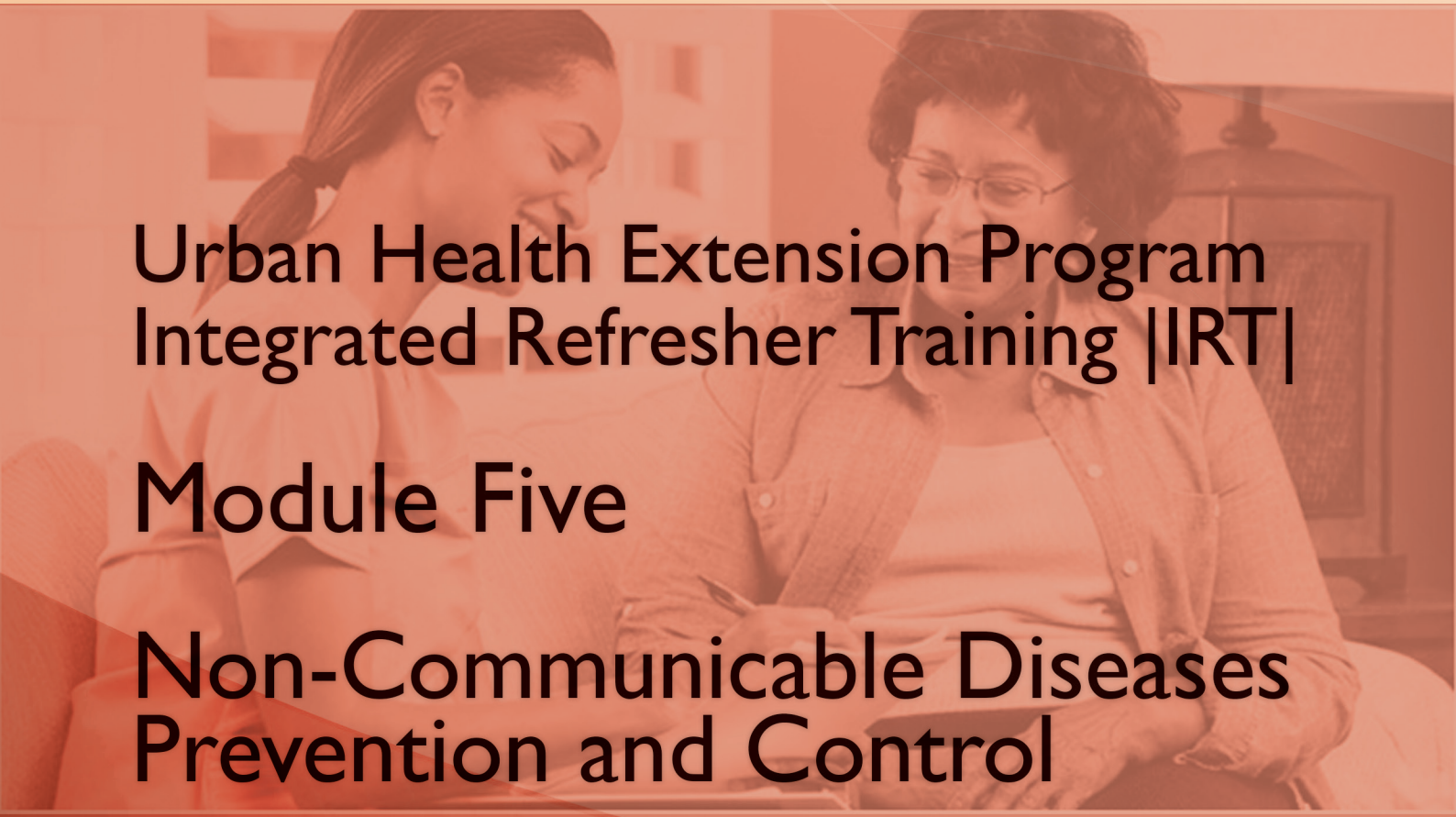
Federal Ministry of Health



Urban Health Extension Program Integrated Refresher Training |IRT|

Module Five

Non-Communicable Diseases Prevention and Control

• Participants Guide

February 2017

Federal Ministry of Health

Urban Health Extension Program

Integrated Refresher Training

Module Five

Non-Communicable Diseases Prevention and Control

PARTICIPANT`S Guide

February 2017

Table of Content

Acknowledgement

The preparation and finalization of the integrated refresher training modules for Urban Health Extension Professionals (UHE-ps) has been made possible through a series of consultative meetings and workshops. During this process, the valuable contributions of our partners and program stakeholders have been crucial. This module is meant for UHE-ps in order to improve their attitude, skill and knowledge, which in turn help them provide quality health services to their clients. Therefore, the Federal Ministry of Health (FMOH) acknowledges all organizations for their contributions in the preparation, fine-tuning and finalization of this document.

FMOH is grateful to all partners involved and in particular USAIDJSI/SEUHP, JHU CCP, World Vision, Challenge TB, UNICEF, for the technical support provided to develop this Integrated Refresher Training(IRT) module in a harmonized approach.

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FMOH acknowledges JSI-SEUHP for providing financial support to organize a series of workshops and consultative meetings as well as to print the final version of all training modules.

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Abbreviation

AIDS	*acquired immune deficiency syndrome*
ASK	*attitude, skill and knowledge*
BMI	*body mass index*
CVD	*cardiovascular disease*
DM	*diabetes mellitus*
EO	*enabling objective*
GDM	*gestational diabetes mellitus*
JHU	*John Hopkins University*
JSI	*John Snow Incorporate*
IRT	*integrated refresher training*
HC	*Health Center*
HCT	*HIV counseling and testing*
HEPHSD	*Health Extension and Primary Health Service Directorate*
Ht	*Height*
HIV	*human immunodeficiency virus*
MH	*mental health*
NCD	*non-communicable disease*
PO	*per os (by mouth)*
SEUHP	*Strengthening Ethiopia`s Urban Health Program*
STI	*sexually transmitted infection*
TB	*tuberculosis*
TOT	*training of trainers*
Vs	*versus*
WHO	*World Health Organization*
Wt	*Weight*
UHE-P	*Urban Health Extension professional*
UNICEF	*United Nations Children's Fund*
USAID	*United States Agency for International Development*

Introduction

Urban Health Extension Program was introduced in Ethiopia in 2009, based on lessons learnt from successful implementation of the health extension program in rural areas. The program is designed with the aim of ensuring health equity by creating demand for essential health services through the provision of health information and basic health services at household level, school and youth centers and improving access to health services through referral to health facilities. Subsequent evaluations conducted on the program implementation have shown that, Urban HEP has contributed for increased health service awareness and utilization among urban dwellers. However, there was a wide disparity in implementation of the program and its achievements among cities. Low competency of Urban Health Extension Professionals (UHE-ps) and lack of integrated and continuous training has contributed for the discrepancy in implementation of the program.

Hence, a training need assessment was conducted to identify the competency gaps of UHE-ps when providing basic services. Therefore, considering the type of competencies that the UHE-ps need to have and identified competency gaps, six modules have been identified and developed based on Competency Based Training approach to provide in-service integrated refresher trainings. In addition, the modules were pre-tested and further refined. These modules are: -

Module 1: Social and Behavioral Change and Communication

It encompasses the health communication component to improve the knowledge and skill of UHE-ps to conduct effective health communication and improve UHE-ps attitudes affecting their performance in provision of health communication activities.

Module 2: Reproductive, Maternal, Neonatal, Child Health and Nutrition

The overall purpose of this module is to improve the attitude, knowledge and skills of UHE-ps to carry out quality family planning, maternal, neonatal, child health and nutrition services as well as enhance the UHE-ps understanding of attitudes affecting their performance in provision of family planning, maternal, neonatal, child health and nutrition services.

Module 3: Water, Hygiene and Sanitation

The overall purpose of this module is to improve the knowledge and skills of UHE-ps to carry out quality Water, Sanitation and Hygiene services as well as enhances the UHE-ps understanding of attitudes affecting their performance in provision of Water, Sanitation and Hygiene services.

Module 4: Major Communicable Diseases Prevention and Control

This module prepares Urban Health Extension professionals (UHE-ps) to provide TB/HIV and malaria-related services including reaching vulnerable populations with key TB/HIV prevention messages, HIV/STI counseling and testing (HCT), TB case detection, TB and HIV/AIDS care and support, referrals to services and malaria prevention and control in malarias areas.

Module 5: Non Communicable Diseases Prevention and Control and Mental Health

The Purpose of the module is to enable the participant s (UHEPs) explore and use their Attitude, Skill and knowledge to improve their performances in terms of providing quality health services related to major NCDs and mental health

Module 6: Basic First Aid

The purpose of this module is to improve the knowledge, attitude and skill of UHE-ps to provide quality first aid service and injury management. The module will also consist of transferring information regarding first aid and injury management to household and communities. This module also includes pre hospital cares.

Module Syllabus

Module description: This four-day training module contains theoretical and practical lessons to give trainees the knowledge, attitudes, and skills pertaining to non-communicable diseases (NCDs) (cardiovascular diseases, diabetes mellitus, cancer, mental health, and eye health including cataract, refractive error, and glaucoma).

Module goal: Equip the participants with improved knowledge, attitudes, and skills needed to screen, counsel, refer, and follow up NCDs at household, youth center, and school levels.

Learning objectives: By the end of this module, participants will be able to:

- Promote healthy lifestyle in the household, school, and community at large.
- Screen, identify, refer, and follow up of major non-communicable diseases.
- Create awareness of the benefits of early detection and treatment of breast cancer.
- Create awareness, promote, identify, and follow up of mental health.
- Increase awareness of benefits at community and household levels to seek early diagnosis and treatment of common eye health problems and refer them.

Training methods

- Brainstorming
- Group work/ discussion
- Small group work/ discussion
- Pair discussion
- Mini lecture
- Presentation
- card sorting
- Demonstration
- "Agree" or "disagree" exercise
- Illustration
- Case study
- Role play

Training materials and equipment

Training materials

- NCD, emergency care, and mental health blended learning module for Urban Health Extension Program (UHEP).
- National comprehensive guideline for clinical and programmatic management of major NCDs.
- UHEP Integrated Refresher Training (IRT) facilitator guide.
- UHEPIRT participant guide.

- UHEP implementation manual(revised).

Training Equipments:

- LCD projector (Optional)
- Flip charts,
- Markers,
- Laptop computer,
- Plaster,
- Colored paper,
- WHO cardiovascular risk assessment charts,
- Video
- Video tape.

Participant selection criteria: Those who work on the UHEP with position of UHE-ps and UHEP supervisors/coordinator

Module assessment: Assessment of the module (pre-test, post-test, and practical and continuous assessments) should be based on attainment of the learning outcomes with reference to the performance criteria indicated in the course objectives.

