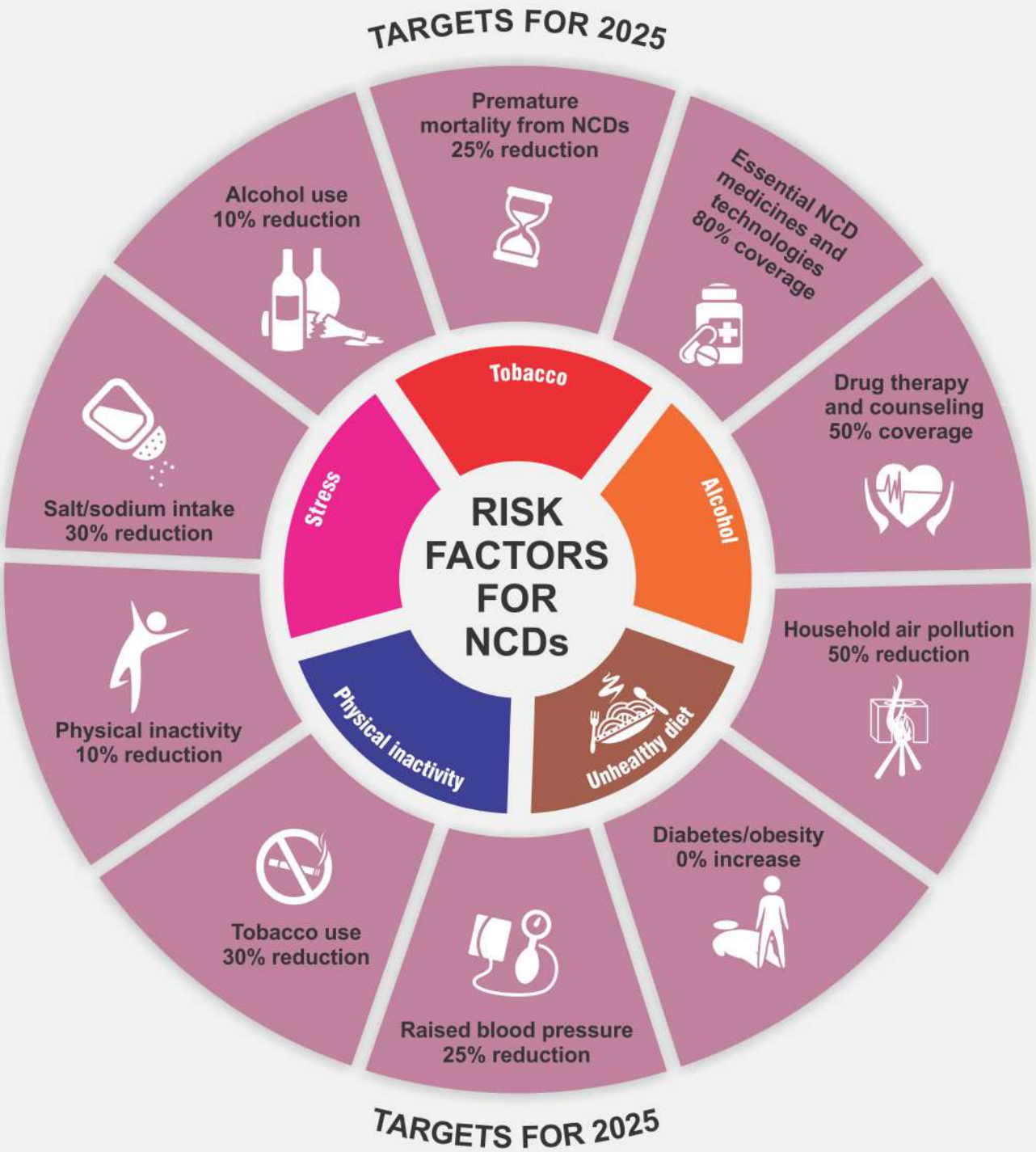
Ministry of Health
& Family Welfare
Government of India

REDUCING RISK FACTORS FOR NONCOMMUNICABLE DISEASES IN PRIMARY CARE



Training Manual for Counselors

REDUCING RISK FACTORS FOR NON COMMUNICABLE DISEASES (NCDs) IN PRIMARY CARE

TRAINING MANUAL FOR COUNSELORS

Developed by the
National Institute of Mental Health and Neuro Sciences, Bangalore
through the
World Health Organization-Government of India
Biennium Workplan
2015

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Foreword

Non-communicable diseases (NCDs) are currently the leading cause of mortality globally and also in India. Cancer, Diabetes, Cardiovascular disease (CVD), Chronic Respiratory Diseases and Common Mental Disorders are major causes of disability and premature mortality. They entail not only adverse health but economic and developmental consequences.

The rising burden of NCDs has generated an overall concern globally to formulate and implement effective strategies for their prevention and control.

In India, a national programme on cancer control was already ongoing for more than three decades. It was decided to integrate this programme with the NCD control programme and the National Programme for prevention and control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) was launched in October 2010. The objectives of this programme include preventing and controlling NCDs through behaviour and life-style changes; providing early diagnosis and management of common NCDs; building capacity at various levels of health care; training human resources adequately and establishing palliative and rehabilitative care. The NPCDCS revised guidelines (2013-2017) seek to create adequate community resources for effective prevention, detection, referral and treatment through convergence/linkage with the ongoing interventions of the National Health Mission (NHM) including programmes such as the National Tobacco Control Programme (NTCP), National Mental Health Programme (NMHP), National Programme for Health Care of the Elderly (NPHCE) for NCDs, programmes that deal with communicable diseases like TB, as well as programmes like the RCH/Adolescent/School Health etc.

Towards this objective, it becomes important to train the health workforce in understanding the risk factors for NCDs in general and the preventable risk factors in particular. This will enable health personnel in the promotion of healthy lifestyles, reduction of risk factors, early identification and intervention, as well as encouraging treatment compliance and follow-up. As reducing many of the risk factors involves behavioural change, health personnel need to be trained to acquire the knowledge and skills to engage clinical and community populations, motivate them to change, initiate and maintain healthy behaviours that will ensure optimal health of the people.

A series of training manuals has thus been developed for different categories of health providers, including counselors, community health workers and medical officers. Various experts have been involved in the development of these manuals. The National Institute of Mental Health and Neuro

Sciences, Bangalore, was given the primary responsibility for developing the manualised training programmes. An expert group meeting held in Bangalore on 6 and 7 February 2014 provided the headstart for the manual development with suggestions on the content, format and delivery of the training. The draft manuals were developed by the NIMHANS team and revised based on the reviews of external experts. These manuals were then field tested and further revised. A second meeting of experts held at New Delhi on August 13, 2014 reviewed the final drafts and provided further suggestions on refinement as well as rolling out.

Optimal behaviour change occurs when persons have the knowledge of risks associated with a particular behaviour, the benefits of changing, the way in which change is possible and supported for such change. Effective counseling can help to motivate persons to change, improve treatment adherence and help them to maintain such changes. We hope health providers will use these training sessions effectively and be agents of change in a community. What they do will have a major impact on reducing the burden from non-communicable diseases in India.

List of Abbreviations

AA – Alcoholics Anonymous
AIIMS – All India Institute of Medical Sciences
ANM - Auxiliary Nurse Midwife
AUDIT - Alcohol Use Disorder Identification Test
BP – Blood pressure
BMI – Body Mass Index
CD - Communicable Diseases
CHW – Community Health Worker
CO – Carbon Dioxide
COPD – Common Obstructive Pulmonary Disease
COTPA – Cigarettes and Other Tobacco Products Act
DALY - Disability Adjusted Life Years
DASH - Dietary Approaches to Stop Hypertension
DM - Diabetes Mellitus
FIT- Frequency Intensity and Timing of exercise
GOI – Government of India
ICMR – Indian Council of Medical Research
LHV - Lady Health Visitor
MO - Medical Officer
NCD - Non Communicable Diseases
NGO – Non government organisation
NHFS - National Family Health Survey
NHM – National Health Mission
NIMHANS - National Institute of Mental Health and Neuro Sciences
NIN – National Institute of Nutrition
NPCDCS – National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
NRT – Nicotine Replacement Therapy
PHC – Primary Health Care
QPE - Quality Physical Education
SHG – Self help groups
SHS – Second hand smoke
TCC – Tobacco Cessation Clinic
WHO – World Health Organization

Introduction to the Training Manual

This training manual is intended as a facilitator's training manual for counselors working in primary care, in order to make them familiar with the behavioural and psychological risk factors for non-communicable diseases and provide them with the skills to identify and reduce these risks, both in the clinical and community settings.

An ideal facilitator for this manualised training would be a professional with a background in health, preferably public or mental health or humanities with a good knowledge of health and health behaviour change. The facilitator would need to have a good understanding of non-communicable diseases and risk factors that mediate these disorders. The facilitator would need to have knowledge of the NCD burden in India. In addition, she or he should be an effective trainer with good communication and motivating skills. A working knowledge of counseling would help the facilitator to teach the NCD counselor/ primary health care counselor skills to bring about and sustain behavioural change among patients as well as the community. Most importantly, the facilitator should be passionate about improving the health and well-being of our communities and convey to the participant counselors that behaviour change is possible and can significantly reduce risk for many of the non-communicable disorders.

It would be desirable to have a co-facilitator who could conduct some of the sessions, answer questions, involve silent participants, distribute the handouts and make the sessions more lively and interactive.

Notes to the Facilitator

The training manual is planned for 5 days and will cover the following areas:

1. Introduction to risk factors and NCDs
2. Counseling practices to address risk factors
3. Tobacco use
4. Alcohol use
5. Unhealthy diet
6. Physical inactivity
7. Stress
8. Teamwork and developing an integrated approach

Each of the 5 risk factors is dealt separately. The training of the Counselors can either be conducted as a continuous 5 day programme or as standalone sessions for each risk factor. Teamwork and developing an integrated approach is the last session describing how health care providers will work together as a team in primary care.

- *A **timetable*** with specific contents and approximate time allocated for each risk factor is given. The facilitator is free to decide how to use this time to plan each session.
- **Format of the training:**

  *1. **Registration and Pre-training assessment.*** The participants should be advised to register themselves at least half an hour prior to starting the training programme on Day 1. The Pre-training assessment can be handed to each participant soon after they register and the filled forms collected prior to Session 1. Further details are provided under the section on pre and post-training assessment.

  *2. **Introduction on Day 1**:* The trainer will open the session on Day I using an ice breaker. The participants will pair off and get to know each other (discuss about what one likes to eat, favourite movies, songs and so on).The aim is to gather information about the person and introduce him/ her to the group. This activity will take about 30 minutes.

Before beginning the introduction session, the facilitator can invite questions regarding the training content and go over the time table.

Instruct participants about:

- Various administrative arrangements for the training (stay, food, travel etc)
- Go over the training schedule
- Distribute files and writing material
- Introduce the facilitator, co-facilitator and other team members conducting the workshop
- Tell the trainees about arrangements for drinking water, location of restrooms and answer questions regarding any other arrangements.

3. ***Opening and Closing session***: Each day will open with a 15 minute session on what was discussed and learnt the previous day. The closing session at the end of the day is to summarize what was discussed. The opening and closing session as an exercise is to link different risk factors and NCDs together as a whole. More about opening and closing session is given at the end of this section.

***4*. Content of each session** (covering risk factors):

- ***Presentation of information****:* The facilitator's style is interactive and generates discussion throughout with the purpose of linking the contents to how the Counselor will actually use it in the field. The slides used in the power point presentation have been linked with the training manual to make it easy for the facilitator. The facilitator kit will include the session-wise training material, the accompanying power-point presentation for each session, and the session handouts to be distributed to the participants.
- ***Format:*** Each risk factor begins with an introduction, broad aim and specific objectives.
- ***Instruction*** given at the beginning of each objective gives the facilitator instructions about how to conduct the session.
- ***Notes to the facilitator*** give instructions about how an activity is to be conducted. It gives simple steps for the facilitator to follow.
- ***Duration:*** Approximate time for the entire presentation of each risk factor (e.g. diet, tobacco etc) and for each activity is given. The trainer can use this timeframe to plan sessions.

- ***Activities**:* Activities during each training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol  ;
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol  ;
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 

- ***Facilitator's reading material**:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

- ***Handouts**:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- ***Annexures** are* at the end of the manual.

- ***Materials for the training*** need to be arranged in advance and they are as follows: LCD projector, writing board and markers or chalk, chart papers and felt pens, drawing pins to display charts, paper and pens for individual work, tables (for group work) and chairs. For the unhealthy diet session, arrange a weighing scale and measuring tape.

- **OPENING AND CLOSING SESSION**

OPENING SESSION (at the beginning of each day)

Duration: 15 minutes

INSTRUCTION

Open the day by inviting participants to share what they learnt from the previous day's program. It is worth taking some time over the opening session as the aim is to link one risk factor to another and so on.

A sample question is provided below.

Prompt question: Could some of you share about what you learnt and understood from the previous day's sessions? For instance, what was the risk factor (s) that was discussed and what action will the Counselor take?

CLOSING SESSION (at the end of each day)

INSTRUCTION

Close the day by inviting participants to share what they learnt from the day's sessions. It is worth taking some time over the closing session and give time to participants to share how they will transfer what they have learnt back to the field. Remember to link one risk factor to another and so on.

A sample question is provided below.

Prompt question: Could some of you share about what you take back from today's sessions? For instance, what was the risk factor (s) that was discussed and what action will the Counselor take?

Training Schedule

TIME 08.30 -9.00	**DAY 1** REGISTRATION AND PRE-ASSESSMENT	**DAY 2**	**DAY 3**	**DAY 4**	**DAY 5**
9.00-10.30	WELCOME AND INTRODUCTION TO THE TRAINING INTRODUCTION TO RISK FACTORS	RECAP TOBACCO USE CONTD.	RECAP ALCOHOL USE CONTD	RECAP PHYSICAL INACTIVITY	RECAP STRESS CONTD.
10.30-11.00	**TEA**	**TEA**	**TEA**	**TEA**	**TEA**
11.00-1.00	COUNSELING PRACTICES IN PRIMARY CARE	TOBACCO USE CONTD.	UNHEALTHY DIET	PHYSICAL INACTIVITY CONTD.	STRESS CONTD.
1.00-1.45	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1.45-3.30	COUNSELING PRACTICES IN PRIMARY CARE CONTD.	ALCOHOL USE	UNHEALTHY DIET CONTD.	PHYSICAL INACTIVITY CONTD.	TEAMWORK AND DEVELOPING AN INTEGRATED APPROACH
3.30-3.45	**TEA**	**TEA**	**TEA**	**TEA**	**TEA**
3.45-4.45	TOBACCO USE	ALCOHOL USE CONTD.	UNHEALTHY DIET CONTD	STRESS	POST TRAINING EVALUATION AND FEEDBACK
4.45-5.00	CLOSING SESSION	CLOSING SESSION	CLOSING SESSION	CLOSING SESSION	CLOSING SESSION

PRE/ POST TRAINING EVALUATION AND FEEDBACK

Instructions to the Facilitator:

- The facilitator will make two sets of the evaluation questionnaire, one for the pre-training evaluation and one for post-training evaluation.
- Pre – training questionnaire will be distributed soon after registration before the session begins (Day1). The facilitator will instruct the participants to tick the appropriate answer to each question. The facilitator/co-facilitator should collect all the response sheets and keep them carefully, as it is necessary to compare this with the post-training evaluation
- On the last day of training, a similar set is distributed (post - training). Participants are asked to fill out the questionnaire which is then collected prior to the valedictory
- An assessment of the change in the responses will be useful for the facilitator to gauge how much the participants learnt from the training.
- In addition to the post-training evaluation, a feedback about the training will also be useful to understand the strengths and weaknesses of the programme and make improvements for further training programmes.
- The Response Key is provided separately to help the facilitator mark the correct responses. Additional information is also provided along with the Response Key as it may help the facilitator discuss and clarify some of the concepts during the training programme.

The Pre-training and Post training evaluation questionnaire, training feedback forms and Response Key are provided as Annexures.

Introduction to Risk Factors for NCDs and their inter-relationship

Session 1

Objectives of the session

By the end of this session, the participants will understand the following:

- Common NCDs and why it is important to prevent NCDs
- The various risk factors for NCDs
- The interrelationship between risk factors
- The power of prevention
- The role of the counsellor in facilitating behavioural change to reduce risk for NCDs

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

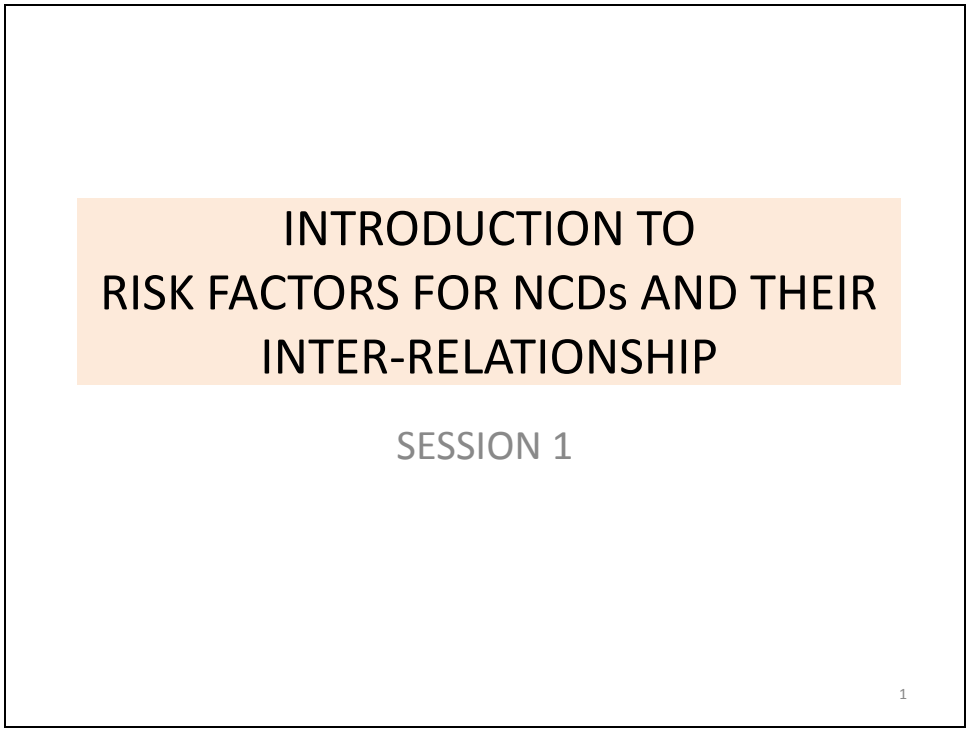
- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Powerpoint presentation:* A DVD containing the powerpoint presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 



INTRODUCTION

In this session, we will try and understand what are NCDs, what are the risk factors for NCDs and reasons why Counselors need to be trained in identifying and carrying out interventions to prevent and address these risk factors.

What are NCDs?

Non communicable diseases (NCDs), also known as chronic diseases, are not passed from person to person. They are of long duration and generally slow progression. They include conditions such as cancer, diabetes, cardiovascular diseases (diseases of the heart and blood vessels and high blood pressure), stroke, chronic respiratory diseases and common mental health disorders (like depression and anxiety).[1]

Why have NCDs become so important?

In 2012, more than two-thirds of the world's 56 million deaths were due to NCDs.[2] In India, it is estimated that 60% of the deaths in 2014 were due to NCDs. These disorders affect both urban and rural populations in their productive (35-64) years. Changing life styles, like the way we live, eat, feel and behave; technological advancements (using gadgets that reduce our physical activity) have increased our risk for NCDs. Once NCDs develop, they become costly to treat, both for the person who has the NCD's and for the health care providers. It is therefore important to prevent them by addressing the risk factors.

[1] World Health Organization. Non Communicable Diseases fact sheet (2013). http://www.who.int/mediacentre/factsheets/fs355/en/

[2] World Health Organization. Global Status Report on Non communicable Diseases. http://www.who.int/nmh/publications/ncd-status-report-2014/en/

What are risk factors for NCDs?

At least five common risk factors have been linked with NCDs. These include tobacco and alcohol use, unhealthy diet, lack of physical activity and stress. There are many other risk factors such as polluted air which can lead to breathing problems, head injury which can lead to fits (epilepsy). Fortunately, all of the risk factors for NCDs are preventable. With training, it is possible to provide counseling to people to modify the risk factors and reduce the occurrence or complications of NCDs.

NCD prevention programme in India

NCD intervention forms an important part of the National Health Mission (NHM). According to the Operational Guidelines, the services in primary care include health promotion, behaviour counseling to reduce risk factors and simple steps to manage the health problem[3]. Health education includes ill effects of tobacco and alcohol use, promoting a healthy diet and adequate physical activity, weight reduction, early diagnosis and screening for NCDs.

Aim of the Counselor's training

The aim of this manual is to orient and train Counselors to learn counseling strategies to address risk factors and promote lifestyle changes among patients in primary care. The role of the Counselor for NCDs services[2] in primary health care facilities is as follows:

1. To provide counseling on lifestyle management and to address risk factors.

2. To assist in follow up care and referral.

The training manual for the Counselor keeps these roles in mind and focuses on how to apply counseling methods for patients with risk factors. The purpose of training is to help them apply the knowledge and skills to the real situation where they work.

Under the NCPDCS, an NCD counselor is provided at the district level and at the CHC level. While this manual is primarily targeted at such counselors, in the absence or inadequacy of such counselors, other suitable health functionaries like nurses may be trained to provide such counseling. Trained counselors from NGOs can also be potential NCD counselors.

Total Duration: 1 hour

Training Objectives

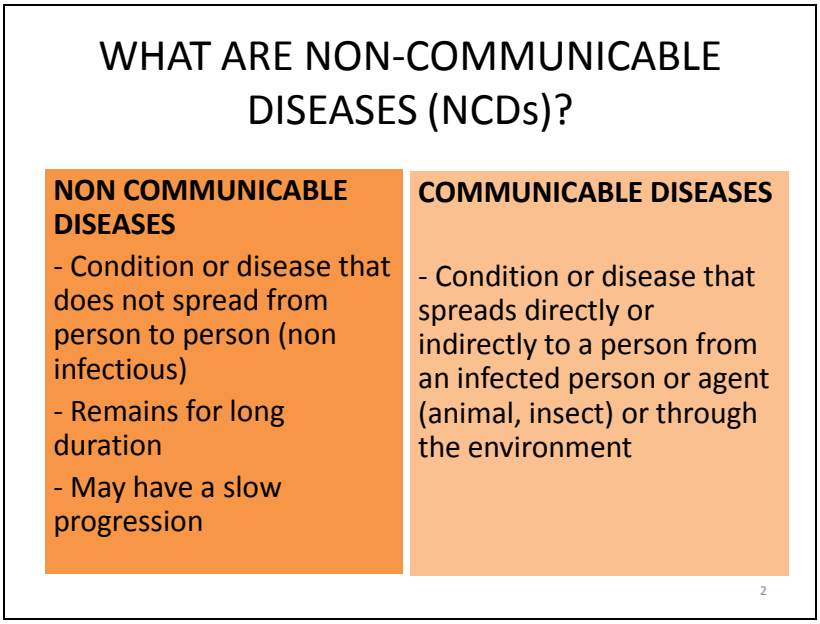
The objectives of this session are to:

- Help the participant understand what are non-communicable disease conditions and how they differ from communicable diseases
- Appreciate the burden of NCDs and the cost of not treating them

[3] Operational Guidelines, NPCDCDS (Revised 2013-17). DGHS, Ministry of Health and Family Welfare, Govt of India 2013.

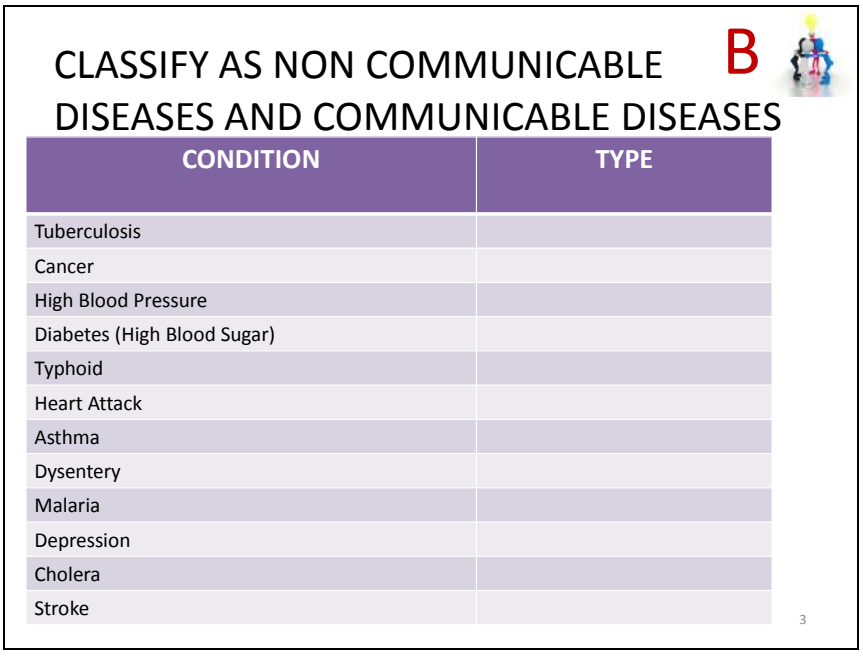
- Know the common risk factors for NCDs and understand that many risk factors are preventable
- Understand that many of the risk factors and NCDs are inter-related and reducing risk for one NCD may also help other NCDs.

Slide 2



Generate discussion and write responses on the board.

Slide 3



Classify conditions as communicable and non communicable disease (NCDs).

Slide 4

NON COMMUNICABLE DISEASES AND COMMUNICABLE DISEASES

CONDITION	TYPE
Tuberculosis	CD
Cancer	NCD
High Blood Pressure	NCD
Diabetes (High Blood Sugar)	NCD
Typhoid	CD
Heart Attack	NCD
Asthma	NCD
Dysentery	CD
Malaria	CD
Depression	NCD
Cholera	CD
Stroke	NCD

4

Common features of NCDs are that they are caused by a variety of factors occurring together; they are prolonged; they cause a lot of problems in a person's functioning and lead to disability.

Slide 5

NON COMMUNICABLE DISEASES

- CANCER
- DIABETES
- CARDIOVASCULAR DISEASES (DISEASES OF THE HEART AND BLOOD VESSELS)
- CHRONIC RESPIRATORY DISEASES
- COMMON MENTAL HEALTH DISORDERS

THERE ARE MANY MORE NCDs

NCDs are the new epidemic

5

In India, while we have been fighting with communicable diseases like tuberculosis and HIV, we find newer health problems in the form of Non Communicable Diseases (NCDs). The country is experiencing a rising burden of Non Communicable Diseases (NCDs) emerging as a leading cause

of death (Registrar of India)[4] and there are risk factors that directly contribute to them. The five main NCDs include cancer, diabetes, cardiovascular diseases (like heart attack and stroke), chronic respiratory disorders and common mental health disorders.

Cancer

Cancer is a disease caused by an uncontrolled division of abnormal cells in a part of the body. It can occur as a growth or tumour, or can occur in blood cells. Lung and oral cancers are the most common cancers in India among men, and breast and cervical cancers the most common among women. Cancers of the head and neck are closely associated with the use of tobacco and alcohol. Common warning signals for cancer include the following:

- Changes in bowel movements
- A sore that does not heal
- Unusual bleeding or discharge
- Thickening or lump in the breast or elsewhere
- Indigestion persistently or difficulty in swallowing
- Obvious changes in a wart or mole (sudden increase in size, discharge, bleeding)
- Nagging cough or hoarseness of voice.

As with the other NCDs, there are many modifiable risk factors for cancer as well.

Diabetes

Diabetes is a condition when the blood sugars remain above normal levels consistently. It occurs when the body cannot make enough insulin or properly use it to break down the sugars that we consume. This leads to sugar build up in the body. Untreated diabetes can lead to heart disease, blindness and kidney disease.

Common symptoms of diabetes include:

- Increased urination
- Increased thirst
- Unexplained weight loss
- Extreme hunger
- Sudden changes in vision
- Tingling or numbness in the hands and feet
- Extreme tiredness
- Slow healing of wounds
- Frequent infections.

However, many people may not show any symptoms, but still have underlying diabetes or be at a risk for diabetes. In India, under the NPCDCS guidelines, opportunistic screening is recommended

[4] NPCDCS: Managing Non Communicable Diseases (2011). http://pib.nic.in/newsite/efeatures.aspx?

for all persons above the age of 30 years. In addition to asking for a clinical history for risk factors, the ANMs and Health Workers are expected to test blood sugar through a glucometer.

