providing health education
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5.1. Concept of health education: Health education is one of the sixteen packages of health extension program and a cross cutting approach of achieving other components.

- Goal of health education include but not limited to:
 - ✓ To provide appropriate knowledge: provision of correct knowledge, facts and information. E.g. facts about diabetes
 - ✓ To help develop positive attitude: has a lot to do with changing opinions, feelings and beliefs of people. E.g. to develop positive attitude towards the practice of prevention behaviors.
 - ✓ To help exercise health practice/behavior: concerned with helping people in decision-making and actually performing. Helping people choosing alternatives
 - ✓ Help in Decision-making:-means choosing between and/or among alternatives in the future about health. Health education has top importance to help people develop the skill of decision-making.
 - ✓ Help in social change: Goal of changing the physical and/or social environment so that people are encouraged to adopt healthier behavior.
 - ✓ Reducing the Burden of disease: Obesity, Diabetes, Asthma, Cancer, Heart Disease and Stroke

5.1.1. Health education on healthy life style is a health behavior that helps for adopting healthy living and focuses on Health” pillars

- Be physically active
- Eat a nutritious diet
- Get preventative screenings

- Make healthy choices
- To prevent disease, disability and death and help to lead safer, healthier, long live



Figure 5.1 providing Health education



Figure 5.2 physical exercise

5.1.2. Health education on early detection of disease:

- Includes general interventions and teaching of early signs of disease.
- It is secondary prevention of disease b/c treatment will be initiated earlier.

5.1.3. Health education on cultural care: Cultural differences will affect the receptivity of a person to person education and willingness to accept information and incorporate it into his or her lifestyles. It is important to remember that every client education interaction has a cultural dimension. Culture is a way of living, thinking, and behaving. The influence of culture on health is vast. It affects perceptions of health, illness and death, beliefs about causes of disease, approaches to health promotion, how illness and pain are experienced and expressed, where persons seek help, and the types of treatment patients prefer.

- Possible Cultural Differences
 - ✓ Personal space
 - ✓ Family patterns
 - ✓ Time orientation
 - ✓ Nutritional choices



- ✓ Pain response
- ✓ Communication
- ✓ Death and dying
- ✓ Religion and spirituality

5.1.4. Conveying Cultural Sensitivity

- ✓ Introduce yourself and state your role.
- ✓ Address clients by their name
- ✓ Be honest if you lack information about cultural practices.
- ✓ Be careful to use culturally sensitive language.
 - ✓ Having a regular doctor or a usual source of care facilitates the process of obtaining health care when it is needed. People who do not have a regular doctor or health care provider are less likely to obtain preventive services, or diagnosis, treatment, and management of chronic conditions.

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Self-Check -5

Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Healthy life style education includes?

- A. physically inactive C. Nutrition and Diet
- B. preventative screenings D. Make healthy choice

2. Included in prevention of chronic non communicable disease

- A. Life style C. Early detection
- B. Culture D. Nutrition

3. Culture has importance in non communicable disease

- A. It affects perceptions of health C. Affects beliefs about causes of disease
- B. Affects approaches to health promotion D. Affects where persons seek help, and the types of treatment patients prefer

Note: Satisfactory rating 3points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information sheet 6	Reporting activities
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6.1. Writing a report on community diagnosis of non communicable disease

6.1.1. Preparing good summary reports

You should ensure that the summary reports you prepare on your activities are:

- Complete: Ensure all the sections of the reports have been completed; no parts have been left blank and all reports due from outreach sites or mobile teams have been received.
- Timely: When reports are sent and received on time, there is a greater possibility of a prompt and effective response to any problems you have identified.
- Accurate: Before sending the reports, check the totals and all calculations to make sure that the reported figures correspond to the actual figures in the tally sheets, the EPI Registration Book and the immunization cards.
- This helps you to evaluate the accuracy of your recorded data and identify and resolve any discrepancies. The district, provincial and national levels should keep track of the completeness and timeliness of reporting at your level, and remind you about any missing or late reports.
- In Ethiopia, non communicable disease is not immediately reportable

6.1.2. Report preparation will be:

- weekly situation reports for Woreda's if required
- monthly situation reports
- quarterly activity progress reports and annually

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Self-Check -6	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Activity report is expected to be the following but not?

- A. Complete
- B. Accurate
- C. Inconsistent
- D. Timely

2. Non communicable disease is immediately reportable in Ethiopia

- A. True
- B. False

Note: Satisfactory rating 2 points

Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Operation sheet 01	Techniques community diagnosis
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- Steps of Standard community diagnosis
 - Step 1: data collection
 - Step 2: data analysis
 - Step 3: priority setting
 - Step 4: action planning
 - Step 5: implementation



LAP test

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 05:00 hour.

1. Demonstrate Steps of Standard community diagnosis



This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Common non-communicable Diseases:
 - ✓ Cardiovascular disease (Hypertension, heart failure)
 - ✓ Diabetes Mellitus
 - ✓ Cancers
 - ✓ COPD
 - ✓ Cataract, Eye and Ear injuries
 - ✓ Disability
 - ✓ Mental health problem
- Screening and referring cases with non-communicable diseases
 - ✓ History taking
 - ✓ Physical examination
 - ✓ Management of minor cases
 - ✓ Referring suspected cases

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Do pertinent history (Hx) and physical examination (P/E) based on the standard procedure
- Refer cases beyond the scope for further investigation and management as per the referral procedure

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2
4. Accomplish the “Self-check 1, Self-check 2,
5. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1, Operation Sheet 2 and Operation Sheet 3 ”
6. Do the “LAP test” **in page – 77** (if you are ready)



1.1. Introduction to common non-communicable diseases

- As deaths from infection decline and people live longer, so their vulnerability to the chronic non-communicable diseases of old age increases. Chronic conditions such as cardiovascular diseases, diabetes, obstructive lung disease and cancers are on the increase all over the world, but particularly in low- and middle-income countries. For example, more than half of the 8 million deaths from cancers every year and over 80% of the 17 million deaths from heart disease and strokes now occur in developing countries. Also increasing across the world are the numbers of deaths and injuries from traffic accidents and violence: over 90% of the 1.3 million traffic-related deaths and 20-30 million serious injuries from collisions with a vehicle occur in developing countries; the poorer parts of the world are also disproportionately affected by injuries requiring emergency care as a result of other accidents and interpersonal violence. Mental health conditions are also responsible for high levels of mortality and disability, accounting for 8.8% of the deaths and 16.6% of the total burden of disease in low- and middle income countries.
- Common non-communicable diseases:
 - ✓ Cardiovascular disease (Hypertension, heart failure)
 - ✓ Diabetes Mellitus
 - ✓ Cancers
 - ✓ COPD
 - ✓ Cataract, Eye and Ear injuries
 - ✓ Disability
 - ✓ Mental health problem

1.1.1. Cardiovascular disease

- Cardiovascular diseases are a major problem all over the world, including in developing countries such as Ethiopia. They are in the top three killers almost in every country. The common cardiovascular disease are hypertension and heart failure



- The circulation of blood
 - ✓ The heart is a large four-chambered muscular bag on the left side of the chest.
 - ✓ In order to appreciate how the heart works, remind yourself of the primary function of the cardiovascular system: to deliver oxygen and nutrients and to remove carbon dioxide and other waste products.
 - ✓ When you breathe in, the lungs are filled with air, of which about 21% is oxygen. To collect this oxygen, the blood has to be pumped through the lungs by the heart.
 - ✓ Oxygenated blood (blood rich in oxygen) from the lungs, which is bright red because oxygen has bound to the hemoglobin, returns to the heart and is then pumped around the body to supply the tissues.
 - ✓ Blood returning from the body to the heart is rich in waste products such as carbon dioxide and is short of oxygen.
 - ✓ This oxygen-depleted blood (dark red in color) is termed deoxygenated blood and is pumped through the lungs again to release carbon dioxide and, of course, to collect more oxygen.
 - ✓ The design of the heart and associated blood vessels ensures that blood going to the lungs is kept separate from that going around the body. The heart prevents the mixing of oxygenated blood with deoxygenated blood by using two separate but parallel circuits of blood vessels: the pulmonary circulation and the systemic circulation.

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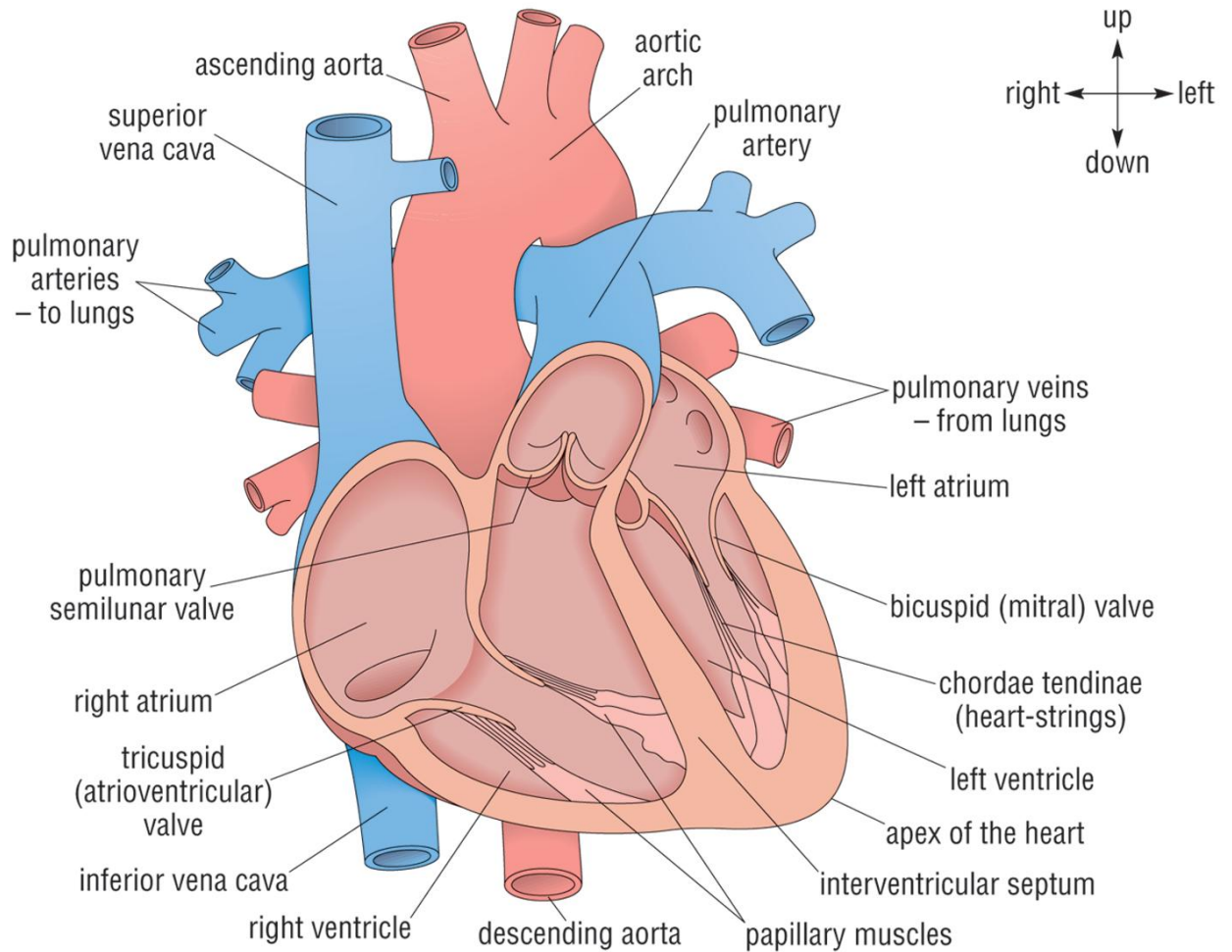


Figure 1.1 Anatomy of the heart.

- ✓ The muscular part of a heart is called the myocardium ('myo-' means muscle' and '-cardium' means 'of the heart'). The heart muscles are very special because they keep beating (contracting and relaxing) spontaneously throughout our whole lives without any conscious decision from us to make them beat.
- ✓ The heart is shown in cross-section, illustrating the position of the atria, ventricles and major veins and arteries.
- ✓ The left and right sides of the heart are separated by a muscular wall (called the septum), and each side is divided into a small chamber, the atrium (plural, atria), and a larger chamber, the ventricle (plural, ventricles).

- ✓ The atria are connected to the ventricles via a valve that ensures a one-way flow of blood.
- ✓ Deoxygenated blood returns from the body through two main 'great' veins, the inferior and superior vena cava (superior means 'at the top' and inferior means 'at the bottom')
- ✓ The atrium is a thin-walled chamber that expands with little resistance as the blood enters in.
- ✓ Blood from the right atrium flows down into the right ventricle, through the tricuspid valve. You can imagine the valve operating in a manner similar to a swing door that only opens in one direction.
- ✓ When blood enters the right atrium, the valve opens and blood flows into the right ventricle.
- ✓ When the ventricles contract, the back pressure of the blood forces the valve to close to prevent any backflow of blood into the atria.

1.1.2. The heart beat (pulse): The heart has got a special property to beat in a coordinated manner, and a normal heart beats between 60-90 beats per minute. Can be counted using "stethoscope" or placing your finger on main arteries.