Time allocated: 4 days

Optimum class size

- Participants: 25–30 trainees per class
- Trainer: two trainers per class and with environmental health background and who have taken TOT

Module outline

Time in minutes	Unit and sessions	Training methods
80	*pre-test and introduction to the module*	
140	Unit 1. Introduction to NCD	
30	Session 1.Basics of NCDs	Mini lecture, brain storming
110	Session 2. NCD risk factors and healthy lifestyle	Group discussion, Demonstration, role play
420	Unit 2. Major NCDs	
300	Session 1. Hypertension	brain storming, group work, demo, card sorting, role play, mini- lecture
120	Session 2. Diabetes mellitus	brain storming, group work, demo, role play, mini- lecture, pair discussion
210	Unit 3: Cancer	
50	Session 1: Introduction	brain storming, mini- lecture
30	Session 2: Risk factors for cancer	Group discussion
100	Session 3: Breast cancer	brain storming, demo, mini- lecture, illustration
30	Session 4. Palliative care for patients who have advanced cancer	Discussion, mini- lecture
350	Unit 4. Mental Health	
170	Session 1. Common mental illnesses and risk factors	Group discussion, group work, mini-lecture
180	Session 2.The role of UHE-ps in prevention, control, referral, and follow-up of mental illness,	Role play, Agree or disagree exercise
360	Unit 5: Eye health	
60	Session 1. Introduction to eye health	Plenary discussion, group discussion
120	Session 2. Cataracts	Group work, role play
90	Session 3. Glaucoma	Group work, role play
90	Session 4. Refractive error	Brain storming, case study
60	Post test and closing	

Module Schedule

Day and Time			Activity
Day 1	Morning	8:30 am – 9:50am	pre-test and introduction to the module
		9:50 am– 10:20 am	Unit 1: Introduction to NCD; Session1. Basics of NCD
		10: 20 am – 10:45 am	Tea break
		10:45 am – 12:35 am	Session 2: NCD risk factors and healthy life style
		12: 35 pm – 1:30 Pm	Lunch
	Afternoon	1:30pm- 4:00pm	Unit 2: Major NCDs Session 1; hypertension
		4:30 pm – 5:15 pm	Hypertension continues
		5:15 pm- 5:30 pm	Day 1 evaluation
Day 2	Morning	8: 00 am- 8:30am	Day 1 recap and brief discussion on the assignment
		8: 30 am- 10:15am	Hypertension continues
		10:15am- 10:30 am	Tea break
		10.30 am – 12:30 pm	Session 2: Diabetes mellitus
	Afternoon	12: 30 pm – 1.30 pm	Lunch
		1:30 pm – 2:20 pm	Unit 3: Cancer Session 1; introduction
		2:20 pm – 2:50 pm	Session 2; risk factors for cancer
		2:50 pm – 4:30 pm	Session 3; breast cancer
		4:30 pm – 4:45 pm	Tea break
		4:45 pm – 5:15 pm	Session 3. Breast cancer
		5:15 pm- 5:30 pm	Day 2: evaluation
Day 3	Morning	8: 15 am- 8:45am	Day 1 recap and brief discussion on the assignment
		8:45am- 9:15am	Session 4: Palliative care for patients who have advanced cancer
		9:15am – 10:00 am	Unit 4: mental Health Session 1; Common mental illnesses and risk factors
		10:00 am –10:15am	Tea break
		10.15 am –12:25pm	Common mental illnesses and risk factors continues
		12:25pm- 1:30pm	Lunch
	Afternoon	1:30pm –4:30pm	Session 2;The role of UHE-p in prevention, control, referral, and follow-up of mental illness
		4:30 pm – 4:45 pm	Tea break

Day and Time			Activity
		4:45 pm – 5:15 pm	Unit 4: Eye health Session 1: introduction
		5:15 pm- 5:30 pm	Day 3: evaluation
		8.00 am – 8:30 am	Day 1 recap and brief discussion on the assignment
		8:30 am – 9:00 am	Session 1: introduction continues
		9:00 am – 10:30 am	Session 2; cataract
		10:30 am – 10: 45am	Tea break
	Morning	10: 45 am – 11:15 am	Session 2; cataract continues
Day 4		11:15 am – 12:.45 pm	Session 3. Glaucoma
		12:45 pm – 2: 00pm	Lunch
		2:00 pm – 3:30 pm	Session 4; refractive error
	Afternoon	03:30 pm – 03:45 pm	Tea break
		3:45 pm –5:00 pm	Post-test and conclusion

Module Units:

Unit 1. Introduction to NCDs

- **Session 1. Basics of NCDs**
- **Session 2. NCD risk factors and healthy life style**

Unit 2. Major NCDs

- **Session 1.Hypertension**
- **Session 2.Diabetes mellitus**

Unit 3. Cancer

- **Session 1.Introduction**
- **Session 2.Risk factors for cancer**
- **Session 3.Breast cancer**
- **Session 4.Palliative care for patients who have advanced cancer**

Unit 4. Mental Health

- **Session 1.Common mental illness and risk factors**
- **Session 2.The role of UHE-p in prevention, control, referral, and follow up of mental illness**

Unit 5. Eye Health

- **Session 1.Introduction to eye health**
- **Session 2.Cataracts**
- **Session 3.Glaucoma**
- **Session 4.Refractive error**

References

Climate setting and Pre-test, (40 min)

Before starting the training sessions your facilitator provides you a pre- test. while working on your pre-test, follow the instruction of your facilitator carefully.

At the end of the day, your facilitator may provide you the "take-home -assignments and you need to work on the assignments.

UNIT 1. INTRODUCTION TO NCDs

Unit description: This unit is developed to enhance trainees` competency to help them understand the common features and interventions of NCDs and how to promote healthy life style

Unit objective: To provide the participant with the knowledge, attitude and skills needed to explain common NCDs , assess related risks and promote positive life styles.

Unit specific objectives: By the end of this training unit, participants will be able to:

- Describe common NCDs and their public health importance.
- Demonstrate improved skills how to assess NCD related risks and promote healthy lifestyle

Time 140 min

Session 1. Basics of NCD

Session objective: By end of the sub sessions, the participant will be able to describe common NCDs and their public health importance.

Time: 30 minutes

Enabling objective 1: Recognize the magnitude of NCDs

Training method: <Mini lecture (5 minutes)

Your facilitator will present information on the magnitude of NCDs globally and nationally to help you understand the significance of the problem. Then s/he will make a presentation on the burden of NCDs. you may need to take note while your facilitator presents the magnitude of the diseases

Note: Cardiovascular diseases, diabetes, obstructive lung disease and cancers are the leading causes of ill health and death worldwide, accounting for more than 60% of all deaths. Mental illnesses are 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. Globally, uncorrected refractive errors are the main cause of moderate and severe visual impairment. Cataracts are the leading cause of blindness in middle- and low-income countries.

Enabling objective 2: Define NCDs

Training method: Brainstorm (10 minutes)

Your facilitator will ask you to define NCD. you need to share your idea (what you know) about NCD . Next, he/she will define non-communicable diseases using a PowerPoint Presentation.

Enabling objective 3: List common NCDs of public health importance

Training methods: Brainstorm (10 minutes) and mini lecture(5 minutes)

Your facilitator will ask you to list the most common NCDs in Ethiopia. Accordingly you need to name

the most common NCDs in your areas. Then the facilitator will make a brief presentation on the common NCDs and their health impact in the country.

Note: Cardiovascular diseases, diabetes, obstructive lung disease, and cancers are increasing globally. Mental health conditions are also responsible for high levels of mortality and disability. According to WHO estimates, 285 million people were visually impaired worldwide in 2014.

Assignment sheet: Introduction to NCD

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator.

1. Describe the magnitude of non-communicable diseases globally, in low- and middle- income countries, and in Ethiopia.
2. Define non-communicable diseases.
3. List non-communicable diseases of public health importance in Ethiopia.

Session 2. NCD risk factors and healthy life style

Session objective: By end of this training session, the participants will be able to correctly explain the common risk factors related to NCDs, exhibit improved skills on how to assess NCDs and promote healthy lifestyles.

Time: 110 minutes

Enabling objective 1: Describe the common preventable risk factors for NCDs.

Training method: Group discussion (10 minutes)

Your facilitator will initiate an interactive discussion on risk factors of major NCDs by asking what the common risk factors for all NCDs are. you need to effectively participate in the discussion.

Enabling objective 2: Demonstrate skills of NCDs risk assessment

Training methods: Group discussion (10 minutes), demonstration (10 minutes), and guided practice (10 minutes)

- The facilitator will divide you (the participants) into groups of 3-4 and ask each group to discuss following questions:
  - How do you define screening?
  - What is the importance of assessing risk factors?
  - What do you look for when you are doing a risk factor assessment?

After the group discussions, your facilitator will provide you with the definition of screening and the importance of assessing risk factors. Next, he/she may distribute handouts having the definition of screening and its importance. you need to demonstrate the risk assessment procedures using WHO Risk Assessment checklist.

Demonstration and practice

Your facilitator will distribute the WHO Risk Assessment checklist, explain its contents and demonstrate its use. Then, in small groups, you will perform risk factors assessments on each other. Finally, your facilitator will ask some of the couples to demonstrate for the larger group. The other groups will give

feedback on what have been demonstrated

Note:

Screening refers to the implementation of a simple diagnostic test to determine whether an individual has a given condition or not.

Risk factors assessment must be administered to all clients during home visits, whether they have specific complaints related to NCDs or other conditions.

Risk factors assessment includes anthropometric measurements, diet and nutrition, level of physical activity, smoking status, and alcohol intake.

Enabling objective 3: Identify and discuss messages to promote healthy lifestyles.

Training method: Group discussion (20 minutes)

Your facilitator will ask you the following questions :

- What are the key areas and general strategies to promote good nutrition and dietary practices?
- What are the benefits of physical activity?
- What are the harmful effects of tobacco use/smoking across population groups and the benefits of smoking cessation?

He /she will facilitate the discussions on the above questions by recording the reflections on a flipchart. you are required to reflect on the above- mentioned questions and your facilitator will also assist discussion on messages that promote good nutrition and dietary practices; benefits of physical activity; harmful effects of tobacco use; and benefits of smoke-free environments and alcohol avoidance. see the following messages.

Note:

Message 1: Promote good nutrition and dietary practices

There are three main ways to mitigate NCD-related nutrition problems.

- Aim for ideal body weight.
- Build healthy nutrition-related practices.
- Choose foods wisely.

Low salt, low fat, and increased fiber in the diet decrease risk of developing NCDs.

Message 2: Physical activity

Regular physical activity promotes physical and psychosocial well-being. It improves the body's function and reduces the severity of other factors that may increase risk for heart disease, such as obesity, hypertension, and high blood levels of sugar, cholesterol, and uric acid.

The minimum recommended amount of physical activity needed to achieve health benefits is 30 minutes per day of moderate intensity activity for 5 days or more days a week. When doing vigorous intensity activity, 3 or more days a week reaps health benefits.

Physical activity prescriptions for every age group and chronic condition ensure that an activity is safe and fits the need and interest of the individual.

Message 3: Harmful effects of tobacco use and promoting smoke-free environments

UHE-ps have a significant role in promoting a smoke-free environment and smoking cessation. Simple interventions include:

- ASKING about smoking.
- ADVISING smokers to quit.
- ASSISTING by providing information and referrals to smoking cessation programs.
- ARRANGING follow-up to prevent relapse.

Message 4: Health risks and social consequences of alcohol consumption

Health risks and social consequences associated with alcohol drinking include its toxic, intoxicating, and dependence-creating properties. Excessive alcohol drinking is also associated with an increased risk of injuries—including traffic—and has been shown to lead to development of chronic diseases.

Enabling objective 4: Exhibit enhanced skills in risk modification and promoting healthy lifestyle

Training method: Role play (40 minutes)

The facilitator will divide you into small groups. Each group will select an individuals who pretend the role of a client, a UHE-p, and an observer. You will practice promoting healthy life styles using the messages provided above. The facilitator may ask your group to present your role play to the plenary (large group).

Assignment sheet: Healthy lifestyle promotion

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator.

1. What are the benefits of risk factor assessment for major NCDs?
2. Briefly describe screening.
3. Mention the areas for risk factors assessment.
4. What information should be collected while performing a smoking status risk assessment?
5. Describe the focus areas of nutritional assessment.
6. What information should be collected when conducting physical activity assessment?
7. What information should be collected in assessing alcohol intake?

UNIT 2. MAJOR NCDs (Hypertension and Diabetes mellitus)

Unit Description: This unit is developed to enhance trainees` competency which help them understand the basics of major NCDs (hypertension and diabetes) and how to mitigate problems related to these diseases

Unit objective: Provide the participant with the knowledge, attitude, and skills to screen, counsel, refer and follow up major NCDs at household, youth center, and school levels.

Unit specific objective: By the end of this training unit, participants will be able to:

- create awareness on the risk factors for hypertension, screen and identify cases for hypertension, and facilitate appropriate referral and follow-up for suspect cases.
- be aware of the risk factors of diabetes, and be able to screen and identify diabetes mellitus and facilitate appropriate referral and follow-up of diabetes cases.

Session 1.Hypertension

Session objective: After completing this session, the participant will be able to create awareness on the risk factors for hypertension, screen and identify cases for hypertension, and facilitate appropriate referral and follow-up for suspect cases.

Time: 300 min

Enabling objective1: Define and classify hypertension.

Training method: Brainstorm (20 min).

Your facilitator will ask you to write the definition of hypertension on a piece of paper. S/he will clarify any confusion by explaining the definition and simple classification of hypertension.

Note: **Cardiovascular disease (CVD) or heart disease** is any disease or condition that affects or damages the heart or blood vessels.