Criteria for diagnosing diabetes under the revised NPCDCS Programme

Diagnosis	Fasting Glucose (mg/dl)	2-hour Post-Glucose Load (mg/dl)
Diabetes Mellitus	>=126	>=200
Impaired Glucose Tolerance	< 110	>140 to <200
Impaired Fasting Glucose	>=110 to <126	

**WHO Definition 1999*

Cardiovascular Diseases

These include diseases of the heart and blood vessels. The blood vessels supplying the heart can become thickened and blocked (coronary artery disease). This is the most common reason for heart attacks (myocardial infarction) or chest pain due to heart disease (angina). Chronic heart disease can lead to enlargement of the heart and heart failure. The valves in the heart (which control the flow of blood in the right direction between the four chambers of the heart) can also get diseased. There can also be disturbances in the rhythm of the heart (arrhythmias).

Just as the blood vessels of the heart can be affected, so can the vessels in other parts of the body, including those in the feet. This is called peripheral vascular disease and can be expressed by pain in the legs while walking.

High blood pressure is a risk for many cardiovascular diseases. Keeping blood pressure under control helps to keep the blood vessels and heart healthy. A healthy blood pressure in the average adult is below 120 mm/80mmHg. High levels of cholesterol and triglycerides can also lead to cardiovascular disease.

Stroke

Similarly, when the blood vessels supplying the brain are affected and blood supply is reduced, it can lead to stroke (or 'brain attack'), which can lead to death, paralysis, loss of speech or loss of vision.

Reasons for increasing stroke burden in India are due to increased longevity and changing lifestyles.

Chronic Respiratory Diseases

These are chronic diseases of the airways (wind pipes) and lungs and include asthma, chronic obstructive pulmonary disease, occupational lung diseases and sleep related breathing disorders. Chronic respiratory disorders are estimated to become the third leading cause of death by 2030[5]. Low- and middle-income countries already shoulder much of the burden of COPD with almost 90% of COPD deaths taking place in these countries[6].

Common mental disorders

Statistics suggest that one in four adults is likely to suffer from a mental disorder during their life time. Common mental disorders like depression and anxiety can have a lifelong course of relapse and remission and are associated with significant disability. In India anxiety, depression and somatoform disorders are common mental disorders that are seen in primary health care settings reporting a prevalence of 21 to 42.3%[7].

Depression

This is a condition in which a person will experience low mood, loss of interest or pleasure and tiredness. Sleep and appetite can be disturbed. Inability to concentrate, thoughts of guilt can be present. In extreme cases, suicidal thoughts and acts may be present [8]. For a diagnosis of depression, the symptoms need to be present more or less every day for a month, or at least one of these symptoms must be present most of the time for at least two weeks[9].

Anxiety Disorders

A person with an anxiety disorder presents with symptoms such as a pounding heart, sweating, dry mouth and shaking. The person may also experience difficulty in breathing, feeling of choking, chest pain, uneasy feeling in the stomach, dizziness, feeling of a loss of control, numbness, hot flushes or cold chills, aches and pains, restlessness, irritability, worrying and inability to relax or sleep. For a diagnosis of anxiety disorder, the symptoms should be present for a period of at least six months.

Often, mixed symptoms of anxiety and depression may be seen.

Common mental disorders in addition to being NCDs can be risk factors for other NCDs. For eg. Anxiety can worsen or precipitate attacks of asthma, a person with depression may neglect taking treatment for diabetes.

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[5] World Health Organization. Burden of COPD. http://www.who.int/respiratory/copd/burden/en/

[6] Lopez AD, Shibuya K, Rao C, Mathers CD, Hansell AL, Held LS, et al. Chronic obstructive airway disease: Current burden and future projections. Eur Resp J.2006;27:397–412.

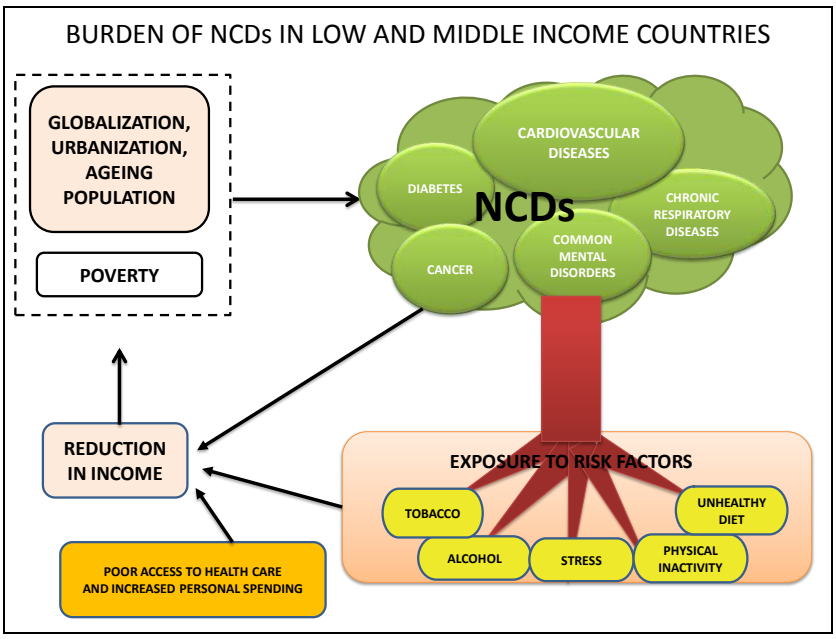
[7] Shankar,B.R, Saravanan,B, Jacob,K.S. (2006). Explanatory models of common mental disorders among traditional healers and their patients in rural South India. International Journal of Social Psychiatry 2006;52:221-33.

[8] Public health action for the prevention of suicide:WHO (2012). Retrieved from apps.who.int/iris/bitstream/10665/75166/1/9789241503570_eng.pdf

[9] The ICD-10 Classification of Mental and Behavioural Disorders. World Health Organization. http://www.who.int/classifications/icd/en/bluebook.pdf

The Burden from NCDs and NCD risk factors

Slide 6



80% of burden from NCDs is faced by low and middle income countries Burden is greater for the poor, vulnerable and disadvantaged people. Diseases are often detected late, personal spending on treatment is high and there is poor access to treatment.

Lakhs of people are pushed into poverty because as patients, they often have to pay for health services and this further worsens their poverty[10]. In low income countries like India, much of the spending is from personal income. NCDs can quickly drain household resources, drive families into poverty and worsen social inequalities. If those who become sick or die are the main earners, families can face hardship to meet expenses on food and education. Many lose their savings and there is reduced care for children's wellbeing. In India, borrowing money and selling of assets was found to be greater among hospitalized patients who are smokers or alcohol users[11]. Families with husbands who drink frequently spend nearly a quarter of their income on alcohol compared to 2% in other families. In households where alcohol consumption is regular there is reduced spending on household necessities, fewer savings and assets are created and there is greater spending on health[12].

[10] Joint Mission of the UN Interagency Task Force on the Prevention and Control of Non Communicable Diseases. India. December 2014. http://www.searo.who.int/india/publications/joint_monitoring_mission_book_2015part1.pdf

[11] Bonu S, Manju R, Peters DH, Jha P, Nguyn SN. Does use of tobacco or alcohol contribute to impoverishment from hospitalization costs in India. Health Policy and Planning , 2005; 20 (1):41-49

[12] Murthy P, Girish N, Maya C, et al. Development of indicators of community related harm from alcohol. Report for WHO SEARO, 2001.

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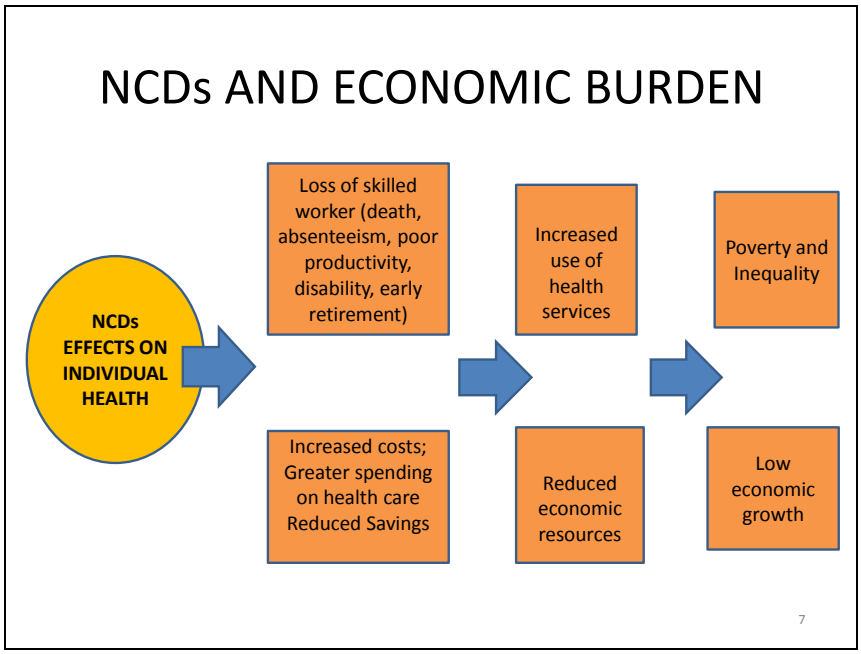
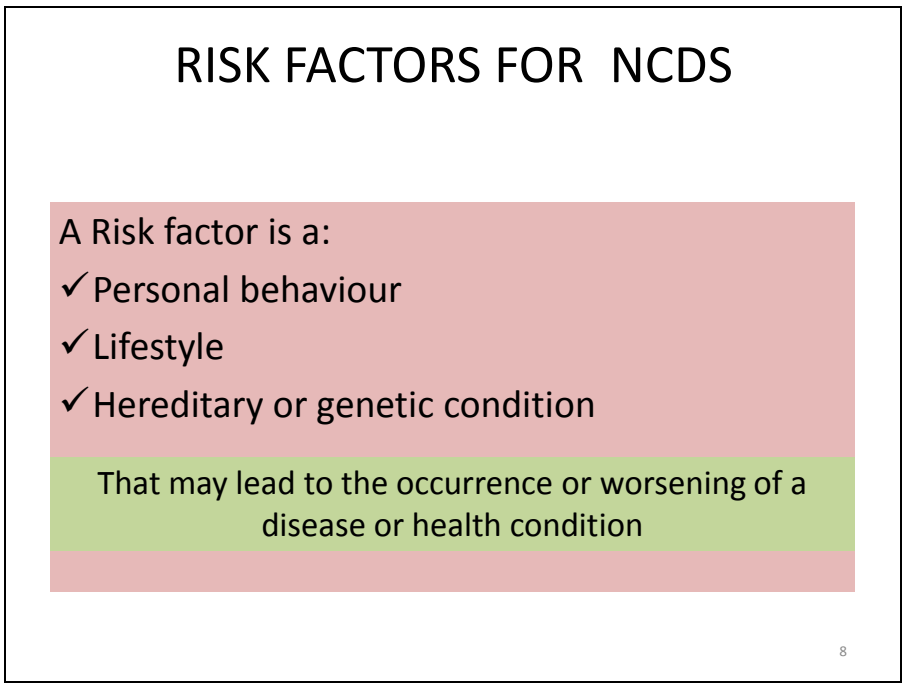


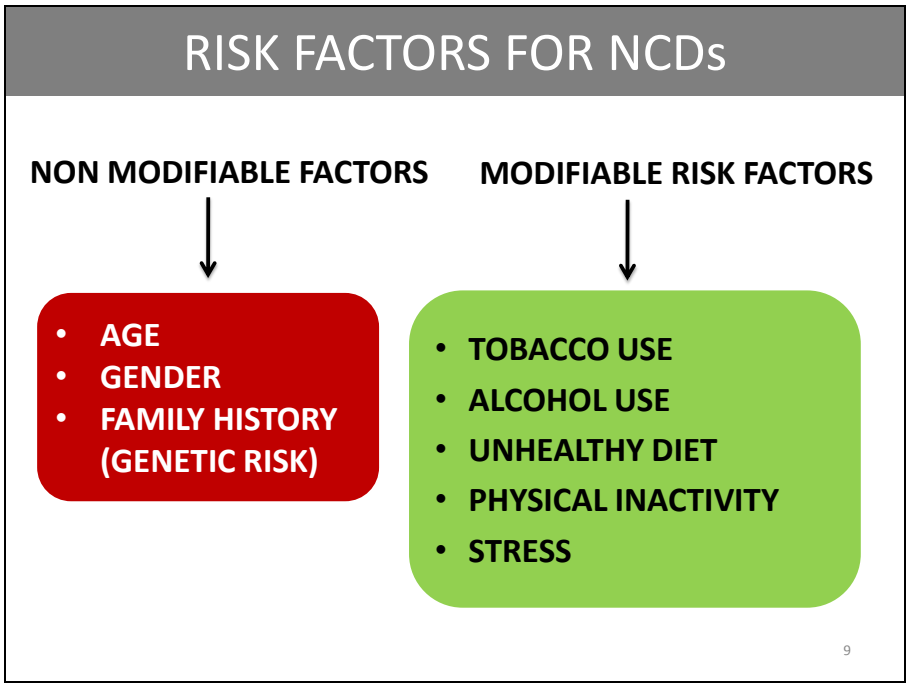
The effects of NCDs are borne by both individuals and society. Just as people should have the right to good health and treatment for NCDs, they have a right to the correct information on how they can follow a healthy lifestyle and reduce their risk for NCDs.

Slide 8



The major NCDs share four common behavioural/psychological risk factors namely tobacco use, alcohol use, unhealthy diet, physical inactivity and stress. All these are preventable through life style changes.

Slide 9



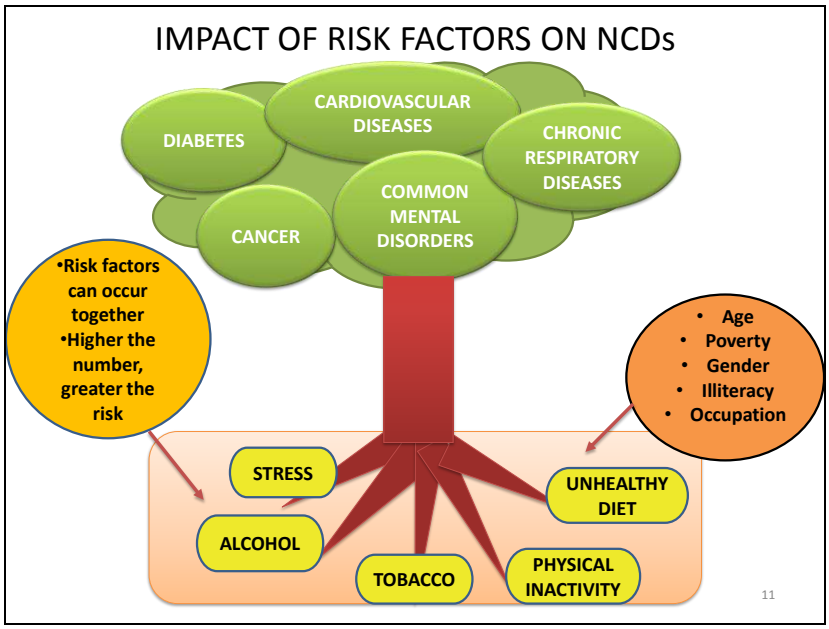
Higher the levels of risk factor in an individual, greater the risk of developing NCDs.

Slide 10

The Counselor can influence change where modifiable risk factors are concerned. The idea here is to point out that while the non-modifiable factors are few, the modifiable factors are larger.

Though NCDs may anyway occur in people who have a biological risk, the point is that reducing the risk factors may prevent the onset or reduce the severity of the problems associated with NCDs.

Slide 11



The diagram illustrates how the risk factors are like roots in a tree and can grow into various Non Communicable Diseases. The more the risk factors, higher is the risk of developing NCDs.

Factors such as education, age of the person, the kind of job a person does, socio economic status and gender all play a role in the risk for NCDs.

Slide 12

DISEASES AND RISK FACTORS

	Stress	Tobacco use	Harmful alcohol use	Unhealthy Diet	Physical Inactivity
Cardiovascular Diseases	√	√	√	√	√
Diabetes	√	√	√	√	√
Cancer	√	√	√	√	√
Chronic Respiratory Diseases	√	√	√		√
Common Mental Disorders	√	√	√	√	√

12

Risk factors for specific NCDs

Risk factors for **cancer** include non-modifiable risk factors such as family history and genetic factors, as well as modifiable risk factors.

Modifiable risk factors for cancer include:

- Tobacco use
- Radiation
- Pesticides
- Asbestos
- Industrial wastes
- Diets low in fibre, consumption of smoked and pickled foods
- Overweight and obesity
- Alcohol use

Risk factors for adult-onset **diabetes** include non modifiable risk factors such as family history, age, gender, race.

Modifiable risk factors for diabetes include:

- Overweight/obesity
- Physical inactivity,
- Unhealthy diet
- Stress
- High blood pressure
- High cholesterol and triglycerides.
- Tobacco use
- Alcohol use

Non-modifiable risk factors for **cardiovascular disease** include family history, age, gender and race.

Modifiable risk factors include

- Physical inactivity
- Unhealthy diet
- Alcohol use
- Overweight and obesity
- Tobacco use
- Stress

Sleep disturbances may also contribute to high blood pressure[13].

The same risk factors also apply to **stroke**. High blood pressure, diabetes, hyperlipidemia, heart rhythm disturbances, smoking, obesity and disease of the blood vessels are some of the modifiable risk factors for stroke.

While non-modifiable risk factors for **chronic respiratory diseases** include age and heredity, there is a long list of modifiable risk factors which include:

- Environmental causes- outdoor and indoor air pollution, exposure to allergens
- Tobacco smoking
- Physical inactivity
- Overweight and obese
- Raised blood pressure
- Raised blood glucose
- High cholesterol and triglycerides

Risk factors can worsen the pulmonary (lung function) and this in turn can lead to chronic respiratory diseases. Stress is well known to worsen conditions like asthma.

Risk factors for **mental illness** include non-modifiable factors such as heredity and age.

There are several modifiable risk factors for mental illness which include:

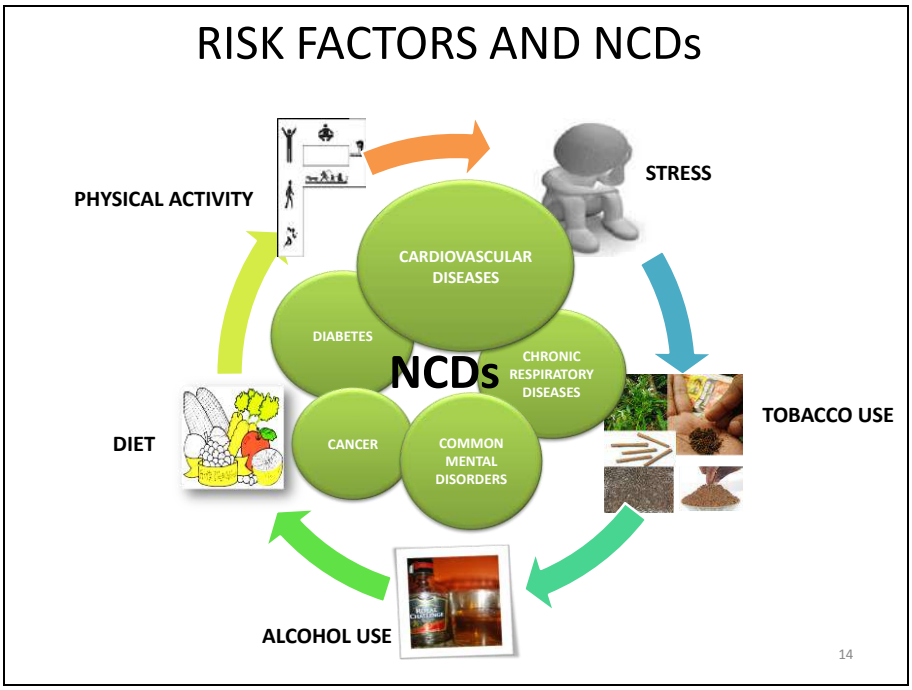
- Stressful life conditions
- Chronic medical conditions
- Abuse and neglect
- Alcohol and drug use
- Traumatic life experiences

[13] American Heart Association. Understanding and managing high blood pressure. http://ksw-gtg.com/hbp/guide/#/1/

Slide 13

Generate discussion and write responses on the board.

Slide 14



The five risk factors lead to NCDs such as, cancer, diabetes, cardiovascular diseases chronic respiratory diseases and common mental health problems (anxiety & depression) and. NCDs are going to become the new epidemic and stress and common mental disorders are known to worsen physical conditions.

Slide 15

THE POWER OF PREVENTION

In the UK, a cycling campaign led to a better physical activity, led to both a positive health impact and a healthier environment as fewer people used motorised vehicles

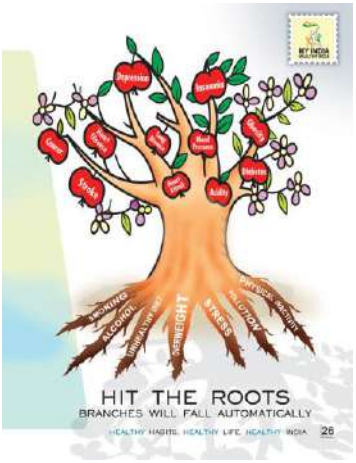
In India, affordable, clean and efficient cook stoves is likely to reduce black carbon emissions and other air pollutants and avoid premature deaths among women and children

Early screening for NCDs is beneficial. In the United Arab Emirates, such a screening programme saw the participation of 28,000 people in the first year. High cholesterol was found in 27% and almost half of whom were unaware of it.

There are initiatives or success stories to address risk factors by different countries.

Slide 16

THE POWER OF PREVENTION



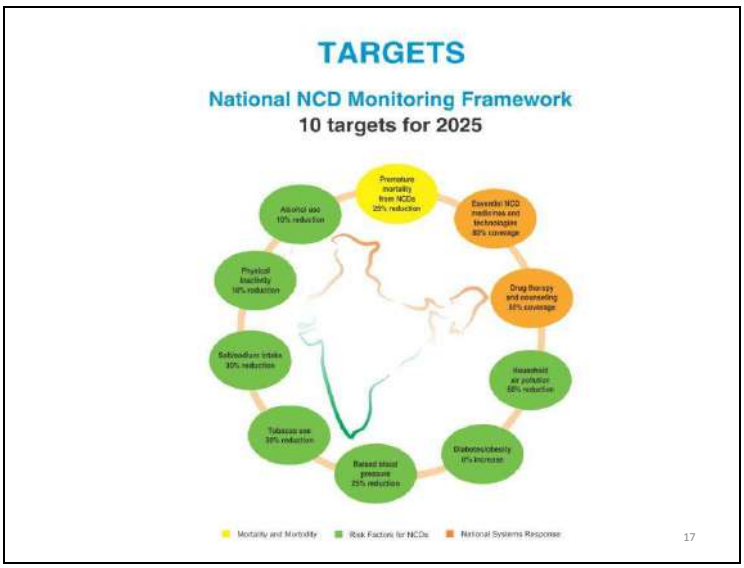
Prepared by the Ministry of Health to educate parliamentarians 2006

16

In our own country, the Ministry of Health and Family Welfare brought out a series of pamphlets to improve awareness among parliamentarians about risk factors for NCDs and how to prevent them. This has been the beginning of a series of efforts to improve awareness and reducing risk factors, so that people can prevent or lower their risk for NCDs.

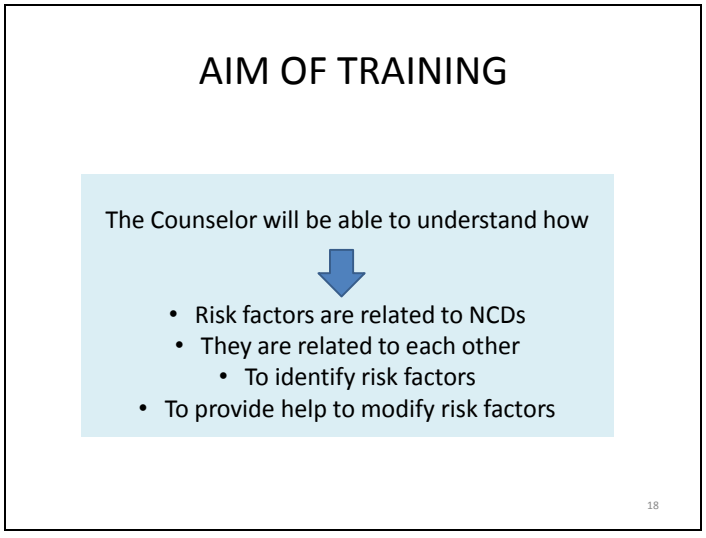
NCD targets in India

Slide 17.



India was the first country in the world to adopt a National Monitoring Framework for NCDs. In 2013, 21 indicators and 10 targets will be used to monitor the national response for the prevention and control of NCDs[14].

Slide 18



The aim of the training programme is for Counselors to address risk factors leading to NCDs and offer help.

[14] Ministry of Health and Family Welfare, Govt of India. National Action Plan and Monitoring Framework for Prevention and Control of Non Communicable Diseases in India. Developed through the WHO-India 2011-2013 Biennial Workplan http://www.searo.who.int/india/topics/cardiovascular_diseases/National_Action_Plan_and_Monitoring_Framework_Prevention_NCDs.pdf

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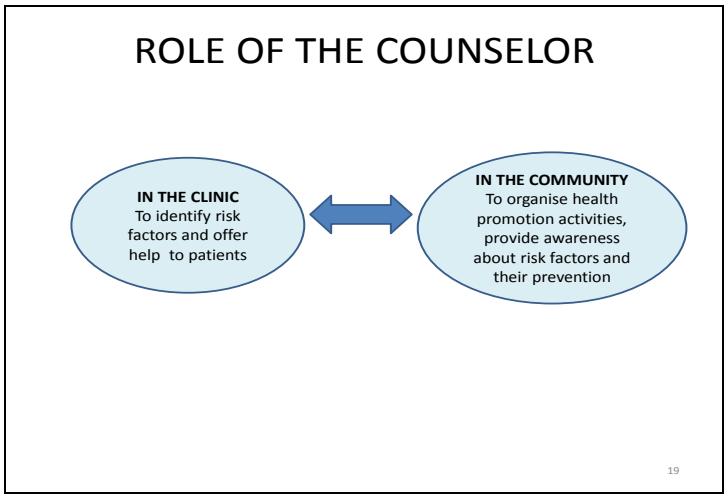
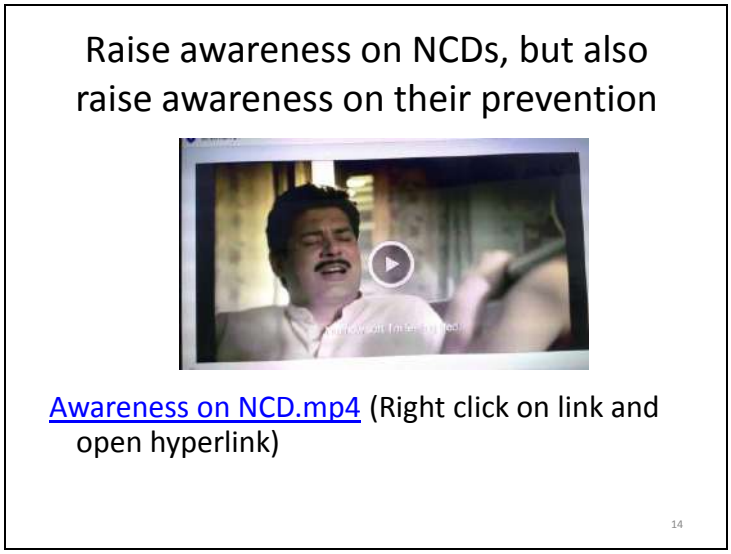


Behaviour change occurs when a person understands the risks of continuing a behaviour (like having unhealthy eating habits, not being physically active, or using tobacco and alcohol), understands the benefits of changing such behaviours (reducing weight, lowering blood pressure which in turn can reduce heart disease or diabetes) and gets support to change behaviour and lifestyle. A Counselor can help the person in bringing about such behaviour change. This may be possible both in a primary health care facility, as well as through building awareness about the importance of lifestyle changes and encouraging people towards early screening for NCDs.

INSTRUCTION

At the end of the session, end with this video clip, which is an awareness video encouraging persons to get tested for diabetes and hypertension. Have a brief discussion on how similar awareness needs to be brought in to address risk factors.