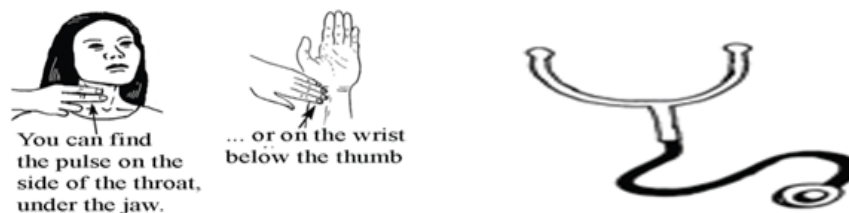


Figure 1.2: area of counting pulse.

1.1.3. The blood vessels

- There are five types of blood vessels
 - ✓ Artery (plural arteries) is subjected to higher blood pressure than any other vessels and the blood flow in them 'pulses', meaning that the blood pressure and the rate of blood flow vary with the pumping action of the heart. Arteries have layers of muscular and elastic

tissue in their walls, which allows the vessels to expand with the contraction of the heart, and contract again as the heart refills with blood.

- ✓ Arterioles are smaller vessels that distribute the blood into the network of capillaries (capillary beds). They too have layers of muscle in their walls; this is very important, because it controls how much blood goes into the capillaries.
- ✓ Capillaries are the smallest blood vessels in the body, having an internal diameter hardly larger than the diameter of a single red blood cell.
- ✓ Venules collect blood from the capillary networks. The blood pressure in these vessels is low, and they do not pulse.

- ✓ Veins are the larger collecting vessels. They may run deep in tissues such as muscles, or superficially, just beneath the skin. Veins have valves to prevent the blood from running backwards or pooling.

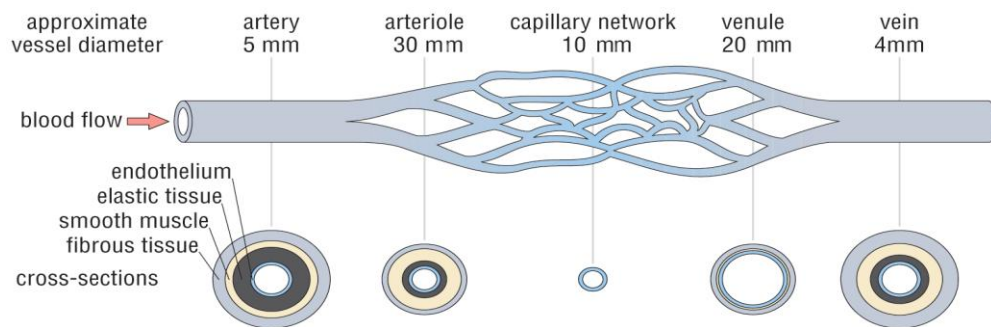


Figure 1.3 Diagrams of the different types of blood vessels.

1.1.4. Blood pressure (BP)

- Blood pressure (BP) refers to how hard the blood is pushing on the major blood vessels as it is pumped around the body by the heart. It is

measured in millimetres (mm) of mercury (a liquid silver metal, which has the chemical symbol Hg), so blood pressure measurements are expressed as a number followed by mmHg.

- A blood pressure measurement is two numbers written one above the other. The top number tells you the systolic pressure, which is the pressure at the moment the heart beats and pushes blood into the body. The bottom number tells you the diastolic pressure when the heart relaxes between each beat so it can refill with blood. Healthy blood pressure stays at or above 90/60 mmHg, but should not reach as high as 140/90 mmHg.
- Blood pressure above 140/90 is considered hypertension (high blood pressure)
- Risk factors for hypertension:
 - ✓ Having a high level of fat (cholesterol) in the blood,
 - ✓ old age, poor nutrition,
 - ✓ being overweight or obese, excessive alcohol intake,
 - ✓ diabetes,
 - ✓ taking oral contraceptive pills for many years,
 - ✓ being physically inactive and, most importantly, being a cigarette smoker
 - ✓ Most of these factors are preventable by teaching the community to change their behavior to healthier ways.

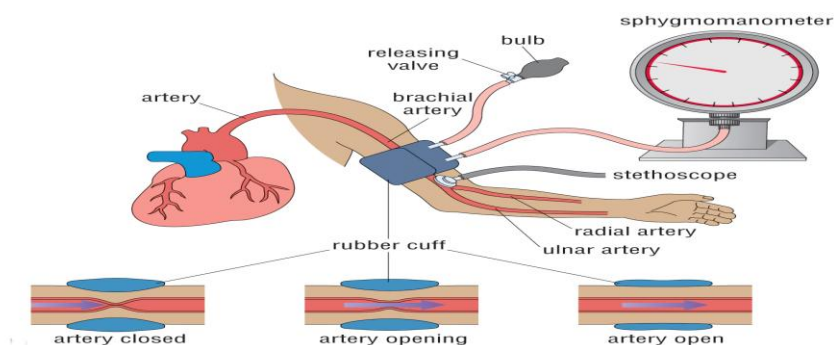


Figure 1.4: equipment for blood pressure measurement



Table 1: Blood pressure levels for adults

Category	Systolic (mmHg)	Diastolic (mmHg)	Advice
Normal	Less than 120	Less than 80	None
Pre-hypertension (before hypertension starts)	120–139	80–89	You should advise people with hypertension to make changes in what they eat and drink, to be physically active, and lose extra weight. If your client also has diabetes, refer him or her.
Hypertension	140 or higher	90 or higher	This person has high blood pressure. Refer him or her to a higher health facility.

1.1.5. Heart failure: is when the heart cannot pump efficiently and is unable to generate sufficient blood flow to meet the demands of the body for oxygen and nutrients, either at rest or during exercise.

- Symptoms of heart failure:
 - ✓ Shortness of breath even when sitting still;
 - ✓ They often cannot sleep without using many pillows
 - ✓ Tiredness and weakness.
- Risk factors for cardiovascular diseases?
 - ✓ unhealthy diet,
 - ✓ Physical inactivity and tobacco use.
 - These are called behavioral risk factors because they are due to people's behavior; these factors are responsible for about 80% of cardiovascular diseases.
- Role of health extension worker is
 - ✓ Identifying the client with symptom of hypertension and heart failure to nearest health center/hospital.
 - ✓ Educating on health life style, exercise.

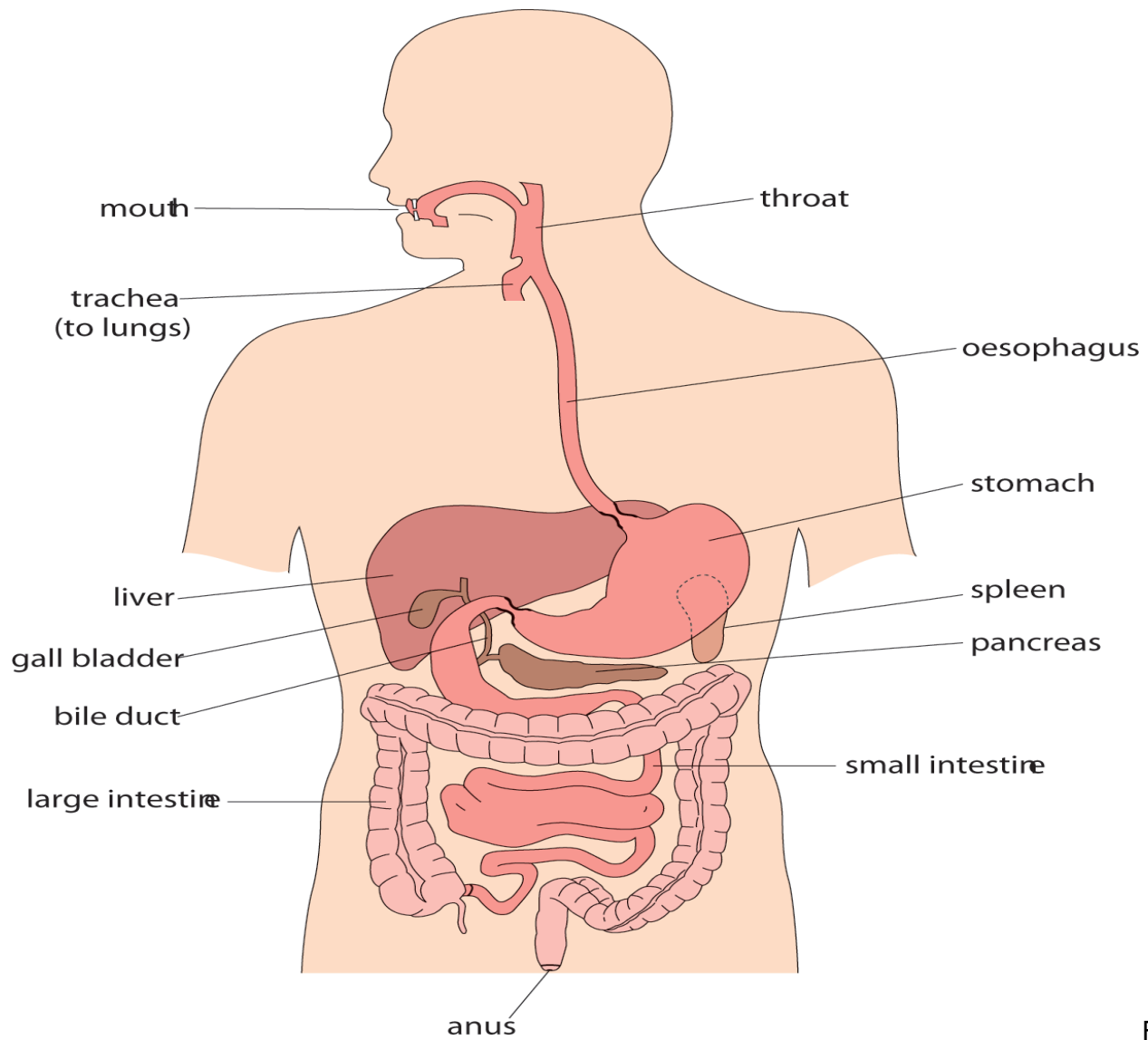
1.2. Diabetes Mellitus

- Diabetes mellitus is a condition in which the level of glucose (the simplest type of sugar) in the blood is poorly controlled, so that sometimes it rises too high and at other times it falls too low. Both these extremes can have serious consequence for the diabetic person. People with diabetes mellitus are usually very thirsty, so they drink a lot of fluids and as a consequence they produce large amounts of urine.
- simple way to test urine or a sign of diabetes, ants are attracted to the urine



Figure 1.5 :Ants are attracted to the urine

- The normal range is between 75-115 mg (milligrams) of glucose in every 10 ml of blood. Glucose control is due to the action of hormones secreted in pancreas.
- If the pancreas is severely damaged or removed by operation the production of insulin and glucagon will stop and diabetes will result.



Figure

1.6: The digestive tract (or gastrointestinal system) and pancreas.

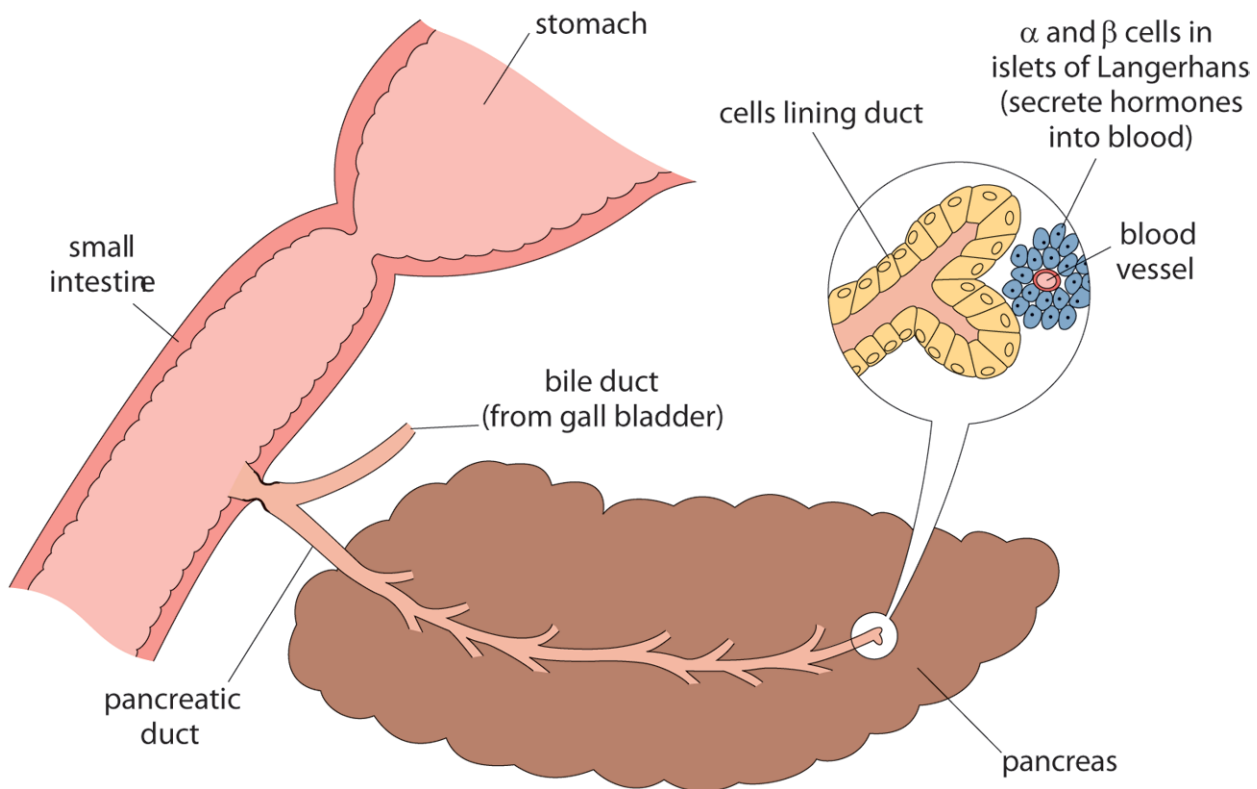


Figure 1.7: Cells in the Islets of Langerhans in the pancreas produce insulin and glucagon. (Source: The Open University, 2006, Living with Diabetes, Figure 2.2)