Hypertension or high blood pressure is when the top number (systolic pressure) in a blood pressure reading is equal to or greater than 140 mm Hg, and the bottom number (diastolic pressure) is equal to or greater than 90 mm Hg. Moreover, the adult BP is:

- **Normal** if readings are less than 120 mmHg systolic pressure and less than 80 mmHg diastolic pressure.
- **Pre- hypertension** if readings are 120–139 mmHg systolic pressure and 80–89 mmHg diastolic pressure.
- **Hypertension** if readings are 140 or higher mmHg systolic pressure and 90 or higher mmHg diastolic pressure.

Hypertension (high blood pressure) is one of the most common cardiovascular conditions in our country. Persistent high blood pressure is one of the risk factors of stroke and heart attack.The latter conditions and rheumatic heart disease are the other common CVDs of public health importance in Ethiopia.

Enabling objective 2: Identify the common causes/risk factors for hypertension.

Training method: Group work followed by plenary discussion (40 minutes)

Your facilitator will divide you into small groups and provide you with the following questions to discuss on. He/ she facilitate the smooth discussion

- What are the risk factors for hypertension?
- Why do we need to look for such risk factors?
- Suppose the above case was a real person. How would you assess and identify those factors?
- How would you prevent or mitigate those risk factors?

When you have finished responding to the questions the facilitator may conclude the activity by recapping the discussion and providing a handout on hypertension risk factors and their prevention.

Note: Four shared behavioral risk factors are responsible for most cardiovascular diseases: These are;

- unhealthy diet (e.g., high salt, fat, and sugar intake);
- physical inactivity leading to obesity;
- alcohol use;
- and tobacco use/ smoking.

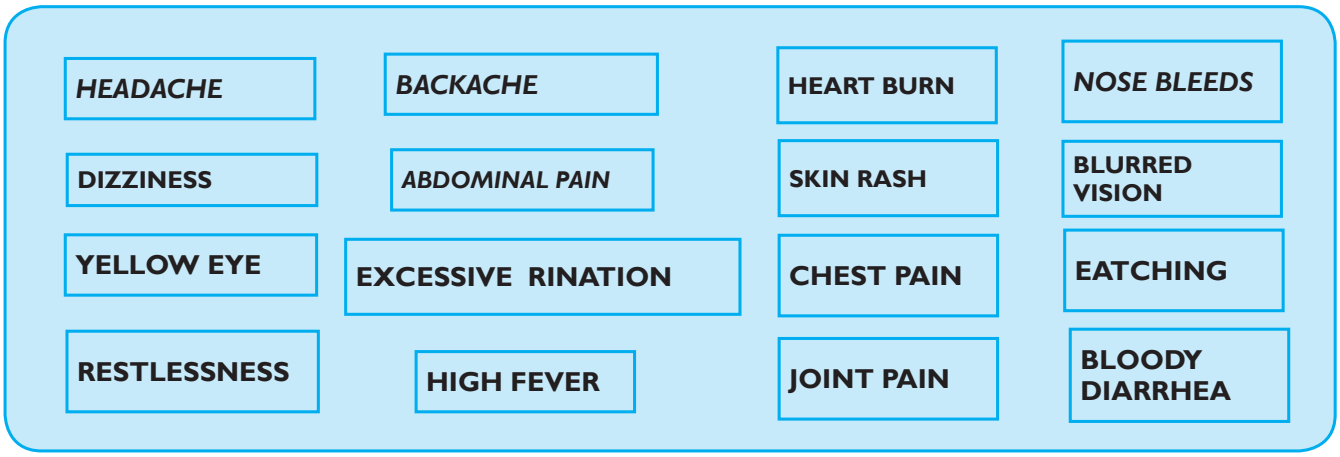
Prevention measures for hypertension include;

- encouraging people to stop over-eating and to stop/reduce salt, sugar, fatty food especially animal fat, hardened fat, cheese, and whole milk intake;
- stop smoking cigarettes;
- reduce alcohol intake;
- exercise regularly;
- control weight and body mass index;

Enabling objective 3: Identify the common signs and symptoms of hypertension**.**

Training method: Brain storming and card sorting (50 min).

Your facilitator will: (a) ask you to list signs and symptoms of hypertension, (b) fix the following cards on a wall and he will give you cards that have signs and symptoms of hypertension and other conditions written on them. Your role is to identify whether the written sign or symptom on your card is a sign/ symptom of hypertension, which you will do by posting each card undersigns on the wall that say 'Hypertension' and ;Not Hypertension' accordingly.



The facilitator will ask the observers if the cards are correctly placed or not.
You need to respond to the following questions as well.

- Why do you need to know those symptoms?
- How do you detect these symptoms?
- Suppose your client developed these symptoms. What would be your course of action?

Enabling objective 4: Screen, identify, and refer hypertension patients.

Training methods: case study (30 min), demonstration and guided practice (40 min)

Case studies

You will be divided into groups and be assigned one of the two case studies. After you have read and understood your case study, your facilitator will ask your group to discuss on the following questions and finally to present your group work to the larger group.

Case study 1

A client called the UHE-p and asked for assistance because he had severe occipital headache, dizziness, and blurred vision. It has been almost ten years since he started taking anti- hypertension drugs.

Case study 2

A young man came to UHE-p office to get his blood pressure checked. When he arrived, he was sweating and breathing fast.

- What is going on in your case study?
- What do you need to ask the client? Why?
- What do you need to do and how will you do it?

After each presentation, the facilitator may ask following questions:

Presenters:

- Why did you need to do such exercises?

- How did you accomplish the necessary activities (observe, ask, do, decide)?
- Which activity was less successful? Why?
- As a UHE-p, how can you improve?
- How are the four steps connected? If you miss the first step (what you need to observe and why), how will the other steps be affected?

Audience:

- What the presenters did well? What did they do less well?
- If you were the presenter what would you have done differently?
- How did they address " ASK" in their exercise?

Demonstration and guided practice

This activity will help you to have an improved skill on how to screen for hypertension by measuring blood pressure (BP).

Your facilitator will divide you into groups of three people. Each group will get BP apparatus and a stethoscope. Two of you act as a UHE-p and one as a client.

Both UHEPs will measure the BP of the clients. Once you are done with measurement, your facilitator will ask you to demonstrate on how to measure BP to the plenary, and the observers will provide you feedback accordingly.

During the plenary, if you are not demonstrating, watch and take notes because you will be asked to give feedback later on.

***Note*: Steps on how to take a blood pressure manually**

1. Ask the patients to sit up straight with their arms stretched forward. The patient's palms should face up, and the arm in which their blood pressure will be taken should be slightly bent. The upper arm should be level with the heart, and the feet should remain flat on the floor during the process.

2. Make sure that the patient is relaxed and calm before proceeding.

3. Turn the sphygmomanometer's air release valve clockwise to close. Ask patient to roll up his/her sleeve before slipping on the blood pressure cuff. Make sure that the cuff is snug around the patient's upper arm. The bottom ½ inch of the cuff should rest directly above the patient's elbow. Straighten the rubber tubing connected to the cuff before proceeding.

4. Find the patient's pulse by pressing the middle and index finger against the inside crease of the patient's elbow (on cuffed arm). Put stethoscope ear pieces in (your ears) and the bell on the patient's arm directly below the blood pressure cuff. Place the chest piece over the brachial artery to get a strong pulse reading.

5. Pump the rubber bulb until no sound comes through the stethoscope. Continue to inflate the cuff by squeezing and releasing the bulb in a rapid motion.

6. Release the air valve by turning it counterclockwise. The pressure in the cuff will release at a rate of 2–3 millimeters per second.

7. The patient's systolic and diastolic pressure will be taken. The sounds heard through the earpieces will resemble a slight tapping sound. Monitor the reading on the gauge for the patient's systolic pressure. This

is the first number needed for a blood pressure reading. Next, wait until the faint sound in the earpiece stops. Check the gauge to get the patients diastolic blood pressure reading.

8. Take the patient's blood pressure once or twice again for accuracy. Wait at least 5 minutes between readings so that blood flow returns to arm.

Enabling objective 5: Describe the prevention, control, and treatment modalities of hypertension.

Training method: Mini lecture (30 min)

Your facilitator will give you tips on the prevention, control, and treatment of hypertension using power point presentation or flipchart show

Enabling objective 6:Counsel patients on treatment compliance and adherence

Training method: Role-play (80 min).

You will be divided in to 4 small groups. your facilitator may ask you to create your own scenario based on your past experiences. As well as he/she will explain the purpose of the role play and how to use'5As' to while counselling your clients :

One person will act as an UHE-p and another will act as a hypertensive patient on treatment. The rest will be observers and will take notes using the checklist below to provide feedback following the role play.

Note: **The '5 As 'for treatment adherence**

Assess

- Review the medication with the patient and ask:

– Many people have trouble taking their medications. Are you having any?

– When and how do you take each pill?

– It is sometimes difficult to take the pills every day and on time.

– When is it most difficult for you to take the pills? How many have you missed in the last three days?

- Ask about/consider factors that may interfere with adherence.

– Patient may not trust the health care worker, or have communication difficulties. Try to find out why, and see if there are misunderstandings.

– Literacy barriers? Try using colors and pictures or symbols.

– Mental illness, especially depression or alcohol abuse. Refer or counsel to reduce or stop alcohol.

– Patient may not understand the disease and the treatment. Repeat the basic information using visual aids.

– Advice from traditional healers or religious teachings may make the patient unwilling or afraid to accept instructions from a modern health care worker.

– Unstable living conditions, poor social support.

– Difficult access to health facility.

– Barriers associated with side-effects. Refer.

- If poor adherence, determine what the problem is.

Advise

- Reinforce the information on hypertension and the importance of adherence to treatment.
- Give additional information that may help with adherence problem. Dispel any misconceptions the patient may have.

Agree

- Agree on solutions to adherence problems (if present).
- Discuss agreements and request patient's commitment.

Assist

- Provide adherence support. Discuss past adherence barriers and develop strategies to overcome them in the future.
- Reinforce interventions that match the patient's needs and adherence challenges, if present:

– Remind patient to bring medication with them if they travel.

– Advise setting a small supply of drugs aside (in car, at work, at a relative's) in case of emergency.

- Make sure the patient has:

– Plans to link taking medications with daily events such as meals.

– Devices (phone alarms/reminders) and peer/family/friend to support adherence.

Arrange

- Schedule another home visit.

Assignment sheet: Hypertension (take-home assignment)

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator.

1. How do you define CVDs and hypertension?
2. What are the behavioral risk factors responsible for most cardiovascular diseases?
3. What are the most common symptoms of hypertension?
4. What healthy lifestyle choices help reduce blood pressure and cardiovascular risk?

Session 2. Diabetes mellitus

Session Objective: After completing this session, participants will be aware of the risk factors of diabetes, and be able to screen and identify diabetes mellitus and facilitate appropriate referral and follow-up of diabetes cases.

Time: 120 minutes

Enabling objective 1: Classify diabetes mellitus

Training method: Group work (10 min)

Based on your facilitator`s instruction, discuss classification of diabetes with the person next to you. Write your responses on you note books and be ready to talk about important learning points from this session.

Note: There are several types of diabetes, but types 1 and 2 are the most common. Worldwide, about 90% of people with diabetes have type 2 and about 10% have type 1. Gestational diabetes accounts for very small numbers of cases.

Enabling objective 2: Identify common risk factors of diabetes

Training method: Role play (30 min)

You will be divided into small groups. One person will play a client, one UHE-p, and the rest observers. you need to create your own case study for the role play. The purpose of the role play is to learn how to identify the risk factors for diabetes mellitus. After you rehearse, the facilitator will invite you to present your plays to the plenary . Next to each presentations, there would be self assessment exercises and peer feedback sessions based on the following questions

Questions for the UHE-p

- How did you communicate with your client? What did you do well and what was your challenges?
- What did you want to achieve, and were you able to achieve it?
- While interacting with your client, how did you manage to demonstrate your enabling attitudes?
- Were you able to apply your diabetes understanding and screening skills affectively?
- Were you able to help your client overcome his/her worries?
- If you were given a chance to do this exercise again, what if anything would you do differently?

Questions for the client

- Did the UHE-p help you understand your situation? How did you feel about your health after you have had discussion with the UHE-p? Did the UHE-P give you advise on how you might improve your health?
- If you had played the role of UHE-p, what, if anything would you have done differently?