Slide 20



Counseling practices helpful in addressing risk factors for NCDs

Session 2

Objectives of the session
By the end of this session, the participants will understand the following:

- Qualities of an effective counselor
- Different stages of counseling
- Skills required for counseling
- Do's and Don'ts of counseling
- Role of the counsellor in motivating for behavioural change to reduce risks for NCDs
- Importance of counseling families to reduce risks for NCDs
- Strategies for health promotion in the community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Powerpoint presentation:* A DVD containing the powerpoint presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities**:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 

COUNSELING PRACTICES HELPFUL IN ADDRESSING RISK FACTORS FOR NCDs

Session 2

1

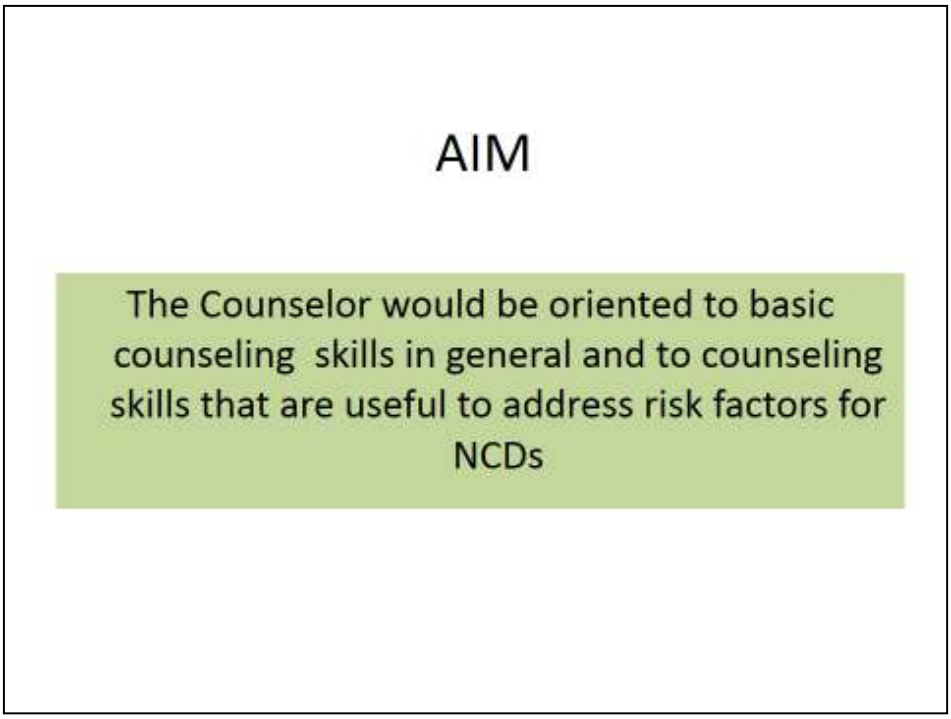
INTRODUCTION

Counseling helps to promote mental and physical health. It can also be used to modify the risk factors for Non Communicable Diseases (NCDs). The use of tobacco and alcohol, unhealthy diet, lack of physical exercise and stress are risk factors that contribute to development of NCDs. Stress can affect many health conditions such as heart disease, stroke, diabetes mellitus, cancer as well as common mental disorders like depression and anxiety. NCDs are often chronic and can add to stress among patients and their families. Mental health problems can add to the patient's burden and come in the way of seeking help and making positive behaviour and lifestyle changes. This session covers basic aspects of counseling and how it plays a role in addressing high risk factors and NCDs in primary care.

The session begins with listing qualities that are essential for Counselors and is followed by the different stages in counseling and basic skills needed for each of these stages. A session on how patients can be motivated to change to reduce risk factors follows. The last session discusses the Counselor's role in health promotion activities in the community.

Total duration: 3 hours and 45 minutes approximately.

Slide 2



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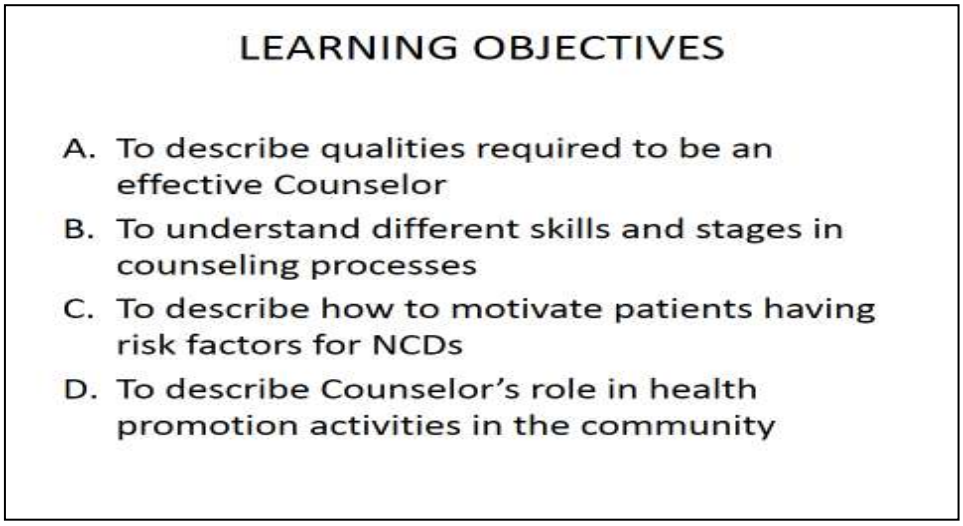
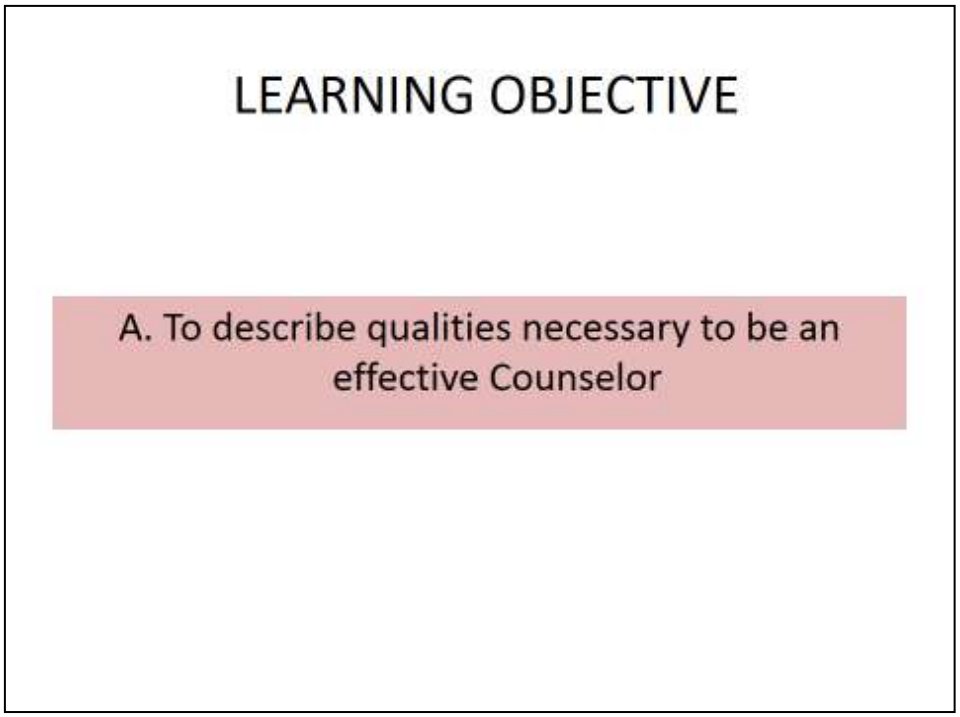


INSTRUCTION

Begin the session by encouraging participants to describe what personal qualities are required for an effective Counselor. Through the individual activity, they will be able to reflect and share what qualities they would wish for if they were being counseled. A discussion will follow.

Slide 4

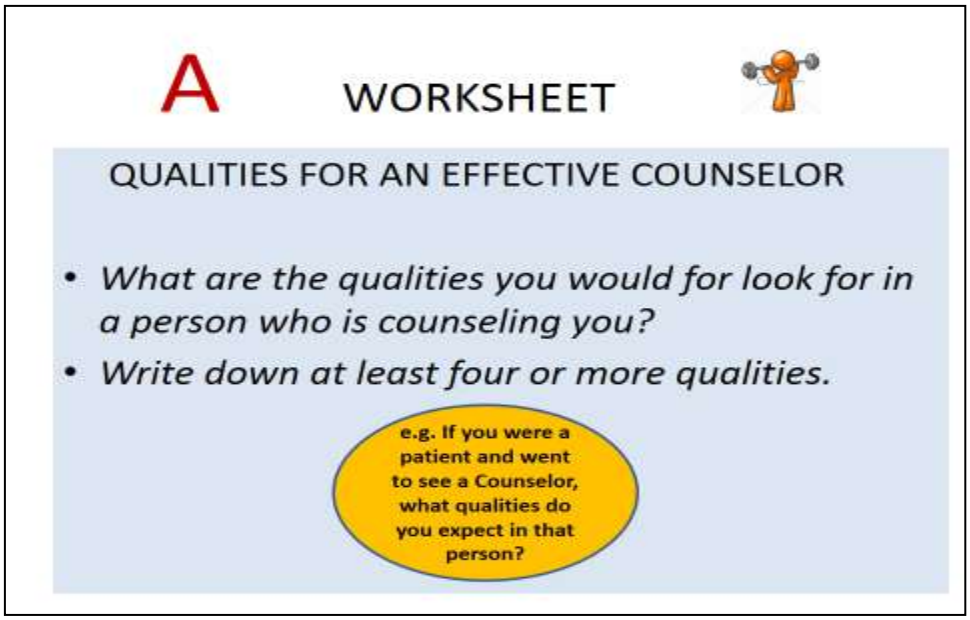


ACTIVITY (Individual activity)

PERSONAL QUALITIES FOR A COUNSELOR

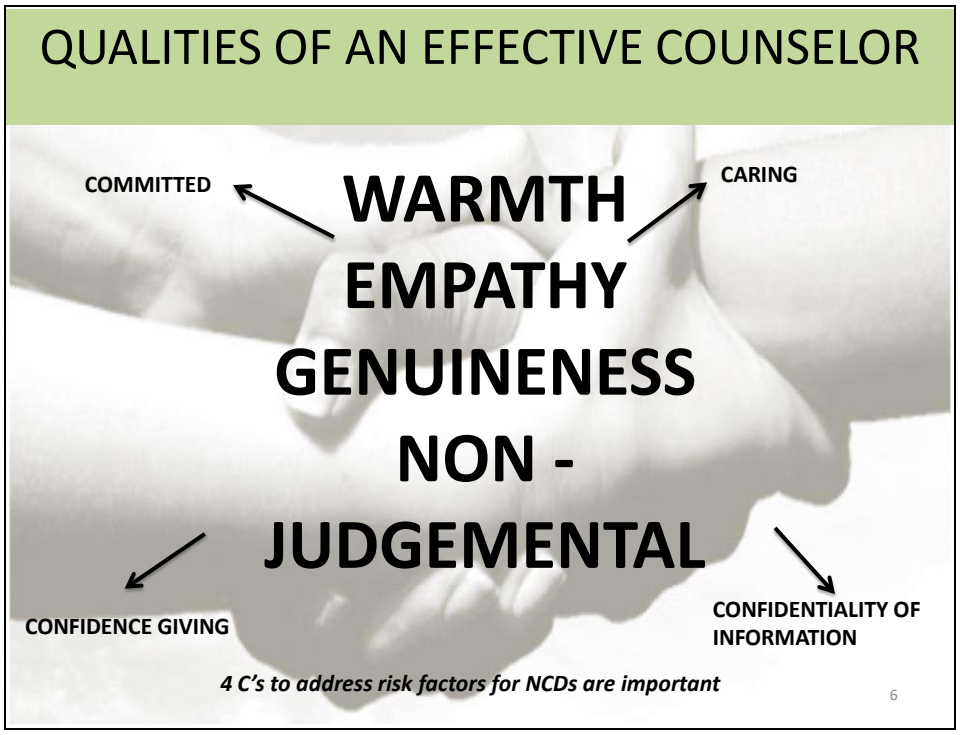
Total duration: 30 minutes

Slide 5



Give worksheets to each participant for individual work for 15 minutes. After the activity, discuss with the group and write the different qualities on the board. Distribute **HANDOUT 1.1** (PERSONAL QUALITIES FOR A COUNSELOR).

Slide 6



There are certain important qualities for Counselors that help in therapeutic changes in another person.

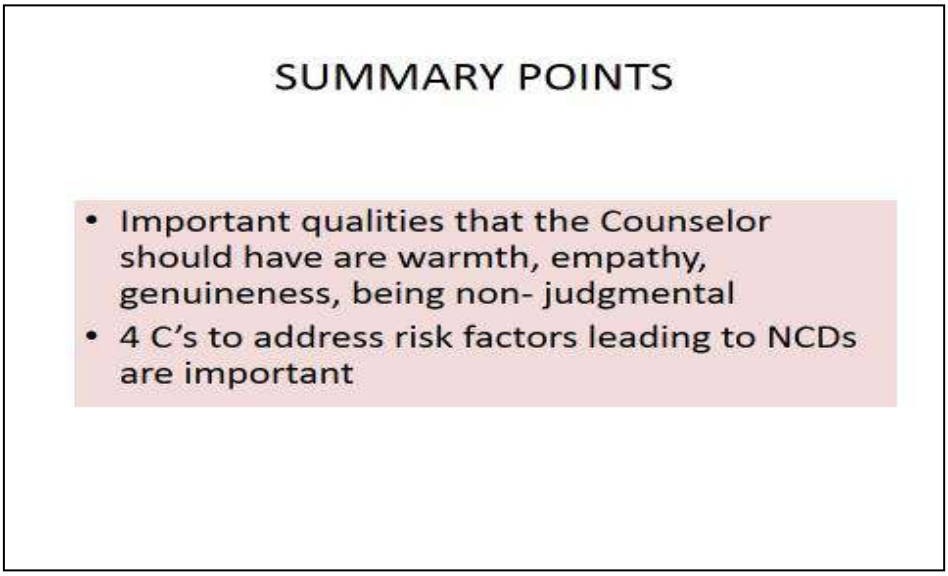
- Warmth (showing interest, a caring attitude)
- Empathy (to see the world as the patient sees it)
- Genuineness (true desire to help)
- Non- judgemental (keeping aside personal opinions, attitudes and values)
- Self awareness (exploring our own life situations)

In addition to the above these qualities are also important:

- Unconditional positive regard (regard for the patient at all times and in all situations)
- Confidentiality (privacy about patient's identity and information shared).
- Sense of humour (adopting a lighter approach; easing tension)
- Self awareness (exploring our own life situations)

Carl Rogers (1967)[15], a psychologist, states how unconditional positive regard is an important quality necessary for helping a person in the changing process. There may be instances when the Counselor is impatient that the patient has not made the desired changes or is shocked by some information shared by the patient. In such cases, the Counselor should continue to maintain positive regard towards the patient whatever the patient says or feels. Good ethical practices include keeping personal information and patients' records (files etc.) confidential.

Slide 7



[15]Carl Rogers (1967) cited in Philip Burnard (1999). Counseling skills training: A sourcebook of activities for trainers. Viva Books Private Limited, New Delhi.

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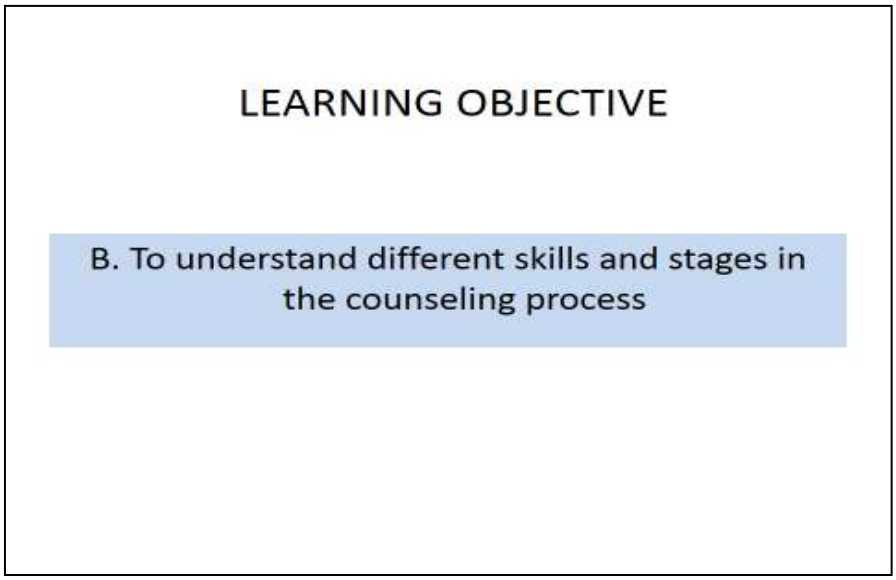
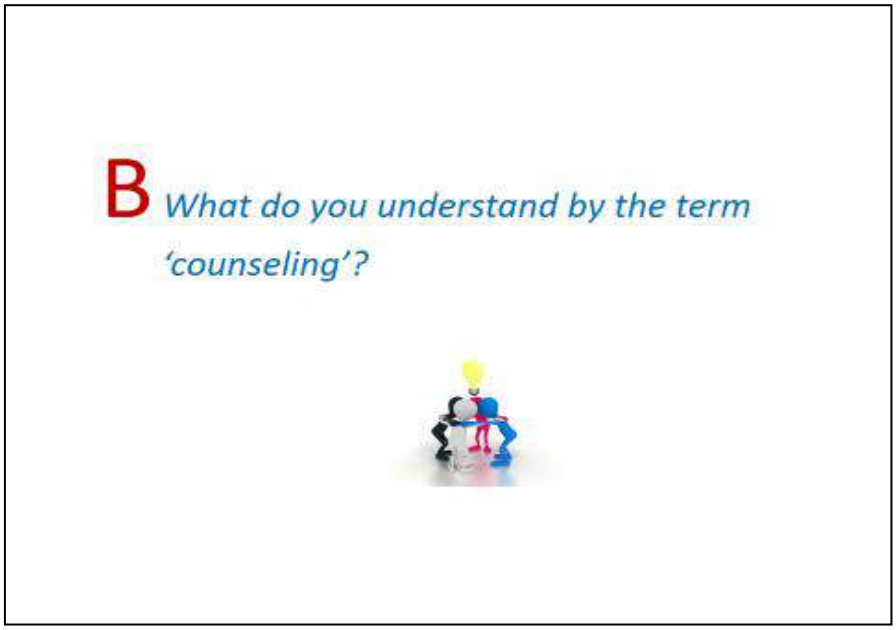


INSTRUCTION

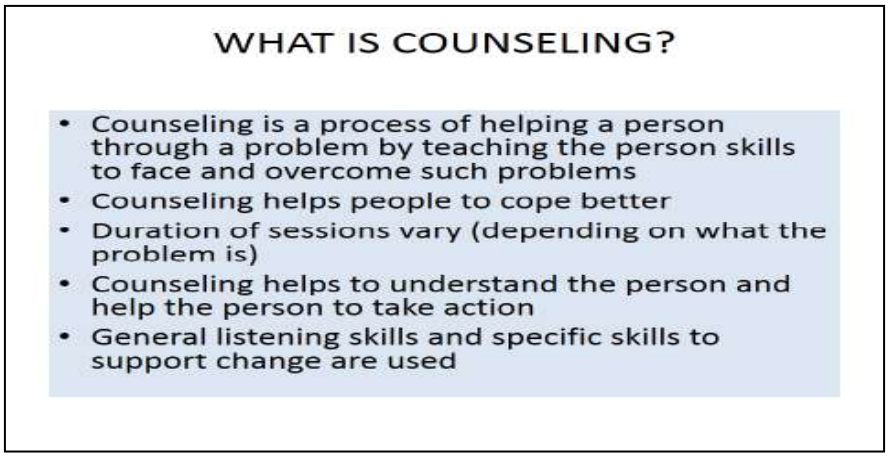
Describe the different skills and stages in counseling (stages begin from the time the patient comes into the first session until the last session). The basic skills that are important in each stage will be discussed. The session will be interactive and role play will be used.

Slide 9



Invite some responses. Write them on the board.

Slide 10

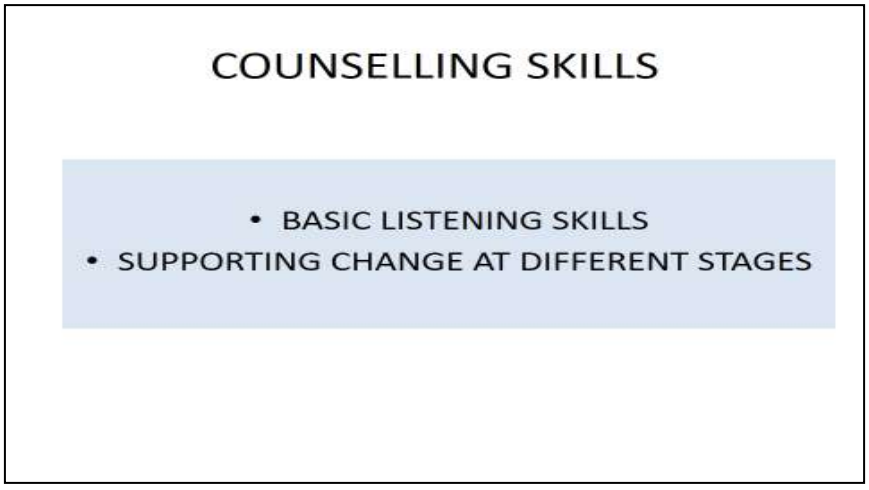


Counseling is a process to help people cope with problems. Problems can be related to health, financial issues, exam tension, heavy work, family problems, impact of major disasters, struggles in daily life and so on.

The duration of counseling sessions can vary depending of the nature of the problem[16].

The Counselor uses skills to draw out patients' stories as to help them find new ways of thinking and new ways of acting.

Slide 11



Skills used in counseling are basic listening skills.

[16]Ivey, E. Allen & Ivey Mary Bradford. Intentional Interviewing and Counseling. Facilitating Client Development in a Multicultural Society 2007 (6th Edition). Thomson Brooks/ Cole. Belmont, CA, USA.

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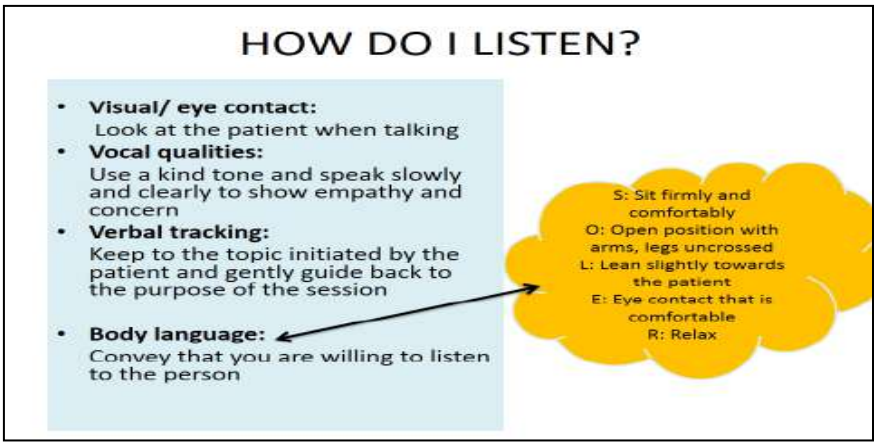

Paying attention using our eyes, tone of voice and sitting and listening by using non – verbal means are important skills in counseling.

ACTIVITY (Role play)

HOW DO I LISTEN?

Total duration: 1 hour

Sit in pairs and face each other. Nominate one person as the Counselor and the other as the patient. All Counselors will be given HANDOUT 1.2(HOW DO I LISTEN). Before role play, give 5 minutes for reading and clarifying. The Counselor and patient start talking on a topic (e.g. diet & exercise, quitting smoking, difficulty in sleeping). Listening skills will be role played. After 10 minutes the pairs switch roles. Ask participants what they learnt from the activity and summarize.

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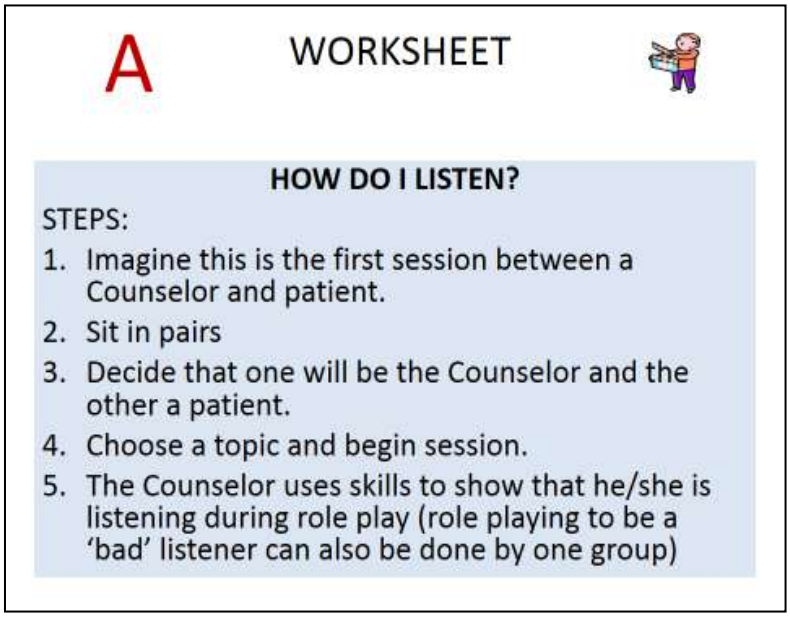
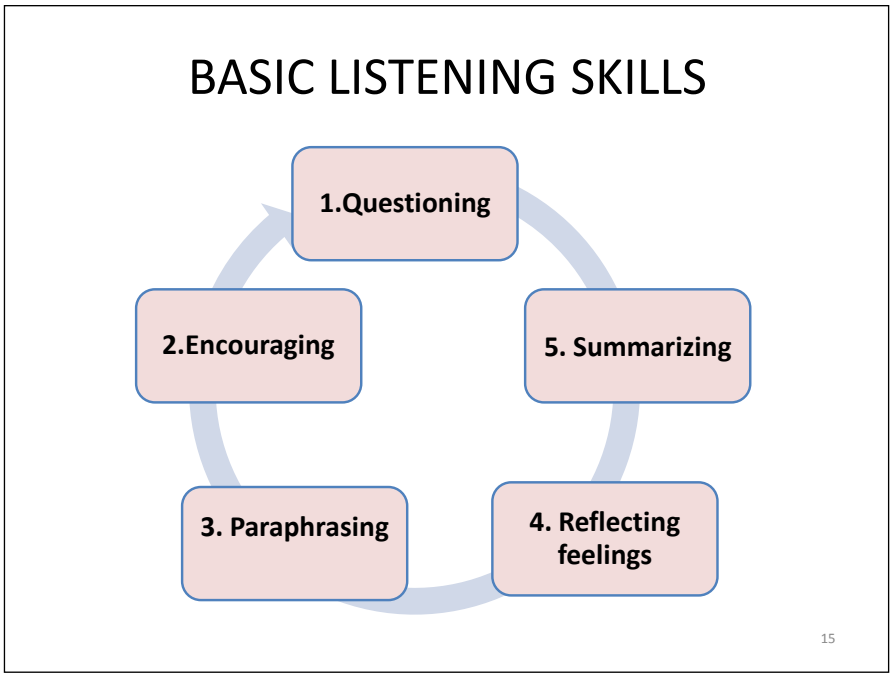


Slide 14

Invite some responses. Write them on the board.

DISTRIBUTE HANDOUT 1.3 (BASIC LISTENING SKILLS).