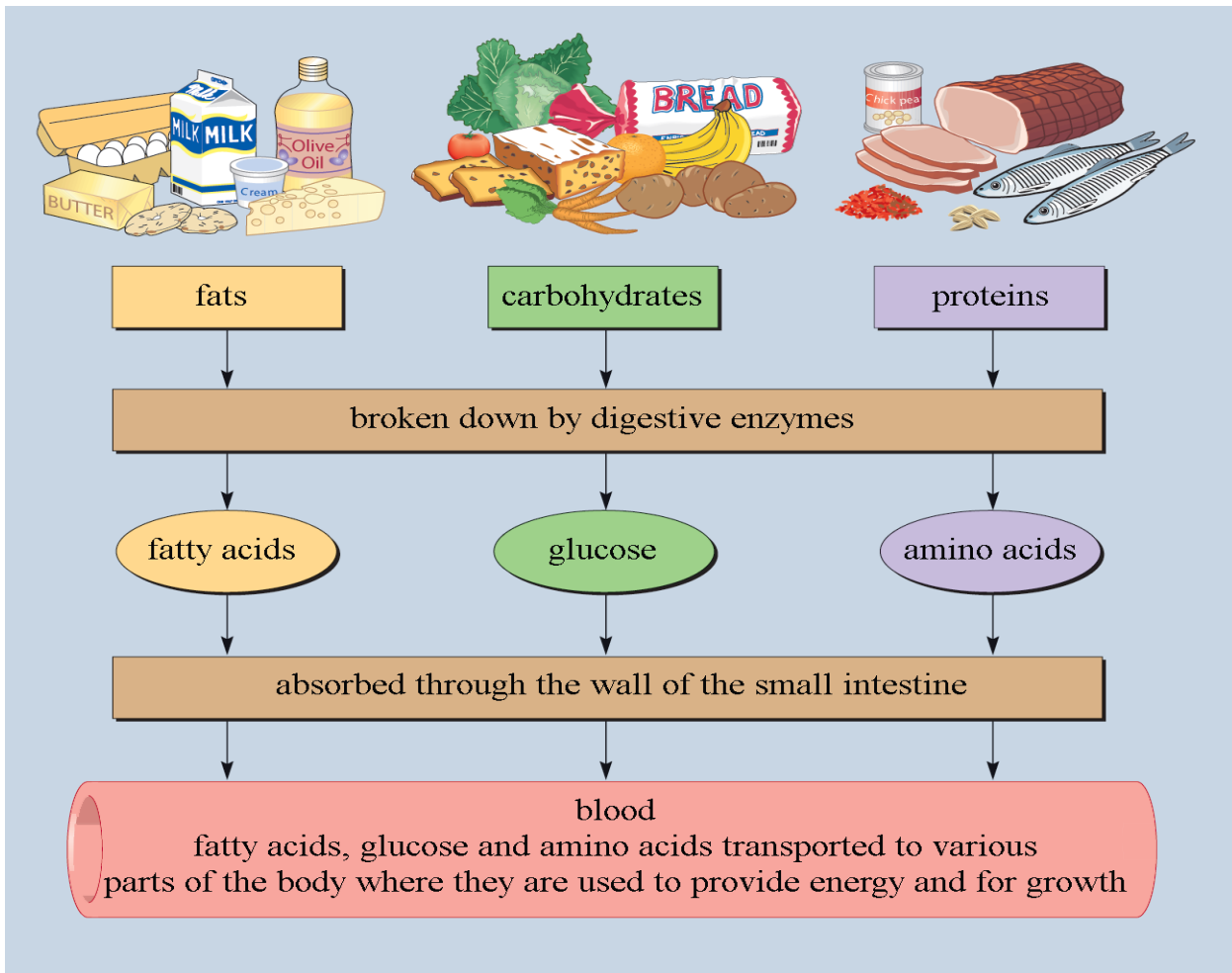


Figure 1.8: Breaking down of food and absorption of its end products

1.2.1. Symptoms and signs of diabetes

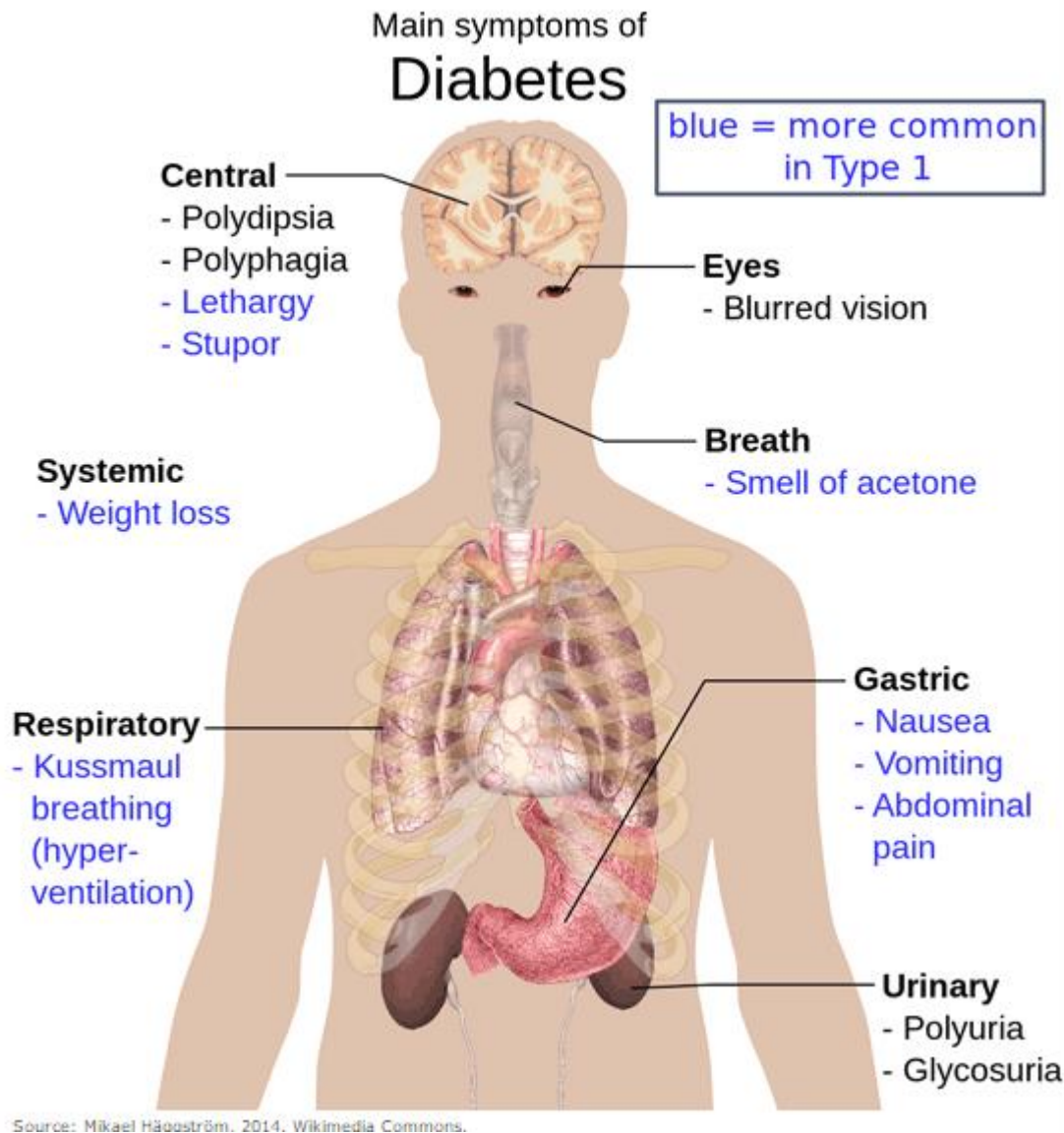


Figure 1.9: Symptoms and signs of diabetes

1.1.1. Classification of diabetes

- Type 1 diabetes: pancreas fails to produce enough insulin
 - ✓ Common at child age and young people (but at any age)
 - ✓ 10% of world people with diabetes



- Type 2 diabetes: the pancreas still produces insulin, though the amount reduces over time. The main problem is that the body cells become increasingly resistant to the action of insulin
 - ✓ 90% of world people with diabetes
 - ✓ Common at old age(>40 years old)

1.1.2. Risk factors for diabetes:

- A family history of diabetes (genetic factors).
- Being overweight or obese; the distribution of body fat also appears to be important, with fat around the abdomen seen as more of a risk than fat hips.
- Lack of exercise.
- Viral infections during child hood

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Directions: Find your weight in kilograms (or pounds) along the top of the table and your height in metres (or ft and inches) along the left hand side. Your BMI is the value at the point in the table where they intersect. *The chart does not apply to athletes, children, pregnant or lactating women.*

Weight	kg	45.5	47.5	50	52.3	54.5	57	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	
lb		100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	
Height	m (ft, in)																								
1.52 (5'0")		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
1.55 (5'1")		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	
1.57 (5'2")		18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	
1.60 (5'3")		17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	
1.63 (5'4")		17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	
1.65 (5'5")		16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	
1.68 (5'6")		16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	
1.70 (5'7")		15	16	17	18	18	19	20	21	22	22	23	24	25	26	27	28	29	29	29	30	31	32	33	
1.73 (5'8")		15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	
1.75 (5'9")		14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	
1.78 (5'10")		14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	
1.80 (5'11")		14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	
1.83 (6'0")		13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	
1.85 (6'1")		13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	
1.88 (6'2")		12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	
1.91 (6'3")		12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	
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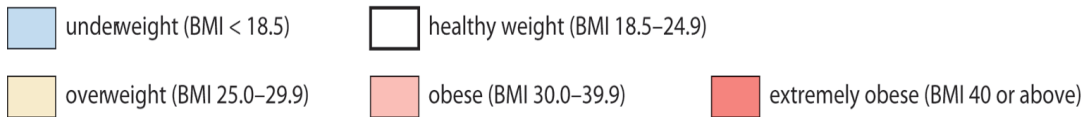


Figure 1.10: Body Mass Index chart. (Source: The Open University, 2006, Living with Diabetes, Figure 4.9)



1.1.3. Self-care and diet for someone with diabetes

- If they are already taking insulin or other drugs to treat their condition, you should advise them to take their medication regularly. Everyone with diabetes, regardless of treatment, should:
 - attend regular medical checkups
 - be aware of possible wound infection if they hurt themselves and seek urgent treatment if this occurs
 - always wear shoes that fit correctly; wounds, blisters or sores on the feet can lead to tissue damage that is difficult to heal
 - have an eye test once every year to check for early signs of eye damage
 - always include exercise as a routine part of their lifestyle
 - Attend health education classes (if they are available) for people with diabetes to learn about self-care.

1.2. Cancers

- Cancers are characterized by the rapid creation of abnormal cells which grow beyond their usual boundaries, which can invade adjoining parts of the body and spread to other organs. Cancers can develop in any part of the body.
- A lump of new cells growing in an inappropriate location is known as a tumor:
 - ✓ Benign tumor:- Most benign tumors are rarely life threatening, though some may grow very large over a long time and eventually interfere with the functioning of a vital organ, such as the liver, heart or brain.
 - ✓ A malignant tumor is the medical name for a cancer (more life threatening)

1.2.1. Risk factors for cancer

Risk factors are factors known to predispose the person to develop the given problem , here “cancer”.

Table: 1.1: Risk factors for cancer

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Modifiable risks	Non modifiable risks
Cigarette smoking Exposure to some industrial chemicals Environmental risk factors, such as radiation and certain viruses Lack of exercise Fatty diet leading to obesity Excessive alcohol consumption.	<ul style="list-style-type: none"> • Age • Genetic factors

1.2.2. Cancer prevention through risk reduction strategies

- Advise them to:
 - ✓ avoid cigarette smoking or chewing tobacco or khat (they increase the risk of cancers of the mouth, throat, lungs, stomach, colon and bladder)
 - ✓ avoid excessive alcohol usage (which is a risk factor for cancers of the mouth, oesophagus, stomach, breast and liver)
 - ✓ eat a healthy diet containing plenty of fruits, vegetables and other high-fibre foods from plant sources like whole grains, peas and beans (this helps in reducing cancer risks in the whole of the gastrointestinal system)
 - ✓ maintain a healthy weight (this reduces the risk of many cancers, including cancers of the ovaries and breast)
 - ✓ avoid exposure to industrial chemicals by wearing personal protective clothing (this reduces the risk of lung and skin cancers, among others)
 - ✓ Avoid exposure to cancer-promoting viruses (described below).
- The best way to prevent cervical cancer due to HPV (ABC rule)

- ✓ Abstinence (refraining from sexual intercourse)
- ✓ Be faithful (to one long-term partner)
- ✓ Condoms (correct and consistent use of condoms for all acts of sexual intercourse).