Questions for the observers

- What did the UHE-p do well in this interaction? Did s/he display enabling attitudes? Did the UHE-p help the client understand the situation/health problem and offer possible solutions?
- If you had played the UHE-p role, what, if anything would you have done differently, and why?

In conclusion, ask the person who played the role of the UHE-p:

- What part of the feedback was helpful? Would you use it to improve your performance if you had another chance?

Enabling objective 3: Identify the common signs and symptoms of diabetes mellitus.

Training method: Pair discussion (10 min)

Your facilitator may ask you to list the main sign and symptom of DM

Note: A person who has untreated diabetes is likely to complain of feeling thirsty all the time, drinking a lot of water and passing large amounts of urine, and/or weight loss. Some patients describe a feeling of emptiness in the stomach, wanting to eat frequently, and tiredness.

People who have diabetes may report episodes of feeling faint, dizzy, or even losing consciousness. This can happen if the blood glucose levels fall too low to support normal brain function.

Enabling objective 4: Screen, detect, and refer diabetes cases.

Training methods: Demonstrations, small group exercise, case study.

BMI chart demo (10minutes)

The purpose of this activity is to teach you to calculate and interpret body mass index (BMI) to screen for diabetes mellitus and refer clients accordingly.

Your facilitator will demonstrate how to calculate BMI and use the BMI chart. Then you will be asked to calculate BMI based on the information given below by using the formula: BMI = weight (kg)/[height (m)]^2

category	Chane	Gebru	Dana	Yeshi
Wt (Kg)	93.20	93.20	93.20	50.00
Ht (m)	1.52	1.75	1.88	1.75
BMI				

Note: while using the BMI chart, you find the weight of the patient along the top of the table and the height along the left hand side. The BMI of the patient is at the point in the table where they meet. Classify him/her whether or not they are underweight, healthy weight, overweight, obese, or extremely obese, according to color (see the BMI chart below)

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

Wt (Kg)	45.5	47.5	50.0	52.3	54.5	57.0	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5
Ht (m)																							
1.52	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26
1.93	12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25

underweight (BMI <18.5) Healthy weight (BMI 18.5-24.9)

over weight (BMI 25.0-29.9) obese (BMI 30.0-39.9) extremely obese (BMI 40 or above)

Body Mass Index (BMI) Chart (Source: The Open University, 2006, *living with Diabetes, Figure 4.9)*

You will be divided in to 4 groups and work on the following cases. Then, your facilitator will ask you to answer the corresponding questions

Case study 1:

Ato Chane, 38, comes to your office to get condoms. You see that he is obese and you worry that he is at risk of diabetes. You talk about the risks of being obese and he allows you to measure him. He weighs 93 kg and is 1.53m in height.

Questions:

- What is Chane's BMI?
- What does his BMI result mean? How do you explain it to him?
- As a UHE-p, what will you do help to Ato Chane?

Case study 2:

WeizeroYeshi,32, worries about getting diabetes mellitus. Although she exercises on occasion, she is gaining weight. Weizero Yeshi expresses her worry to Sister Zemenay when she visits Yeshi's home. Zemenay tells Yeshi to come to her office in three days. At the appointment, Zemany takes anthropometric measurement and findsYeshi's weight is 50 kg and height is 1.75m.

Questions

- What is Yeshi's BMI?
- What does her BMI result mean? How do you explain it to her?
- If you were Sister Zemenay, how would you help WeizeroYeshi?

In conclusion, discuss the following questions when asked:

- What did you learn from these cases?
- What interventions would you plan for these cases and how would you implement them?
- If you use BMI to assess risk for diabetes in your catchment population, which groups should you exclude? Why?
- Which groups of people in your community are most at risk for diabetes? Why?

Step 3

Glucometer and urine dipstick (40 min) demo.

Your facilitator will demonstrate for you first how to measure blood glucose using a dipstick. Then some of you will be asked to redemonstrate the procedure . each of you will be given the following steps

Steps for glucometer use:

1. Obtain a glucometer and test strips.

2. Read the materials and directions that come with your meter.
3. Determine where you insert your test strip and where the readout will be.
4. Test the glucometer before using it:

Most glucometers include a way to test to make sure they are reading correctly. This could be in the form of a premade test strip or a liquid you place on a test strip. These are inserted into the machine and the reading should be within acceptable limits.

5. Wash the area from which you are going to draw blood.
6. Place alcohol on a cotton ball.
7. Place a test strip into the slot provided on the glucometer.
8. Swab the area you are going to use to draw your sample from with the cotton ball.
9. Wait for the readout on the diabetic glucometer to tell you to put the drop of blood on the strip.

   The readout may actually say "place sample on strip," or it may give you a symbol, such as an icon that looks like a droplet of liquid.

10. Use the lancet provided with the diabetic glucose meter and prick the area for the sample.
11. Place a drop of blood on the test strip.
12. Wait for results.

The meter will begin to count down in seconds once the sample hits the strip and the meter detects it. For newer meters it will be 5 seconds, older meters could be 10–30 seconds. The meter will sound a tone, or beep, when it has a reading for you.

13. Read and record your results. Some diabetic glucose meters will store the readings for you in their onboard memory. With others, you will have to write your results down. Make sure you note the day, time and the reading.

Follow these steps to test urine glucose:

1. Explain how to store the test strips: Protect the strips from moisture and excessive heat and light but do not refrigerate. Replace the top on the storage container immediately after removing a strip.
2. Completely immerse the reagent area of the strip in fresh urine for 1–2 seconds and remove.
3. Gently tap the edge of the strip against the side of the urine container to remove excess urine.
4. Compare the test area closely with a colour chart exactly 30 seconds after dipping the strip in the urine. Hold the strip close to the color chart and match carefully.

The results are expressed as either negative or varying degrees of positive, indicating different amounts of glucose present.

you will be instructed to repeat the procedure.

Enabling objective 5: Describe the prevention, control, and treatment modalities of diabetes mellitus.

Training method: Mini lecture (10 min)

Your facilitator will give you tips on prevention, control, and treatment modalities of diabetes. Please note that this is only an overview: supplement by reading about details on your own.

Note:

The management of diabetes entails: 1) diabetes education; 2) proper nutrition; 3) physical activity; 4) weight control; 5) cessation of smoking; 6) Cessation of alcohol intake, and; 7) adherence to diabetes drugs intake.

People with diabetes and their families need to know that diabetes is serious chronic disease that has no cure, but can be controlled; diabetes complications are preventable; regular medical check-ups are very important.

The cornerstones of diabetic treatment include: 1) individualized education and counseling;2)what foods, how much, and how often to eat; 3)how to exercise and the precautions (a light snack before and after the exercise); 4) how and when to take medications.

Stress the value of physical activity and exercises in the prevention, control, and management of diabetes.

Good nutrition is a key pillar of prevention, control and management of diabetes. Diabetics need to eat a healthy, balanced diet with food components from all the food groups.

Medication and management of diabetes mellitus: People living with type 1 disease need insulin for the management of their diabetes. People living with type 2 diabetes should be mainly managed with oral drugs. Insulin can be used when oral drugs are ineffective.

Adherence to diabetes management is very important in maintaining blood sugar levels and preventing diabetic complications.

Insulin is the mainstay of therapy for patients with type 1 DM and should be promptly initiated as a life-long treatment.

Metformin is the first-line oral anti-diabetic agent in patients with type 2 diabetes who are not controlled by lifestyle management only and who do not have contraindications like renal insufficiency, advanced liver disease, hypoxia or drug intolerance.

Metformin dose: 500 mg, PO daily (after the evening meal); side effects: anorexia, nausea, vomiting, abdominal discomfort and diarrhea; contraindications: Chronic kidney disease (Creatinine >1.5 for males and Creatinine >1.4 for females), advanced hepatic disease, and heavy alcoholism).

Assignment sheet: diabetes mellitus

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator.

UNIT 3. CANCERs

Unit description: This unit is developed using competence based training approach to improve trainees` knowledge, attitude and skill that they need to better understand the prevailing risk factors and some common manifestations of cancers and to be able to screen an individual for suspected cancer and refer him/her to the next level health care facilities for early detection and treatment as well as to make regular follow up visits for diagnosed cases and provide the required palliative care to those with advanced cancer.

Unit objective: equip the participants with enhanced knowledge, attitude, and skills to explain the basics of cancer; screen, counsel and refer clients who have suspected for a cancer and provide regular follow ups and home based care to patients with known cancers.

Unit specific objective: By the end of this training unit, participants will be able to:

- explain what a cancer is and the classification of the cancers
- explain and identify common risk factors for a cancer and accustom themselves to risk-reduction strategies for preventing cancers
- explain about the magnitude and risk factors of breast cancer, identify and refer patients with breast cancer.

Time: 210 min

Session 1. Introduction

Session Objective: By the end of this training session, the participant will be able to explain what a cancer is and the classification of the cancers

Time: 50 minutes

Enabling objective 1: Define cancer and other related terms

Training methods: Brainstorm (15 min) and mini lecture (5 min)

Your facilitator will you to share your thoughts on cancer by telling personal or stories from their communities. you need to respond accordingly

Note: Cancer is the name for diseases that cause the body's cells become abnormal and divide without control. Cancer cells may invade nearby tissues and may spread through the bloodstream and lymphatic system to other parts of the body.

Genes are structures that determine what type of cells will develop, how they function, and how the cells are arranged, nourished, stimulated, and protected in the body.

Tumors can be either 'benign' or 'malignant' and have a dramatic effect on a person's chances of survival.

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.

Malignant tumor is the medical name for a cancer. Some cells in a malignant tumor break away from the original primary mass of cells and spread around the body through the blood stream or lymphatic vessels.

Enabling objective 2: Classify tumors.

Training method: Case studies (25 min)

You will divide yourself in to smaller groups **and be told** to read and analyze the case studies (***Asnakech and Ketema***) individually. When everyone in a group has finished reading, the facilitator will ask the groups to answer the three questions:

1. Do scenarios like this happen in your community?
2. Are the two cases similar or different? How?
3. Which one is cancerous and which one is not?

Case studies

Asnakech, a mother of five, was taking a shower when she realized she had a lump on the right side of the breast. She was scared and immediately went to a health facility. A biopsy was taken to the lab for investigation. She became well after a small surgery.

Ketema, a prominent business man, was always told by his friends that he was healthy because layers of skin were forming at the back of his head and he had pot belly, which his community interpreted as a sign of wealth. Ketema never went to hospital until one day he fell ill with malaria. The doctor was shocked to see the mass on his neck. He was screened for having something abnormal and the doctors said it was too late to reverse the situation. Ketema died shortly thereafter.

Take- home assignment : diabetes mellitus

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator

1. Describe the difference between benign and malignant tumors.
2. Explain the magnitude of different types of cancers

Session 2. Risk factors for cancer

Session Objective: By end of this session, the participants will be able to explain and identify common risk factors for a cancer and accustom themselves to risk-reduction strategies for preventing cancers

Time:30 minutes

Enabling objective 1: Describe the risk factors for cancer.

Training method: Discussion (10 min.)

The facilitator will write the following questions on a flipchart and ask you to discuss them one by one in a plenary:

1. From your experiences as a health professional, what are the common risk factors for an individual or community to develop cancers? why?
2. How does your community describe the cancer and persons who have developed a cancer?
3. How do you differentiate between facts and misconceptions about cancer.

Followed, he/she summarizes the risk factors of cancer using the information below.

Note:

Cancer is a complex group of diseases with many possible causes. Known causes of cancer include but are not limited to the following: genetic factors; lifestyle factors such as tobacco use, diet, and physical

activity; certain types of infections; and environmental exposures to various chemicals and radiation.

A **carcinogen** is a substance or agent that tends to cause cancer.

Genetics and cancer: Some types of cancer run in certain families, but most cancers are not clearly linked to the genes we inherit from our parents.

Tobacco and cancer: Cigarette, cigar, and smokeless tobacco effects people who use them and those around them when they use them. Tobacco has many cancer-inducing substances.

Cancer and alcohol use: Alcohol is a known cause of cancers of the mouth, throat (pharynx), voice box (larynx), esophagus, liver, colon rectum, and breast. Alcohol may also increase the risk of cancer of the pancreas. For each of these cancers, the risk increases with the amount of alcohol consumed.

Unhealthy diet and physical inactivity: Unhealthy diet, physical inactivity, and excess body weight increase risk of cancer.