Slide 15



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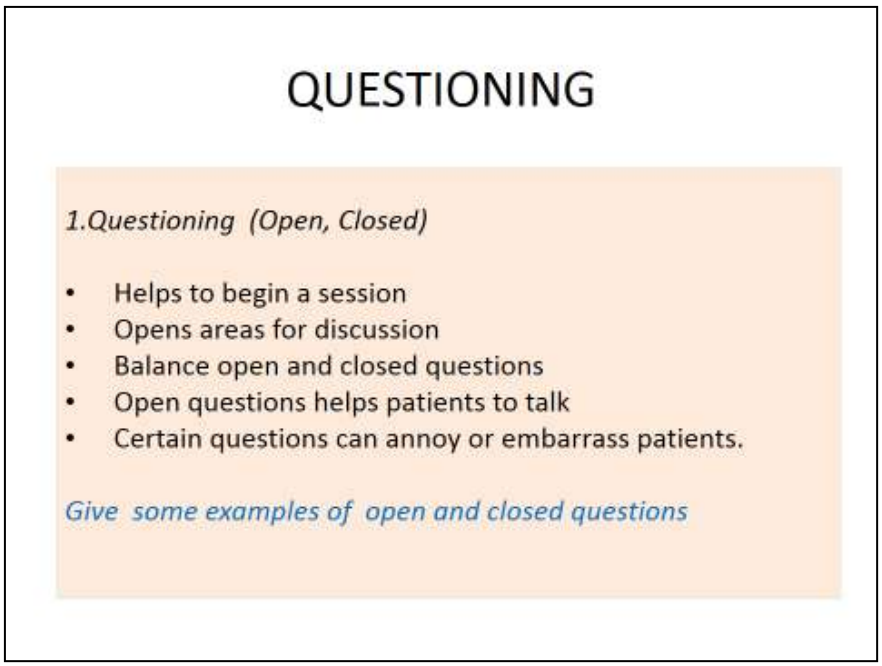

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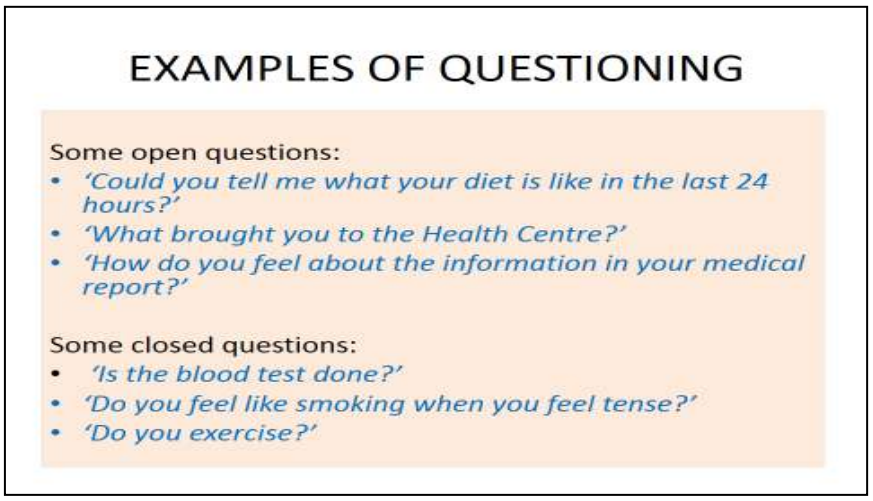
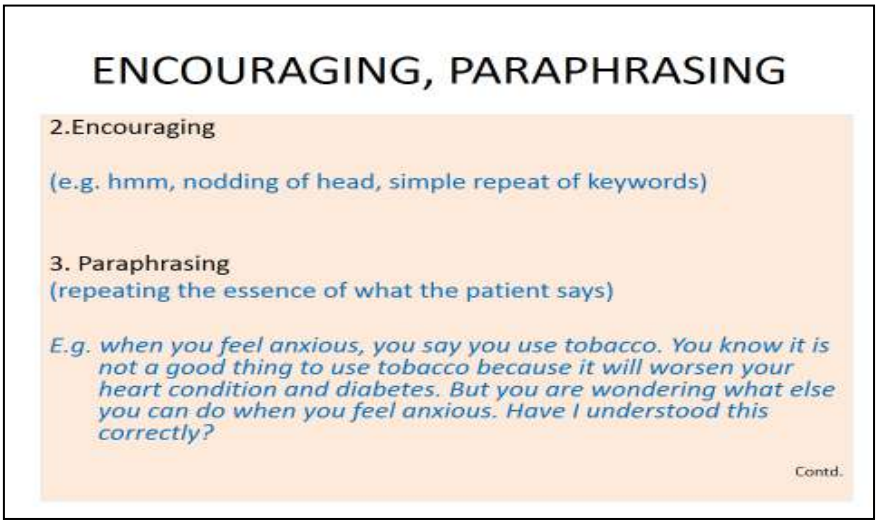


1. Questioning skills helps to begin the interview and open up areas for discussion and clarifications. Appropriate use of questioning skills and balance between open and closed questions is important. In some instances, the Counselor should be mindful that certain questions can annoy or embarrass patients.

Open ended questions are useful to get the patient to talk and do not have a one word answer. Questions can begin with *what, how or could.*

Closed questions produce a simple yes or no answer and help in clarification. Questions can begin with *is, are, do*.

Slide 18



2. Encouragers*:* Verbal and non-verbal ways can be used to encourage the patient to talk. Examples are nodding of head, simple repeating of key words that the patient says and using sounds like 'hmmm'.

3. Paraphrasing: The Counselor uses his/ her own words and some phrases by the patient and repeats the essence of what has just been said by the patient. After paraphrasing, the Counselor must clarify with the patient if it is correct or not. Check. *E.g. when you feel anxious, you tend to use tobacco. You know it is not a good thing to use tobacco because it will worsen your heart condition and diabetes. But you are wondering what else you can do when you feel anxious. Have I understood this correctly?*

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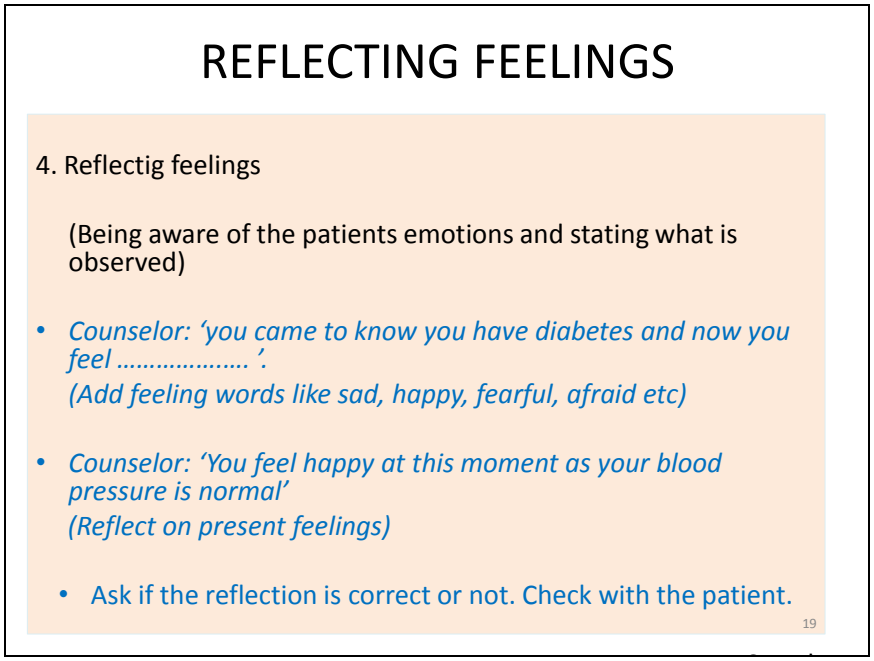


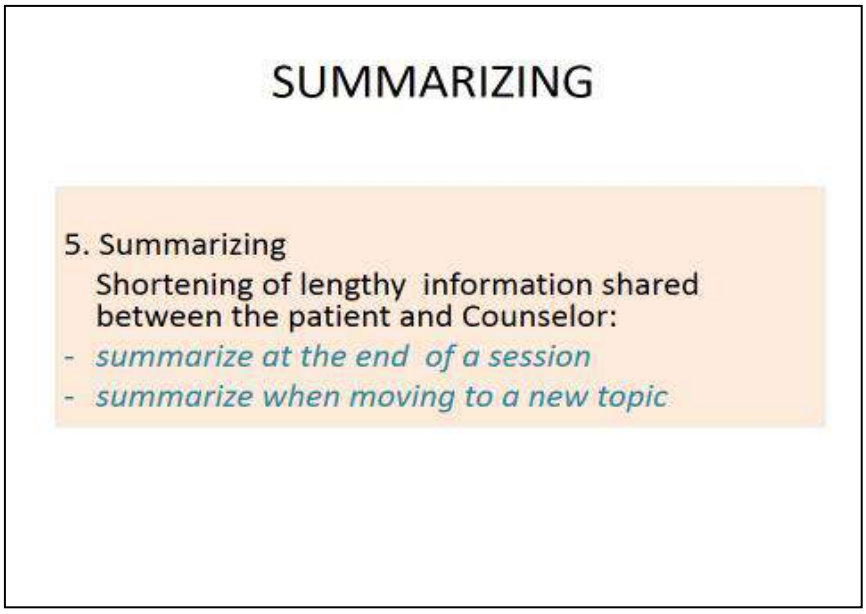
4. Reflecting feeling*:* Emotions underlie patient's life experiences and the Counselor needs to identify them during the session. Non-verbal and verbal expressions of feelings can be observed by the Counselor.

Some examples:

- Counselor: *'you feel…….* …. ' (add feeling words like sad, happy, afraid etc). Ask the patient if the reflection is correct or not. Check.

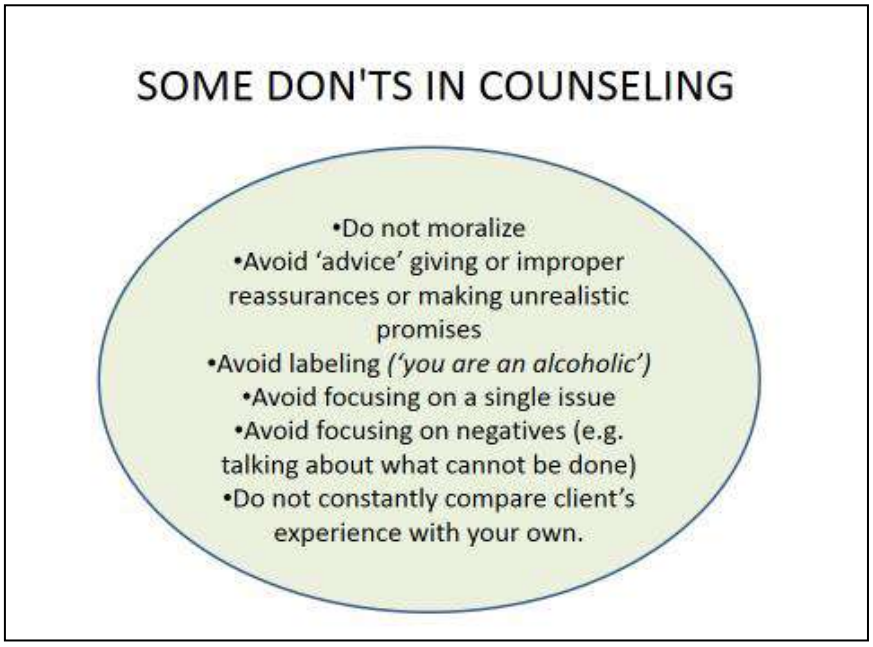
- 'Counselor: '*You feel happy at this moment…..*' (Reflect on the present feelings)

Slide 20



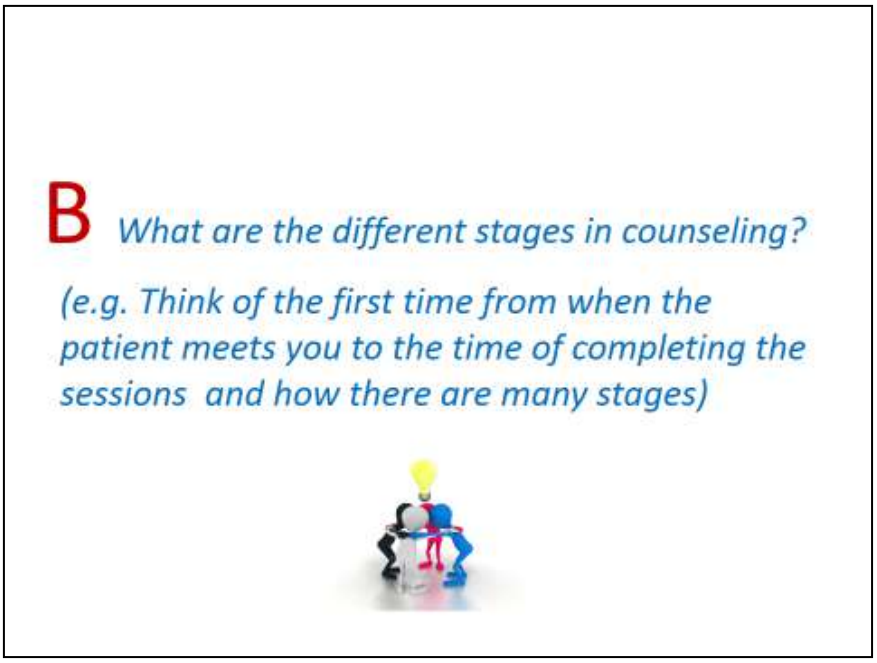
5. Summarizing: Shortening of lengthy information is summarizing. The Counselor uses it to end an interview, or when moving to a new topic.

Slide 21



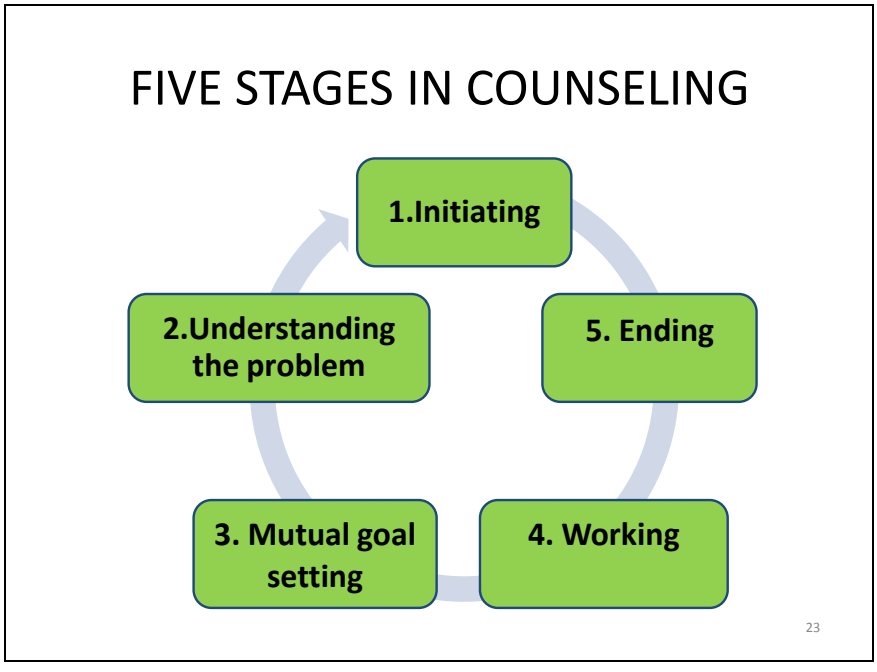
These are some don'ts that Counselors' have to keep in mind when engaging with patients.

Slide 22



Invite some responses. Write them on the board.

Slide 23



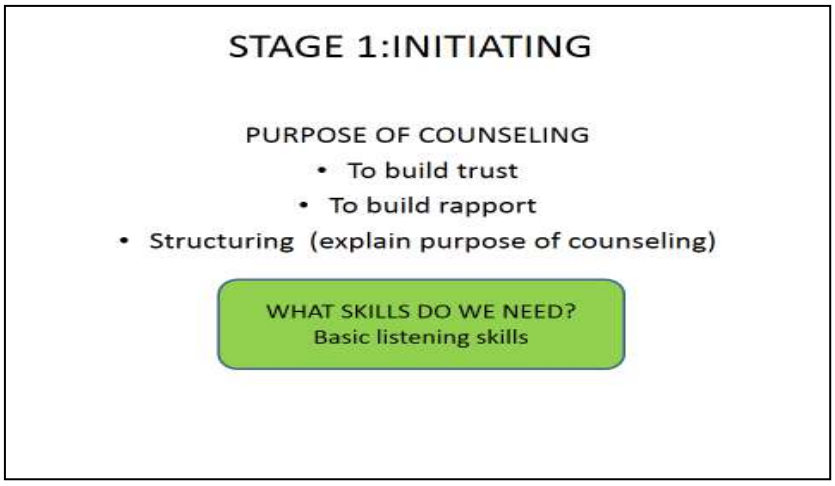
FIVE STAGES IN THE PROCESS OF COUNSELING

STAGE OF COUNSELING	PURPOSE	SKILLS COMMONLY REQUIRED
1.Initiating the session (Rapport and Structuring)	-To make the patient feel comfortable with the Counselor -Structuring: Explain purpose of counseling	Basic listening skills
2. Understanding the problem (Drawing out problems, stories, concerns and issues)	-To find out need for counseling and listen to his / her story -To identify problems -To identify strengths	Basic listening skills
3.Mutual goal setting (What does the patient want to happen?)	-To understand what the patient wants to achieve -The desired direction of the patient and Counselor should be harmonious	Basic listening skills
4.Working (Exploring alternatives, re-storying, addressing conflict)	-To work towards finding a solution -Using a problem solving model	Basic listening skills
5.Ending (acting on new stories)	-Facilitating changes in thoughts, feelings and behaviours in daily life. -Checking if patient understands importance of changing	-Giving information/ education -Basic listening skills

The five stages and skills in each stage are important.

DISTRIBUTE HANDOUT 1.4. (FIVE STAGES OF COUNSELING).

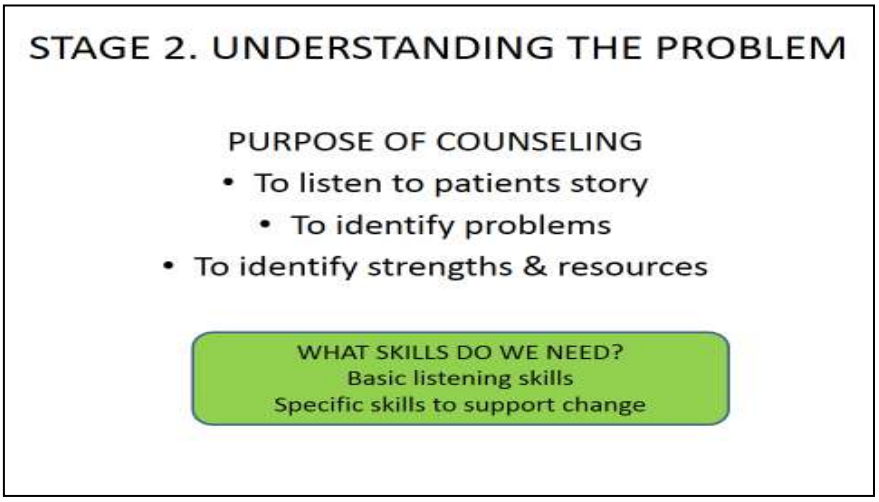
Slide 24



1. INITIATING THE SESSION

The first session is important as it is to build trust, make the person comfortable and build a working relationship. Some patients may be fearful and tense about meeting the Counselor. Some may be confused and wonder why he /she have been referred to the Counselor. Structuring includes discussing the purpose of the session, number of sessions, confidentiality, what can be achieved and how the patient can benefit from the process. As some patients can have high expectations from the sessions, it is important to say what the Counselor can and cannot do. Basic listening skills are used in the five stages.

Slide 25



2. UNDERSTANDING THE PROBLEM

Skilful problem definition will help the patient from aimlessly jumping from one topic to another and gives a sense of direction. The strengths of the patient need to be drawn out.

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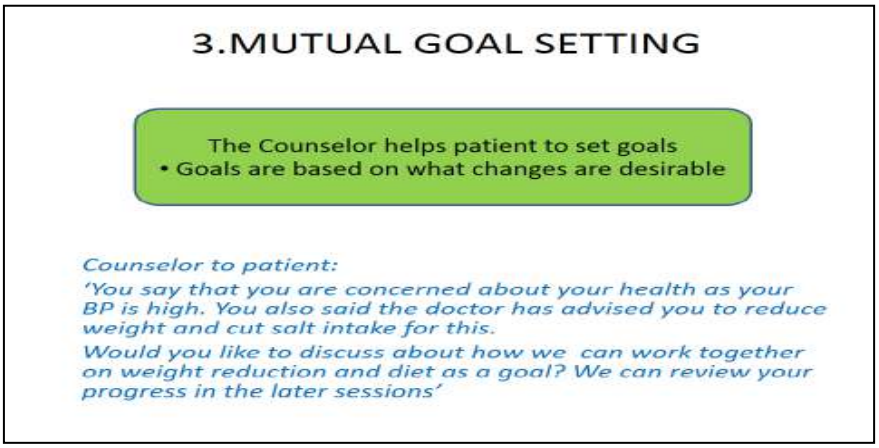
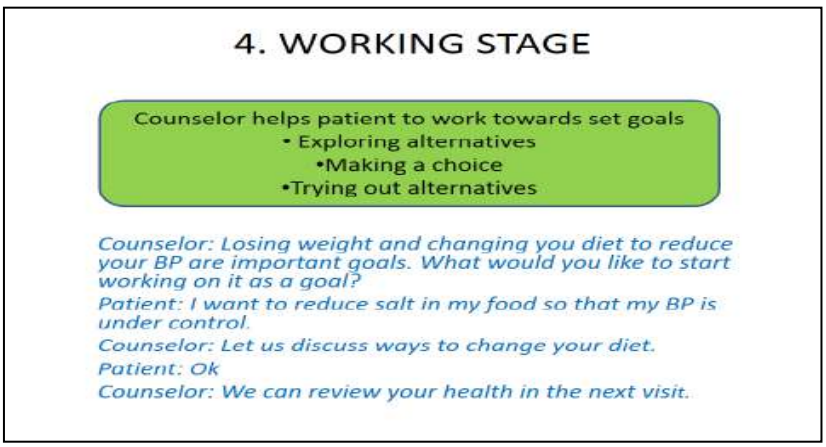


3. MUTUAL GOAL SETTING

The Counselor actively helps the patient to set goals based on what changes are desirable. The patient may set unrealistic goals, be confused or may want more than what can be expected.

Slide 27

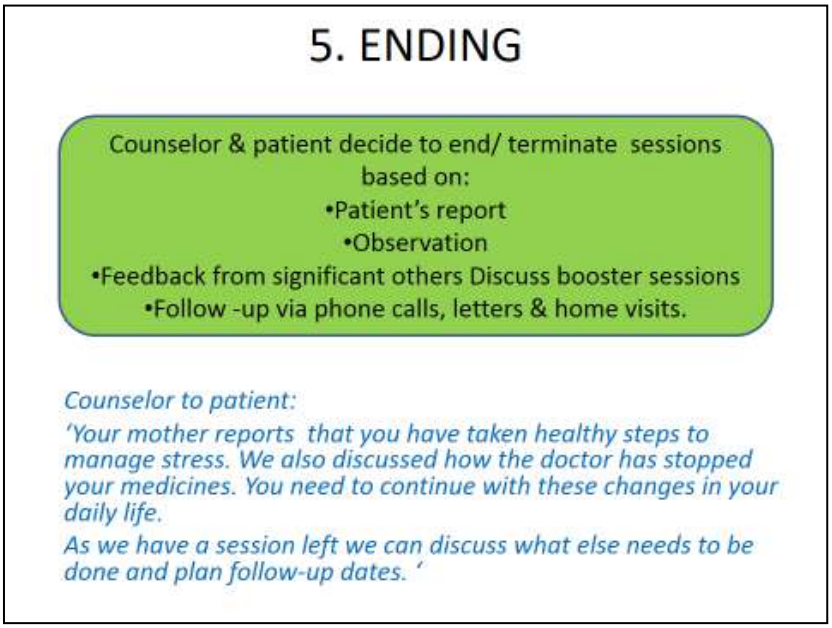


1. WORKING STAGE

The Counselor helps the patient to work towards set goals. Exploring alternatives, making a choice and trying out the alternative are a part of this session. e. g. trying out new ways of coping, making changes in diet and exercise, reducing harmful use of alcohol and quitting tobacco are some examples. Referrals to specialists related to risk factors may occur in this phase (Medical Officer in primary care, specialists in nutrition and exercise etc.). A directory of services and contact persons

should be maintained (local, state and national level information) for referrals. Follow - up and home visits with help from the Community Health Worker are important linkages.

Slide 28



2. ENDING (Stopping the counseling sessions)

The Counselor and patient can decide to terminate sessions based on the patient's report on how he /she is progressing, the Counselor's own observation (including other health providers') and feedback from significant others (spouse, children, relatives, support person). Patients may have doubts about how they will manage life after termination. The Counselor can give regular feedback and summarize main points.

Example: The Counselor can say '*….We have a few sessions left. Let us discuss the progress made and what else needs to be done. We can discuss follow -up dates …'*

Booster sessions are useful to motivate patients to work through difficulties and to check their progress. Follow -up is done via phone calls, letters or home visits.

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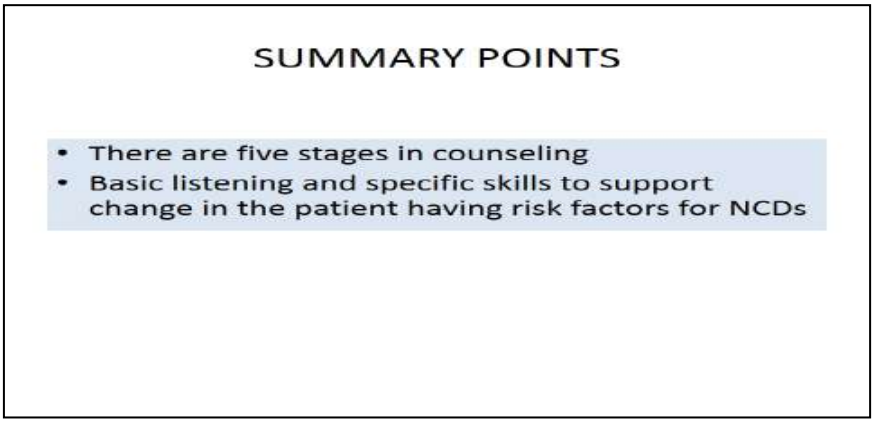

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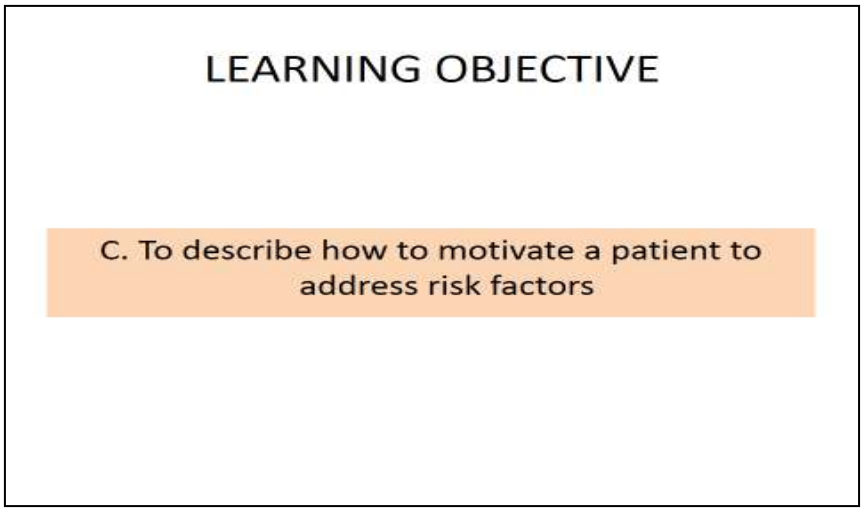
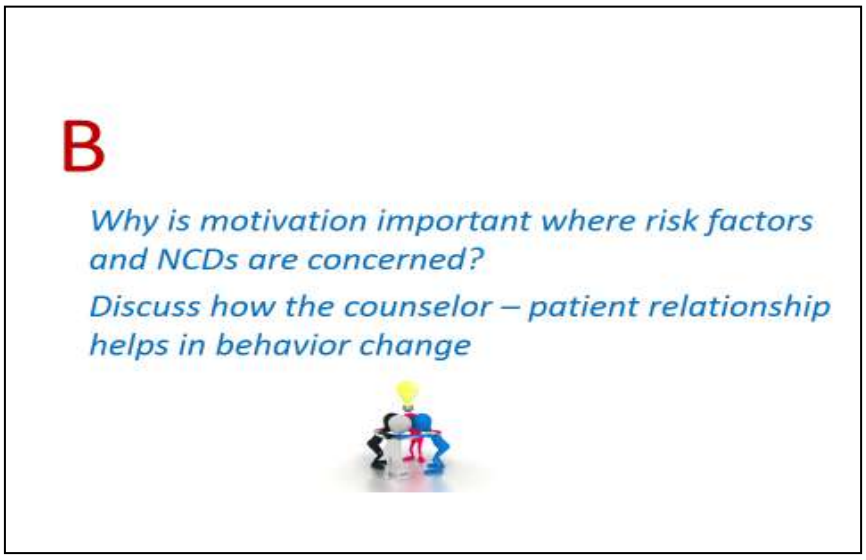


INSTRUCTION

Discuss about the role of motivation, readiness to change and how patients can be in the three stages of change: unsure, sure and ready to change. The strategies and do's and don'ts will be discussed in each stage.

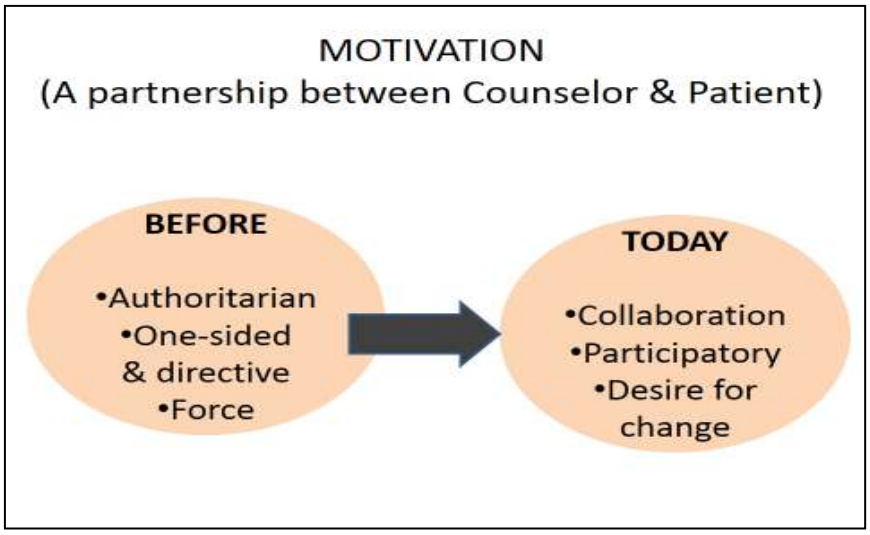
DISTRIBUTE HANDOUT 1.5 (MOTIVATION FOR CHANGE).