1.3. Screening for breast cancer

- Screening refers to any method of examining an apparently healthy person to see if they have the early signs of a particular disease, which would benefit from having early treatment. Screening for breast cancer is easily carried out by women themselves.

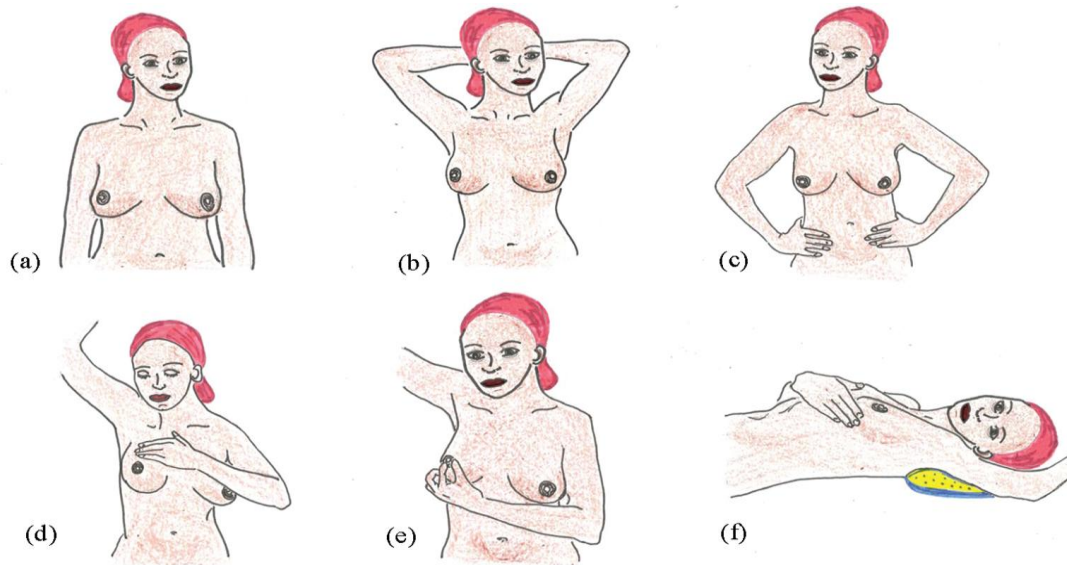


Figure 1.11: The steps of breast self-examination

1.3.1. Breast cancer treatment

- Breast cancer is usually treated surgically, either by removing just the cancerous tumor from the breast, or by removing the whole breast, hence role of the health extension worker is to recognize and refer to hospital.

1.4. Cervical cancer

- Cervical cancer refers to cancer cells growing in the tissues of the cervix – the muscular organ connecting the uterus and the vagina.

Most cases of cervical cancer are caused by sexually-transmitted infection with the human papilloma virus (HPV).

- In low- and middle-income countries, cervical cancer is the most common female cancer and one of the leading causes of death amongst women. In Ethiopia, it is believed from hospital reports that cervical cancer is the most common of all cancers. It is usually a slow-growing cancer that may not produce symptoms in its early stages. If the cancer is advanced, it may produce symptoms including an offensive discharge and bleeding from the vagina, and pain during sexual intercourse. You should encourage any woman with these symptoms to seek urgent medical attention.

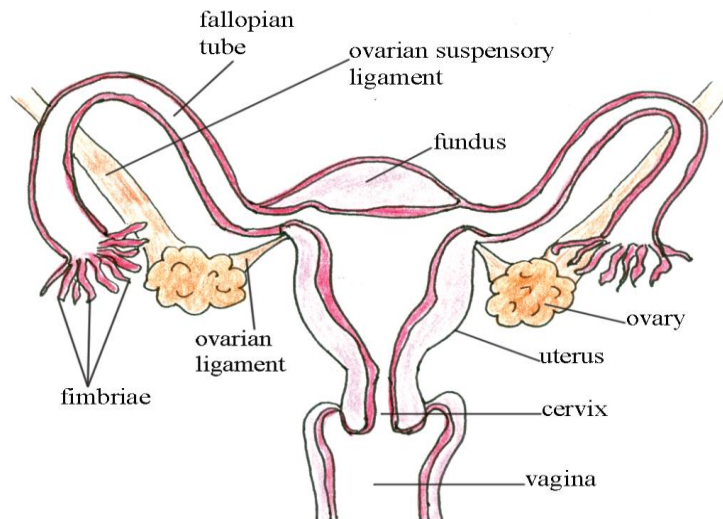


Figure 1.12: Female internal reproductive organs.

1.4.1. Cervical cancer screening

- Early detection of cervical cancer can be done with a test called a Pap smear test, in which cells are gently scraped from the cervix with a blunt instrument, smeared onto a glass slide and looked at under a microscope. A special stain is applied to the cells (called the Pap stain after the doctor who invented it), which shows up the cancer cells if they are present.
- Women who are sexually active should ideally have a Pap smear test once every two or three years, but this is only available in higher-level health facilities in Ethiopia. Cervical cancer screening

detects the cancer early. If effective treatment, such as surgical removal of the uterus, chemotherapy or radiation follows, it dramatically stops the progression of cervical cancer and can cure the disease completely. Advise your female clients to go to a specialised well-woman clinic if possible and have the screening test for cervical cancer.

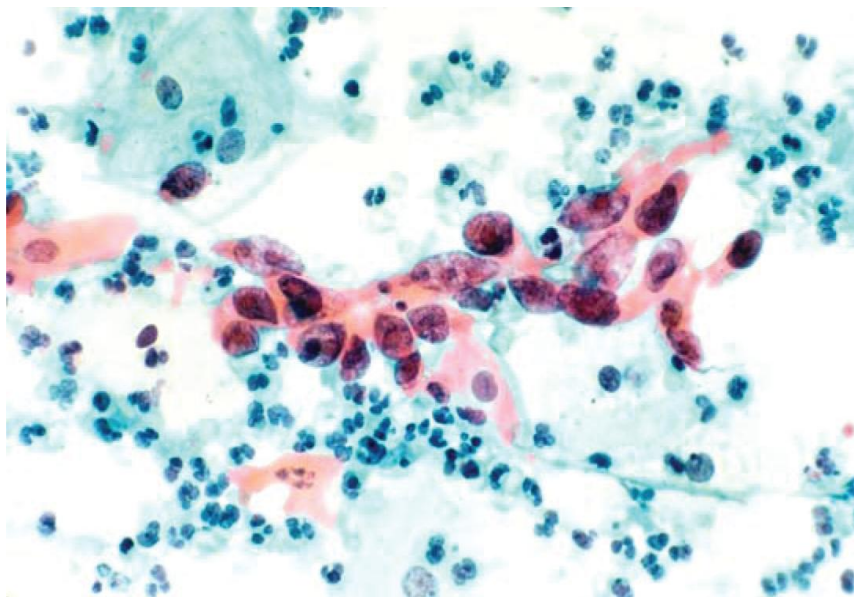


Figure 1.13: Pap smear of cells from the cervix magnified by a microscope (Photo in the public domain: National Cancer Institute, USA)

1.5. Chronic Obstructive Pulmonary Disease (COPD)

- Chronic obstructive pulmonary disease (COPD) are very common respiratory diseases (i.e. affecting the respiratory system) all over the world, including in Ethiopia. Patients with COPD are usually in the older age groups and have a combination of two clinical conditions – emphysema and chronic bronchitis
- A chronic disease is one that begins slowly, gradually gets worse over time and lasts for a long time, usually for the rest of the person’s life.
- Chronic obstructive pulmonary disease (COPD) is a progressive respiratory disease that makes it hard to breathe

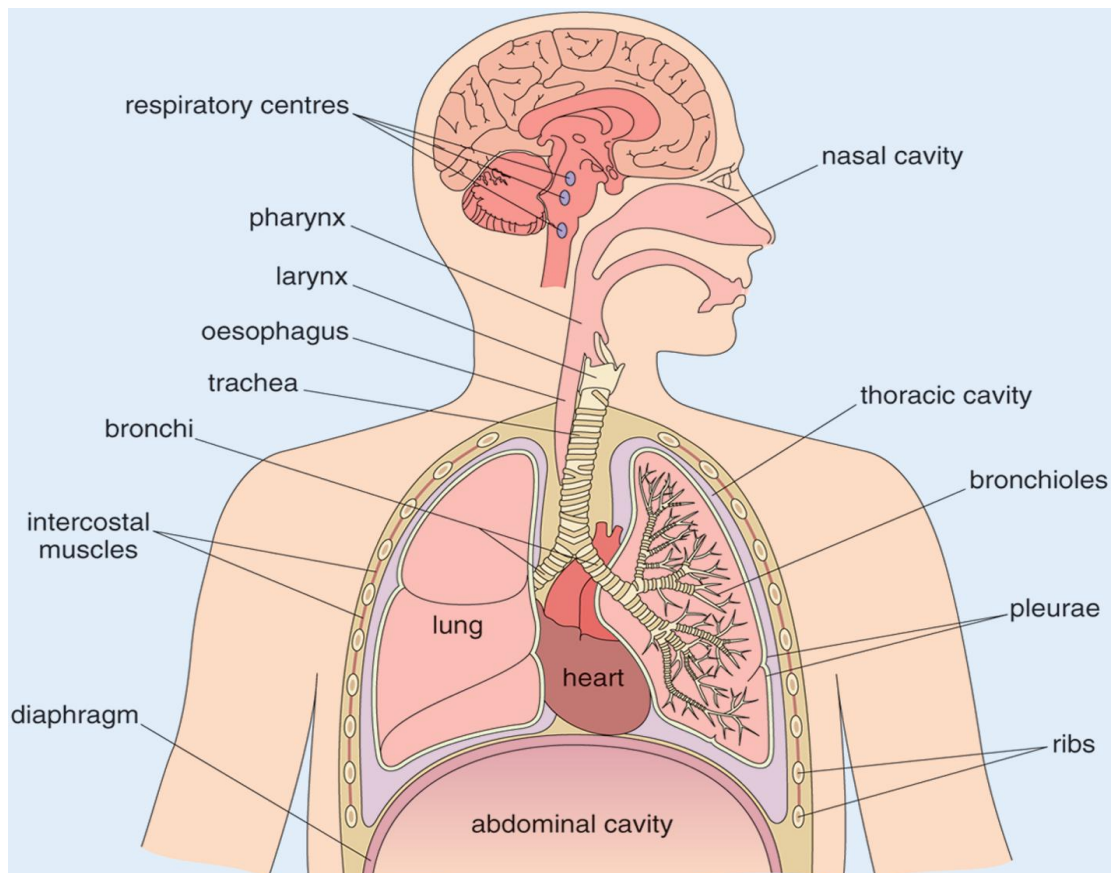


Figure 1.14: The human respiratory system (also known as the pulmonary system)(Source: The Open University, Chronic Obstructive Pulmonary Disease, SDK125 Case Study 5, Figure 3.3)

1.5.1. The lungs in COPD

- People with COPD have inflammation in their lungs that causes the production of large amounts of mucus – a clear slimy fluid secreted by cells lining the inside of the lungs. The mucus is a very good place for bacteria to grow, so lung infections are common in people with COPD. The mucus blocks the fine bronchioles and causes wheezing – squeaky breathing; you can often hear a quiet whistling or squeaking sound coming from the lungs when the person breathes in.

1.5.2. Risk factors for COPD

- Age is a risk factor for COPD: most people who have COPD were at least 40 years old when their symptoms began. However, the main risk factor is

smoking tobacco. Most people who have COPD smoke or used to smoke cigarettes. People who have a family history of COPD (older relatives who developed it) are also more likely to develop the disease if they smoke. Longterm exposure to other lung irritants is another risk factor for COPD.

These include:

- ✓ second hand-smoke from someone who is smoking tobacco in the same house every day
- ✓ industrial air pollution (smoke, chemical fumes and dust)
- ✓ most important of all in low-income countries – indoor smoke from cooking fires



Figure 1.15: Breathing smoke from indoor cooking fires (Photo: Basiro Davey)

1.5.3. COPD screening at community level

Table 1.2: COPD screening questions

Questions		Yes	No
1	Have you been coughing a lot and producing thick mucus (sputum) coughed up from your lungs?		
2	Have you had shortness of breath?		
3	Have you heard wheezing from your lungs when you breathe?		
4	Do you smoke cigarettes, or did you smoke cigarettes in the past? If not, do you live with someone who smokes cigarettes?		
5	Does anyone in your family have asthma and or allergies?		
6	In your work, have you been exposed to dust or chemicals that you often breathed in?		
7	Have you often been exposed to smoke from cooking fires inside your house?		

- Interpretation of the results of the COPD screening questionnaire is as follows:
 - ✓ If the person answers 'yes' to at least two out of Questions 1, 2 and 3, refer him or her to the health centre for further evaluation. It is likely that they have COPD.
 - ✓ If the person answers 'yes' to only one of Questions 1, 2 or 3, and also has one or more of the risk factors mentioned in Questions 4 to 7, then advise them about the need for regular screening for COPD and educate them on the prevention of COPD by reducing their exposure to the risk factors.