Sun and UV exposure: There is a link between too much sun exposure and cancer especially, in people who have low levels of melanin in their skin.

Radiation exposure and cancer risk: Certain types of radiation exposure increase cancer risk. For instance, pregnant women should avoid x-rays because fetuses that are exposed to radiation are vulnerable to defects and cancer.

Other carcinogens: The environmental causes of a cancer may be in our homes, at work, in pollution, and even in some medical tests and treatments. Certain infections are linked to cancer.

As discussed earlier, **Cancer** is occurred when the body's cells become abnormal and divide without control. These abnormal changes are caused by interactions between a person's genetic factors and three categories of external agents: physical carcinogens (e.g., ionizing radiation); chemical carcinogens (e.g., asbestos, components of tobacco smoke, aflatoxins); and biological carcinogens (certain viruses, bacteria, or parasites).

Enabling objective 2: Be familiar with the risk-reduction strategies to prevent cancers

Training method: Small group discussion (15 minutes)

you will be divided in to three groups to discuss the following questions:

- Discuss prevention of cancer at the individual, household, and community levels.
- As a UHE-p, what activities can you do at work to prevent cancer?

After you have discussed this, the facilitator will ask one of the groups to present the results of their discussion to the plenary.

Note:

Promotion of healthy diet and physical activity: People can take personal initiatives. Parents can avoid buying junk food and encourage their families to engage in community sports. The community can organize football matches and other athletic events to get community members engaged in physical activities.

Choose foods and drinks in amounts that help you get to and maintain a healthy weight.

- Read food labels to become more aware of portion sizes and calories. Be aware that "low-fat" or

"nonfat" does not necessarily mean "low-calorie."

- Eat smaller portions, especially of high-calorie foods.
- Eat vegetables, whole fruits, legumes such as peas and beans, and other low-calorie healthy foods instead of calorie-dense and nutrition-poor foods such as French fries, potato and other chips, ice cream, donuts, and other sweets.
- Limit intake of sugar-sweetened beverages such as soft drinks, sports drinks, and fruit-flavored drinks.
- When away from home, choose food that is low in calories, fat, and added sugar, and avoid eating large portion sizes.

Limit how much processed meat and red meat you eat.

- Limit intake of processed meats such as bacon, sausage, lunch meats, and hot dogs.
- Choose fish, poultry, or beans instead of red meat (beef, pork, and lamb).
- If you eat red meat, choose lean cuts and eat smaller portions.
- Prepare meat, poultry, and fish by baking, broiling, or poaching rather than frying or charbroiling.

Eat at least 2½ cups of vegetables and fruits each day.

- Include vegetables and fruits at every meal and snack.
- Eat a variety of vegetables and fruits each day.
- Emphasize whole fruits and vegetables; choose 100% juice if you drink vegetable or fruit juices.
- Limit use of creamy sauces, dressings, and dips with fruits and vegetables.

Choose whole grains instead of refined grain products.

- Eat whole-grain breads, pasta, and cereals (such as barley and oats) instead of breads, cereals, and pasta made from refined grains. Eat brown instead of white rice.
- Limit intake of refined carbohydrate foods, including pastries, candy, sugar-sweetened breakfast cereals, and other high-sugar foods.
- Control use of alcohol at individual level by avoiding alcohol, at household level by explaining the dangers of alcohol to youth and children, and at community level by ensuring that local businesses do not sell or serve alcohol to children.
- Control environmental exposure to carcinogens at local government and policy levels.

Take- home ASSIGNMENT: RISK FACTORS FOR CANCER

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator

1. List the risk factors for cancer. Which can be reduced by actions that a person can take for themselves?
2. List cancer risk-reduction strategies.

Session three: Breast Cancer

Session Objective: By the end of this session, the participant will be able to explain about the magnitude and risk factors of breast cancer, identify and refer patients with breast cancer.

Time: 100 minutes

Enabling objective 1: Describe the magnitude of breast cancer and its risk factors.

Training method: Mini lecture and Group work (20 min)

The facilitator will highlight the epidemiology of breast cancer for 5 minutes, then divide you in groups of three or four. He/ she will instruct each group to discuss the risk factors of breast cancer and UHE-ps role for dealing with those risk factors. Finally the facilitator may invite two groups to present their work.

Note:

Causes of breast cancer

The cause of most breast cancer is unknown. Genetic factors are involved in about 2% of cases, and women who are obese and/or eat a high fat diet, or drink a lot of alcohol are more at risk, but there is no clear cause in most cases. However, benign (harmless) lumps in the breast are very common, so you need to reassure women in your community that every change and every lump found in the breasts does not mean they have breast cancer. Only about one in every five women with a breast lump turns out to have cancer. Breasts change with the phases of the menstrual cycle, during which levels of female reproductive hormones (estrogen and progesterone) fluctuate. Sometimes these changes result in temporary lumps in the breast. Some women develop small painless lumps just before their menstrual period, which disappear after a few days. Sometimes a small tender cyst develops (a collection of fluid in the breast), which also disappears after a few days. If a lump felt in the breast remains for two weeks, it is wise to get it checked by a health professional.

Risk factors for breast cancer

The primary risk factors for breast cancer are being female and older age. Other risk factors include: genetics, lack of childbearing or lack of breastfeeding, higher levels of certain hormones, certain dietary patterns, and obesity. The risk factors for breast cancer can be summarized as below:

Modifiable: Lifestyle factors such as drinking alcohol, lack of exercise, Poor diet (especially high fat diets), obesity, smoking, estrogen exposure and radiation

Non-modifiable risk factors: Age- risk increases above 40, race, gender and individual or family history of breast cancer

Smoking tobacco appears to increase the risk of breast cancer, with the greater the amount smoked and the earlier in life that smoking began, the higher the risk. A lack of physical activity has been linked to ~10% of cases. Sitting regularly for prolonged periods is associated with higher mortality from breast cancer.

A number of dietary factors have been linked to the risk of breast cancer. Dietary factors that increase risk include a high fat diet, high alcohol intake, and obesity-related high cholesterol levels.

Other risk factors include bearing children after age 40 or not giving birth at all.

Enabling objective 2: Describe a normal breast and list signs and symptoms of breast cancer.

Training methods: Mini lecture (5 min) and brainstorm (15 minutes)

The facilitator will highlight what the normal breast is and illustrate it using the breast diagram. Then he ask the participants the signs and symptoms of breast cancer. He finally summarize the topic by asking about the experience and role of UHE-ps in detecting symptoms.

Note:

1. The normal breast

The breasts of a woman are made of fat, supportive (connective) tissue, and tissues with glands called lobes. These lobes produce milk. They are connected to the nipple by a network of ducts.

Most women's breasts are slightly different from each other. They change throughout a woman's life and often feel different at different times in the month because of hormonal changes. Just before periods they may feel lumpy. They may feel softer, smaller, and laxer as a woman ages (see figure 1).

Under the skin, an area of breast tissue extends into the armpit (axilla). This is called the tail of the breast. The armpits also contain a collection of lymph nodes, which are part of the lymphatic system. There are also lymph nodes just beside the breastbone and behind the collarbones. These drain the breast tissues and are affected in breast diseases and inflammatory conditions. A network of tiny lymphatic tubes connects the lymph nodes. Lymph flows through the lymphatic system.

2. Symptoms of breast cancer

Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is capable of invading surrounding tissues or metastasizing (spreading) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too.

The immune system normally seeks cancer cells and cells with damaged DNA and destroys them. Breast cancer may be a result of failure of such an effective immune defense and surveillance.

Breast cancer can have a number of symptoms but usually shows as (Figure 3) lump or thickening in the breast tissue; deformity, ulcers, and discharge from the nipple; skin changes; redness and nipple crusting.

Enabling objective 3: Demonstrate screening for breast cancer and self-examination to detect breast cancer as early as possible.

Training methods: Group discussion (15 min), video demonstration (30 min), and illustration (10 min)

Step 1

you will be divided in to four groups. The facilitator will instruct you to discuss methods of detecting breast cancer and the steps of breast self-examination.

Step 2

Next, the facilitator will show you a video on breast self-examination.

Step 3

Finally, he will post the illustrations (Fig 1 and 2) on a wall and invite the participants to get around and see the illustrations. He could explain about the illustrations (normal Vs abnormal and how to do breast self examination), then, instruct you to practice self breast examination in private when you go home

The facilitator concludes the activity by asking - the following questions.

- What new things did you learn from the video and illustrations?

- Why do you need to learn this?
- As a professional, how do you apply your learning to your routine activities?

Note: Advise women in your community to examine their breasts once every week, using the method of breast self- examination illustrated below.

Refer women who find a breast lump to the HC to seek the required further diagnosis and treatment as early as possible

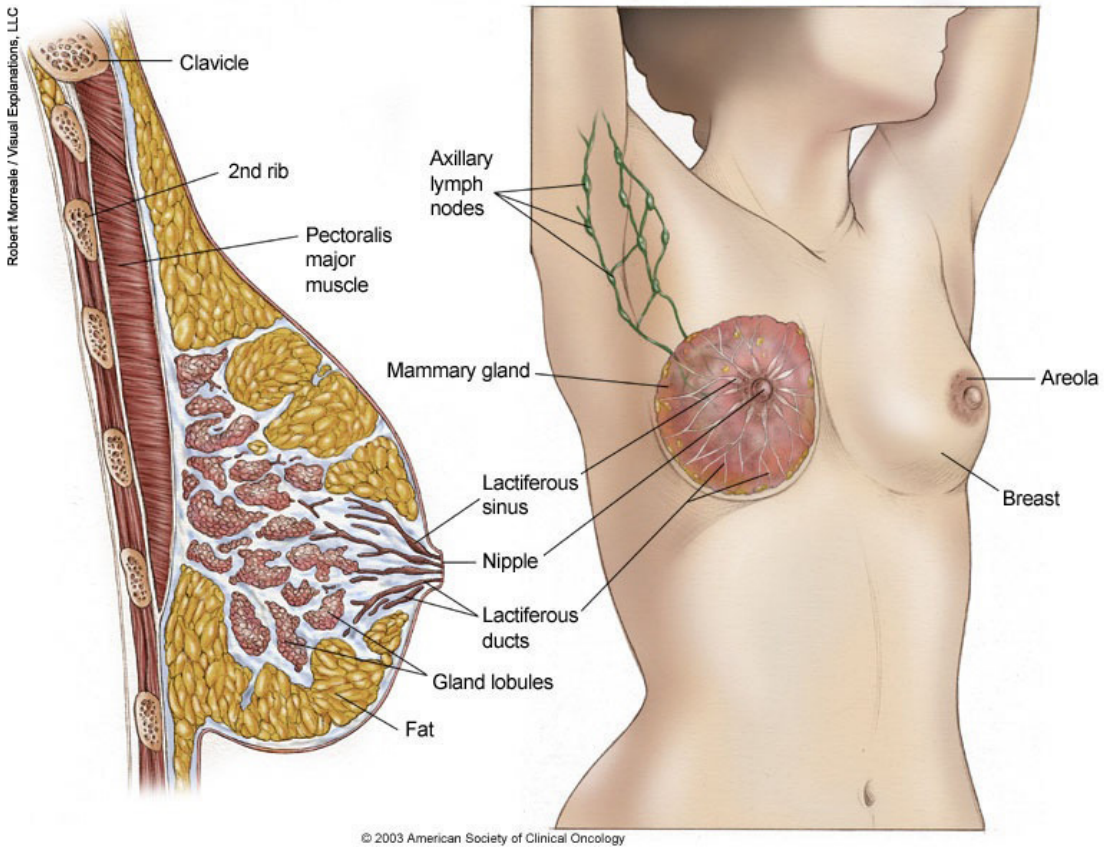


Figure 1: the normal breast

This picture shows the lobes and ducts inside the breast. It also shows the lymph nodes near the breast.