Slide 31



Invite some responses. Write them on the board.

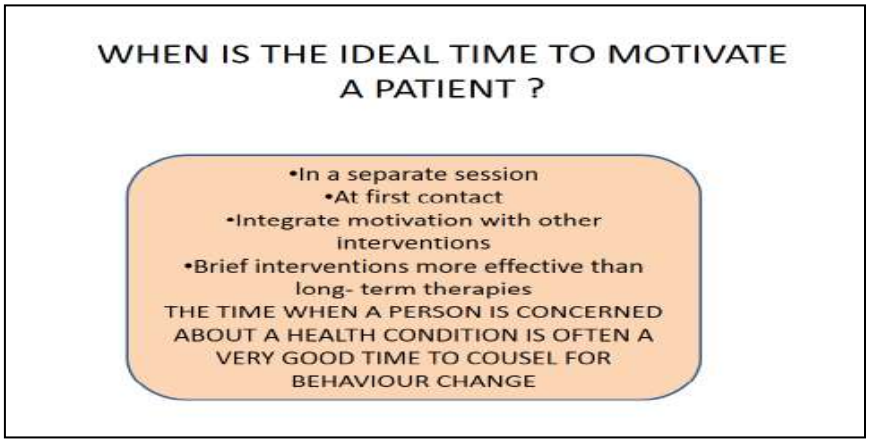
Slide 32



The importance of motivation is to help the make patient make a positive shift and change his/ her present behaviour and risky lifestyle. Motivation is best when there is a partnership between the patient and the Counselor. Getting individuals to make a life style change where risk factors are concerned before it develops into NCDs is most challenging.

The relationship between the Counselor and patient is a partnership of collaboration and not coercion or force. Enhancing motivation in patients is a process of collaboration. In the past, the relationship between the Counselor and patient was authoritarian, one sided and directive. The patient was often forced to make changes. Today, the relationship is more collaborative, participatory and desire for change comes from the patient.

Slide 33



What is the ideal time to motivate the patient?

- It can be at first contact between the patient and Counselor.
- It can be done in a separate session.
- It is can be integrated with other interventions at different points of time. For example when the patient comes to meet the Medical Officer for follow - up, he/ she meets the Counselor during same visit.

- Research on substance dependence reveals how brief and timely interventions are more effective than long- term, intensive therapies.

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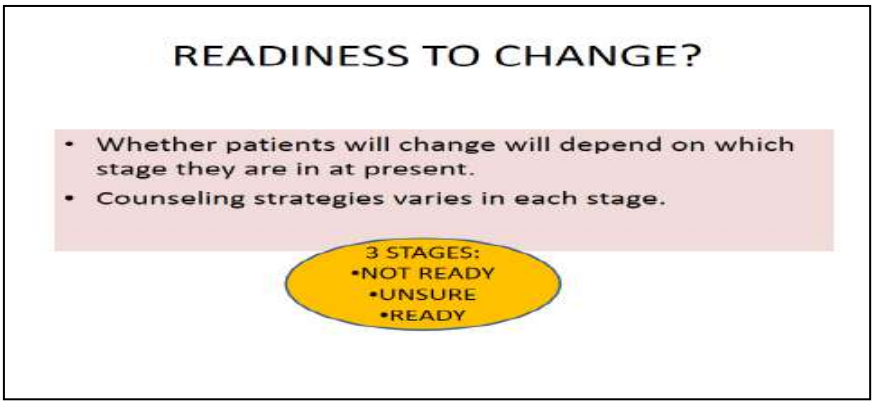
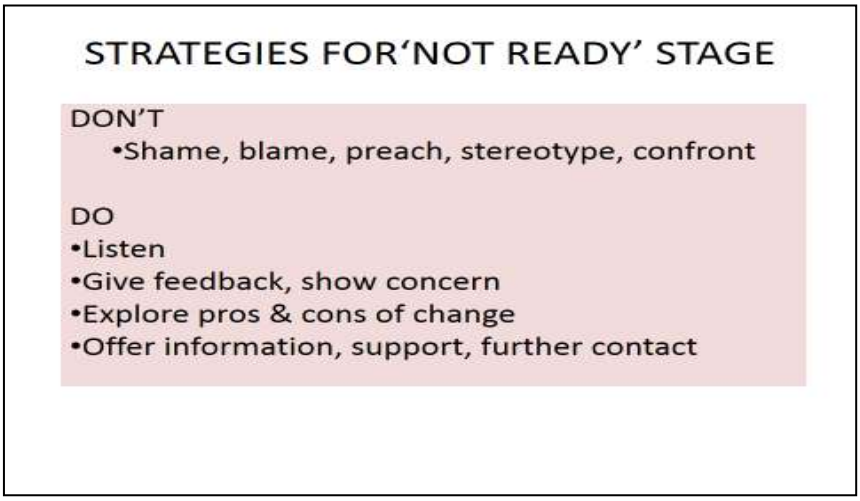


Readiness to change:

How ready for change patients are will depend on which stage they are in and the three stages are those who are not ready, those who are unsure, and those who are ready. Counseling methods will vary in each stage. Offering support during the session and encouraging follow up is important.

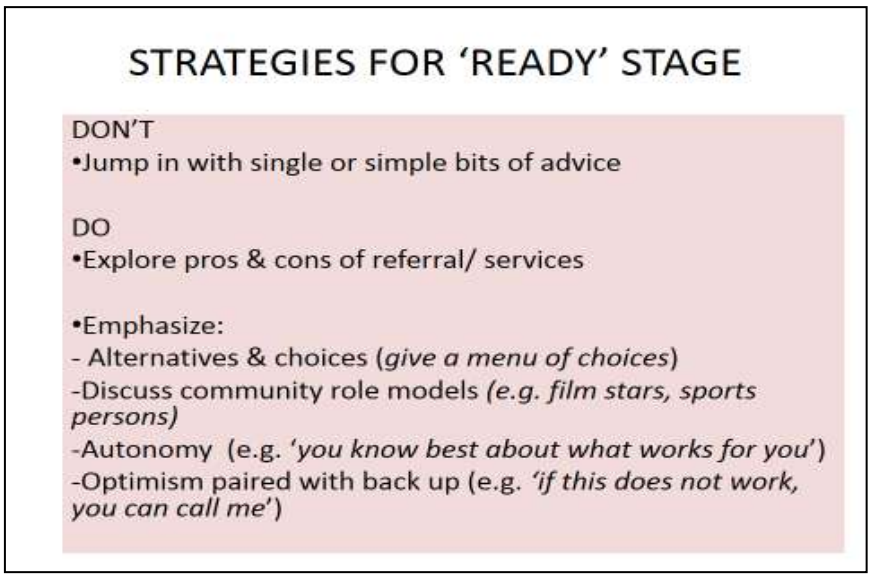
DISTRIBUTE HANDOUT 1.6 (READINESS TO CHANGE).

Slide 35



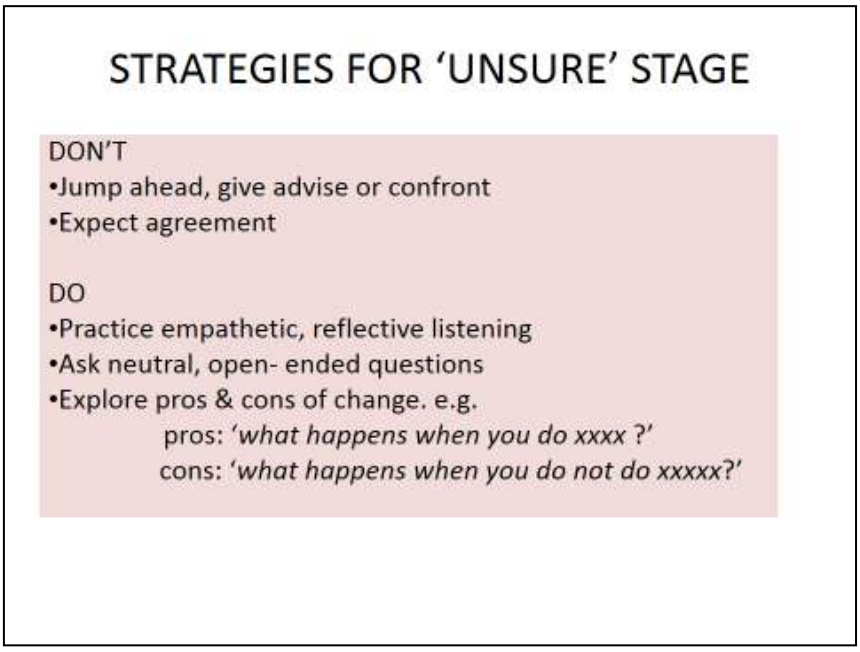
'Not ready' stage.

Slide 36



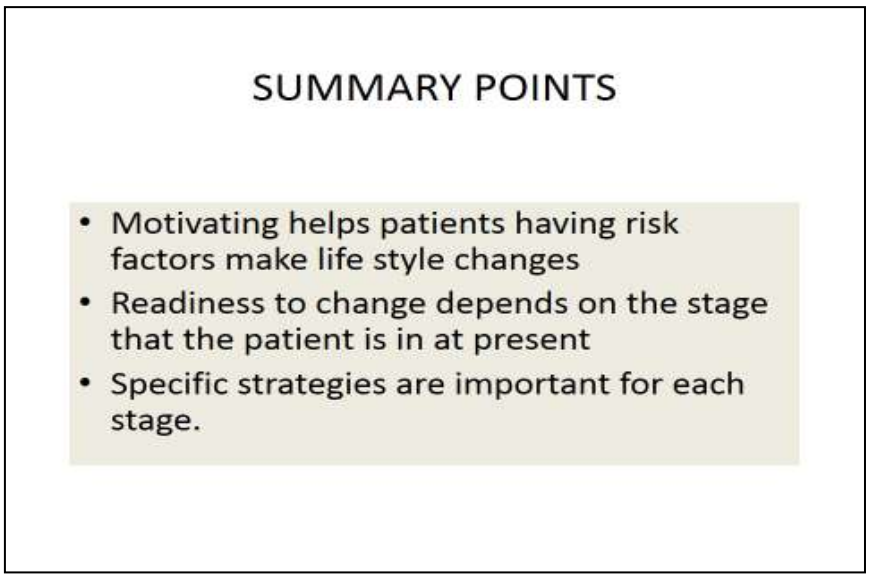
'Ready' stage.

Slide 37



'Unsure' stage.

Slide 38



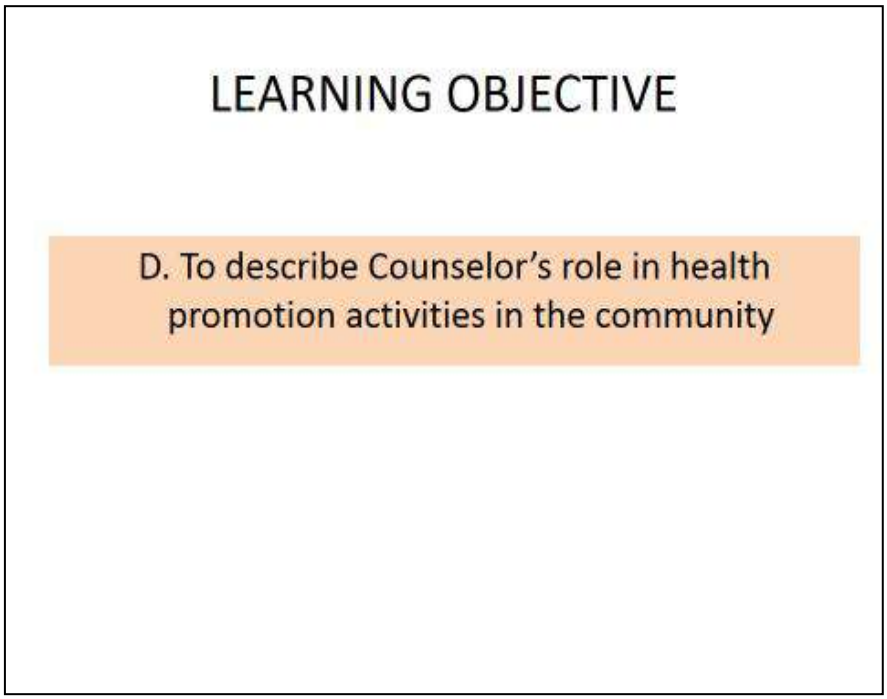
Slide 39

Many people in India live in extended or joint families although this is changing and family units have become smaller. In all situations, the family is important for several reasons. Older family members often make decisions that influence the risk factors for children (diet, physical activity). Household decisions about what needs to be bought for the monthly ration may influence the diet patterns of the family. If one of the members in the household is spending a substantial amount of

money on risk factors such as alcohol or tobacco, this may not only affect the person, but the rest of the family as well. There may be less money available for the treatment of underlying illnesses.

Most importantly, the family members can also be a source of support to address risk factors and proper control of NCDs. It is a very common sight to see family members accompany a person with health problems to the primary care facility. Involving the family member can help in addressing the risk factors in the person at risk/with diagnosed NCD and also make the family member aware of the importance of a healthy lifestyle.

Slide 40

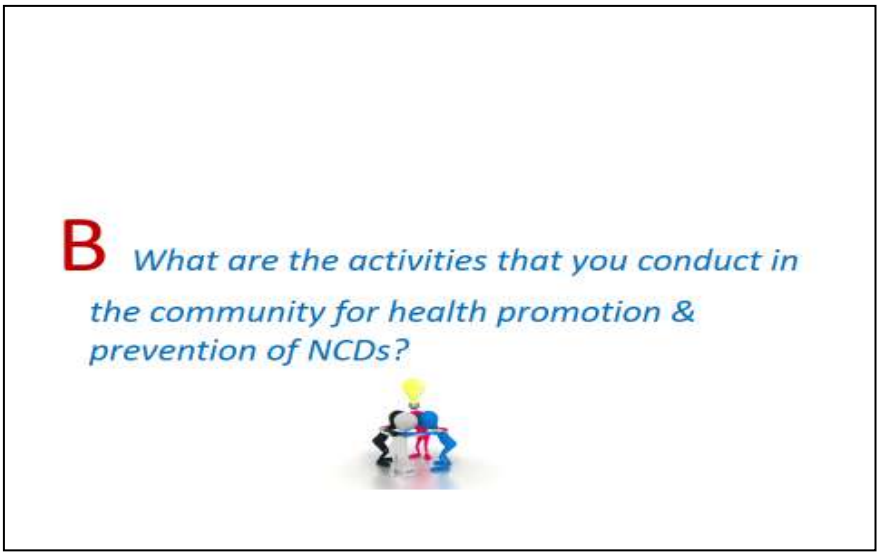


INSTRUCTION

Facilitate a discussion among participants about what health promotion activities they conduct at present (on risk factors and NCDs). Levels of prevention and methods will be presented and an activity related to health promotion follows.

DISTRIBUTE HANDOUT 1.7(LEVELS OF PREVENTION).

Slide 41



Invite some responses. Write them on the board.

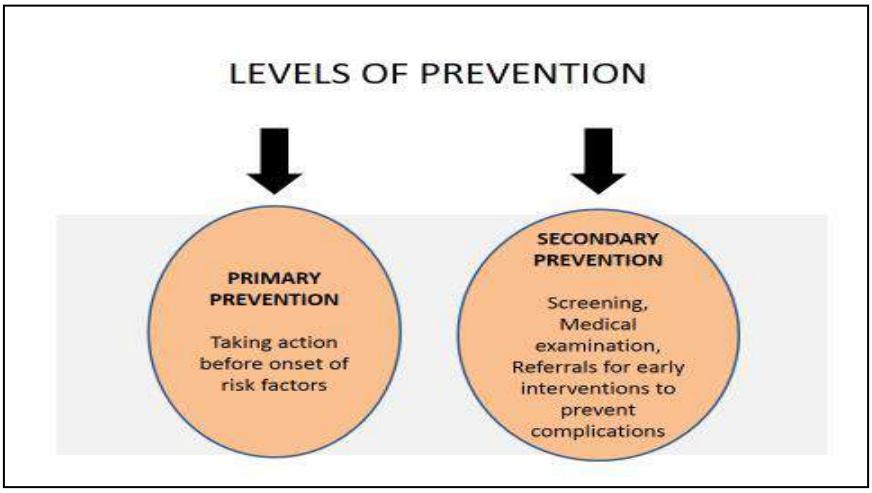
Health promoting behaviours in the community prevent disease and reduce disability. When the community has the proper information and skills, members of the community can take on some of the functions done by health care providers like providing information and referring to health services.

Community participation helps to gather resources through families and other social networks for management of diabetes and high blood pressure to community based management of mental illnesses[17]. This can reduce demands on follow-up services and institutional care. In a country like India, where many people are still illiterate, audio visual media can be an important way for effective communication. In Karnataka, a programme by mental health professionals through the community radio was shown to be very helpful in educating rural communities on mental health related issues.

[3]Srinath Reddy, K. Prevention and control of non-communicable diseases: status and strategies. Indian Council for Research on International Economic Relations.2003, Working Paper No. 104. *www.icrier.org/pdf/wp104.pdf*

Levels of prevention

Slide 42.



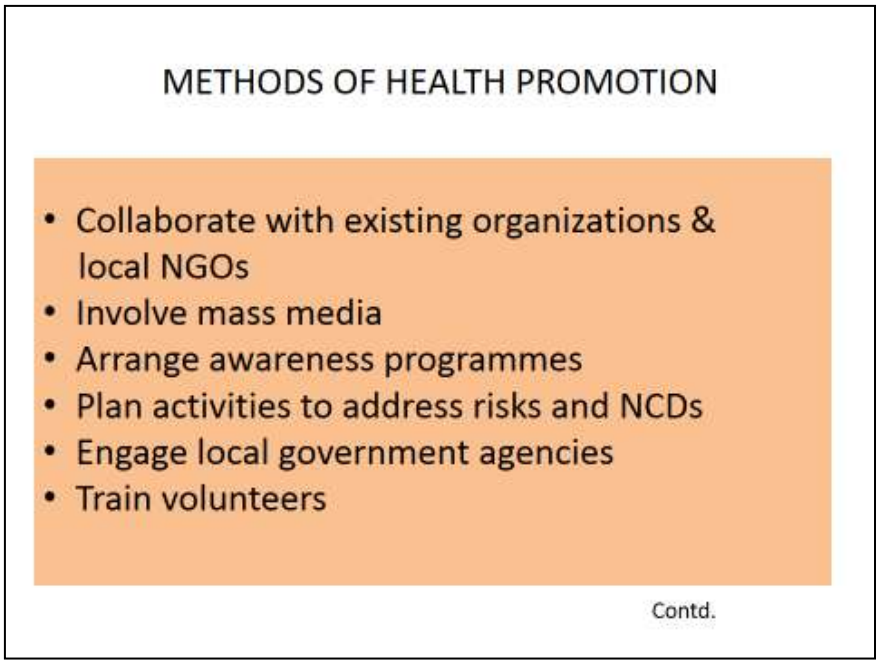
There are different levels of community prevention[18]:

1. **Primary prevention**: When action is taken *before the onset* of risk factors i.e. through education activities in the community (in schools, self –help groups, women's group, farmers, youth groups, factory workers etc). Another example is where a factory may decide to have a 'smoke-free environment' in order to discourage workers from smoking, reduce health issues and promote well-being.

2. **Secondary prevention**: Screening, medical examination and referrals for early interventions for high blood pressure or excess weight helps to reduce risk factors from becoming complicated and developing into NCDs.

[4]Murthy P and Nikketha S. Psychosocial Interventions for Persons with Substance Abuse: Theory and Practice, 2007; Publication No.64. National Institute of Mental Health and Neuro Sciences, Bangalore.

Slide 43



METHODS OF HEALTH PROMOTION

- *Collaborate with existing organizations*: Mobilize, raise funds and conduct programmes (with rural societies, traditional healers, youth groups, senior citizens with spare time, village leaders, panchayat members, mahila groups for women, service minded groups like the Lions and Rotary Clubs, charitable and religious organizations etc). Many corporate organizations can be included to help as part of their corporate social responsibility programmes.
- *Involve local NGOs*: Sensitize local non - government organizations on health promotion agenda and use their resources to help individuals adopt healthy life styles. Some NGOs may have recreation centres, gyms, activity
- groups, community Centres, vocational training, micro credit schemes, employment opportunities, self- help groups(like Alcoholic Anonymous) and referral to these services can benefit patients adopt healthy lifestyles[19](see Box).

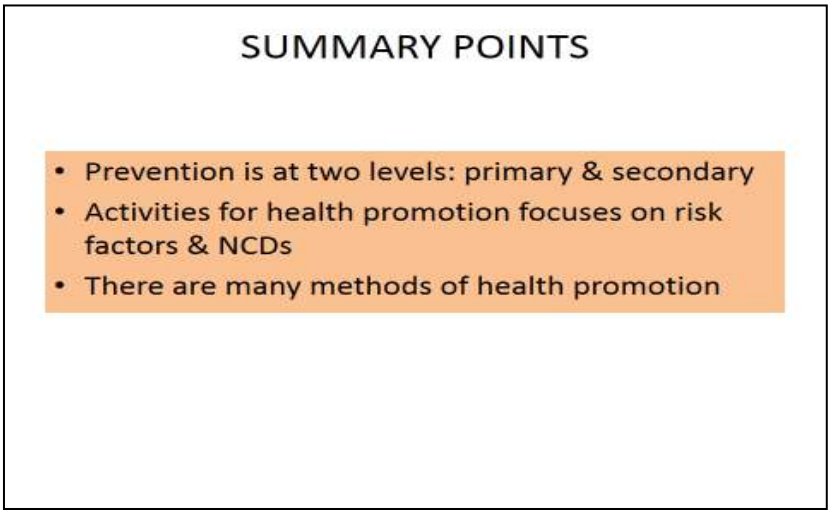
Community education for a risk factor such as alcohol use includes:

- Removing wrong beliefs about the positive effects of drinking
- Providing facts on impact of alcoholism and need for community involvement
- Correcting wrong beliefs and giving accurate information about treatment
- Awareness programmes should include not only alcohol (as risk factor) but other issues like improving quality of life
- Community members should be encouraged to visit treatment sites and persons should be identified to provide support after treatment

[19]Ranganathan S.The Empowered community.A paradigm shift in the treatment of alcoholism, 1996. T.T. Ranganathan Clinical Research Foundation, Chennai.

- *Involve mass media*: Get mass media to cover campaigns and counter health relates myths (Television, local newspapers)
- *Arrange awareness programmes* for schools, colleges, workplaces and other vulnerable communities.
- *Activities for health promotion for risk factors and NCDs* include psycho education, campaigns, screening special films, exhibitions, posters, debates, talks by experts, conducting health camps, writing newspaper articles, street plays, broadcasting information, songs, poems
- *Engage local government agencies to* strengthen resources for health promotion.
- *Train* volunteers to increase local resources. Volunteers can help in early identification, referrals, follow-up and accompany patients to the Health Centre as support persons.

Slide 44



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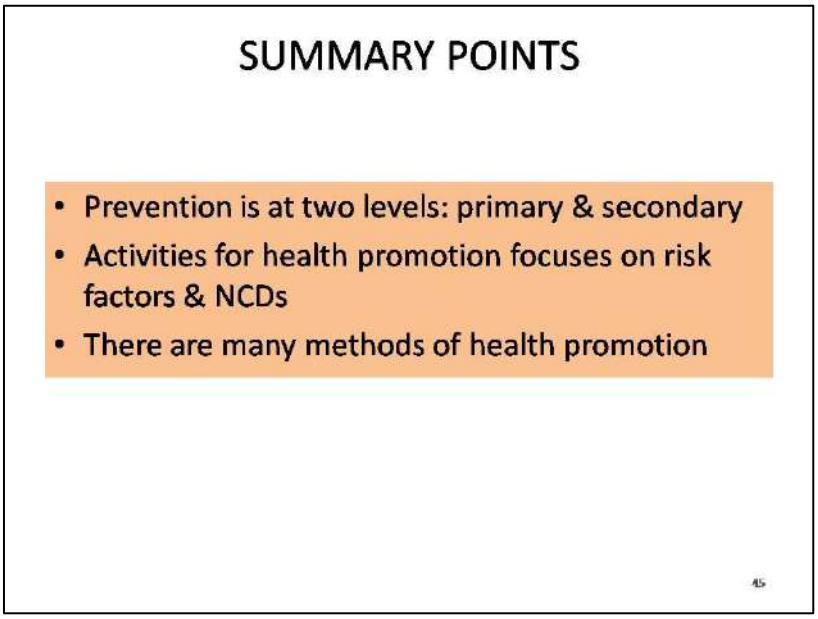


HANDOUTS

COUNSELING PRACTICES

1.1. PERSONAL QUALITIES OFA COUNSELOR
1.2. HOW DO I LISTEN?
1.3. BASIC LISTENING SKILLS
1.4. FIVE STAGES OF COUNSELING
1.5. MOTIVATION FOR CHANGE
1.6. READINESS TO CHANGE
1.7. LEVELS OF PREVENTION

1.1. PERSONAL QUALITIES A COUNSELOR

There are certain important qualities for Counselors that help in therapeutic changes in another person.

- Warmth (showing interest, a caring attitude)
- Empathy (to see the world as a patient sees it)
- Genuineness (true desire to help)
- Unconditional positive regard (regard for the patient at all times and in all situations)
- Confidentiality (privacy about patient's identity and information shared).
- Sense of humour (adopting a lighter approach; easing tension)
- Non- judgmental (keeping aside personal opinions, attitudes and values)
- Self awareness (exploring our own life situations)

1.2. HOW DO I LISTEN?

Paying attention:

- Visual/ eye contact: Look at patient when talking
- Vocal qualities: Use vocal tone and speech rate that conveys empathy and concern
- Verbal tracking: Keep to the topic initiated by the patient and gently guide back to the purpose of the session
- Body language: Sit comfortably facing the patient

Listening:

- S: Sitting firmly and comfortably
- O: Open position with arms, legs uncrossed
- L: Leaning slightly towards the patient
- E: Eye contact that is comfortable
- R: Relaxed position

1.3. BASIC LISTENING SKILLS

1. Questioning (Open, Closed)
2. Encouraging
3. Paraphrasing
4. Reflection of feelings
5. Summarizing

1.4. FIVE STAGES OF COUNSELING

STAGE OF INTERVIEWING	PURPOSE	SKILLS COMMONLY REQUIRED
1.Initiating the session (Rapport and Structuring)	-To make to patient feel comfortable with the Counselor -Structuring: Explain purpose of counseling	Basic listening skills
2. Understanding the problem (Drawing out problems, stories, concerns and issues)	-To find out need for counseling and listen to his / her story -To identify problems -To identify strengths	Basic listening skills
3.Mutual goal setting (What does the patient want to happen?)	-To understand what the patient wants to achieve -The desired direction of the patient and Counselor should be harmonious	Basic listening skills
4.Working (Exploring alternatives, re-storying, addressing conflict)	-To work towards finding a solution -Using a problem solving model	Basic listening skills
5.Ending (acting on new stories)	-Facilitating changes in thoughts, feelings and behaviours in daily life. -Checking if patient understands importance of changing	Giving information/ education Basic listening skills

1.5. MOTIVATION FOR CHANGE

The importance of motivation is to help the make patient make a positive shift and change his/ her present behaviour and risky lifestyle. Motivation is best when there is a partnership between the patient and the Counselor. Getting individuals to make a life style change where risk factors are concerned before it develops into an NCD is most challenging.

The relationship between the Counselor and patient is a partnership of collaboration and not coercion or force. In the past, the relationship between the Counselor and patient was authoritarian, one sided and directive. The patient was often forced to make changes. Today, the relationship is more collaborative, participatory and desire for change comes from the patient.

What is the ideal time to motivate the patient?

- It can be at first contact between the patient and Counselor.
- It can be done in a separate session.
- It is can be integrated with other interventions at different points of time. For example when the patient comes to meet the Medical Officer for follow - up, he/ she meets the Counselor during same visit.
- Research on substance dependence reveals how brief and timely interventions are more effective than long- term, intensive therapies.

1.6. READINESS TO CHANGE

Whether patients will change will depend on which stage they are in at present. Not Ready, Unsure, Ready are the three stages. Counseling strategies varies in each stage.

STRATEGIES FOR'NOT READY' STAGE:

DONT

- shame, blame, preach, stereotype, confront

DO

- Listen
- Give feedback, show concern
- Explore pros & cons of change
- Offer information, support, further contact

STRATEGIES FOR 'UNSURE' STAGE:

DON'T

- Jump ahead to give advice or confront
- Expect agreement

DO

- Practice empathetic, reflective listening
- Ask neutral, open- ended questions

- Explore pros & cons of change. e.g.
  Pros: '*what happens when you do xxxx*?'
  Cons: '*what happens when you do not do xxxxx*?'