1.5.4. Prevention of COPD

- The good news is that COPD is a preventable disease! Educate people in your community how they can protect themselves from developing it by not smoking (or stopping from smoking) tobacco, which is dangerous to health not only in terms of COPD.

1.6. Cataracts, Eye and Ear, Injuries



1.6.1. Anatomy and function of the eye

- The eyelids are muscular folds of skin above and below your eyes, which can open and close like a gate covering and revealing the eye. They protect the eye from foreign matter, such as dust, dirt and other debris that might damage the eyes. When you blink, the eyelids also help spread tears over the surface of the eye, keeping it moist and comfortable.
- Eyelashes are small hairs growing from the edges of the eyelids. They filter out dust and debris from the air close to the eye, preventing it from getting into the eyeball.
- The sclera is a tough, leather-like, white tissue that extends all around the eye. Similar to an eggshell surrounding an egg and giving its shape, the sclera surrounds the eye and gives the eye its shape. The sclera is also attached to small muscles around the eye, which, in turn, move the eye left and right, up and down, and diagonally. When you look at yourself in the mirror the white part of your eye that you see is the front part of the sclera.
- Outside the sclera is a very thin transparent membrane, called the conjunctiva.
- The cornea is a clear layer at the front of the eye which is continuous with the sclera
- The iris is the coloured part of the eye and is made of muscle. The iris controls the amount of light that enters the eye through the pupil. The central opening in the ring-shaped muscular tissue of the iris is called the pupil, and the amount of light that enters the eye, can be altered by the iris changing its shape.

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Figure 1.16: The human eye, front view. (Adapted from: The Open University, 2008, Visual Impairment: A Global View, SDK125 Case Study 7, p.13)

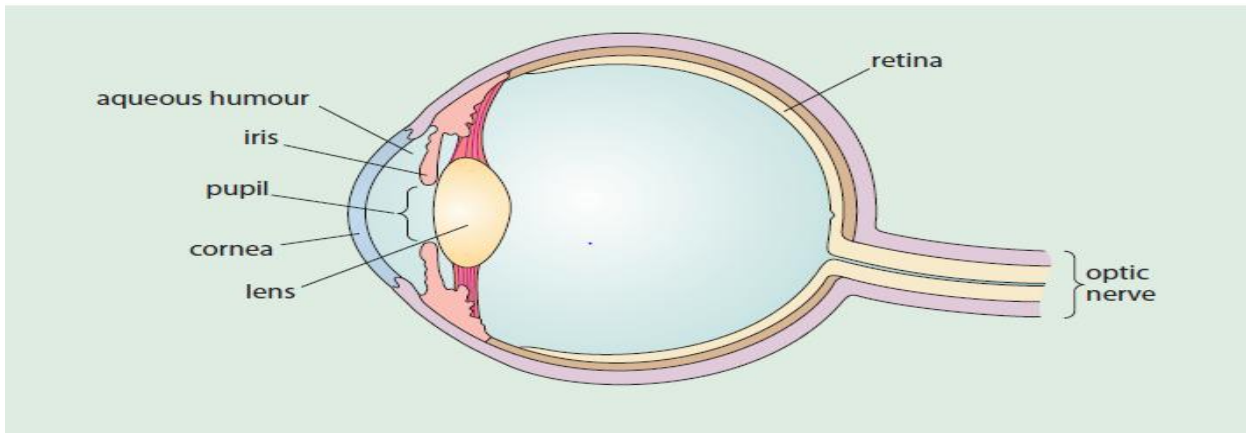


Figure 1.17: Cross section of the eye showing the different parts viewed from the side. (Adapted from: The Open University, 2008, Visual Impairment: A Global View, SDK125 Case Study 7, p.13)

- The lens of the eye is a clear flexible structure that is located just behind the iris and the pupil. The lens focuses the light as it passes through the eye onto the retina at the back of the eye. The aqueous humour (it means ‘watery matter’) is the fluid found just behind the cornea; its function is to nourish the lens.



- The retina is a complex layer of tissue at the back of the eye, where the image from the light entering the eye is focused. When light hits the retina, it sends signals to the brain along the optic nerve. The brain interprets these signals and turns them into information about what the eye is seeing. Damage to any of the structures of the eye due to physical injury or infection, or their gradual wearing out due to age, reduces the quality of vision.

1.7. Cataracts

- Cataracts are changes in clarity (clouding) of the lens in the eye, which interferes with the passage of light into the eye. As the lens gets increasingly cloudy (opaque), less and less light can get through it.

1.7.1. Recognition of cataracts

- You should suspect cataracts are the problem when a person comes to you with complaints of visual changes, such as blurred vision, difficulty in seeing in bright light, inability to see distant objects or scenes, poor colour vision, and difficulty in reading. As cataracts continue to progress and the lens become more opaque, the person will say they feel like they are looking through cloudy glass. The area of the pupil appears white or cloudy when the cataract is found at a late stage.
- Cataracts are usually progressive and painless and not associated with any redness of the eye. When you look at a person with advanced cataract you can see the clouding or milky appearance of the lens, which is particularly obvious if you shine a light into the eye

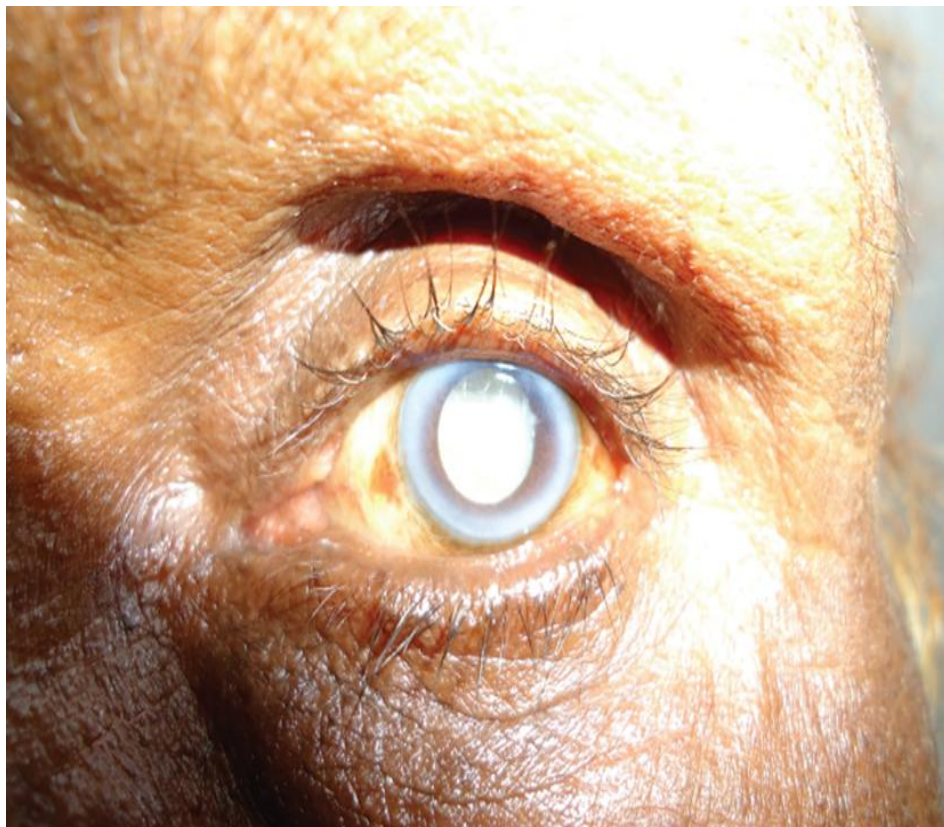


Figure 1.18 a cataract clouding the lens. (Photo: Dr Amir Bedri Kello)

1.7.2. Prevention of cataracts

- By getting treatment if they are diabetic, because effective blood-sugar control delays the progression of cataracts, shading their eyes with dark glasses to protect them from the harmful rays from the sun, not smoking cigarettes, and ventilating their room if smoke from a cooking fire is collecting in the house.
- Preventing and treating trachoma
- For late-stage cataract with blindness, the best intervention is surgical treatment to remove the cloudy lens

1.8. Eye injuries: are very common in most communities, especially in children and people younger than 30 years. Injury to the eye is one of the causes of cataracts. Eye injuries are the leading cause of blindness in only one eye worldwide. When you study the types of injuries described below, you will understand why young people are more likely than older people to suffer a blinding injury to one eye.

1.8.1. Causes and types of eye injuries:

- Chemical injury (splash)
- Scratch by a foreign body
- Penetration by sharp objects
- Blunt (non-penetrating) injury
- Injury to the eyelids

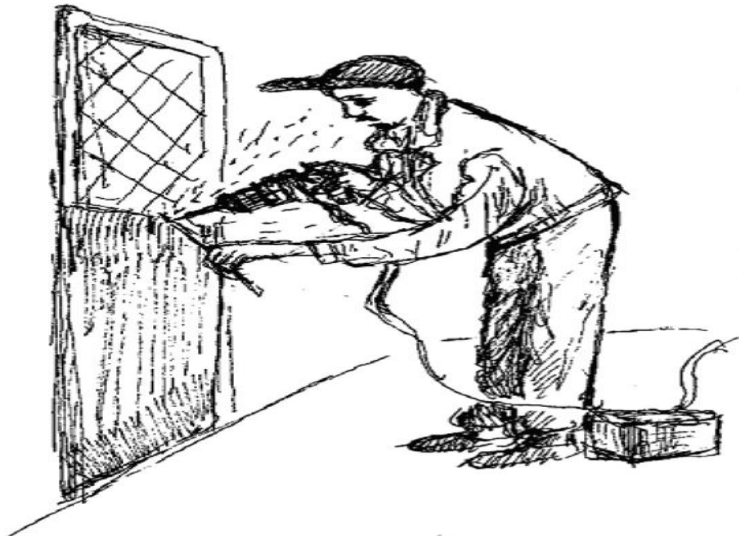


Figure 1.19: A young man at risk of a penetrating eye injury.

1.8.2. Supportive care in the case of eye injury

- If you are treating someone with a chemical splash injury, or dust in the eyes, simply rinse the eye with plenty of clean water. Foreign bodies which are not attached to the eye, or do not cause penetration to the eyeball, can simply be removed with the edge of a clean piece of cloth. Getting the chemicals, dirt or other foreign body out of the eye quickly, protects it from further damage. If the foreign body is difficult to remove because it is attached to the eye, or if there is penetration or injury to the eye ball cover the eye with clean cloth and transfer the person to the health centre or hospital.



Figure 1.20. The cornea has been partly torn away in this person's eye. Injuries are a common cause of sight loss. (Photo: Dr Fitsum Bekele Gulelat)

1.9. Ear injuries due to foreign objects

- Very common ear problem in children is caused when they put foreign objects into the ear canal when they are playing. They often put small objects such as beans, peas, rice, beads, fruit seeds, or small stones into their ears. If these foreign bodies remain in the ear for a long time, they make it more likely that the child will develop an ear infection. This in turn may lead to a loss of hearing, if untreated. You should suspect the possibility of something foreign in a child's ear if the child complains of pain in the affected ear, a bad smell or discharge comes from the ear, or the parents or school teacher tell you that the child doesn't seem to hear them talking if they speak into that ear.



Figure 1.21: Pus discharge as a result of chronic ear infection (otitis media). (Photo: WHO, 2006, Primary Ear and Hearing Care Training Resource: Student's Workbook Intermediate Level, p.53)

- Simple removal of a foreign object from the ear helps to reduce the risk of deafness resulting from chronic (long-term) infection. Shine a torch into the child's ear and if the foreign object is visible, try to remove it by using a thin blunt instrument– the end must not be sharp! If the ear drum is broken or scarred by infection, the child could suffer some permanent hearing loss in that ear. If you don't see a foreign object when you look into the ear with a torch, transfer the child to the nearest health facility for specialist help. If there is any discharge from the ear, the child will need medical treatment with antibiotics.

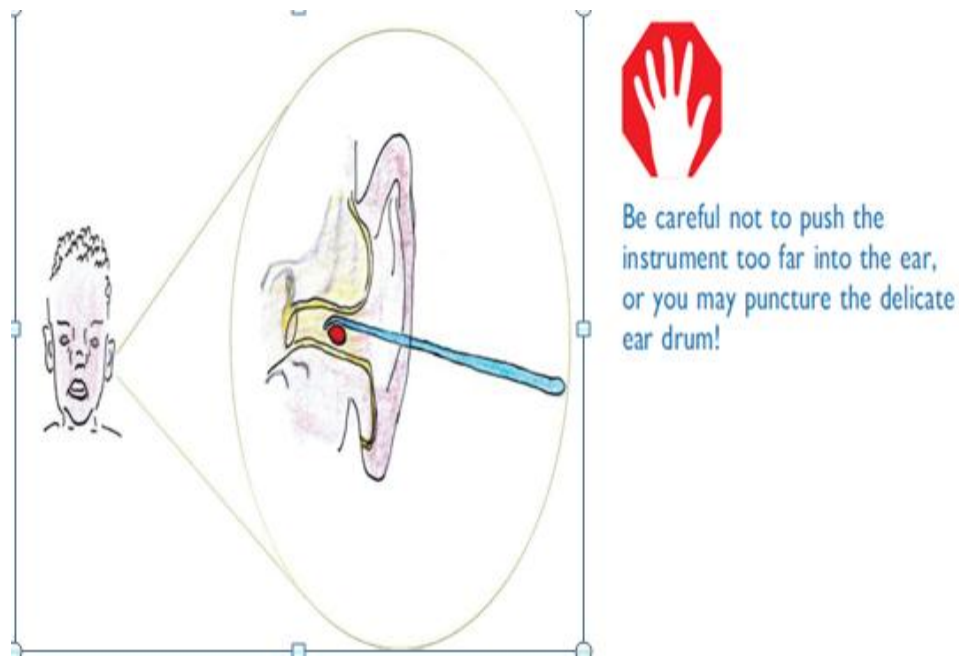


Figure 1.22: Foreign object being carefully removed from a child’s ear by a thin blunt instrument.
(Diagram: Dr Radmila Mileusnic)

1.10. Disability: is present when a person has a health condition (in this case, mental illness) which impairs their day-to-day functioning in some way. The level of disability experienced depends partly on the seriousness of the impairment, and partly on the social exclusion that further disables people with mental health problems.