Breast self-examination

Steps in breast self-examination
The following steps relate to the diagrams in Figure 2 and should be conducted in this order.
(a) View the breasts with arms down at your sides. One breast is normally a little larger than the other, but do they appear about the same size and shape? Is the outline of each breast rounded and smooth,or are there any creases or dimples?
(b) Look at your breasts for the same signs as in (a), but this time with your arms raised and your hands holding each other behind your head.
(c) Repeat the visual inspection with your hands on your hips.
(d) Raise your right hand above your head; with all four fingertips of your left hand, gently press the whole of your right breast, moving your fingers to the next area and using small circular movements. Feel for any lumps or thickened tissue. Repeat with the left breast and right hand.
(e)Hold your right nipple between the thumb and first finger of your left hand; gently roll the nipple, feeling for any lumps or tenderness. Repeat with the left breast.
(f)Lie down and stretch your left arm upwards and behind your head. Use small circular pressures with the fingertips of your right hand to examine the whole breast. Repeat with the right breast and left hand.

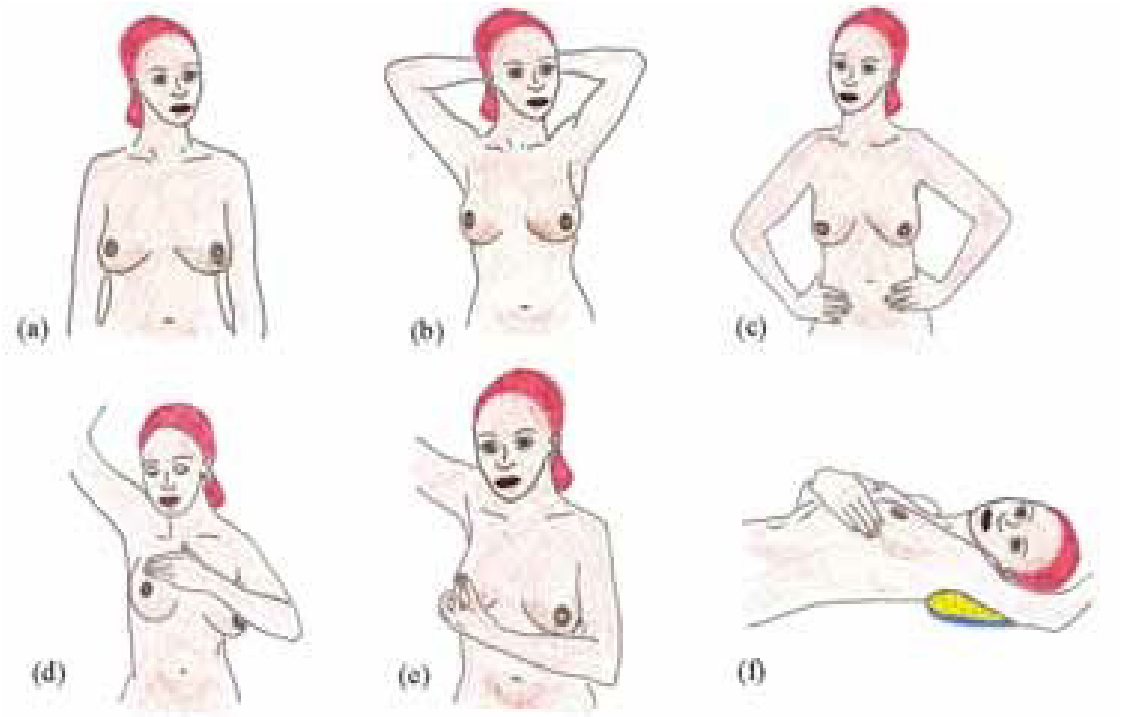


Fig 2 self breast screening

The steps of breast self-examination: steps (a)–(c) are done facing a mirror. Step (f) is done in lying position.

If a woman feels an unusual lump or any palpable mass in the breast, or sees a change in the appearance of the breast, she should go to the nearest health center for further assessment and specialist treatment. These types of changes in the appearance or 'feel' of the breast should alert a woman to seek medical help (Fig 3).

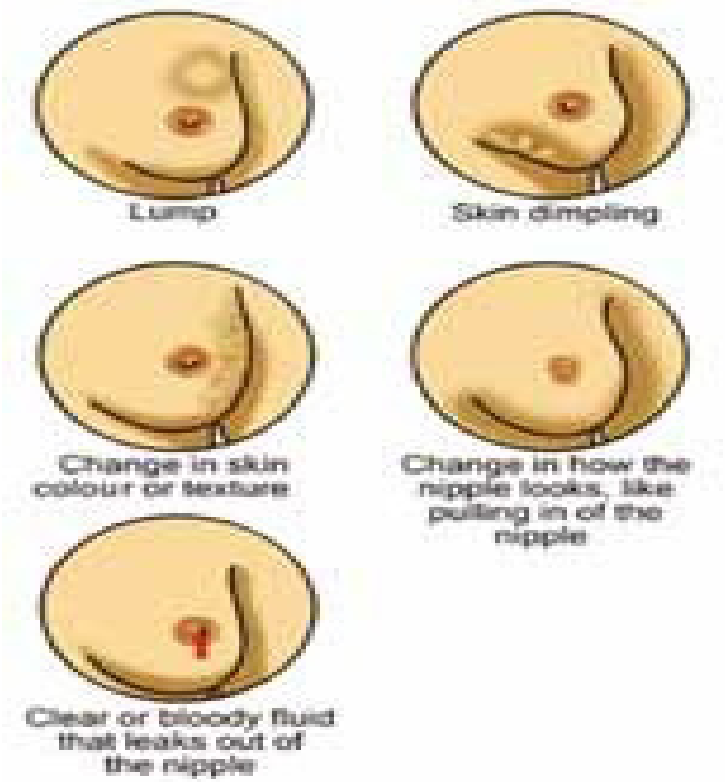


Fig 3 Abnormal breasts

Prevention of breast cancer

Because no one knows exactly what causes it, there are no SURE ways to prevent breast cancer. However, the following illustrations may help to reduce your risk (Figure 4):

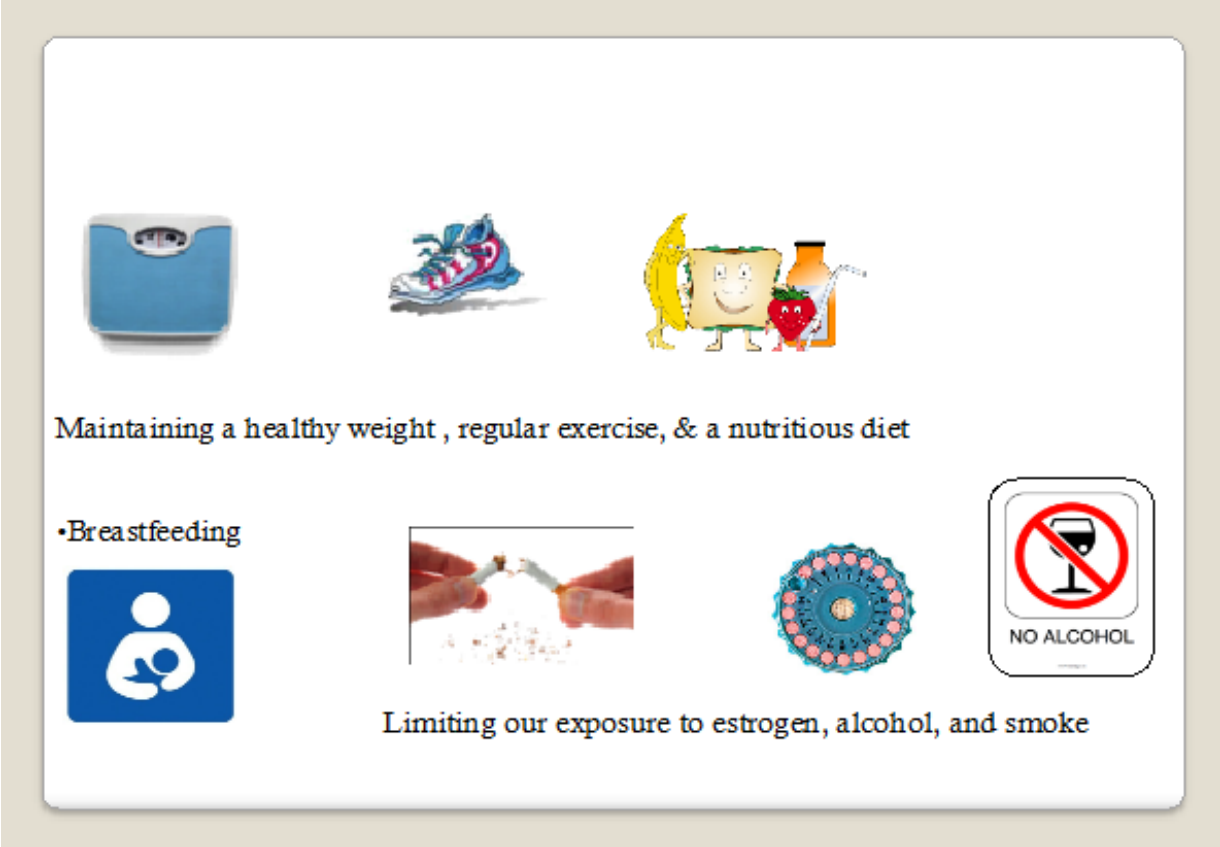


Fig 4: illustrations to prevent breast cancer.

Take- home assignment sheet: Breast cancer

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator

1. What are the risk factors for breast cancer?
2. List methods used to detect breast cancer.

Session 4: Palliative care for patients who have advanced cancer

Session objective: By end of the session, the participants would be able to explain the basics of palliative care

Enabling objective 1 : Define palliative care and its aim (15 min)

Enabling objective 2: describe the main features of palliative care (10 min)

Training methods: Interactive discussion and mini lecture (25 min)

You will be asked to discuss the definition of palliative care, its aim and features in plenary

followed, your facilitator will give you an overview on the definition, aim, and features of palliative care.

Note:

Palliative care is given to a person who has advanced cancer (or any other chronic life-threatening condition).

The aim of palliative care is to improve the quality of life of the sick individual and his/her family in the period before the death, and to help the family cope with the bereavement after the death.

Palliative care involves prevention and relief of suffering, pain, and other physical problems, and attention to psychosocial and spiritual issues. It focuses on helping a person enjoy what remains of his/her and managing symptoms such as pain and nausea. It also helps relatives to cope with overwhelming feelings related to losing a loved one.

Palliative care strives to keep a patient in his/her own home for as long as possible, and to involve people in the community who can comfort the patient and family members.

The facilitator will ask you if there are outstanding questions. He may invite some one from the trainees to summarize the session by recapping the following points:

- The definition of palliative care and its key feature

UNIT 4: MENTAL HEALTH

Unit description: This unit is developed using competence based training approach to help the participants improve their attitude, skill and knowledge in terms of understanding mental health (MH) problems, identifying risk factors and providing referral services for those who have developed mental illness

Unit Objective: equip the participants with improved attitude, skill and knowledge to explain about the features and manifestation of common mental illnesses, identify the associated risk factors and how to prevent the illness at household and community levels.

Unit specific Objectives: By end of the session, the participants will be able to:

- explain about the main features and manifestations of mental illnesses and to identify the common risk factors for developing the illnesses.
- explain about their roles in providing mental health services and be aware of their own attitude whether or not it affects their routine activities while caring for mentally ill patients.

Session 1: Common mental illnesses and the risk factors

Session Objective: By end of the session, the participants will be able to confidently explain about the main features and manifestations of mental illnesses and to identify the common risk factors for developing the illnesses.

Time: 170 minutes

Enabling objective 1: Describe the basic features of common mental illnesses and their signs and symptoms.

Training methods: Group work (30 min) and interactive discussion (40 min)

Your facilitator will ask you to group yourself. He may instruct you to discuss on common mental illness including sign and symptoms. One or two groups will be invited to present their work to the plenary followed by interactive discussions.

Note: The following table shows the major mental illness and their manifestation

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 refers to the intention a lending of one's own life.
Abuse of alcohol and other substances	This refers to excessive use of the substances to the detriment of one's health.
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 long standing 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

Enabling objective 2: Identify the risk factors of common mental illness using the social ecology model.

Training methods: Mini lecture (10 min), group work (80 min).