STRATEGIES FOR 'READY' STAGE:

DON'T

- Jump in with single or simple bits of advice

DO

- Explore pros & cons of referral/ services
  Emphasize:
- Alternatives &choices (give menu of choices)
- Discuss community role models (e.g. film stars)
- Autonomy (e.g. '*you know best about what works for you*')
- Optimism paired with back up (e.g. *'if this does not work, you can call me*')

1.7. LEVELS OF PREVENTION

- Primary prevention: Taking action before onset of risk factors
- Secondary prevention: Screening, medical examination, referrals for early interventions to prevent complication

  METHODS OF HEALTH PROMOTION

  - Collaborate with existing organizations &local NGOs
  - Involve mass media
  - Arrange awareness programmes
  - Plan activities to address risks and NCDs
  - Engage local government agencies
  - Train volunteers
  - Plan campaigns, screening special films, exhibitions, posters, debates, talks by experts, conducting health camps, writing newspaper articles, street plays, broadcasting information, songs, poems

Tobacco use as a risk factor for NCDs

Session 3

Objectives of the session
By the end of this session, the participants will understand the following:

- Health problems associated with tobacco and tobacco use as a risk factor for NCDs
- Benefits of quitting tobacco
- Different forms of tobacco used in India
- Reasons for tobacco initiation and maintenance
- Environmental effects of smoking and other forms of indoor air pollution
- Role of the counselor in promoting behavioural change among tobacco users
- Identification of tobacco use among patients
- Intervention for tobacco cessation
- Promotion of cessation in the community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 

INTRODUCTION

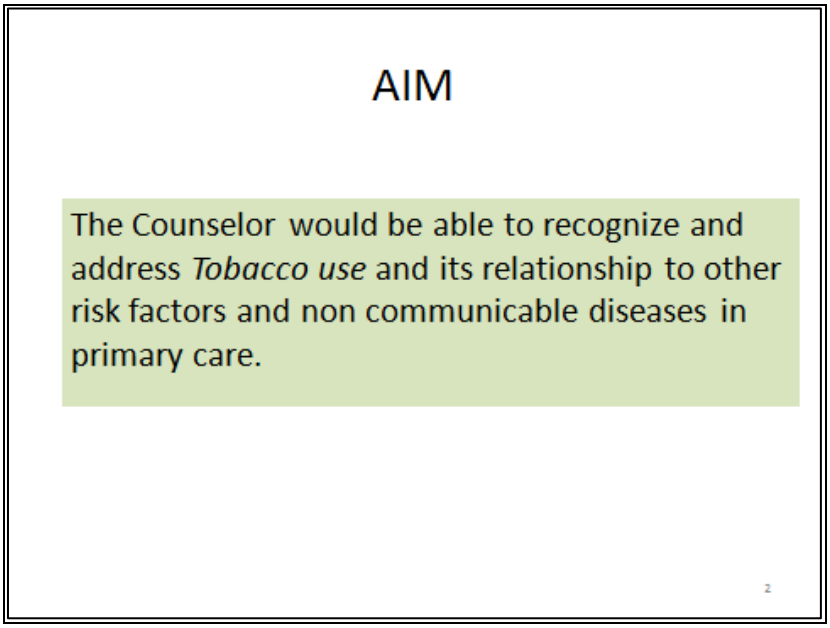
Across the world, approximately one person dies every six seconds due to tobacco use, and tobacco is responsible for one in ten adult deaths[20]. In India, 2,500 to 3000 persons die every day due to tobacco related diseases[21]. More than one out of three adults in India (35%) use tobacco in either the smoking or smokeless form. Overall, tobacco use is much higher among Indian males, with nearly one in two males using tobacco (48%). However, as many as one in five women (20%) also use tobacco, mostly smokeless[22]. Use of tobacco brings diseases not just for the user but also to their family, through the effects of second-hand smoking (the smoke that comes out of the cigarette or bidi inhaled by others around the smoker is also dangerous). Tobacco causes a variety of diseases including cancer, cardiovascular disease and respiratory diseases. It kills more people than AIDS, legal and illegal drugs, road accidents, murder and suicide put together[23]. According to WHO, the risk factors such as tobacco use, unhealthy diet and physical inactivity, if eliminated, would lead to 80% reduction in heart diseases, strokes, Type -2 diabetes and 40 % of cancer related problems[24].

[20] World Health Organization. Tobacco Fact Sheet. May 2014. www.who.int/mediacentre/factsheets/fs339/en/
[21]Murthy P & Nikketha S. Psychosocial interventions for persons with substance abuse: Theory and Practice. National Institute of Mental Health and Neuro Sciences, Bangalore 2007; NIMHANS Publication 64
[22]Global Adult Tobacco Survey (GATS) Fact Sheet India: 2009-2010. www.
nccd.cdc.gov/gtssdata/Ancillary/DownloadAttachment.aspx?ID=964
[23]Centres for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost and productivity losses- United States, 1997-2001. www.cdc.gov/mmwrhtml/mm5114a2.htm
[24] World Health Organization. Preventing Chronic Disease: A vital investment.
www.who.int/chp/chronic_disease_report/part1/en/index11.html

This session aims to make the Counselor understand the problems of tobacco use and its linkages to other risk factors and NCDs, as well as to know how to address tobacco use in primary care. The first section is about improving the counselor's understanding about tobacco use and its relationship to other risk factors and NCDs. The next section is about how the counselor will use methods for behavioural change in patients in order to stop tobacco, which in turn will reduce risk for NCDs. The final section is to plan health promotion activities in the community.

Total Duration: 4 hours 30 minutes approximately

Slide 2



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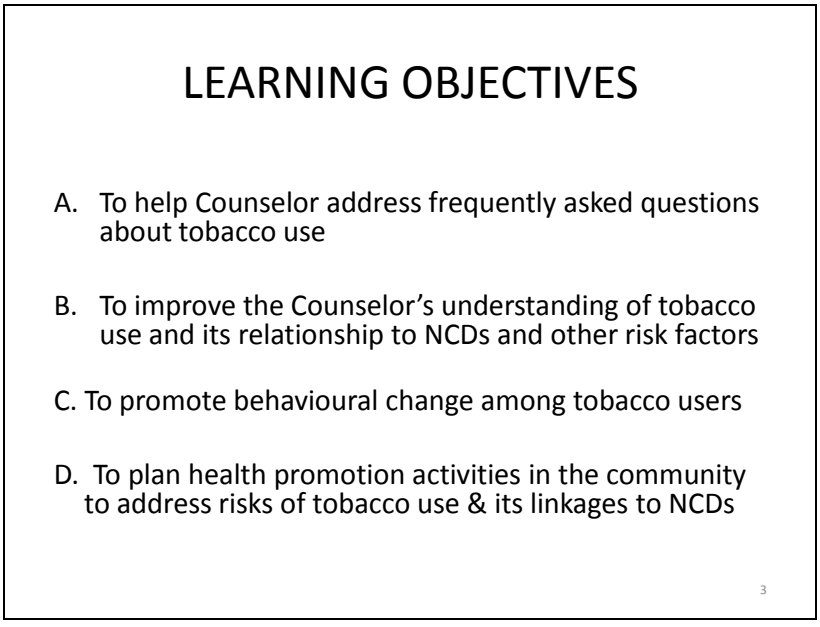


Slide 4

LEARNING OBJECTIVE

A. To help Counselor address frequently asked questions about tobacco use

4

INSTRUCTION

Discuss about frequently asked questions about tobacco use and some important facts about tobacco use.

Slide 5

? FREQUENTLY ASKED QUESTIONS

1. Why is tobacco bad? What happens if we smoke a few bidis or chew a few packets of smokeless tobacco a day?
2. Why should tobacco cause death? I am using tobacco for many years and am still alive.
3. I smoke only 1 or 2 cigarettes a day. Is that safe?
4. One has to die some day. How does it matter if I die because of tobacco related disease or otherwise?
5. I won't smoke at home but will go out and smoke. Is that ok?
6. I am smoking all these years. If I stop will I get my good health back?
7. I have anyway been told I have an incurable disease. How does it matter whether I use tobacco or not?

DISTRIBUTE HANDOUT 3.1(FREQUENTLY ASKED QUESTIONS**)**[25]

FREQUENTLY ASKED QUESTIONS

1. Why is tobacco bad? What happens if we smoke a few cigarettes or bidis or chew a few packets a day?

    - Even a single cigarette or bidi has been shown to be harmful. Tobacco use is a common risk factor for persons dying from heart problems, cancer, stroke and so on. Smoking or tobacco use is responsible for nearly 50% of all heart attacks; 30% of all cancer deaths and 87% of lung cancer each year. There is also 50% increase in the risk of impotence among smokers compared to those who have never smoked.

2. Why should tobacco cause death? I am using tobacco for many years and am still alive.

    - Among the 4000 chemicals in the cigarette and bidi, 60 are cancer causing. It's like inhaling pesticides, insecticides, paint thinner, battery fluid, etc. It reduces 15 years of your life. Chewing tobacco also contains these cancer causing chemicals, particularly N-nitrosamines, aldehydes, uranium, polonium and other chemicals.

3. I smoke only 1 or 2 cigarettes a day or chew tobacco a few times. Is that safe?

    - No amount of tobacco is safe. The safest way to reduce risk from tobacco use is not to use it in any form.

4. One has to die some day. How does it matter if I die because of tobacco related disease or otherwise?

    - Tobacco causes diseases which cause a lot of suffering for the patient before he dies. Have you thought of what happens to a person who develops a stroke or cancer. They don't just die but suffer a lot. Thus, it is a lot of suffering for both the person and the family. The economic cost of treatment is also another huge burden to the family.

5. I won't smoke at home but will go out and smoke. Is that ok?

    - This may prevent your family members from inhaling the smoke, but the smoke will go into the surrounding air and is harmful to others. In our country, public smoking is banned for this reason. But remember, **your** health is affected wherever you smoke.

6. I am smoking/chewing tobacco all these years. If I stop will I get my good health back?[26]

[25] World Health Organization, South-East Asia Regional Office. Helping People Quit Tobacco. A Manual for Doctors and Dentists. Murthy, Hiremath, Mohan (authors). WHO SEARO 2010. ISBN 978-92-9022-380-1

Yes. There are short term and long term benefits.

After 2 days:

- Sense of smell and taste will improve. You will enjoy your food more.
- Your risk of a heart attack begins to decrease.

After 2 weeks:

- Blood flow improves as nicotine has passed from your body.
- Within 2 weeks to 3 months circulation will improve making walking and running easier.
- Lung functioning goes up by 30%

Within 6-9 months:

- You will experience less coughing, tiredness and breathlessness

After 1 year:

- Your risk of heart disease will be about half of what it would have been if you continued to smoke

After 5 years:

- Your risk of stroke will be less.

After 10 years:

- Your risk of dying from lung cancer will be about half of what it could have been if you had continued to smoke
- Your risk of cancer of the mouth, throat, oesophagus, bladder, kidney and pancreas will decrease

Within 15 years:

- Your risk of dying from heart attack is equal to a person who has never smoked.

---

[26] Adapted from : United States Department of Human and Health Services. The health benefits of smoking cessation: A report of the Surgeon General. Centres for Disease Control and Prevention (CDC) Office on Smoking and Health. 1990. *www.profiles.nlm.nih.gov/NN/B/B/C/T/*

Slide 6

SOME IMPORTANT FACTS TO KNOW

- Nearly 3000 persons die daily from tobacco related diseases
- Tobacco contains many chemicals, including 60 that produce cancer
- Even a single stick of tobacco or a single packet of smokeless tobacco is harmful to the user
- Tobacco related diseases can be very painful and associated with a lot of suffering, both of health and finances
- Smoking affects the health of not only the user, but also those around
- There are benefits from quitting
- Even if a tobacco user has developed a disease, quitting is important for health

Slide 7

SUMMARY POINTS

These are frequently asked questions about tobacco use by people all over the country that need to be addressed

7

Slide 8

LEARNING OBJECTIVE

B. To improve the Counselor's understanding of tobacco use and its relationship to NCDs and other risk factors

8

INSTRUCTION

Discuss about tobacco use in the Indian context. Different forms of tobacco, its effects, and linkages of tobacco as a risk factor to various other risk factors like alcohol, stress, diet, physical inactivity and NCDs will be presented.

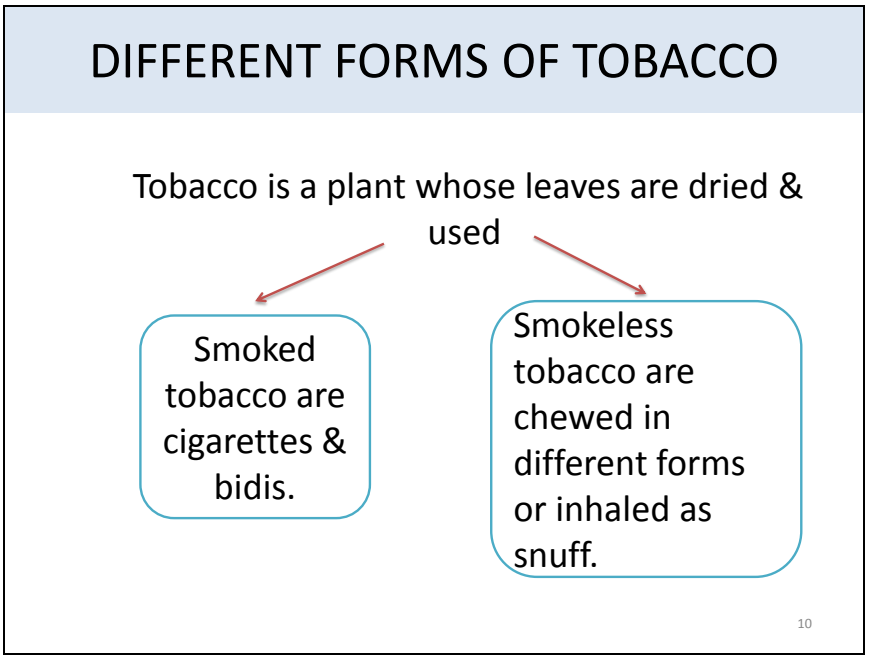
Slide 9

B *What are the different forms of tobacco use in India?*

9

Generate discussion and write responses on the board.

Slide 10



Tobacco is a plant whose leaves are dried and used in various ways. It may be smoked in the form of cigarettes or bidis. Smokeless tobacco is commonly chewed in different forms or inhaled as snuff. In India 1/3rd of its population used tobacco (smoking or smokeless forms). India ranks first in smokeless tobacco use. Chewing tobacco and using other forms of smokeless tobacco are more popular in India among men, women, children and teenagers. Smoking by women is not looked upon favourably by society but there is no taboo with regard to smokeless forms[27].

[27]Tobacco Dependence Treatment Guidelines 2011. National Tobacco Control Programme, Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India. 2011. www.treatobacco.net/en/uploads/documents/Treatment%20Guidelines/India%20treatment%20guidelines%20in%20English%202011.pdf

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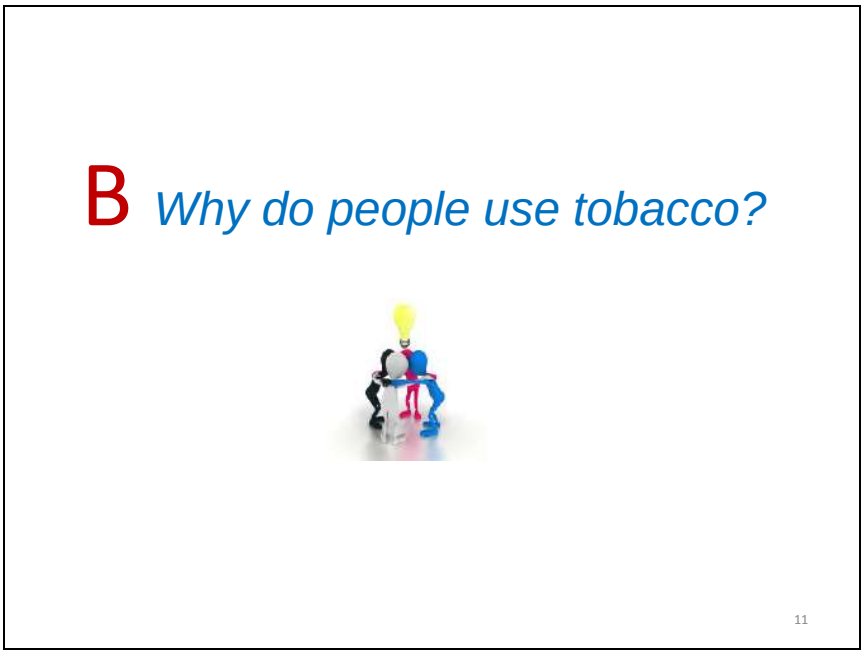

Generate discussion and write responses on the board.

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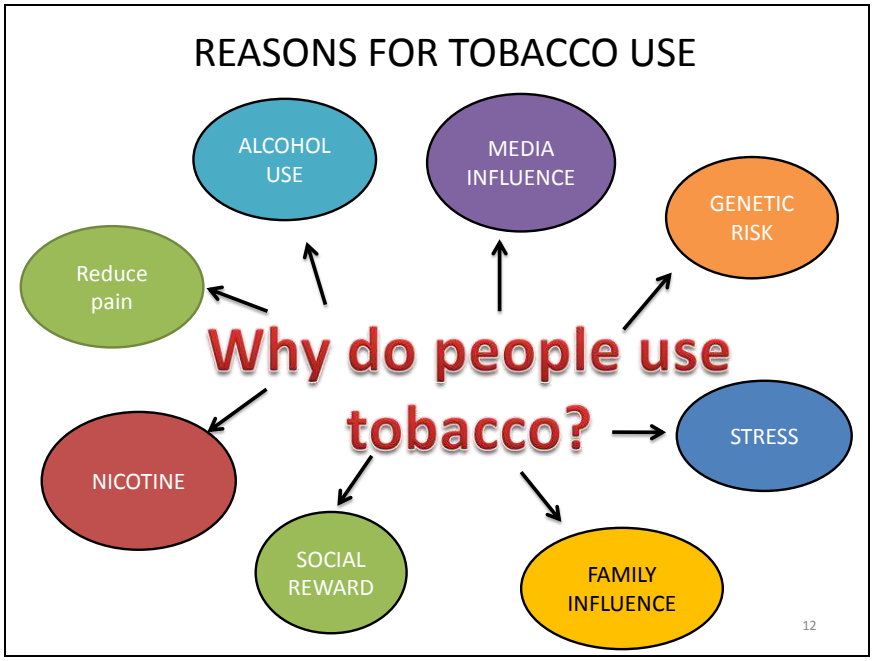


The idea here is to discuss that there are a variety of reasons why people start to use tobacco. Tobacco is culturally accepted in many societies. It has been a common source of relaxation, a common way to reduce tension. Recently, more and more people have come to know about the harm from tobacco.

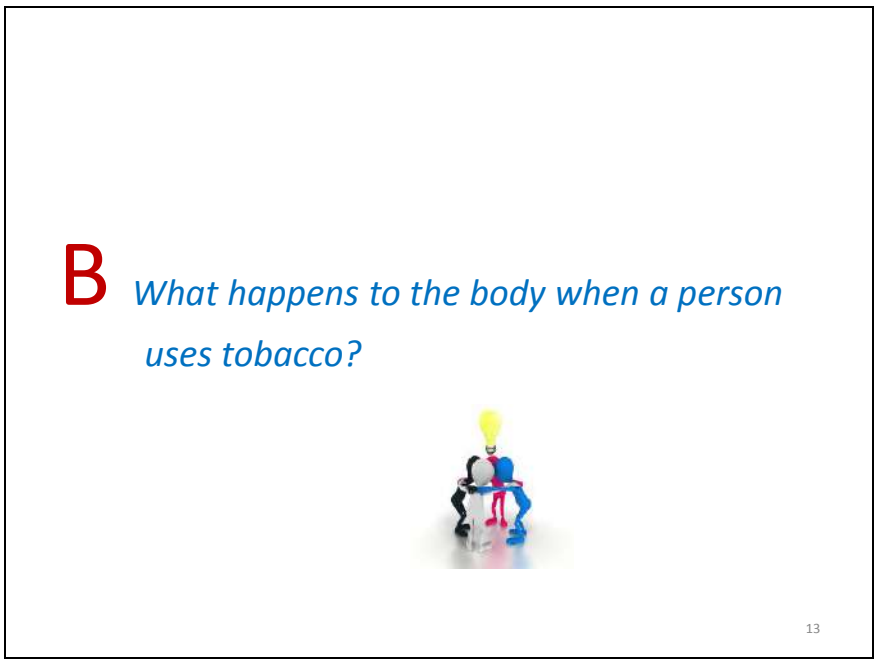
Interrelationships between tobacco and other risk factors

Tobacco, diet and physical activity: Tobacco use can reduce appetite, lead to loss of weight and poor nutritional intake.

Stress: People manage their emotions with tobacco. For instance, a person may smoke or chew tobacco when he/she is tired or feeling sad, angry or frustrated (negative emotions) or feeling happy, joyous or excited (positive emotions).Persons experience two types of stress related to smoking. One type comes from the addiction itself, as tobacco users experience withdrawal symptoms when they have not used tobacco for a while. The other type applies to use of tobacco in specific situations viz. when they are conflict with family members, friends, or co-workers.

Alcohol: Studies have found that people who smoke are more likely to drink and people who drink are more likely to smoke. Many people having alcohol dependence smoke and it puts them at high risk for tobacco-related complications including multiple cancers, lung disease, and cardiovascular disease[28] .

Slide 13



Generate discussion and write responses on the board.

[28]Alcohol Alert, January report NIAAA, 2007 http://pubs.niaaa.nih.gov/publications/AA71/AA71.htm

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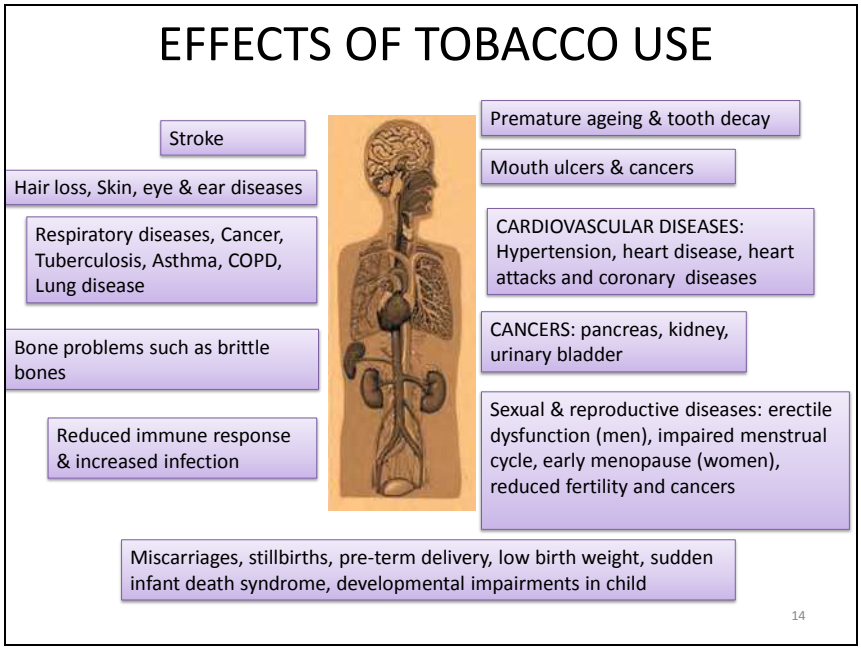
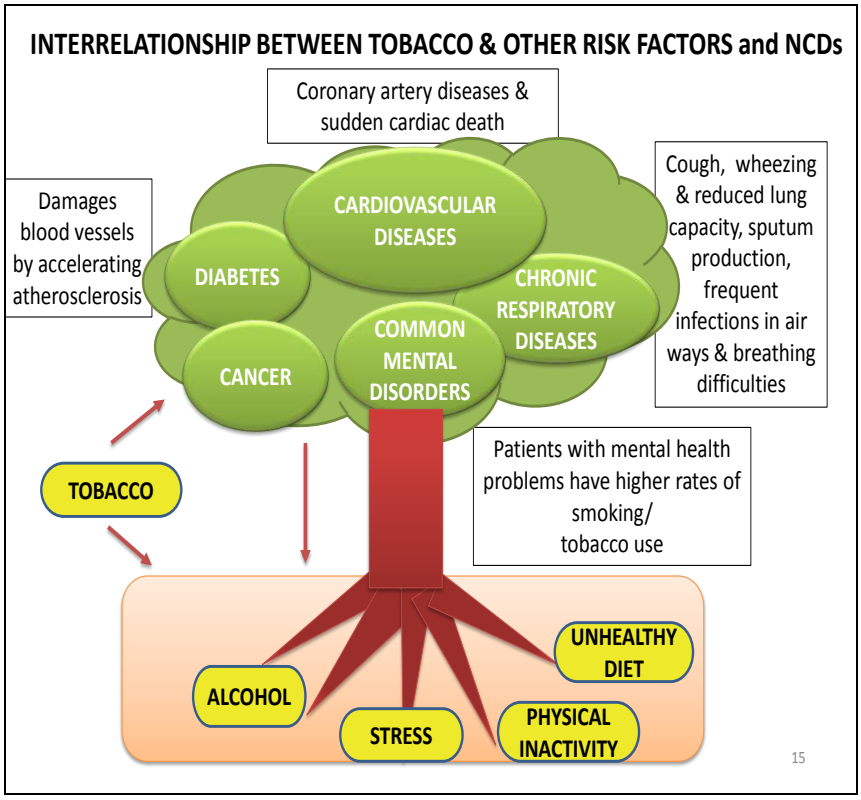


The diagram is about the effects of tobacco use. [29]

Slide 15



[29] WHO SEARO. Helping people to quit tobacco: A manual for doctors and dentists. Murthy, Hiremath, Mohan (Authors) 2010. www.nimhans.kar.nic.in/cam/CAM/Doctors_and_dentists_tobacco_cessation.pdf

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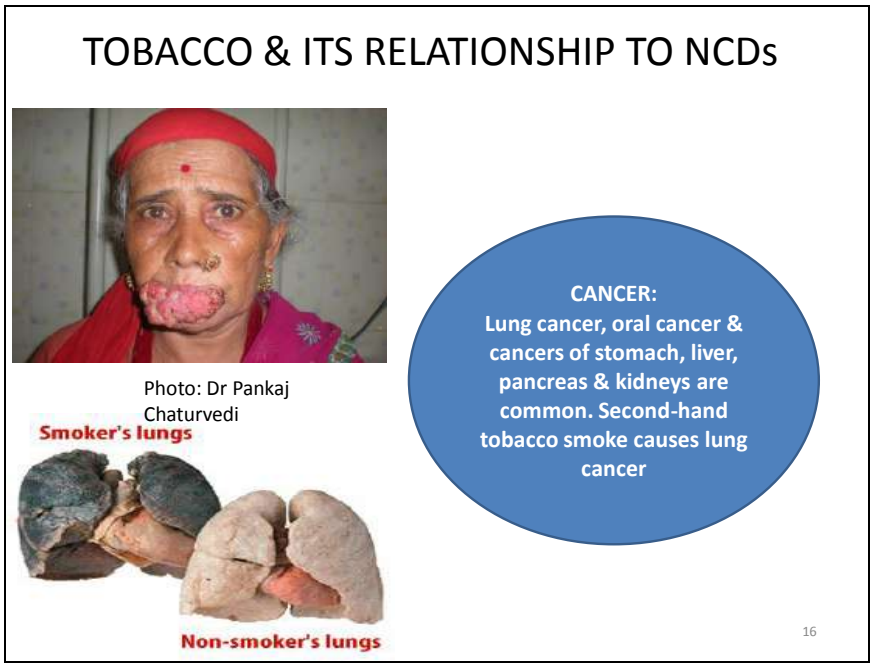


Tobacco and cancer: Tobacco use is the major cause of lung cancer, oral cancer and cancers of the stomach, liver, pancreas and kidneys. In addition, exposure to second-hand tobacco smoke causes lung cancer. Smoking has also been related to cardiovascular diseases. The International Agency for Research on Cancer (IARC)[30] found that tobacco smoking is the major cause of lung cancer and is associated with oral cancer, and cancers of the oropharynx and hypopharynx, oesophagus, stomach, liver, pancreas, larynx, nasopharynx, nasal cavity and nasal sinuses, urinary bladder, kidney and cervix, and myeloid leukemia. In addition, second-hand tobacco smoke also causes lung cancer. The IARC reports that chewing betel quid with tobacco and tobacco mix with lime are carcinogenic. Several studies from the South East Asian region provide evidence of oral cancer risk.

Tobacco and cardiovascular diseases: Tobacco use, especially in the form of smoking has been found to lead to coronary artery diseases and sudden cardiac death. A study in Bangalore found that the most important predictor of acute myocardial infarction (heart attack) was the smoking of cigarettes and bidis.