- 1.10.1. Disability includes difficulty in one or more of the following areas:
- Understanding and communicating
 - Getting around
 - Self-care
 - Getting along with people
 - Working (including housework)
 - . Participating in society, e.g. attending a funeral or coffee ceremony

- 1.10.2. Major causes of impairment
- ✓ Disease
 - ✓ Poverty

- ✓ Wars
- ✓ Drought
- ✓ Famine
- ✓ Harmful traditional practices
- ✓ Household, work place and traffic accidents



Figure 1.23: Physical disability & physical aids

1.11. Mental health problem

- Mental health can be defined as ‘a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community’. (World Health Organization).
- Mental illnesses occur in the absence of mental health, and are generally characterized by some combination of abnormal thoughts, emotions, and behavior and relationships with others.
- Around 1 to 2% of the adult Ethiopian population, that is around 400,000 to 800,000 people across the country, are affected by

psychosis. People with psychosis may believe things that aren't real, hear things that aren't there, and have disturbed behavior.



Figure 1.24: Psychosis can lead to abnormal behavior.

- A further 10 to 15% of the adult population (4 to 6 million people) suffer from depression at some point in their lifetime – approximately 5% (2 million) at any one time. In depression, people have an abnormal level of sadness that doesn't go away. Depression can lead to a person giving up on life and wanting to die. If very severe, somebody with depression may even consider killing themselves (suicide). We don't know for certain how many people commit suicide in Ethiopia every year, but it is probably at least 4,000 people (10 per 100,000 adults per year).



Figure 1.25: a depressed person.

- In addition, we estimate that around 5% of the adult population of Ethiopia (around 2 million people) will suffer from an anxiety illness at some point during their lifetime. Anxiety is when a person worries too much about something, for example their health, their problems, or even what will happen in the future.



Figure 1.26: somebody who is very anxious.

- In summary, without including childhood disorders, estimate that at least 1 in 6 Ethiopians will suffer from a mental illness that needs treatment during their lifetime .

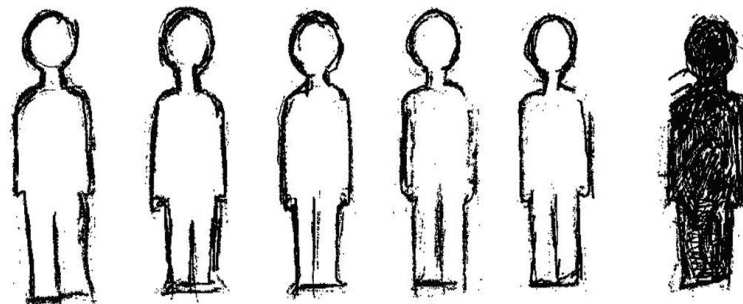


Figure 1.27: One in six Ethiopians will be affected by mental illness during their Lifetime
 Table 1.3: The frequency of mental illnesses in Ethiopia

Mental illness	Estimated % of Ethiopian population affected
Psychosis	1–2%
Depression	10–15%
Anxiety disorders	5%
Alcohol and khat abuse	3–5%

1.11.1. What causes mental illness?

- The biopsychosocial model
- The causes of specific mental illnesses vary but most are caused by a combination of biological, psychological and social problems
- Biological causes: genetic (inherited) causes, a chemical imbalance in the brain, head injury, alcohol or khat use, under nutrition
- Psychological causes: not loved in childhood, too many worries, the stress of somebody dying, disappointment, frustration, severe shock
- Social causes: poverty, not living in a good house, not having somebody who they can talk to about their problems, discrimination, migration.

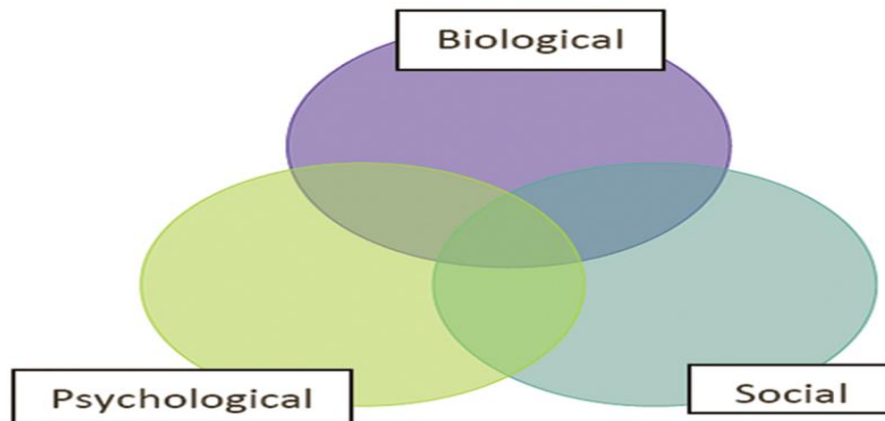


Figure 1.27: The biopsychosocial model of mental illness.

Table 1.4: Comparing explanatory models.

Questions	Biopsychosocial model	Local cultural model
Why did I get ill?	Because I was drinking and had lost my family and friends.	Because my neighbour bewitched me.
Will I get better?	Things could get better if I stopped drinking.	This is a serious thing. I might even die unless this curse is removed from me.
What treatment might help?	If I had help to stop drinking, and was able to talk about my problems to somebody.	Going to see the witch doctor (<i>tanquaye</i>) and slaughtering a sheep.

1.11.2. Cultural explanations for mental illness

- Spirit possession (likift, zar, wuqabi)
- Punishment for sins
- Evil eye
- Bewitched/cursed
- Thinking too much
- Exposure to cold air (berrd)
- Exposure to sun rays (mitch).

1.11.3. Priority mental health disorders (WHO)

- Psychosis: this is the collective name for a group of serious disorders characterized by changes in behavior (for example poor self-care, restlessness), strange thoughts or beliefs (for example believing that others wish to do the individual harm) and related dispositions.
- Mania: a form of severe mental illness in which a person is excessively happy or irritable (experiences extreme mood swings), appears over-active and sleeps poorly. People with mania have poor reasoning skills (they have difficulty understanding what is good and what is bad), and display excessive self-confidence.



- Depression: this is the most common priority disorder and is characterized by excessive sadness, loss of interest, lack of energy and related symptoms.
- Suicide: this will be discussed in more detail in this session and refers to the intentional ending of one's own life.
- Abuse of alcohol and other substances
- Childhood mental disorders
- Dementia: this condition is more common in older people and is characterized by memory problems and broader problems with thinking and understanding.
- Epilepsy: this is a chronic or longstanding condition caused by abnormal electrical conductions in the brain. In its most obvious form, it is characterized by episodic loss of consciousness and repetitive jerky movements of the body.

1.11.4. Common symptoms of a person with Severe Mental Illness.

- Delusions: believing things that are untrue, for example that people are in love with them, or that people are trying to poison them
- Hallucinations: hearing or seeing things that no one else can hear or see
 - ✓ Agitation and restlessness
 - ✓ Withdrawal and lack of interest
 - ✓ Increased speed of talking
 - ✓ Irritable mood (getting angry easily)
 - ✓ Grand ideas (out of keeping with reality)
 - ✓ Talking in a way that does not seem to make sense
 - ✓ Poor self-care (not related to poverty).

1.11.5. Suicide risk indicators in people with mental illness

- Suicidal thoughts: if a person tells you they are thinking about suicide, you should take this very seriously; about 66% of those who commit suicide have previously told someone about their intention.
- Severity of mental illness: the more severe the illness, the higher the risk of suicide. Someone young with a severe mental illness like psychosis, may be at increased risk if they have developed awareness about how ill they are; this is particularly the case if they also develop depressive symptoms

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- Substance misuse: the risk increases when the person also misuses substances like alcohol and khat.
- Social isolation and lack of support: for example, when someone does not have family to care for them, is single, and/or jobless. Marriage reinforced by children is thought to be a protective factor in relation to the risk of suicide.
- History of suicide attempts or self-harm: the risk is increased if there have been previous attempts.
- When someone has already attempted suicide, their risk of suicide is about 100 times higher than that in the general population. This risk is particularly high in the first year after the original attempt. It is therefore crucial that you closely monitor the risk of suicide after an attempt has been made. Be open with the patient, asking about the risk as a matter of fact.

1.11.6. Risk indicators for life-threatening self-harm

- Preparation for self-harm: someone who has taken time to plan, considered the consequences of their actions, said goodbye to people or taken precautions to avoid being discovered by others represents a much higher risk than a person who self-harms without much thinking about it (i.e. self-harm as an 'impulsive' act).
- Seriousness of the method used to self-harm: violent methods such as hanging, stabbing or throwing oneself into deep water are considered serious and indicate higher risk.
- Current mental illness: at least 60% of people who self-harm have some form of mental illness.
- Factors that reduce self-control: the use of alcohol or other drugs, or having an impulsive personality, reduce self-control and increase the risk of serious self-harm.
- Presence of ongoing 'real life' difficulties: marital problems, financial problems, difficulties at work, or other problems in daily life increase the risk of self-harm.

1.11.7. Questions to help assess the risk of suicide in someone with a mental illness

- A. How do you see the future?
- B. Do you think things will get better for you?
- C. Are there times when you feel you have had enough of life itself?



D. Are there times when you wish you were dead, or when you feel it would be better if you had died?

E. I know this may be a difficult question, but have you even considered ending your own life?

F. If you have thought of suicide, have you thought how you might do it?

If the person answers yes to any of the last three questions, you must refer them to a higher health facility for further assessment.

1.11.8. The roles of Health Extension Practitioners in mental healthcare

- Improving detection of mental illness by identifying people who are affected in your community
- Referring people with possible mental illness to the nearest health facility for further assessment and treatment
- Supporting people with mental illness and their families in the community
- Encouraging people to attend follow-up appointments and to keep taking their medication
- Educating patients, their families and the wider community
- Reducing stigma, discrimination and abuse against people with mental illness.

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Information sheet 02	Screening and referring cases with non-communicable diseases
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2.1. Concept of Screening and referring cases with non-communicable diseases

- May include:
 - ✓ History taking
 - ✓ Physical examination
 - ✓ Management of minor cases
 - ✓ Referring suspected cases

2.1.1. History taking: The process of gathering all the information and recording it using clear, accessible questions is called history taking

- it demands:
 - ✓ Tact
 - ✓ Patience
 - ✓ Tolerance
 - ✓ Sympathy and Understanding.
- History can be classified as:
 - ✓ Subjective data :symptom of health problem that the pt. complains
 - ✓ Objective data: sign of health problem that the health worker identifies
- Physical examination: Physical Examination is designed to locate and begin the initial management of the signs and symptoms of illness or injury.
- Vital signs are the key signs used to evaluate a patient's condition. The first set is known as baseline vitals. Vital signs includes: Respirations, Pulse and Blood pressure, skin temperature and condition, capillary refill time, pupils reaction and level of consciousness
- The basic steps of physical examination are:
 - ✓ Inspection
 - ✓ Palpation
 - ✓ Percussion
 - ✓ Auscultation



Figure: 2.1. Health extension worker measuring Blood pressure



Video of measuring blood pressure
(<https://www.youtube.com/watch?v=Gmic13mvsgo>)



Self-Check -6	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mr Bulcha is 1.70 m tall and weighs 68 kg.