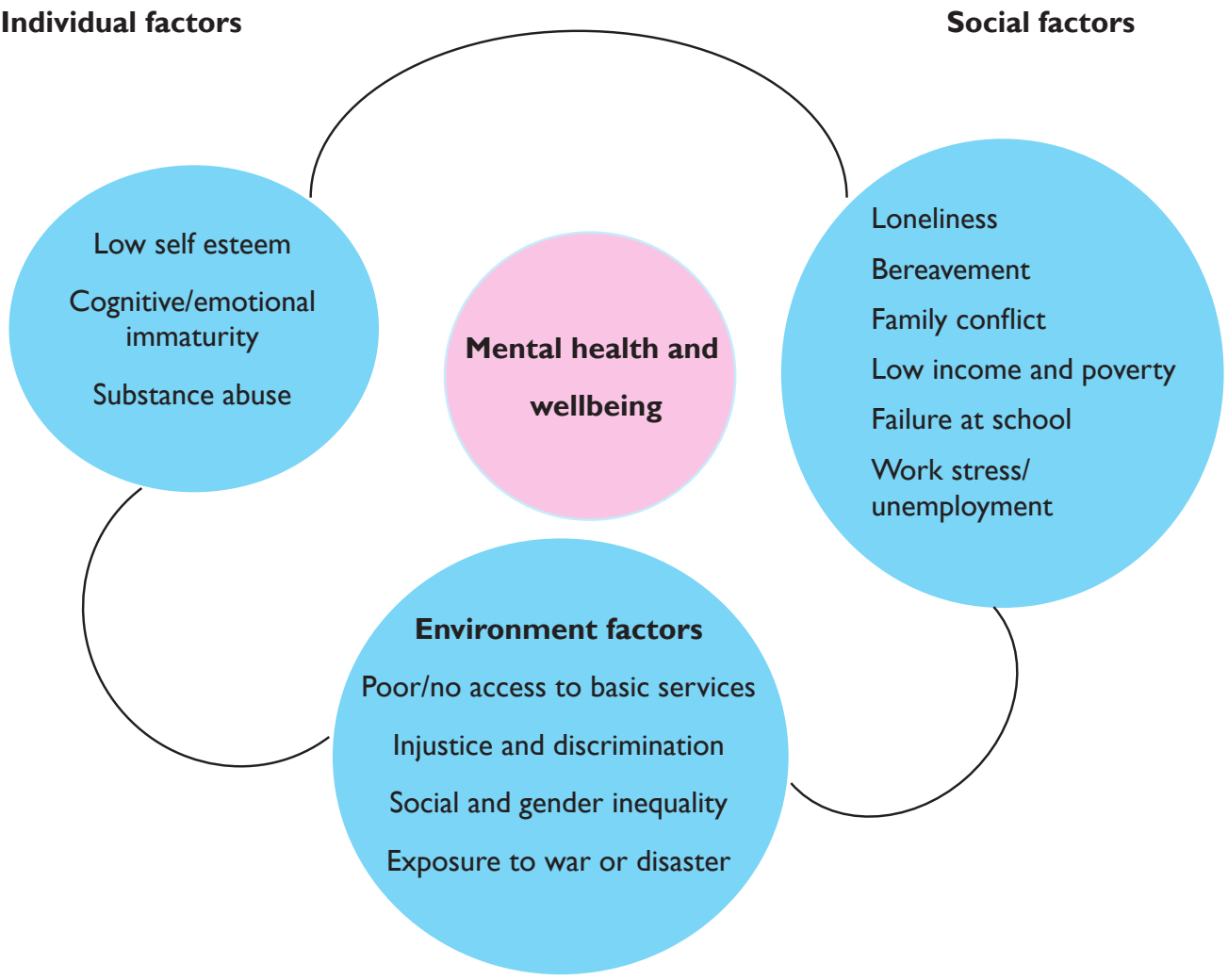
Your facilitator will explain the social ecology model and its importance.

You will be in four groups and discuss the following questions:

- From your experience, which social ecology factors at different levels affect an individual to develop mental illness
- what can you do about those factors?

Two of your groups will be asked to present their work. Based on your presentations, you may be asked more questions.

Note. The Social Ecology Model for Mental Illness



Session 2: The role of UHE-ps in the prevention, control, referral, and follow up of mental illness

Session Objective: By end of the session, the participants will be able to explain about their roles in providing mental health services and be aware of their own attitude whether or not it affects their routine activities while caring for mentally ill patients.

Time: 180 min

Enabling objective 1: Identify their role in preventing and control mental illnesses and referring patients with mental health problems

Training method: Role play (90 min)

The purpose of this activity is to build your capacity to conduct risk assessment for mental health problems at the household level and create awareness of mental illness in the community. you will be asked to perform the role play based on your experiences. One group will focus on risk assessment and the other on creating community awareness. Some group members will make observations using the respective checklist.

After the role play, there will be self assessment and peer feedback sessions

Mental health risk assessment: Role play checklist			
Structure	**Examples of what UHE-p might say**	**Yes**	**No**
Rapport building	Use simple and understandable language; explain the purpose and advantage of this conversation; and explain and assure confidentiality.		
Exploring risks	***Risk of suicide:*** ask about any mental conditions that increases risk of suicide. ***Risk of self-neglect***: ask if the person is eating and drinking enough; proper dressing and protect oneself from dangers (accidents, bad weather, etc.). ***Risk of violence:*** ask about history of violence, what triggers the person, and whether these incidents of violence have been related to use of substances such as alcohol and khat. ***Risk to children and other dependents:*** ask children and other dependents (e.g., elderly or sick people) who live with someone who has a serious mental illness what it's like to live with this person; i.e., are there frequent conflicts, assaults, times when they feel particularly threatened; and if the person is receiving the appropriate treatment. ***Risk of abuse:*** ask if the person is being stigmatized, insulted, or even physically abused because of his/her condition.		
Provision of referral service	Explain objectives and use of referral. Identify and locate appropriate referral point and explain its services. Record information in referral registration book and issue referral slip.		
Conclusion	Schedule and agree on follow up visit		
Cross-cutting issues	Demonstrate use of effective communication skills and enabling attitudes. Use of problem solving skills.		

Awareness-raising dialogue about community mental health: role play checklist			
Structure	**Examples of what the UHE-p might say**	**Yes**	**No**
Introduce the topic	Use simple and understandable language; explain the purpose and advantage of this session; and discuss the common responsibility to prevent mental illness.		
Find out what people know	Is mental illness a problem in your community? What causes of mental illnesses do you know about?		
Explain why mental illness is important	Mental illness is common and causes a lot of suffering. Anybody can be affected by mental illness during his/her life. Mental illness prevents a person from living a full life. People who are mentally ill are more likely to have poor health and shorter life spans.		
Explain the different types of mental illness	Priority mental disorders		
Explain how people can reduce their risk of developing mental illness (primary prevention)	Items of primary prevention		
Explain why it is important to identify people with mental illness (secondary prevention)	Mental illness can be treated in a health facility, just like physical illness. The earlier that treatment is started, the quicker and more fully a person can recover.		
Discuss treatments for mental illness(tertiary prevention)	People with mental illness need to continue their medication, even if they also have traditional treatments. Some traditional remedies, like beating, are harmful. In addition to medication, people who are mentally ill need care and support from people around them. If aperson is properly treated s/he doesn't need to be chained at home.		
Explain the negative effects of stigma, discrimination, and abuse (secondary and tertiary prevention)	Stigma/discrimination exacerbates mental illness and preventspeople from getting treatment and family and social care, and encourages isolation.		
Explain how the community can help (secondary and tertiary prevention)	Encourage people who are mentally ill to go to a health facility and take medication. Befriend a person who has mental illness and include him/herin community life. Support the family of the mentally ill person.		

Enabling objective 2: Understand how their attitude affects their performance and quality of services they are providing to their clients

Training method: Agree/disagree exercise (80 min).

Your facilitator will read attitude statements one by one and ask if you agree or not agree followed by reasoning out "why agree or why not?". You may change your mind after you hear other participants `opinion but you have to explain why you changed your mind.

UNIT 5. EYE HEALTH

Unit description: This unit is developed using competence based training approach to help the trainees improve their knowledge, attitude and skill on how to describe eye health and diseases in general and screen clients for early detection and treatment of common eye problems such as cataract, glaucoma and refractive error.

Unit objective: Equip the participants with enhanced attitude, skill and knowledge to define common eye problems and to screen, counsel and refer clients who have major eye problems.

Unit specific objectives: At the end of this unit, participants will be able to:

- Describe the characteristics of a normal eye, and the magnitude and impact of eye health problems in the country
- List down the causes, sign and symptoms of cataract, identify cataract cases in a household and the community and describe how to prevent and control the disease.
- Identify the types of glaucoma and detect its warning sign before damaging the sight.
- Understand a basic concept of refractive errors and how to take a vision test, screen school children for refractive errors, and refer them to a nearby health facility.

Session 1: Introduction to eye health

Session objective: At the end of the session, participants will be able to describe the characteristics of a normal eye, and the magnitude and impact of eye health problems in the country

Time: 60 minutes

Enabling objective 1: Describe the physical appearance of a normal eye.

Training methods: Plenary discussion and drawing exercise (15 min).

The participants will discuss the characteristics of a normal eye. Your facilitator will give you blank paper and ask you to draw pictures of a healthy and an unhealthy eye and post them on the wall.

The facilitator will then summarize the characteristics and physical appearance of the normal eye and the abnormal eye.

Note; Characteristics of the normal eye include:

- Eyelid opens and closes properly.
- No lumps on lid.
- Lashes do not turn in.
- Colored part of the eye should be smooth and shiny, and have no white marks or broken blood vessels.
- The white of the eye should be white, except for a few visible blood vessels. It should not be red.

Enabling objective 2: Discuss the global and national burden of eye health problems.

Training method: Discussion (15 min)

Under this EO, You will learn about and discuss the magnitude of eye health problem in Ethiopia.

Note: In Ethiopia, according to the 2005/6 National Survey on Blindness, Low Vision, and Trachoma, the prevalence of blindness was 1.6% and low vision 3.7%, which represents one of the highest prevalence rates in the world. This survey showed that the leading causes of blindness in Ethiopia are cataracts(49.9%) and trachoma (11.5%). Other causes included corneal opacity (7.8%);refractive error (7.8%); and glaucoma (5.2%). The major causes of visual impairment are cataract (42.3%);refractive errors (33.4%); and trachoma 7.7%. However, 80% of all visual impairment can be prevented or cured.

Blind people need to be referred to an eye care provider to check if anything can be done to restore their sight. People who are incurably blind need rehabilitation services to help them to live well. They need to be part of the community.

Enabling objective 3: Understand the economic effects of blindness and low vision on the country.

Training methods: Group discussion and blindfold exercise (25 min)

Your facilitator will ask you to form pairs and discuss the socio-economic and psychological effects of blindness. Then you will take turns being blindfolded and navigating your way into the classroom and to your seat. This exercise will help you appreciate the challenges of being blind.

After, you will discuss how you felt and what you learned. The facilitator will summarize by the reviewing various effects blindness and low vision.

Note: Negative effects of blindness/low vision include:

Economic: Unable to meet basics need, absenteeism from work, decreased income.

Social: Decreased school performance, increased accident (e.g., car).

Psychological: Depression, loneliness, anxiety, suicidal thoughts, and dependence.

Assignment sheet: Introduction to eye health

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, read the above- mentioned statements on Eye Health (EO 1,2 and 3) and check your answers with the "notes".

1. List the leading causes of blindness in Ethiopia.
2. Describe the negative effects of blindness and poor vision.

Session 2: Cataracts

Session objective: At the end of the session, participants will be able to List down the causes, sign and symptoms of cataract, identify cataract cases in a household and the community and describe how to prevent and control the disease.

Time: 120 min

Enabling objective 1: Describe the risk factors and clinical manifestation of cataracts

Training methods: Group work and plenary presentations (30 min)

The aim of this activity is to refresh your knowledge on causes and clinical manifestations of cataracts. You will have a large-group discussion about cataracts, then will break into four small groups. Groups 1 and 2 will work on the risk factors for cataract and groups 3 and 4 on clinical manifestations of cataracts.

One group from each topic will present its response to the plenary and ask for feedback.

Your facilitator will summarize by asking you what you have learned from this activity and how it will help you practice differently in the future.

Note:

The major risk factors for cataracts are uncontrolled diabetes mellitus, eye injury, and direct exposure to sunlight, smoke, and fumes.

As an UHE-p, you should consider cataracts when a person comes to you with complaints of changes such as blurred vision, difficulty seeing in bright light, inability to see distant objects or scenes, poor color vision, and difficulty reading. As cataracts progress and the lens become more opaque, the person might say that s/he feels like s/he is looking through cloudy glass. The area of the pupil will appear white or cloudy when the cataract is found at a late stage.