Tobacco and respiratory diseases: Tobacco is associated with chronic respiratory diseases including symptoms such as cough and wheezing and reduced lung capacity. Tobacco can also cause chronic cough, sputum production, frequent infections in the air ways and breathing

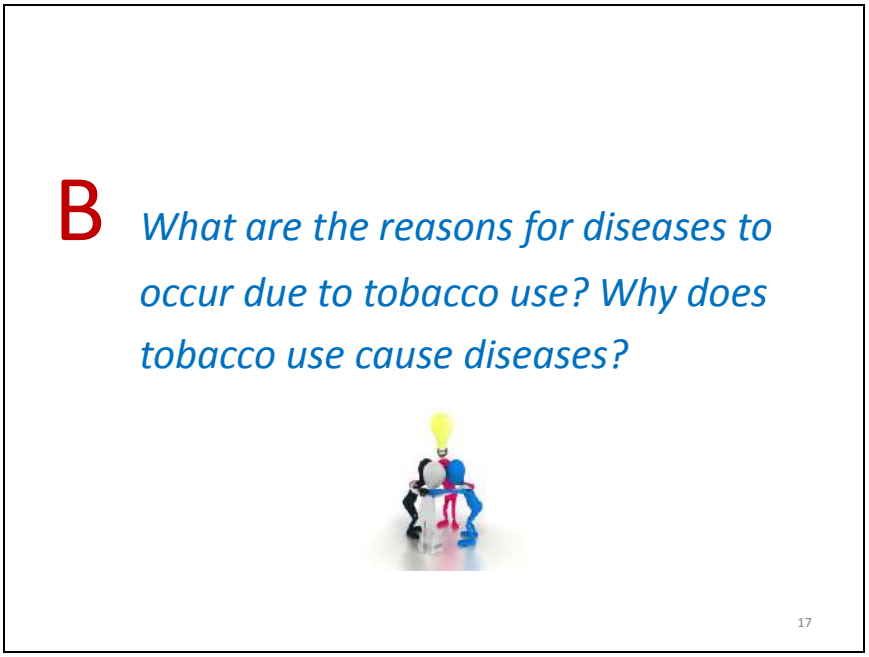
[30] IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. Tobacco smoke and involuntary smoking. IARC volume 83. Lyon: IARC, 2004 (http://monographs.iarc.fr/ENG/Monographs/vol83/mono83-1.pdf

difficulties. In Nepal, the high incidence of respiratory tract infections among under-fives is linked to smoke from cigarettes and cooking in enclosed areas[31].

Tobacco and mental disorder: Patients with mental health problems have higher rates of smoking/tobacco use and are prone to serious health problems both on account of their mental illness and on account of tobacco use[32].

Tobacco and diabetes: Tobacco use increases the risk of diabetes. In persons who are diabetic, tobacco use increases damage to blood vessels by accelerating atherosclerosis.

Slide 17

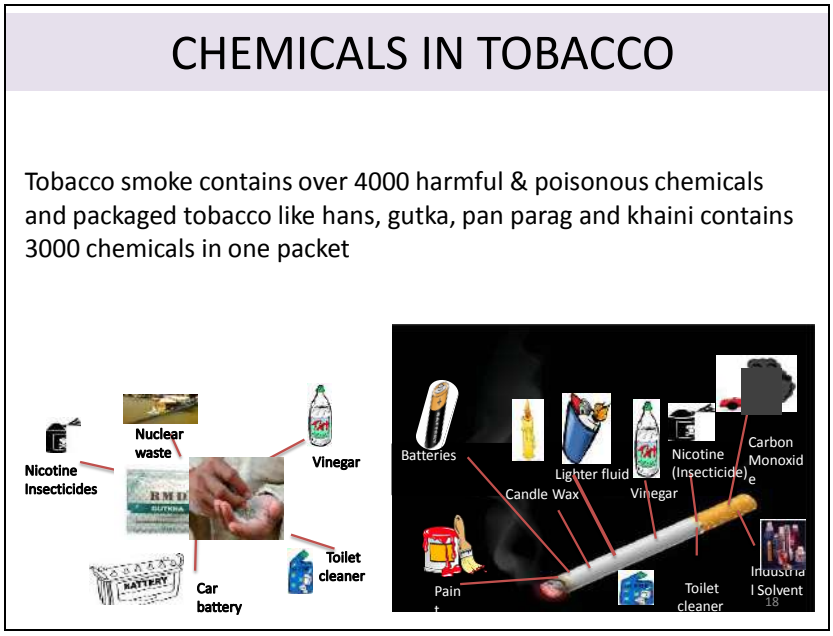


Generate discussion and write responses on the board.

[31]The Framework Convention on Tobacco Control in the South-East Asia Region. Regional CommitteeFifty-third session, document no. SEA/RC53/14. New Delhi: WHO SEARO, 2000. www.searo.who.int/LinkFiles/RC_53_rc53-14.pdf

[32]Tobacco Dependence Treatment Guidelines, Control Programme Directorate General of Health Services, Ministry of Health & Family Welfare Government of India. National Tobacco Control Programme, Directorate General of Health Services Ministry of Health & Family Welfare Government of India. 2011.

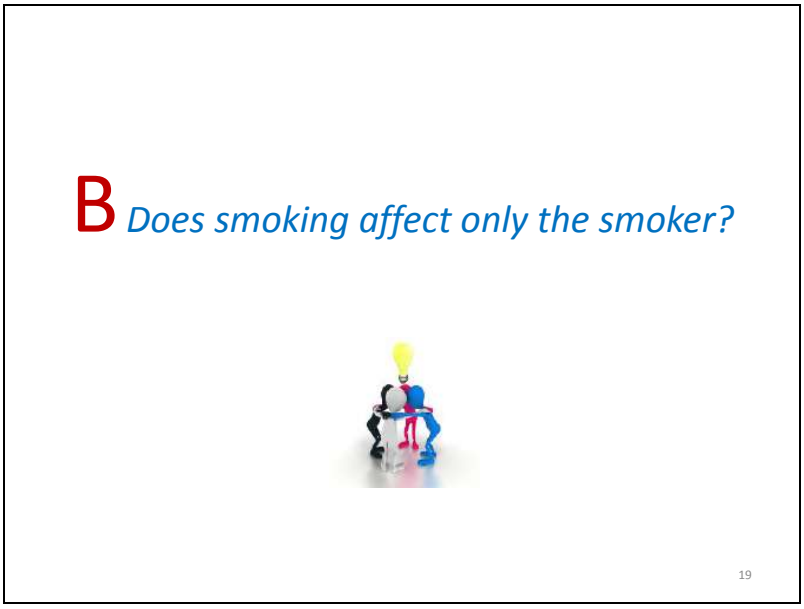
Slide 18



Chemicals in tobacco and their action on human beings: There are 4000 chemicals in one cigarette and 3000 chemicals in one gutka packet[33].

DISTRIBUTE HANDOUT 3.3. (CHEMICALS IN TOBACCO). Many of these chemicals can cause cancer.

Slide 19



Generate discussion and write responses on the board.

[33]National Cancer Institute. Secondhand smoke: questions and answers. www.cancer.gov/images/Documents/3770da1d-1c3a-4a1c-905f-944140049158/Fs10_18.pdf.

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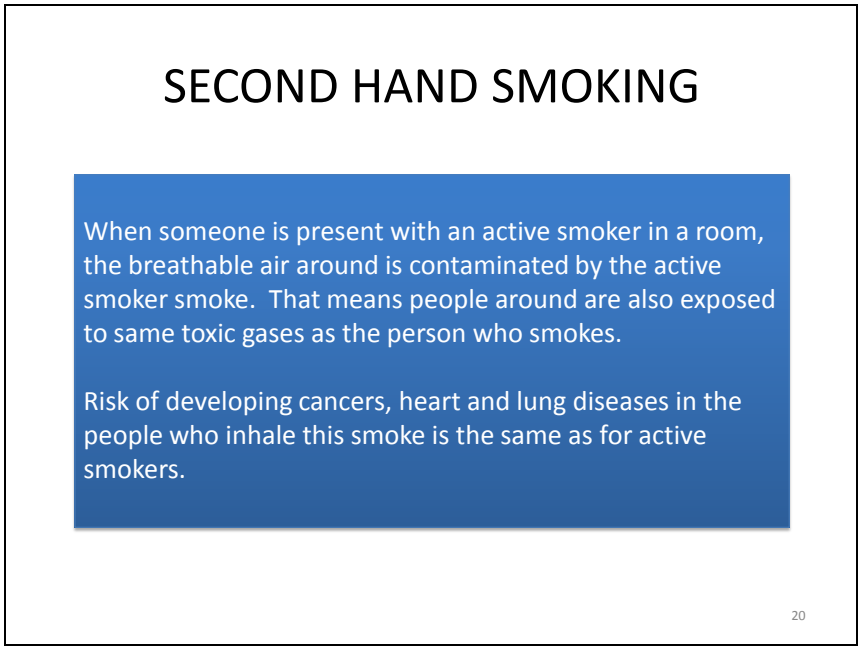
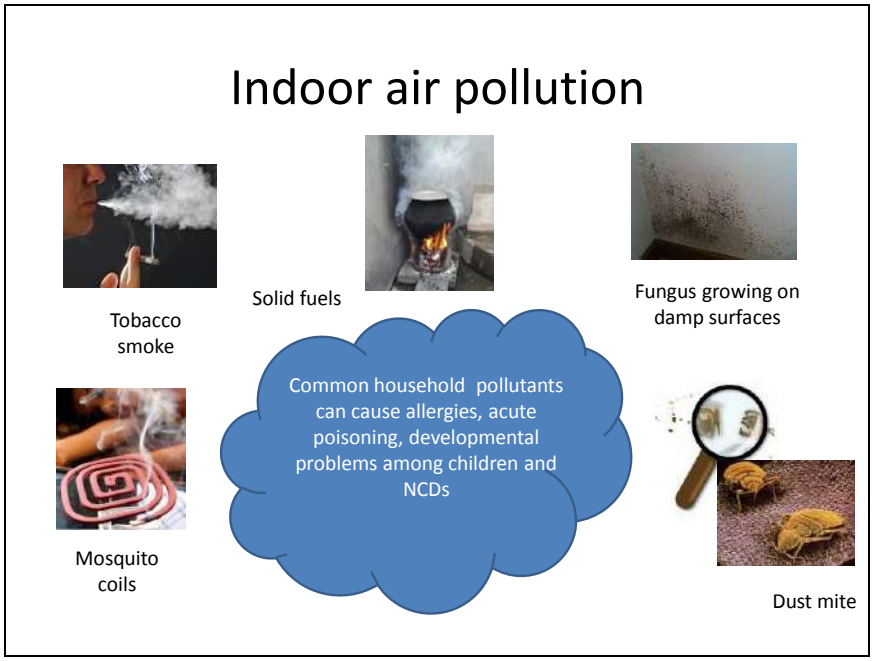


Second hand smoking: When someone is present with an active smoker in a room, the breathable air is contaminated by the smoke. That means people around are also being exposed to the same toxic gases as the person. A passive smoker is therefore at risk to develop cancers, heart and lung diseases as the active smokers. Second hand smoke is a complex mix of thousands of chemicals. At least 50 substances in second hand smoke have been shown to cause cancer that can enter the body through the lungs before being absorbed into the blood stream.

A note on indoor air pollution

In India, major sources of air pollution in the home are tobacco smoke and the smoke from the use of solid fuels (wood, coal, charcoal, dung, crop wastes). Household or indoor air pollution occurs from a variety of pollutants such as fine particles and carbon monoxide.

Slide 21



It is mostly women and young children who are the first victims of indoor smoke-related acute and chronic respiratory and cardiovascular illnesses. According to WHO estimates, in 2012, 4.3 million people die prematurely each year across the world due to household air pollution[34]. Of these, 1.7 million premature deaths are in the South East Asia region. Most of these premature deaths were due to noncommunicable diseases such as heart disease, stroke, chronic obstructive pulmonary disease and lung cancer. Indoor air pollution is also responsible for a significant number of acute respiratory illnesses in young children. Children have lungs which are still immature. They also spend a lot of time indoors. Poor nutritional status also worsens their risk to various respiratory diseases.

Causes of Indoor air pollution

Indoor air pollution can be caused by a number of environmental pollutants. These include:

Chemical – the most common being tobacco smoke and gases from solid fuel burning; pesticides including mosquito coils, constant inhalation of fumes from burning incense, exposure to chemicals like paints, kerosene etc (volatile solvents)

Biological – Dust mites (tiny invisible insects) that are commonly seen in dusty and mouldy carpets, curtains and beds; fungus that grows in damp environments

[34] World Health Organization. Household (Indoor) air pollution. www.who.int/indoorair/en/

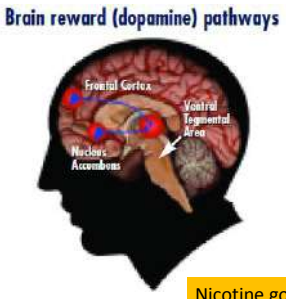
Building materials - Material such as asbestos has been found to have adverse health effects
Conditions in which people live in, particularly limited living space, overcrowding, poor ventilation, poor nutrition and a lack of awareness worsen the consequences of exposure to indoor air pollutants.

While counseling about the dangers of second-hand smoking, it would be useful for the counselor to also educate clients about avoiding other forms of indoor pollution.

Slide 22

WHY IS STOPPING TOBACCO SO HARD ?

- Nicotine is the chemical in tobacco that leads to pleasure by releasing chemicals like dopamine in the brain
- Gradually the brain needs more nicotine to experience the pleasure
- Over time, when the brain does not get nicotine, it sends distressing signals to the person in the form of craving, restlessness and irritation



Nicotine goes to the brain and produces a sense of well being

Slide 23

SUMMARY POINTS

- Different types of tobacco are used in India (smoking and smoking less tobacco)
- People use tobacco for various reasons
- Tobacco use causes harm to the body and leads to NCDs
- There are harmful and poisonous chemicals in tobacco
- Second hand smoking can cause health problems

23

Slide 24

LEARNING OBJECTIVE

C. To promote behavioural change among tobacco users

24

INSTRUCTION

Use a case study and discuss how tobacco use can be recognized as a risk factor and how behavioural change can be promoted.

Slide 25

B CASE STUDY

Case study:

Raja is 40 years old and works as a farmer. He stays at home due to coughing and tiredness. He has been taking rest at home and is unable to go to his farm. When he comes to the Health Centre for his frequent cough, he was also found to have high BP.

The Medical Officer advises him medication and asks him to meet the Counselor.

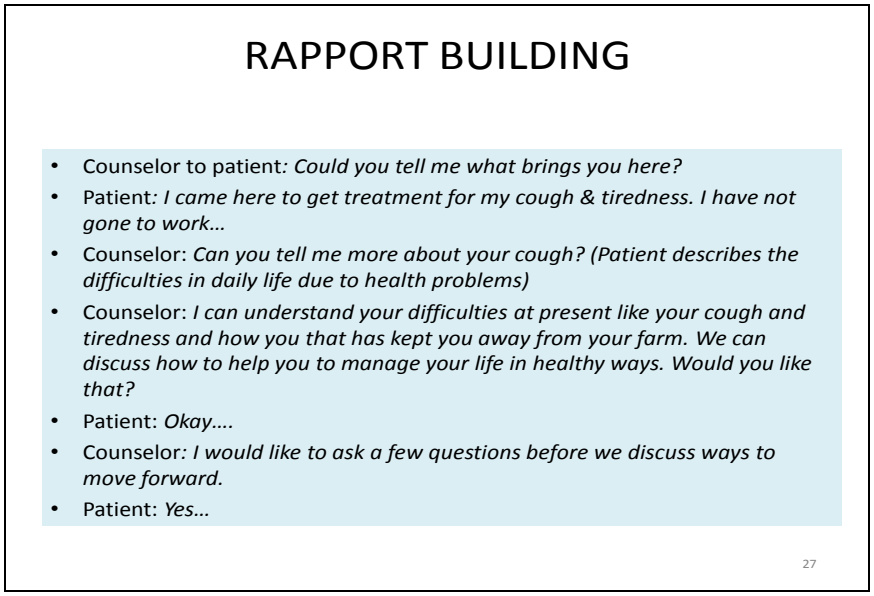
What will you do as a Counselor?

25

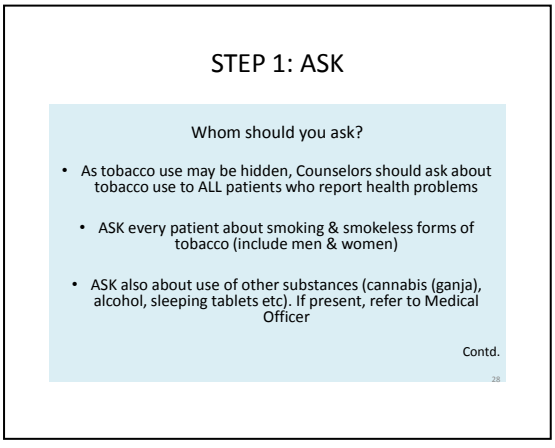
Generate discussion and write responses on the board.

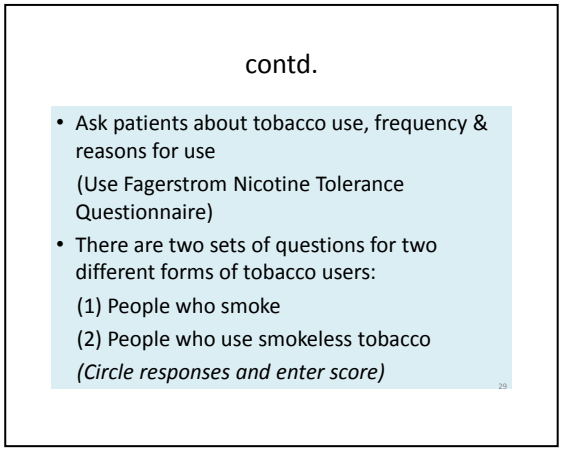
Slide 26

Slide 27



Slide 28 and 29





Tobacco use may not be a presenting problem and may be hidden. Therefore, the counselor should ask about tobacco use to all patients who report with health problems. As tobacco use is common, the counselor should ask every patient about smoking and smokeless forms of tobacco (this includes men and women). ASK also about use of other substances (cannabis (ganja), alcohol, sleeping tablets etc). If present, refer to Medical Officer.

The responses are circled and scores are entered. The counselor will plan intervention based on the scores. The Fagerstrom's addiction scale for smokers can be applied for all smokers, including bidi smokers.

Slide 30 and 31

FAGERSTROM ADDICTION SCALE FOR SMOKERS & SMOKELESS USERS

1.SET OF QUESTIONS FOR SMOKERS

1. How soon after you wake in the morning do you smoke or first use tobacco? a. With in 5 minutes 3 b. 6 to 30 minutes 2 c. 31 to 60 minutes 1 d. More than 60 minutes 0
2. Do you find it difficult not to use tobacco where tobacco is forbidden? a. Yes 1 b. No 0
3. Which of cigarettes would you most hate to give up? a. First thing in the morning 1 b. Any other time 0
4 Do you use tobacco when you are sick enough to have to stay in bed? a. Yes 1 b. No 0
5. How many cigarettes do you smoke a day? a. 10 or less 0 b. 11-20 1 c. 21-30 2 d. 31 or more 3
6. Do you use tobacco more in the morning than the rest of the day? a. Yes 1 b. No 0

Scoring = The closer to zero your score, the less dependent you are on tobacco and the higher the score, the more strongly you are addicted.

2. SET OF QUESTIONS FOR SMOKELESS TOBACCO USERS

1. After a normal sleeping period, do you use smokeless tobacco within 30 minutes of waking?			
a. Yes 1	b. No 0		
2. Do you use smokeless tobacco when you are sick or have mouth sores?			
a. Yes 1	b. No 0		
3. How many times do you use per week?			
a. Less than 2 times 0	b. More than 2 times 1	c. More than 4 times 2	
4. Do you intentionally swallow your tobacco juices rather than spit?			
a. Never 0	b. Sometimes 1	c. Always 2	
5. Do you keep a dip or chew in your mouth almost all the time?			
a. Yes 1	b. No 0		
6. Do you experience strong cravings for a dip or chew when you go for more than two hours without one?			
a. Yes 1	b. No 0		
7. On average, how many minutes do you keep a fresh dip or chew in your mouth?			
a. 10-19 minutes 1	b. 20-30 minutes 2	c. More than 30 minutes 3	
8. What is the length of your dipping day (total hours from first dip/chew in a.m. to last dip/chew in p.m.)?			
a. Less than 14.5 hours 0	b. More than 14.5 hours 1	c. More than 15 hours 2	
9. On average, how may dips/chews do you take each day?			
a. 1 - 9 times 1	b. 10 - 15 times 2	c. >15 times 3	

Scoring similar to the previous one (Questions for smoking tobacco)

Slide 32

A TO IDENTIFY TOBACCO USE

CASE STUDY (TO IDENTIFY TOBACCO USE)

Raju is 38 years old and works in the local village shop. He has been feeling very tired and has a persistent cough. He tells his wife that he feels dizzy and complains of headaches. He comes to the Health Centre for his headache. The Medical Officer reports that his BP is high and prescribes medication. He refers Raju to the Counselor.

The Counselor finds out that Raju gets irritated and shouts at the customers and tends to smoke in the shop. His manager has suspended Raju from work as he smokes and spits tobacco juice at the shop entrance. Raju also chews tobacco (hans) as a habit about 5 times a day and keeps it in his mouth most of the time. He starts the day by smoking beedis with his morning tea and smokes a packet (of 10) throughout the day.

Fill up the Fagerstrom questionnaire for Raju.

32

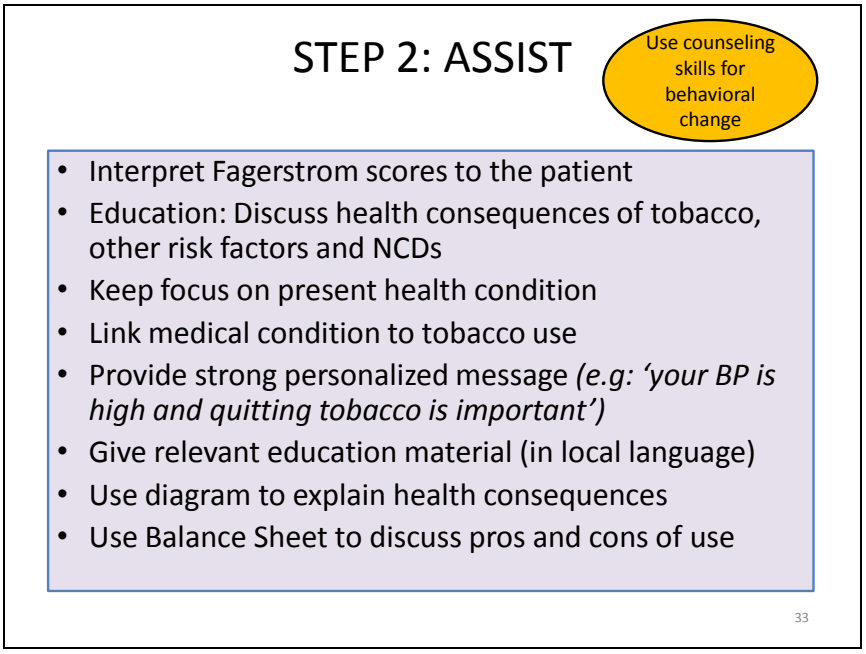
TO IDENTIFY TOBACCO USE

Duration: 45 minutes

INSTRUCTION

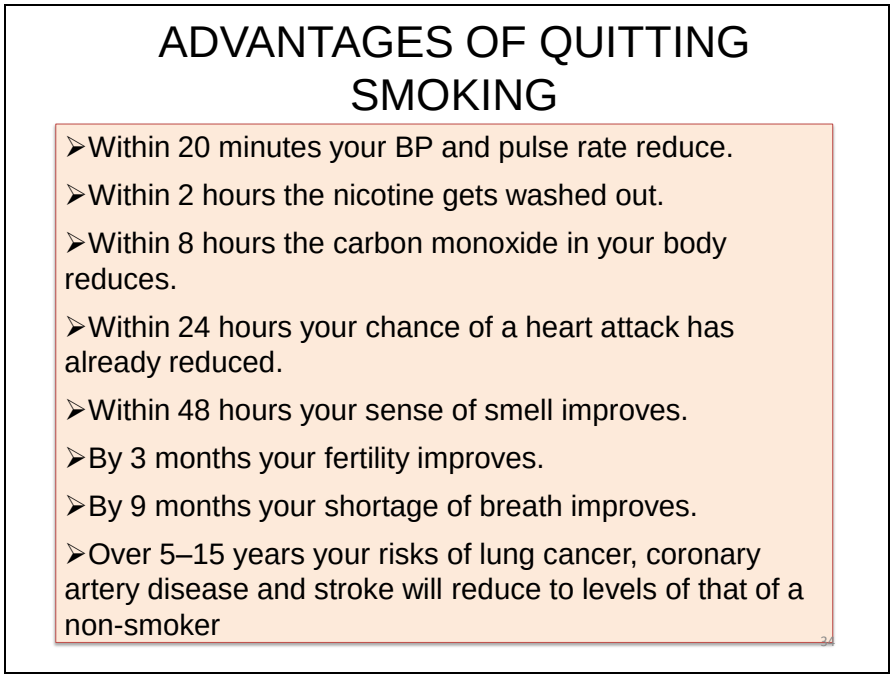
Conduct an individual activity for participants identify tobacco use. The case study is given in the slide and participants will use FAGERSTROM to indentify tobacco use. Discuss and summarize after individual activity.

Slide 33

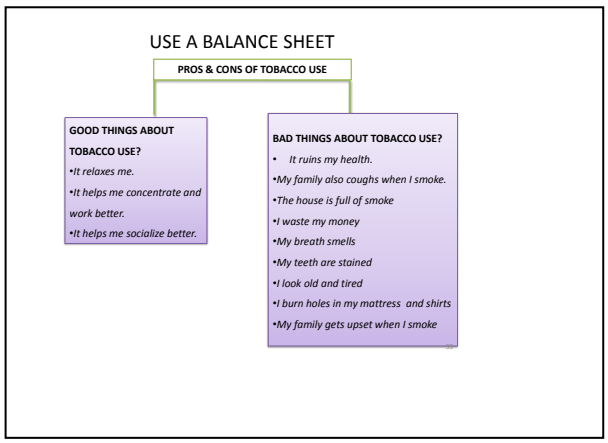


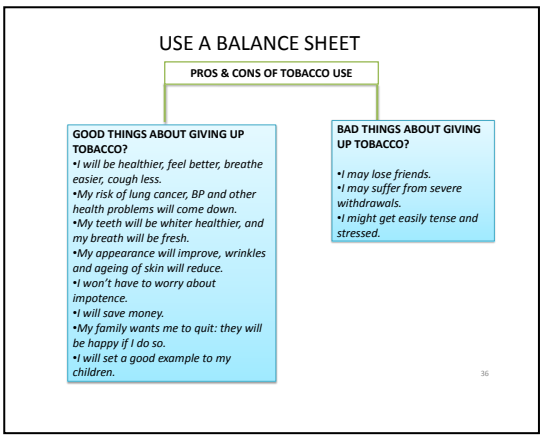
Educate: The health consequences of tobacco use, other risk factors and NCDs will be discussed (use diagram when explaining). Where necessary the counselor will inform the patient about the connection of tobacco, other risk factors and NCDs (present health condition). Keep focus of counseling on present health condition. Link medical condition to tobacco use and provide a strong personalized message. Give relevant education material (in local language). Most tobacco users are not aware of the health risks of tobacco and just have a general knowledge. The counselor's information has greater impact when it is provided in the context of the patient's disease status or risk factor, and current family or social situation (e.g. patient can have school going children or poor living conditions and how smoking and present health condition can affect family life if unchecked).

Slide 34



Slide 35 and 36



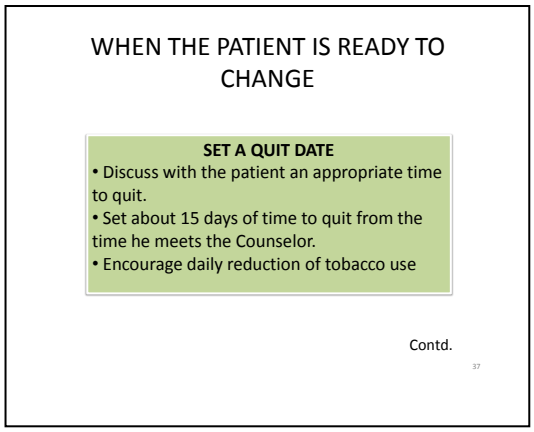


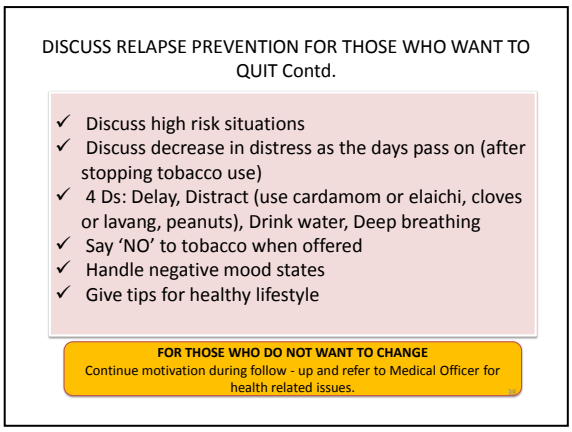
The **Balance Sheet** will be used to discuss the pros and cons of tobacco use as a risk factor and how it affects health and other aspects of daily life[35]. The counselor can discuss with the patient using the balance sheet and motivate him/ her to change the use of tobacco as a risk factor. The list of problems is invariably longer. As the patient goes through this exercise, the counselor will highlight what is most relevant for the patient. The aim is to make the message personally

[35]Nattala P & Murthy P. *Relapse prevention in alcohol dependence: A family-based approach.* National Institute of Mental Health and Neuro Sciences, Bangalore, 2013; Publication No 87.

meaningful to the patient. The counselor's role is to be able to help the patient to favour the decision to change.