A. 23.5	C. 40
B. 29	D. 25.5

2. Diabetes is a condition in which the blood glucose level is always too high.

A. True	B. false
---------	----------

3. Behavioral risk factors for cardiovascular diseases **exclude**?

A. Healthy diet	C. Physical inactivity
B. Tobacco use	D. Regular screening

4. Which of the following is incorrect?

A. COPD is not preventable	C. indoor smoke from cooking fires is risk for COPD
B. Screening is use full for early detection	D. Blood pressure above 140/90 is considered hypertension

5. hearing or seeing things that no one else can hear or see

A. Hallucinations	C. Dementia
B. Epilepsy	D. Depression

Note: Satisfactory rating 2 points Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

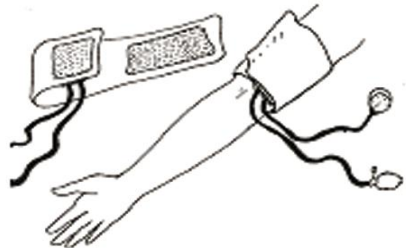

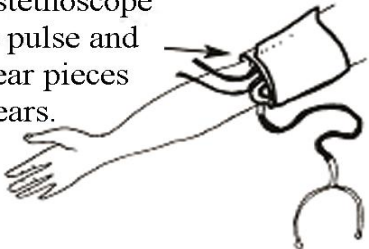




Score = _____
Rating: _____

Name: _____

Date: _____

Operation sheet 01	Techniques of blood pressure measuring
--------------------	--

1.1. The technique of measuring blood pressure

<p>1 Fasten the cuff around the bare upper arm.</p> 	<p>2 Close the valve on the rubber bulb by turning the screw to the right. The screw will get shorter.</p> 	
<p>3 Feel for a pulse just below the cuff on the inside of the elbow. Put the stethoscope over the pulse and put the ear pieces in your ears.</p> 	<p>4 Pump the cuff up by squeezing the bulb.</p> 	
<p>5 As you pump the needle will move. Stop when it reaches 200.</p> 	<p>6 Then open the valve just a little so that the air leaks out slowly.</p> 	<p>7 The needle will begin to go back down. (If the valve is closed, it will stay at 200.)</p> 

Operation sheet 02	Techniques of education on Diabetes mellitus
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Procedure of effective education on DM (“ASSURE”)

Step 1: Analyze the learner

Step 2: State the objectives

Step 3 : Select appropriate teaching methods

Step4: Use effective instructional materials

Step 5 : Require learner performance

Step 6: Evaluate the learning

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Operation sheet 03	Techniques client clinical assessment
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Demonstration of client clinical assessment

Step 1: History taking

Step 2: Physical examination

Step 3: Diagnosis

Step 4: Managing the case:

- ✓ Treatment of minor case
- ✓ Referring if beyond your scope



LAP test

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 02:00 hour.

1. Demonstrate blood pressure measurement
2. Conduct effective education on Diabetes Mellitus(DM)
3. Demonstrate of client assessment with diabetes mellitus



Reference materials

1. Barbara Bates-A Guide to Physical Examination and History Taking, 6th Edition, 1995
2. Mental Healthcare Manual (2003), published by Gaskell, London.
3. website at www.open.ac.uk/africa/heat
4. Central Statistical Agency (CSA) [Ethiopia] and ICF. 2017. 2016 Ethiopia Demographic and Health Survey Key Findings. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF.

**Instruction Sheet****LG32: Follow up cases and promote community based rehabilitation**

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Promotion of Community Based Rehabilitation
- Communities mobilization for taking care of people with disabilities
- Training family care and support group
- Follow up of Common Non-Communicable Diseases Cases

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Mobilize Communities for taking care of people with disabilities.
- Conduct Trainings to select family members and community based organizations.
- follow up Cases as per the feedback obtained from the health institution

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”.
4. Accomplish the “Self-check 1, Self-check t 2, Self-check 3 and Self-check 4”
5. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1
6. Do the “LAP test” in page – 105 (if you are ready)



1.1. Concept of rehabilitation

- Primary prevention: strategies which occur prior to onset of illness or disease. Examples: daily use of aspirin, exercise and diet control for weight management and maintenance of appropriate blood pressure, elimination of smoking and environmental smoke.
- Secondary prevention: strategies which occur after disease or illness and pathology have already occurred. Examples: reduction of blood pressure, pharmacological agents for risk reduction, exercise and weight management to control blood pressure and reduce blood pressure, Diabetes screening, Mammograms, pap smears, low salt diet.
- Tertiary prevention: strategies which occur once disease or disorder has resulted in permanent damage. Stroke with neurological damage. Gait problems. Examples: promotion of rehabilitation goals and exercise to halt damage and reach maximum potential and independence, Dietary education on low-fat, low-sodium diet or other prescribed diets.
- Rehabilitation services are an essential part of tertiary prevention
- Rehabilitation is Restorative measures using the remaining capacities of an individual and making him/her self reliant and useful in the community.
- Community health centers are often the first point of contact for persons with disabilities and their families seeking healthcare.
- Community-Based Rehabilitation (CBR) programmes provide home-based support to parents and children with disabilities as well as to older people with disabilities. You can support CBR activities by finding out about impairments among children in your locality, focusing on the early identification of impairments, and providing basic interventions to children, youth and adults with impairments. you can also facilitate links between individuals with impairments and specialized services.

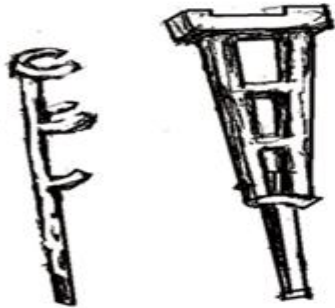


Figure 1.1: Rehabilitation with physical aids



Instructional Video for Transfer a Patient from Bed to Wheelchair
(https://www.youtube.com/watch?v=JxmH3_E2uDo)



Self check 01	Written test
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Directions: Match all the questions listed below to their corresponding answer. Use the Answer sheet provided in the next page:

- | | |
|-------------------------|---------------------------|
| A | B |
| 1. Primary prevention | A. Diabetes screening |
| 2. Secondary prevention | B. elimination of smoking |
| 3. Tertiary prevention | C. Rehabilitation |
| | D. exercise |

Note: Satisfactory rating 3 points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information sheet 02	Communities mobilization for taking care of people with disabilities
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4.1. Introduction

- In recent years, more and more health professionals have started to distinguish impairment from disability. Impairment refers to the physical, intellectual, mental and/or sensory characteristics or conditions that limit a person's individual or social functioning, in comparison with someone without these impairments.
- Disability, in contrast, is not something individuals 'have', but has a wider social meaning. It is the exclusion of people with impairments due to attitudinal and environmental barriers that limits their full and equal participation in the life of the community and society at large.
- It is now accepted that the disabling environmental and social barriers are major causes of the disability experienced by individuals with impairments. It is important to ensure the inclusion of disabled people in society.
- Inclusion refers to the need to make sure that people with disabilities have access to all necessary services and that the barriers and limitations they experience in society are reduced.

4.2. Models of disability

- A good way of understanding the distinction between impairment and disability is to consider some of the ways that disability has been thought of in the past. In this part of the session you are going to look at several models of disability.

4.2.1. The charity model

- The charity model of disability is a traditional way of viewing persons with disabilities as being dependent and helpless. In this model, people with disabilities are seen as:



- ✓ Objects of charity
- ✓ Having nothing to give, only to receive
- ✓ Being inherently poor, needy and fully dependent on charity or welfare for their survival.
- ✓ The charity model is often related to traditional cultural and religious beliefs and practices such as the giving of alms. The problem with such practices is that they reinforce the idea that people with disabilities are helpless recipients of 'charity' from a 'caring' society, rather than subjects with rights.

4.2.2. The medical model

- The medical model of disability focuses primarily on the medical problems of persons with disabilities and emphasizes medical solutions. It assumes that:
 - ✓ The problem of disability is due entirely to the individual's condition or impairment.
 - ✓ People with disabilities are — first and foremost — 'patients'.
 - ✓ The problem of disability requires a purely medical solution.
- In the medical model the problem of disability is addressed by medical experts through providing treatment for people with disabilities, rather than asking them what they want. Like the charity model, this approach is largely unconcerned with the social or environmental features of disability.

4.2.3. The social model

- The social model of disability views people with disabilities as being disabled less by their impairment than by society's inadequate response to their specific needs. The social model emphasizes that:
 - ✓ Disability is best thought of as a social problem.



- ✓ The problem is not the person with disabilities or their impairment, but the unequal and discriminatory way they are treated by society.
- ✓ The solution lies in removing the barriers that restrict the inclusion and participation of people with disabilities in the social life of the community.
- The emphasis on the removal of barriers focuses attention on a range of issues ignored in both the charity and medical models. For instance, it challenges inequalities before the law, restrictions caused by physical structures (the way buildings and villages are designed), and discrimination – the disabling aspects of negative attitudes towards people with disabilities.

4.2.4. The human rights model

- The human rights model of disability can be seen as the most recent development of the social model. It states that:
 - ✓ All human beings are equal and have rights that should be respected without distinction of any kind.
 - ✓ People with disabilities are citizens and, as such, have the same rights as those without impairments.
 - ✓ All actions to support people with disabilities should be 'rights based'; for example, the demand for equal access to services and opportunities as a human right.
- Like the social model, the human rights model places responsibility for addressing the problems of disability on society rather than on the person with disabilities. It also places a responsibility on you to ensure that appropriate legislation designed by the government is complied with at a local level.

4.3. Community mobilization

- It is an attempt to bring both human and non-human resources together to undertake developmental activities in order to achieve sustainable development. Community mobilization is a process through which action is stimulated by a community

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itself, or by others, that is planned, carried out, and evaluated by a community's individuals, and groups.

- It is an initial and ongoing process central to any community and social change effort that seeks to build support and participation of individuals, groups, and institutions to work towards a common goal or vision. It can be viewed as a process which begins a dialogue among members of the community to determine who, what, and how issues are decided, and also to provide an opportunity for everyone to participate in decisions that affect their lives. It is a means to achieve reliable and sustainable healthy lifestyles and behavioral changes.

4.3.1. Community mobilization allows you to:

- Identify needs and promote community interests.
- Promote good leadership and democratic decision making.
- Identify specific groups for undertaking specific problems.
- Identify all the available resources in the community.
- Plan the best use of the available resources.
- enable the community to better govern itself





Figure 2.1: women's army, HEW and health center head on community mobilization. (Photo: Mohammed Hussein, 2012)

4.3.2. Basic steps for community mobilization

- Community mobilization in general involves certain basic steps that can be applied to HIV/AIDS-related community mobilization efforts. These steps should be taken into account when preparing any type of community mobilization to realize significant impact. At each level of the community mobilization process, full participation of all relevant stakeholders is essential for successful community mobilization.
- The basic steps of community mobilization involve the following features:
 - ✓ Defining the problem: The first step in community mobilization is to collect the basic information about the issue, in this context the disabled people in catchment area. This will give you an idea of the extent of the problem and what the underlying causes are. In doing so, you will have a clear statement of the problem and identify the target population in the community affected by it.
 - ✓ Establishing a community mobilization group: The aim is to establish a group that can influence community mobilization activities. It usually consists of influential groups and members of the community such as formal and informal leaders and religious and traditional leaders.
 - ✓ Designing strategies, setting objectives and selecting target groups: To achieve a planned change at community level, resources need to be mobilized from the community and other external partners. After obtaining resources, the community mobilisation group should design strategies to address the identified problem with objectives that are SMART, which means Specific, Measurable, Achievable, Relevant and Time-



bound. The objectives should be assessed for their impact on the targeted groups in the community.

- ✓ Developing an action plan with a time line: An action plan links the general community mobilization plan with time lines for the actual implementation of the planned activities, and the deadlines set for goals to be achieved. This enables the progress of activities to be monitored against the targets set during the planning phase.
- ✓ Building capacity: Capacity building involves identifying existing capacity resources and assessing the gaps that exist to implement the community mobilization. The gaps identified should be supplemented by capacity building of the community groups and other relevant stakeholders in the community involved in community mobilization.
- ✓ Identifying partners: In the community there are various partners that work independently to achieve similar goals. Therefore, it is important to identify relevant partners through a simple mapping exercise. May be religious institutions, local non-governmental organizations (NGOs), kebele forums, maheber, idir etc.
- ✓ Implementing the plan of activities: Based on the action plans developed with all of the relevant community level partners, implementation of the community mobilization activities is the main task. In the implementation process, a clear role for any partners that are involved should be put in place and communicated with all of them.
- ✓ Monitoring and evaluation: Monitoring and evaluation is the last, but essential, element of community mobilization. It enables you

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to check whether the action plan has been implemented effectively and the specific objectives are met with respect to the issue the community is mobilized to achieve.

2.3.3. Community mobilization action cycle

- You should start the mobilization process by organizing your plan of work with the community. After that you can explore all the most important health issues in order to understand what is currently happening in the community. Once the health issues are fully explored, you can set priorities, develop a more detailed plan of work, and carry out the plan. During implementation of the programme, you should monitor and finally evaluate your activities.

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- This process of activities that people together is called community action cycle. The Community Action Cycle is a set of stages and steps that community members can follow to take action in a participatory and systematic way.



Fig 2.2: Community Action Cycle



Information Sheet 03	Training family care and support group
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3.1. Introduction

- Training family care and support group is important since most of the care given for chronically ill persons is given at home level to reduce bed occupancy for long duration.

3.1.1. A supportive partner and family will have a positive effect on improving the life outcomes for chronically ill individuals.

- Example: as you have seen in previous sections, cancer may be treatable if it is diagnosed early and depending on its type. However, some cancers are untreatable and others are diagnosed too late for treatment to be effective. If the original cancer spreads to other part of the body, the secondary tumors can damage the function of many different organs and make the patient very sick. As the cancers grow, they can interfere with processes that maintain life and the patient becomes terminally ill (i.e. expected to die within weeks). The care given to a person who has advanced cancer (or any other chronic life-threatening condition) is referred to as palliative care. The aim of palliative care is to improve the quality of life of the sick individual and their family in the period before the death, and to help the family cope with the bereavement after the death. It involves prevention and relief of suffering, pain and other physical problems, and attention to psychosocial and spiritual issues. It focuses on supporting the patient to enjoy what remains of their life as fully as possible, and helps them and their family to manage symptoms such as pain and nausea. It also helps the relatives to cope with the overwhelming feelings they may be experiencing about losing their loved one.