Enabling objective 2: Identify the role of UHE-ps in cataract prevention and control.

Training method: Role play (80 min)

You will break into groups of three or four and rehearse a role play based on one of the case studies below. During the role play, one participant will act as a health professional (UHE-p); the other as a client and the rest as an observer. Your facilitator will ask you to present your play to your audience. As you finish your task , You may be asked to do self assessment and have peer feedback on what has been presented

Case study 1:

Weizero Alemitu is 40 years old. Sister Zemenay, a UHE-p, usually helps her implement health extension program packages. Weizero Alemitu started to complain blurred vision, difficulty seeing in bright light, inability to see distant objects, and difficulty reading. She told Sister Zemenay that she's never had eye health problems.

Case study 2:

Ato Kebede is a diabetic patient Sister Desta's catchment area. Every two weeks, Sister Desta visits AtoKebede's house to counsel him on lifestyle modification. During the previous session, she did not mention his risk of cataracts. This time, she decides to counsel him on the probability of acquiring cataract and ways that he might prevent it.

Take- home assignment on Cataract

Instruction: Use the information from the presentations, notes and discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator

1. What are the causes and types of eye injury?
2. What supportive care will you provide in case of eye injury?

Session 3. Glaucoma

Session Objective: By the end of the session, the participants will be able to identify the types of glaucoma and detect its warning sign before damaging the sight.

Time: 90 minutes

Enabling objective 1: Identify the types of glaucoma and detect its warning sign before damaging the sight

Training method: Group work (30 min)

You will be divided into small groups and discuss about the risks and prevention of glaucoma. Your facilitator may ask you to present your points to the plenary

Enabling objective 2: Describe the role of UHE-ps in preventing glaucoma.

Training method: Role play (50 min)

Your facilitator will tell you to stay in the same group that you have organized in the previous role-play. Each group should read the case study carefully and assign a person to pretend the role of a client; the other one to act as a professional (UHE-p) and the rest to observe. You will be asked to present your task and do the same as before (self assessment and peer feedback)

Case study

Ato Belachew is 45 years of old and lives in Woliso. He had complained of blurred vision and itching in his eye for the last two months. He used traditional medicines to alleviate the pain and blurring, but recently he has complained of difficulty focusing on both distant and near objects. He also developed double vision and excess tearing. Sister Aster, a UHE-p, met Ato Belachew while making home visits, and he told her his complaint. If you were Sister Aster, how would you counsel Ato Belachew?

Note:

Unfortunately, most cases of glaucoma do not occur with readily noticeable symptoms to warn of the irreversible optic nerve damage being done. However, the presence of the following indicates that a person needs a thorough examination by an eye doctor: I.e.; unusual trouble adjusting to dark rooms, difficulty focusing on near or distant objects, squinting or blinking due to unusual sensitivity to light or glare, change in color of iris, red-rimmed, encrusted, or swollen lids, recurrent pain in or around eyes, double vision, dark spot at the center of viewing, lines and edges appear distorted or wavy, excess tearing or "watery eyes", dry eyes with itching or burning, seeing spots and ghost-like images.

The following may indicate serious problems that require emergency medical attention: sudden loss of vision in one eye, sudden hazy or blurred vision, flashes of light or black spots and Halos or rainbows around light.

The symptoms mentioned above may not necessarily mean that you have glaucoma. However, if you experience one or more of these symptoms, contact your eye doctor for a complete exam.

Who is at risk for glaucoma?

High eye pressure alone does not mean that a person has glaucoma, but it is an important risk factor. An ophthalmologist will use it to determine your risk for developing the disease.

Important risk factors include; age, elevated eye pressure, thin cornea, family history of glaucoma, nearsightedness, past injuries to the eyes, steroid use, and a history of severe anemia or shock. Individuals who have diabetes and hypertension may have an increased risk of developing open-angle glaucoma.

Session 4. Refractive error

Session Objective: By the end of this unit, participants will be able to understand a basic concept of refractive errors and how to take a vision test, screen school children for refractive errors, and refer them to a nearby health facility.

Time: 90 minutes

Enabling objectives: By the end of this unit, participants will be able to:

- Understand the basic concept of refractive errors.
- screen school children for refractive error and refer them to a health facility.

Enabling objective 1: Understand the basic concept of refractive errors.

Training methods: Brainstorm (10 minutes) and pair discussion (30 min).

Turn to the person next to you and discuss the following questions and share your response with the plenary

- What is refractive error?
- What is its cause?
- What are its symptoms?

Note: **Major symptoms of refractive error are blurred vision, difficulty reading or seeing, up close, crossing of the eyes in children (exotropia), headache, double vision and cloudy vision.**

Enabling objective 2: Screen and identify school children for refractive error and refer them to a health facility.

Training method: Case study (45 min).

You will be divided into four groups. Groups 1 and 2 will read and discuss case study 1 and groups 3 and 4 case study 2 and then to answer the following questions. Next, you are expected to present your points to the plenary

Questions

1. What screening criteria should Sister Mahlet use to identify Biniyam's problem?
2. What should his teacher and family do to help Biniyam?
3. What do you understand from case study 2?
4. What can Sr Birke do for Almaz`s 9 years old child? why?

Case study 1

Sister Mahlet, a UHE-p, meets Biniyam's teacher while conducting school health programs at an elementary school in her catchment area. The teacher invites Sister Mahlet to her class room to provide personal hygiene education. While delivering the health education session, Sister Mahletsees that Biniyam, age seven, sits in the back of the room and looks very lonely. When she invites him to come to the front, he refuses. After class, the teacher tells Sister Mahlet that Biniyam had been a clever student but then started to withdraw from the class and his school performance has declined.

Case study 2

Wizero Almaz has three children, ages 5, 9, and 12. Her nine-year-old child has unusual headache, blurred vision, and excessive tearing in his eyes. Recently, he's refused to attend school and his performance reduced radically. His interest in playing with friends also decreased significantly. Almaz took him to the nearby clinic and got eye ointment that he applied for seven days, but with no improvement. Almaz met Sister Birke, a UHE-p, and told her about her son's problems.

Note:

Screening refers to the implementation of a simple test that helps determine whether an individual has a given condition. The **primary goal** of screening is to detect a disease in its early stages. Screening is disease-specific. It is the presumptive identification of unrecognized disease or defect by the application of tests or other procedures that can be applied rapidly.

It is not a diagnostic measure but a preliminary step to diagnosis. Diagnostic tests and evaluation by a health professional/physician are needed for definitive diagnosis. Screening can be on an individual or in groups (mass screenings).

Basic questions for UHE-ps to screen people for refractive error:

- Is there a reduction in vision? Which eye?
- When did the symptoms start? How? Sudden or gradual?
- Does the patient use spectacles? (near, far)
- Is there blurring or diplopic (double vision)?
- Is there ocular (eye) pain?
    - Character of pain
    - Time
    - Relation to other symptoms and conditions (near vision, nausea, vomiting, reduction of vision, blurring, etc.)
- Is there any headache?
    - Location(where in head)?
    - Extent of pain

- When does it get worse?
- Is it related to vision?

- Tearing
  - When did it start?
  - Is it constant? When does it stop, if ever?
  - Is it related to redness?
- Discharge
  - Lash matting
  - Color of discharge
  - Green
  - Yellow
  - White
- Photophobia (fear of light)
- Trauma
  - General trauma
  - Direct trauma to the eye
  - Trauma to periocular tissues or the head.
  - Foreign bodies, chemical burns (acid, alkali)
  - Reduction of vision related to the trauma.
- Previous eye disease
  - Eye surgery
  - Systemic disease related to the eye (hypertension, diabetes mellitus)

References

- Non-Communicable Diseases, Emergency Care and Mental Health; Part 1 Chronic diseases and emergencies; Blended Learning Module for the Health Extension Program; Federal Democratic Republic of Ethiopia Ministry of Health.
- Non-Communicable Diseases, Emergency Care and Mental Health; Part 2 Mental illness; Blended Learning Module for the Health Extension Program; Federal Democratic Republic of Ethiopia Ministry of Health.

Post-test, course evaluation, and closing (60 min)

When you have finished the module, your facilitator will summarize the whole module and administer the post-test. You must score at least 70 percent to get your certificate.

APPENDICES

Appendix 1: Pre-/post-test

Code_____

Instructions: Choose the best answer.

1. Which of the following is a false statement according to WHO's 2014 report?
   A. Cardiovascular diseases, diabetes, obstructive lung disease and cancers are on the increase all over the world except in low- and middle-income countries.
   B. Non-communicable diseases are the leading cause of ill-health and death, accounting for more than 60% of all deaths.
   C. Worldwide, 285 million people are estimated to be visually impaired.
   D. Mental health conditions account for 8.8% of the deaths and 16.6% of the total burden of disease in low- and middle income countries.
2. Which of the following is *not* an area for risk factor assessment?
   A. Cigarette smoking
   B. Nutrition/diet
   C. Overweight/obesity
   D. Physical inactivity/sedentary lifestyle
   E. None of the above
3. Which of the following is a normal blood pressure?
   A. Diastolic 70 mmHg
   B. Systolic 140 mmHg
   C. Diastolic 90 mmHg
   D. All are normal
4. Which of the following is *not* a risk factor for hypertension?
   A. Low cholesterol
   B. Diabetes mellitus
   C. Kidney disease
   D. High BMI
   E. All are risk factors
5. Which of the following is *not* a risk factor for diabetes mellitus?
   A. Family history of diabetes
   B. Hypertension
   C. High BMI
   D. Gestational diabetes mellitus

E. All are risk factors

6. Which of the following is *not* among the top five organs in which fatal cancers develop?
   A. Lungs
   B. Stomach
   C. Liver
   D. Breast
   E. Cervical
7. Which of the following is a secondary prevention strategy for cancer?
   A. Health promotion
   B. Early diagnosis and treatment
   C. Prevention of exposure
   D. Prevention of disease
   E. None
8. Which of the following is *not* a **modifiable** risk factor for breast cancer:
   A. Radiation exposure
   B. Estrogen exposure
   C. Smoking
   D. Family history of breast cancer
   E. Obesity
9. Which pair of risk factors for mental illness in the social ecological model is correct?
   A. Loneliness – individual factor
   B. Low self-esteem – individual factor
   C. Poor access to basic services – social factor
   D. Low income and poverty – environmental factor
10. Which is not a correct combination for prevention of mental illness?
   A. Explain how people can reduce their risk of developing mental illness – primary prevention.
   B. Explain why it is important to identify people with mental illness – secondary prevention
   C. Discuss the treatments for mental illness – tertiary prevention
   D. All of the above are correct combinations

Answers to pre-/post-test

1.A, 2.E, 3.A, 4.A, 5.E, 6.E, 7.B, 8.D, 9.B, 10.D

Appendix 2: A check-list for daily evaluation

- **How useful is this training to help you reflect on your current knowledge and experience to identify how you can improve what you do in your work?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you identify how to re-orient your attitudes to better do your job?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you identify and analyse broader social factors that may affect different clients and groups you are meant to reach?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you expand knowledge and identify how to use it with different clients and groups you are meant to train?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you improve your skills to apply CBT approach in providing services to your clients?**

Very useful **useful** **Partially useful** **Not useful**

- **How relevant are the methods in addressing ASK and ELC?**

Very relevant **relevant** **Partially relevant** **Not relevant**

- **other comment** _____
  _____
  _____
  _____
  _____

Appendix 3: A check-list for end-course evaluation

- **How useful is this training to help you reflect on your current knowledge and experience to identify how you can improve what you do in your work?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you identify how to re-orient your attitudes to better do your job?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you identify and analyse broader social factors that may affect different clients and groups you are meant to reach?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you expand knowledge and identify how to use it with different clients and groups you are meant to train?**

Very useful **Useful** **Partially useful** **Not useful**

- **How useful is this training to help you improve your skills to apply CBT approach in providing services to your clients?**

Very useful **useful** **Partially useful** **Not useful**

- **How relevant are the methods in addressing ASK and ELC?**

Very relevant **relevant** **Partially relevant** **Not relevant**

- **other comment** _____
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Non-Communicable Diseases Prevention and Control

• Participants Guide