3.1.2. Palliative care is care given to chronically ill people to improve their quality of life and that of their families. It involves prevention and relief of suffering, pain and other physical problems, and attention to psychosocial and spiritual issues. Palliative care is also provided for terminally ill patients with conditions such as cancer, heart disease and stroke.

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3.1.3. The four components of palliative care in Ethiopia are symptom management, including:

- ✓ pain management;
 - ✓ psychosocial and spiritual support;
 - ✓ home-based care,
 - ✓ End-of-life care.
- The aim in palliative care is always to support the patient in their own home for as long as possible, and to involve others in the community who can give comfort to the patient and family members. In Ethiopia, an important contribution can be made by religious and spiritual leaders in the community. Don't forget that families who are caring for a dying person also need practical help and support, for example to lift a bedridden patient to change the bedding or make the person more comfortable.
 - Note that palliative care does not only mean the terminal care given to people dying from an incurable chronic illness.



Figure 2.3: A Health Extension Practitioner and a family member changing the position of a terminally ill person to make him more comfortable.



3.1.4. Preventing bedsores in bedridden patients

- To prevent bedsores, you should do the following:
 - ✓ Help the patient to sit out in a chair from time to time if possible.
 - ✓ Lift the patient up off the bed slowly — do not drag the person’s body as it breaks the skin. Ask a family member to help you — two people can do this much more easily, with less discomfort for the patient.
 - ✓ Encourage the patient to move around in the bed as much as they are able to. If they cannot move, change their position on the bed frequently, if possible every one or two hours. Use pillows or cushions beside the patient to help them keep the new position.
 - ✓ Keep the bed sheets clean and dry. Put extra soft material, such as a soft cotton towel, under the patient.
 - ✓ Look for damaged skin (change of colour) on the patient’s back, shoulders and hips every day. Massage the back and hips, elbows, heels and ankles every day with petroleum jelly if available, or any other soothing cream or oil. This helps to prevent ‘bed sores’ from developing.

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4.1. Follow-up

- The most important element in the management of chronic non communicable disease is follow-up care.
- Following your referral, the doctor at the higher health facility will examine the person with mental health problems, diagnose the nature of the illness and prescribe the appropriate treatment if necessary. After the treatment is initiated, it is essential to have follow-up visits to your clients and their family members to discuss how they are doing. Follow-up is important to achieve adherence to treatment and improve the overall outcome. If for any reason the patient discontinues the prescribed treatment, all your efforts and the efforts of the doctor and the family members will have been fruitless.

4.1.1. Follow up of patients with mental health

- Questions to ask during follow-up
 - ✓ Is the client taking his/her medicines regularly as prescribed?
 - ✓ How much improvement has the client made?
 - ✓ Has the client developed any side effects following the drug use?
 - ✓ Has the client started working again?
 - ✓ Has the client seen the doctor for follow-up and review?
- Based on the information you collect during the follow-up visits, you may identify some continuing issues that need to be addressed. In the remainder of this section we will discuss how you can deal with some of the problems that are likely to arise during follow-up of clients who are taking medication.



Figure 4.1: A man with mental illness taking his medication

4.1.2. Follow up on self-care and diet for someone with diabetes

- If they are already taking insulin or other drugs to treat their condition, you should advise them to take their medication regularly. Everyone with diabetes, regardless of treatment, should:
 - ✓ attend regular medical checkups
 - ✓ be aware of possible wound infection if they hurt themselves and seek urgent treatment if this occurs
 - ✓ always wear shoes that fit correctly; wounds, blisters or sores on the feet can lead to tissue damage that is difficult to heal
 - ✓ have an eye test once every year to check for early signs of eye damage
 - ✓ always include exercise as a routine part of their lifestyle
 - ✓ Attend health education classes (if they are available) for people with diabetes to learn about self-care.
- Maintaining a healthy diet
 - ✓ Maintaining a healthy diet is one of the most important aspects of treatment for diabetes.

Table 4.1: Recommended diets in diabetes.

Foods	Can be eaten in moderate amounts	Limited to small occasional amounts
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Carbohydrates	Complex (starchy) carbohydrates should be the main part of any meal, e.g. injera, bread, other cereals, rice, potatoes, etc. Starchy carbohydrates are broken down slowly into sugars, so the glucose levels in the blood rise slowly.	Foods containing sugar are not encouraged, particularly if the person needs to lose Weight, because sweet foods are energy-rich and ‘fattening’. Sugary foods and drinks can put up blood glucose levels very quickly and have very little or no nutritional value.
Fats	Fats, such as those in olive oil and avocados, are good for maintaining a healthy weight. Grilling, baking and steaming cooking methods produce less fattening foods than frying.	Fats should be limited to help control body weight, especially ‘hard’ fats such as butter and animal lard.
Proteins	Protein is found in meat, fish, eggs, nuts, pulses and dairy products and is recommended in a healthy diet.	Avoid ‘fatty’ sources of protein such as fatty meat, or a lot of egg yolks.
Vitamins, minerals and fibre	Fruits and vegetables are an excellent source of dietary fibre, vitamins and minerals; try to eat five portions of fruit and vegetables each day, e.g. ‘gommen’ or kale, cabbage, carrots, spinach, tomatoes, mangoes.	Fruit contains sugar and tends to increase blood glucose levels. People are often surprised at this because fruit is a healthy-eating option.
Salt	A small amount of salt daily is all that is needed; this can mostly be obtained from fresh Natural foods.	Most people eat more salt than is required by the body; food should be tasted before salt is added, if necessary, at the table. Limiting salt intake can help decrease blood pressure.

4.1.3. Follow up of patients with Hypertension

- Follow-up visits are a good time to let your health care provider know about any side effects you are having from your medication. He or she will have suggestions for coping with side effects or may change your treatment.
- Follow-up visits are a great opportunity for monitoring other associated risk factors, such as high cholesterol and obesity.
 - ✓ Attend regular medical checkups
 - ✓ After starting high blood pressure drug therapy, you should see your doctor at least once a month until the blood pressure goal is reached.
 - ✓ Have an eye test once every year to check for early signs of eye damage
 - ✓ Always include exercise as a routine part of their lifestyle
 - ✓ Attend health education classes (if they are available) for people with diabetes to learn about self-care.
 - ✓ Maintaining a healthy diet(avoid salty and fatty food)

4.1.4. Follow up of patients with cancer

- Follow-up care visits are also important to help in the prevention or early detection of other types of cancer, address ongoing problems due to cancer or its treatment, and check for physical and psychosocial effects that may develop months to years after treatment ends. All cancer survivors should have follow-up care





Figure 4.1: observing patient with cancer

- The objective of Cancer follow up:
 - ✓ To determine outcomes of treatment
 - ✓ The patient's current vital status
 - ✓ To collect information on any recurrence including treatment and any new primary cancer
- Follow-up care is important because it helps to identify changes in health. The purpose of follow-up care is to check for recurrence (the return of cancer in the primary site) or metastasis (the spread of cancer to another part of the body).
- Follow-up care visits are also important to help in the prevention or early detection of other types of cancer, address ongoing problems due to cancer or its treatment, and check for physical and psychosocial effects that may develop months to years after treatment ends. All cancer survivors should have follow-up care.
- During each visit, patients should tell their doctor about:
 - ✓ Any symptoms that they think may be a sign that their cancer has returned
 - ✓ Any pain that bothers them
 - ✓ Any physical problems that interfere with daily life or are bothersome, such as fatigue; difficulty with bladder, bowel, or sexual function; difficulty concentrating; memory changes; trouble sleeping; and weight gain or loss
 - ✓ Any medicines, vitamins, or herbs they are taking and any other treatments they are using
 - ✓ Any emotional problems they are experiencing, such as anxiety or depression
 - ✓ Any changes in their family medical history, including any new cancers

4.1.5. Follow up of cases with cataract, eye and ear injuries

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- First aid care for eye injuries: Any kind of injury or trauma to the eyes should be taken seriously. Prompt medical attention for eye problems can save your vision and prevent further complications.

- ✓ Chemical burns: Chemicals common at home or in the workplace can easily get splashed into your eyes. It is important to wear safety glasses when handling toxic or abrasive chemicals and use caution with household cleaners in order to prevent injury.

- ✓ First aid care for chemical burns includes:
 - Remain calm and keep eyes open until they can be flushed. Closing your eyes traps the chemical in and does further damage.
 - Flush eyes generously with water for 15 to 20 minutes. Make sure you keep your eyes open during flushing.
 - Get immediate medical care. You can also call local poison control center for instructions. Be prepared to give information about the name and type of chemical, if possible.

- ✓ Foreign object: The eye often cleans itself of debris with tearing, so no treatment is needed until you are certain the eye cannot remove the object by itself. First aid care for foreign objects in the eyes includes:
 - Don't rub your eyes.
 - Lift the upper eyelid up and out over the lower lid, and then roll your eyes around.
 - Flush your eyes generously with water, and keep your eyes open during flushing.
 - Repeat the previous steps until the object is eliminated.



- Follow up with a doctor to make sure all debris is gone and the eyes have not been scratched or damaged. Your doctor may evaluate you for damage by using a special eye drop that fluoresces under a certain type of light; it will help reveal any cuts or scratches in the cornea.
 - If there is an object embedded in the eye, do NOT remove it, as this may cause further damage. Instead, cover the eye with an eye shield or gauze and seek prompt medical attention.
- ✓ Blows to the eye: Impact to the eye is another form of eye trauma. Minor blows can often be managed at home. Any eye injury should be monitored for signs of a serious injury or potential infection. First aid care for a blow to the eyes includes:
- Gently place a cold compress over your eye in 5- to 10-minute intervals. Do not place ice directly on the skin. Instead, use a cloth in between the ice and skin.
 - Call your doctor. They may want to examine the eye for potential damage. If the trauma was significant (for example, skull fracture or displaced bones), you will need to go to an emergency department for immediate evaluation.
 - After 24 hours, switch to warm compresses. This will help lessen bruising.
 - Seek immediate medical attention if you notice any of the following symptoms: drainage from the affected eye, vision changes, persistent pain, any visible abnormalities or bleeding in the sclera, which is the white part of the eye

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Self check 01	Written test
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Directions: Match all the questions listed below to their corresponding answer. Use the Answer sheet provided in the next page:

1. The objective of Cancer follow-up include .
 - A. To determine outcomes of treatment
 - B. The patient’s current vital status
 - C. To collect information
 - D. To stop medication

Note: Satisfactory rating 3 points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Operation sheet 01	The basic steps of community mobilization
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Basic steps of community mobilization

Step 1: Defining the problem

Step 2: Establishing a community mobilization group:

Step 3: Designing strategies, setting objectives and selecting target groups:

Step 4: Developing an action plan with a time line

Step 5: Building capacity





Step 6: Identifying partners:





Step 7: Implementing the plan of activities

Step 8: Monitoring and evaluation

Operation sheet 02	Techniques of transfer from Bed to chair
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Table shows Techniques of transfer from Bed to chair

Step	Information
1. One health care provider is required.	 <p>Explain procedure to patient</p>
2. Apply proper footwear prior to Ambulation	 <p>Proper footwear</p>
3. Lower the bed and ensure that brakes are applied. Place the wheelchair next to the bed at a 45-degree angle and apply brakes. If a patient has weakness on one side, place the wheelchair on the strong side.	 <p>Wheelchair with one leg rest removed</p>
4. Sit patient on the side of the bed with his or her feet on the floor. Apply the gait belt snugly around the waist (if required). Place hands on waist to assist into a standing position	 <p>Patient position prior to standing</p>

<p>5. As the patient leans forward, grasp the gait belt (if required) on the side the patient, with your arms outside the patient's arms. Position your legs on the outside of the patient's legs. The patient's feet should be flat on the floor.</p>	 <p><i>Assist to a standing position using a gait belt</i></p>
<p>6. Count to three and, using a rocking motion, help the patient stand by shifting weight from the front foot to the back foot, keeping elbows in and back straight.</p>	 <p><i>Weight shift to back leg by health care provider</i></p>
<p>7. Once standing, have the patient take a few steps back until they can feel the wheelchair on the back of their legs. Have patient grasp the arm of the wheelchair and lean forward slightly.</p>	 <p><i>Assist into the wheelchair</i></p>
<p>8. As the patient sits down, shift your weight from back to front with bent knees, with trunk straight and elbows slightly bent. Allow patient to sit in wheelchair slowly, using armrests for support.</p>	 <p><i>Transfer to wheelchair</i></p>

<https://opentextbc.ca/clinicalskills/chapter/3-7-transfers-and-ambulation/>



LAP test

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 02:00 hour.

1. Demonstrate basic steps of community mobilization
2. transfer from Bed to Wheelchair



Reference materials

1. Barbara Bates-A Guide to Physical Examination and History Taking, 6th Edition, 1995
2. Mental Healthcare Manual (2003), published by Gaskell, London.
3. website at www.open.ac.uk/africa/heat
4. Central Statistical Agency (CSA) [Ethiopia] and ICF. 2017. 2016 Ethiopia Demographic and Health Survey Key Findings. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF.
5. <https://opentextbc.ca/clinicalskills/chapter/3-7-transfers-and-ambulation/>