Slide 37 and 38





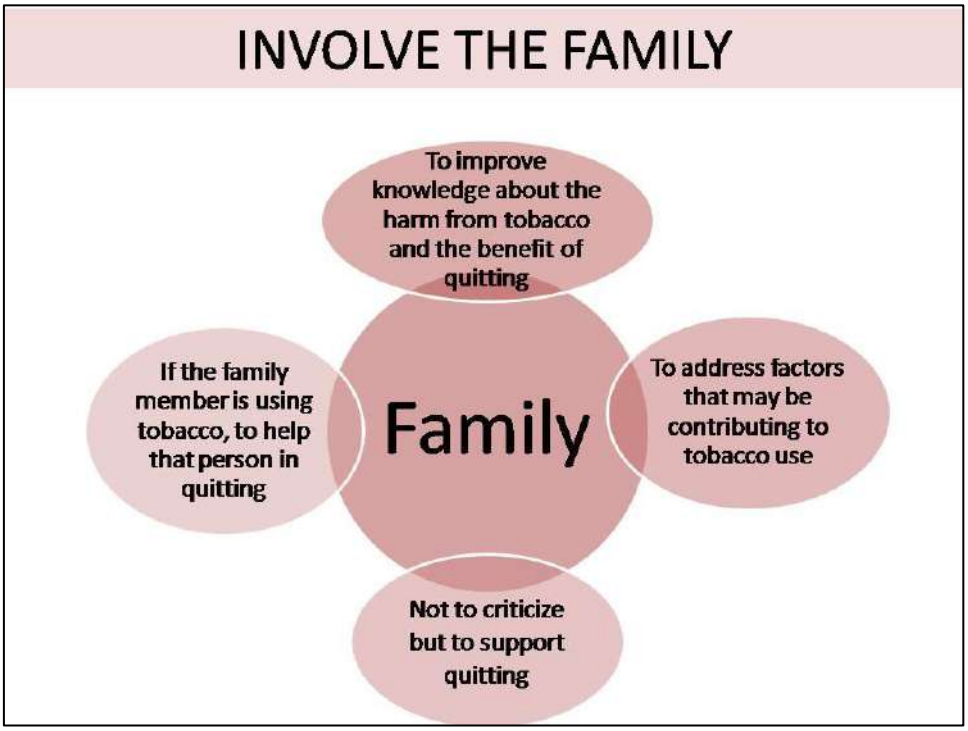
SET A QUIT DATE[36]

- Discuss with the patient an appropriate time to quit. It can be on the persons' birthday or child's birthday or as a gift to the family. Set about 15 days of time to quit from the time of meeting the counselor.
- Reduce the tobacco use daily (from 10 to 9 bidis; 9 to 8 and so on)
- Help the patient to identify & handle high risk situations (e.g. smoking a cigarette in the morning, drinking coffee/ tea, after food, being with other smokers, taking a break at work and feeling bored)
- Discuss how craving(urge to use tobacco)can be managed
- Discuss 4 Ds that are useful when craving occurs: Delay, distract (use cardamom (elaichi), cloves (lavang), peanuts), drink water, deep breathing
- Learning to say 'NO' to tobacco is an important step that the patient should practice and is given below:
  - Say NO first
  - Respond fast, use eye contact and have a clear tone and show that you are serious
  - Don't make excuses to not smoke (people feel guilty and make excuses; cut the conversation short)
  - Leave the situation quickly if you are forced to use tobacco
- Learning to handle negative mood states in positive ways is another step (e.g. feeling angry, bored, sad, restless)

[36] Sebastian M, Krishnan D, Dhingra M, Zutshi A, Benegal V, Murthy P. Tambakina upayogavannu nillisalu sahayavaguva kaipidi. Tobacco Use: A Smart Guide On Why you should stop…and how. 2007. www.nimhans.kar.nic.in/cam/CAM/TOBACCO_USE-_A_SMART_GUIDE__ENGLISH___NIMHANS__BANGALORE_.pdf

- Tips for healthy lifestyle should be planned (e.g. prayer, staying with non - tobacco users, following a balanced diet, ensuring good sleep and exercise, time management, practicing relaxation)
  FOR THOSE WHO DO NOT WANT TO CHANGE: Continue motivation during follow- up and refer to Medical Officer for health related issues.

Slide 39



The use of tobacco often runs in families. There are two reasons for this. It is now understood that there may be a genetic risk to develop addiction, once a person starts the use of tobacco. Further, younger people in a family start tobacco use when there is a 'role model' using tobacco. Thus, involving the family member of the tobacco user is important for many reasons:

1. To educate them about the risks of tobacco use on health
2. To get them to support the tobacco user in his or her quit attempt
3. To address any possible risk factors for tobacco use (e.g. stress at home)
4. To motivate tobacco using family members to also quit.

Slide 40

STEP 3: ARRANGE

- Refer patient to Medical Officer for health related issues & medication for tobacco cessation
- Inform patient about follow - up &monitor progress.
- Make home -visits with the help of the Community Health Worker

40

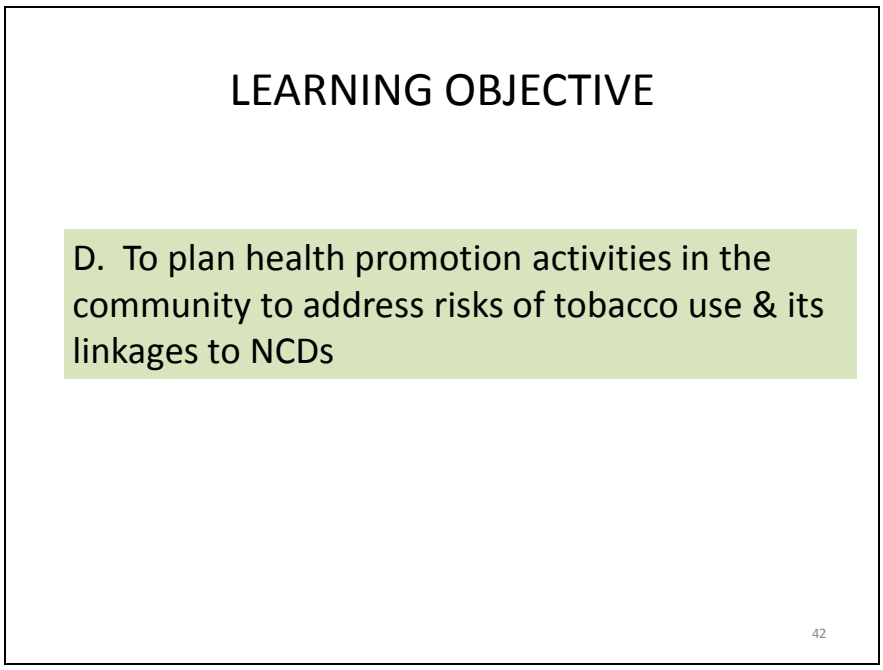
Slide 41

SUMMARY POINTS

- Use Ask, Assist and Arrange
- Ask ALL patients about tobacco use
- Use Fagerstrom Questionnaire to assess tobacco use
- Discuss advantages of quitting, pros and cons of tobacco use and quit date and relapse prevention for those who want to quit
- Refer to Medical officer for tobacco cessation
- Arrange for follow - up & monitor progress with the help of Community Health Worker

41

Slide 42



INSTRUCTION

For the activity, help the group to list out suitable methods for health promotion activities to address tobacco as a risk factor in the community. Each group will make promotion using chart papers and pens.

A note for health promotion in schools on preventing tobacco use[37]:

- Speak about adverse effects of tobacco
- Address incorrect beliefs about tobacco and clarify all questions
- Emphasize healthy habits (good nutrition, avoiding junk food, study habits, exercise and rest)
- Provide tips to cope with stress (handling exams, improving self image)
- Keep the description simple, vivid and real and a medicate rationale helps
- Use tobacco free role models (film stars, sportspersons)

[37] Murthy P, Nattala P, Salkar S (Authors) Tobacco Cessation: A Manual for Nurses, Health workers and other health professionals WHO SEARO, 2010. www.searo.who.int/entity/tobacco/documents/9789290223849/en/

Slide 43

A HEALTH PROMOTION IN THE COMMUNITY

Choose a specific group in the community and plan a health promotion programme (youth, self - help groups, schools, women, farmers, workers, village panchayat, sanitation committee etc.) and plan methods of health promotion (campaigns, camps, street plays for awareness)

- *Specify duration, content, methodology*

43

ACTIVITY (Group Work)

HEALTH PROMOTION IN THE COMMUNITY

Duration: 30 minutes

Divide participants into small groups and ask them to nominate a representative to make the presentation. Give each group chart papers and felt pens to describe a health promotion plan. Group presentation will be made using chart paper and felt pens (15 minutes). Discuss & summarize (15 minutes).

Slide 44 and 45

TOBACCO CONTROL IN INDIA

National Tobacco Control Program

LAWS ON TOBACCO CONTROL

PUBLIC PLACES

MANDATORY DEPICTION

NEAR EDUCATIONAL INSTITUTIONS

BELOW AGE OF EIGHTEEN YEARS

NO SALE

NO ADVERTISEMENT

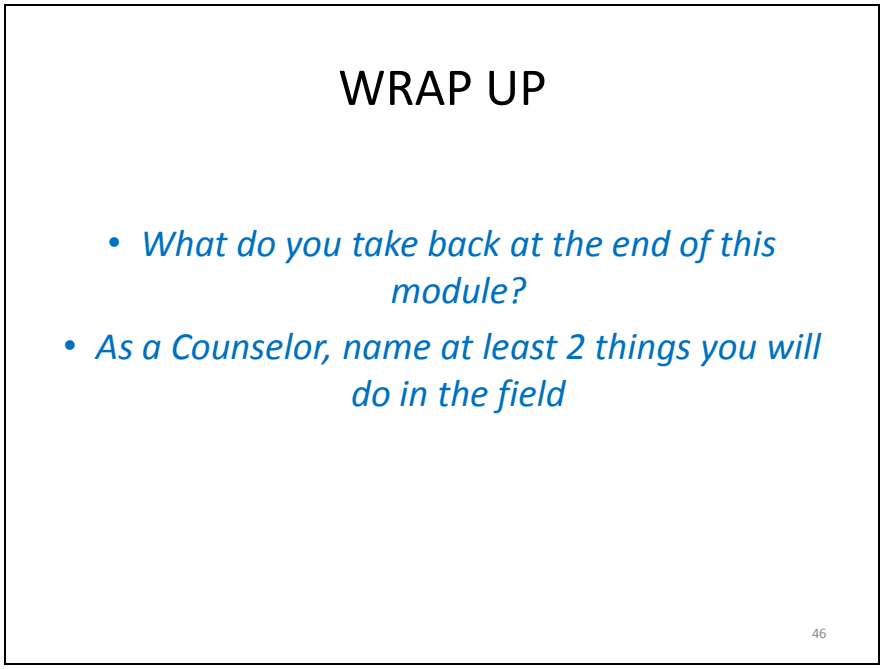
45

Several steps have been attempted to reduce tobacco related harm in our country. We have a law The Cigarettes and Other Tobacco Products Act (COTPA)[38] that:

- Bans smoking in public places
- Bans the sale of tobacco products to minors
- Bans the sale of tobacco within a radius of 100 metres from any educational institution
- Bans advertising of tobacco products
- Makes it compulsory to display health warnings on tobacco products
- Imposes fines for public smoking and sale to minors
- Prescribes norms for packaging and pictorial warnings and outlines punishments for non-adherence to norms.

We have a National Tobacco Control Programme that is being carried out in many states. Most states have banned the sale of gutka and other forms of packed smokeless tobacco products.

Slide 46



[38] Kaur J, Jain DC. Tobacco Control Policies in India: Implementation and Challenges. Indian J Public Health 2011; 55 (3):220-227.

HANDOUTS

3.1. FREQUENTLY ASKED QUESTIONS

3.2. DIFFERENT FORMS OF TOBACCO

3.3. CHEMICALS IN TOBACCO

3.4. EFFECTS OF TOBACCO ON HEALTH

3.5. FAGERSTROM QUESTIONNAIRE

3.6. STEPS TO IDENTIFY USE OF TOBACCO & PROMOTE BEHAVIOUR CHANGE

3.1. FREQUENTLY ASKED QUESTIONS

1. Why is tobacco bad? What happens if we smoke a few cigarettes or bidis or chew a few packets a day?

   Even a single cigarette or bidi has been shown to be harmful. Tobacco use is a common risk factor for persons dying from heart problem, cancer, stroke and so on. Smoking or tobacco use is responsible for nearly 50% of all heart attacks; 30% of all cancer deaths and 87% of lung cancer each year. There is also 50% increase in the risk of impotence among smokers compared to those who have never smoked.

2. Why should tobacco cause death? I am using tobacco for many years and am still alive.

   There are 4000 chemicals in one cigarette and 3000 chemicals in a smokeless tobacco packet[39]. At least 28 of these chemicals in tobacco smoke and 69 in smokeless tobacco are known carcinogens [chemicals than can cause cancer]

   It is like inhaling or consuming pesticides, insecticides, paint thinner, battery fluid, etc. It reduces 15 years of your life.

3. I smoke only 1 or 2 cigarettes a day. Is that safe?

   No amount of tobacco is safe. The safest way to reduce risk from tobacco use is not to use it in any form.

4. One has to die some day. How does it matter if I die because of tobacco related disease or otherwise?

[39]National Cancer Institute. Secondhand smoke: questions and answers. (http:// www.cancer.gov/images/Documents/3770da1d-1c3a-4a1c-905f-944140049158/Fs10_18.pdf - accessed 1 April 2010).

Tobacco causes diseases which cause a lot of suffering for the patient before he dies. Have you thought of what happens to a person who develops a stroke or cancer. It is a lot of suffering for both the person and the family.

5. I won't smoke at home but will go out and smoke. Is that ok?

   This may prevent your family members from inhaling the smoke, but the smoke will go into the surrounding air and is harmful to others. In our country, public smoking is banned for this reason. But remember, **your** health is affected wherever you smoke.

6. I am smoking all these years. If I stop will I get my good health back?

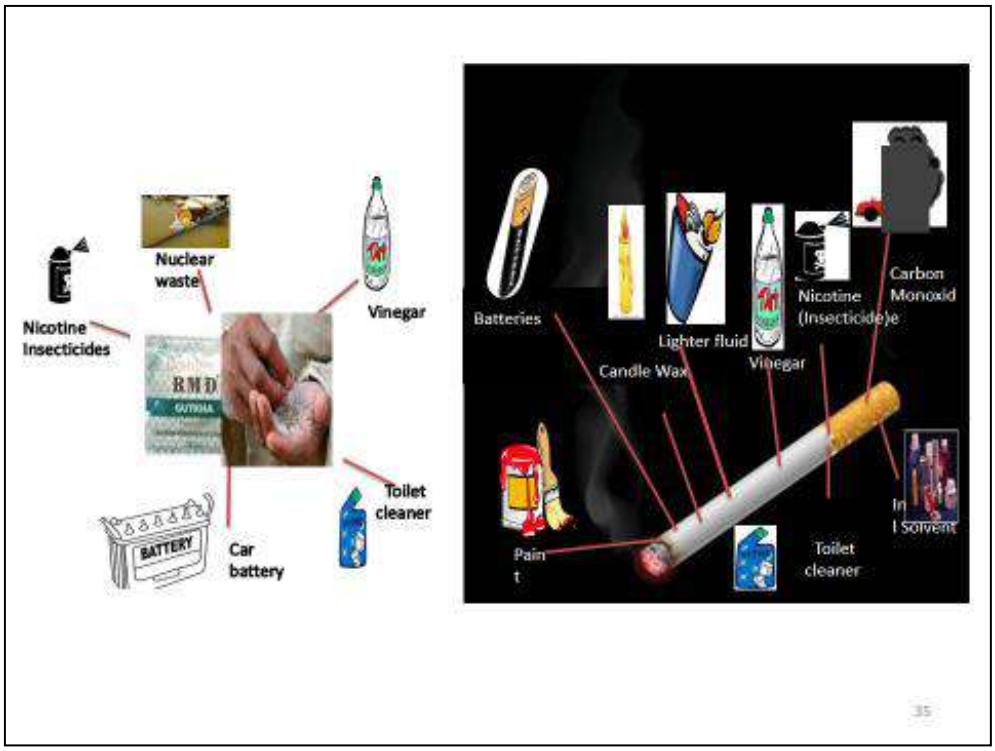
After 2 days: Sense of smell and taste will improve. You will enjoy your food more. Your risk of a heart attack begins to decrease. After 2 weeks: Blood flow improves as nicotine has passed from your body. Within 2 weeks to 3 months circulation will improve making walking and running easier. Lung functioning goes up by 30% Within 6-9 months: You will experience less coughing, tiredness and breathlessness After 1 year: Your risk of heart disease will be about half of what it would have been if you continued to smoke After 5 years: Your risk of stroke will be less. After 10 years: Your risk of dying from lung cancer will be about half of what it could have been if you had continued to smoke Your risk of cancer of the mouth, throat, oesaphagus, bladder, kidney and pancreas will decrease Within 15 years: Your risk of dying from heart attack is equal to a person who has never smoked.

Yes. There are short term and long term benefits:

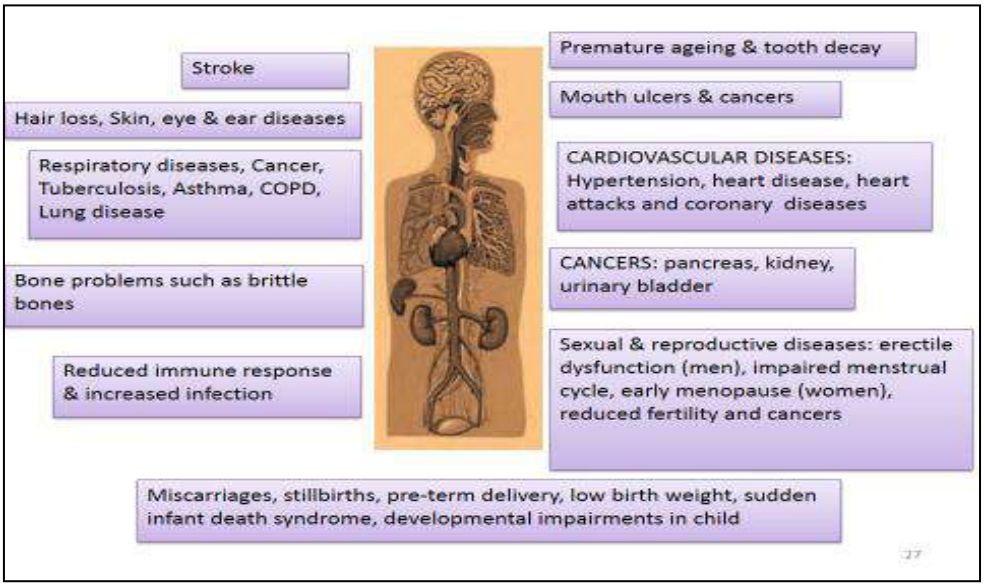
3.2. DIFFERENT FORMS OF TOBACCO

Tobacco is a plant whose leaves are dried and used in various ways. It may be smoked in the form of cigarettes or bidis. Smokeless tobacco comprises tobacco chewed as gutka, khaini, and hans or inhaled as snuff.

3.3. CHEMICALS IN TOBACCO



3.4. EFFECTS OF TOBACCO AND HEALTH



3.5. FAGERSTROM ADDICTION SCALE FOR SMOKERS & SMOKELESS USERS

1.SET OF QUESTIONS FOR SMOKERS

1. How soon after you wake in the morning do you smoke or first use tobacco?
   a. Within 5 minutes 3
   b. 6 to 30 minutes 2
   c. 31 to 60 minutes 1
   d. More than 60 minutes 0

2. Do you find it difficult not to use tobacco where tobacco is forbidden?
   a. Yes 1
   b. No 0

3. Which of cigarettes would you most hate to give up?
   a. First thing in the morning 1
   b. Any other time 0

4 Do you use tobacco when you are sick enough to have to stay in bed?
   a. Yes 1
   b. No 0

5. How many cigarettes do you smoke a day?
   a. 10 or less 0
   b. 11-20 1
   c. 21-30 2
   d. 31 or more 3

6. Do you use tobacco more in the morning than the rest of the day?
   a. Yes 1
   b. No 0

Your score =

- The closer to zero your score, the less dependent you are on tobacco.
- The higher the score, the more strongly you are addicted.

(2).SET OF QUESTIONS FOR SMOKELESS TOBACCO USERS

1. After a normal sleeping period, do you use smokeless tobacco within 30 minutes of waking?
   a. Yes 1
   b. No 0

2. Do you use smokeless tobacco when you are sick or have mouth sores?
   a. Yes 1
   b. No 0

3. How many times do you use per week?
   a. Less than 2 times 0
   b. More than 2 times 1
   c. More than 4 times 2

4. Do you intentionally swallow your tobacco juices rather than spit?
   a. Never 0
   b. Sometimes 1
   c. Always 2

5. Do you keep a dip or chew in your mouth almost all the time?
   a. Yes 1
   b. No 0

6. Do you experience strong cravings for a dip or chew when you go for more than two hours without one?
   a. Yes 1
   b. No 0

7. On average, how many minutes do you keep a fresh dip or chew in your mouth?
   a. 10-19 minutes 1
   b. 20-30 minutes 2
   c. More than 30 minutes 3

8. What is the length of your dipping day (total hours from first dip/chew in a.m. to last dip/chew in p.m.)?
   a. Less than 14.5 hours 0
   b. More than 14.5 hours 1
   c. More than 15 hours 2

9. On average, how may dips/chews do you take each day?
   a. 1 - 9 times 1
   b. 10 - 15 times 2
   c. >15 times 3

Your score =

- The highest possible score = 16
- The closer to zero your score, the less dependent you are on tobacco.
- The higher the score, the more strongly you are addicted.

3.6. STEPS TO IDENTIFY USE OF TOBACCO & PROMOTE BEHAVIOUR CHANGE:

RAPPORT BUILDING: Paying attention & listening & basic counseling skills

& use brief counseling.

STEP 1: ASK

Whom should you ask?

- As tobacco use may be hidden counselors should ask about tobacco use to ALL patients who report health problems
- ASK every patient about smoking & smokeless forms of tobacco (include men & women)
- ASK also about use of other substances (cannabis (ganja), alcohol, sleeping tablets etc). If present, refer to Medical Officer

STEP 2: ASSIST

- Interpret Fagerstrom scores to the patient
- Psycho education: Discuss health consequences of tobacco, other risk factors and NCDs
- Keep focus on present health condition
- Link medical condition to tobacco use
- Provide strong personalized message *(e.g.: 'your BP is high and quitting tobacco is important')*
- Give relevant education material (in local language)
- Use diagram to explain health consequences
- Use Balance Sheet to discuss pros and cons of use (discuss good things and bad things when a person quits tobacco use)

WHEN THE PATIENT IS READY TO CHANGE:

SET A QUIT DATE:

- Discuss with patient an appropriate time to quit.
- Set about 15 days of time to quit from the time he/she meets the counselor.
- Encourage daily reduction of tobacco use

DISCUSS RELAPSE PREVENTION FOR THOSE WHO WANT TO QUIT:

- Discuss high risk situations for re starting tobacco

- 4 Ds: Delay, distract (use cardamom or elaichi, cloves or lavang, peanuts), drink water, deep breathing
- Saying 'NO' to tobacco when offered
- Handling negative mood states
- Tips for healthy lifestyle

FOR THOSE WHO DO NOT WANT TO CHANGE:

- Continue motivation during follow - up and refer to Medical Officer for health related issues.

STEP 3: ARRANGE

- Refer patient to Medical Officer for health related issues & tobacco cessation
- Inform patient about follow - up &monitor progress.
- Make home -visits with the help of the community health worker

Alcohol use as a risk factor for NCDs

Session 4

Objectives of the session

By the end of this session, the participants will understand the following:

- Beliefs in the community about alcohol use
- Types of alcohol available and commonly encountered alcohol related problems in clinical practice
- Reasons for alcohol use initiation and maintenance
- Health problems associated with the use of alcohol and alcohol use as a risk factor for NCDs
- Harms to others from alcohol use
- Harm from other drug use
- Identification of alcohol use among patients
- Intervention for alcohol use disorders
- Strategies for preventing and managing alcohol use disorders in the clinic and community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 

- **Role Play** is indicated by the letter **RP** and symbol 

INTRODUCTION

Few people know that alcohol is a chemical substance, like other drugs. According to the WHO[40], 3.3 million deaths occur each year globally from alcohol use. Alcohol use is linked with other risk factors such as tobacco, diet, physical inactivity and stress. Combined use of alcohol and tobacco is common. Alcohol consumption is related to 200 diseases and injury conditions. These include cancers, liver diseases such as cirrhosis, diabetes, cardiovascular diseases and mental disorders. Alcohol consumption causes death and disability fairly early in life. One in four deaths in the age group of 20-39 years is alcohol-attributable.

Alcohol use is closely linked with both communicable diseases like tuberculosis, HIV/AIDS as well as with non-communicable diseases. Beyond health consequences, harmful alcohol use brings significant social and economic losses to individuals as well as society.

In India, there are about 62.5 million alcohol users (NHSDA 2004). Alcohol related problems accounts for over every fifth of hospital admissions and most people do not receive any treatment

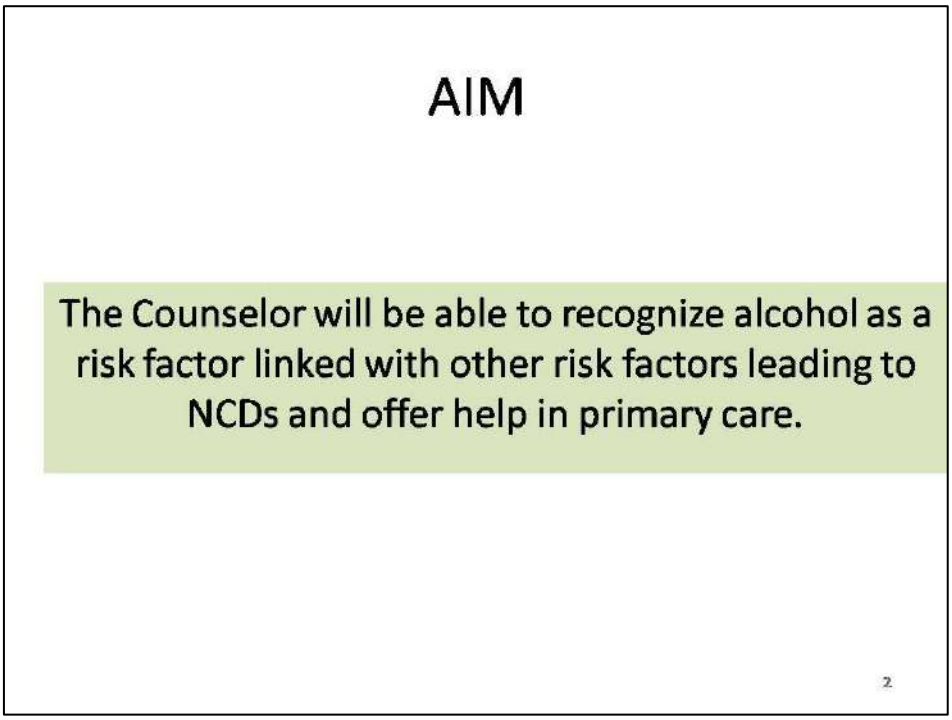
[40] World Health Organization. Global Status Report on Alcohol and Health. 2014. www.who.int/substance_abuse/publications/global_alcohol_report/en/

for the problem. Alcohol use is a serious public health problem in India[41]. High consumption of alcohol leads to inappropriate food intake and low physical activity. [42]

This session helps the participants to understand the linkages of alcohol to other risk factors and non communicable diseases and address them in primary care. The first objective is to help counselors to explore beliefs about alcohol use. This is followed by a session on improving the counselor's understanding of alcohol use consequences, the relationship of alcohol use with other risk factors and its relationship to NCDs. The training also focuses on using a behavioural change model to address harmful patterns of alcohol use, which in turn will reduce risk for NCDs. The final objective is to plan health promotion activities in the community.

Total duration: 4hours 30 minutes approximately

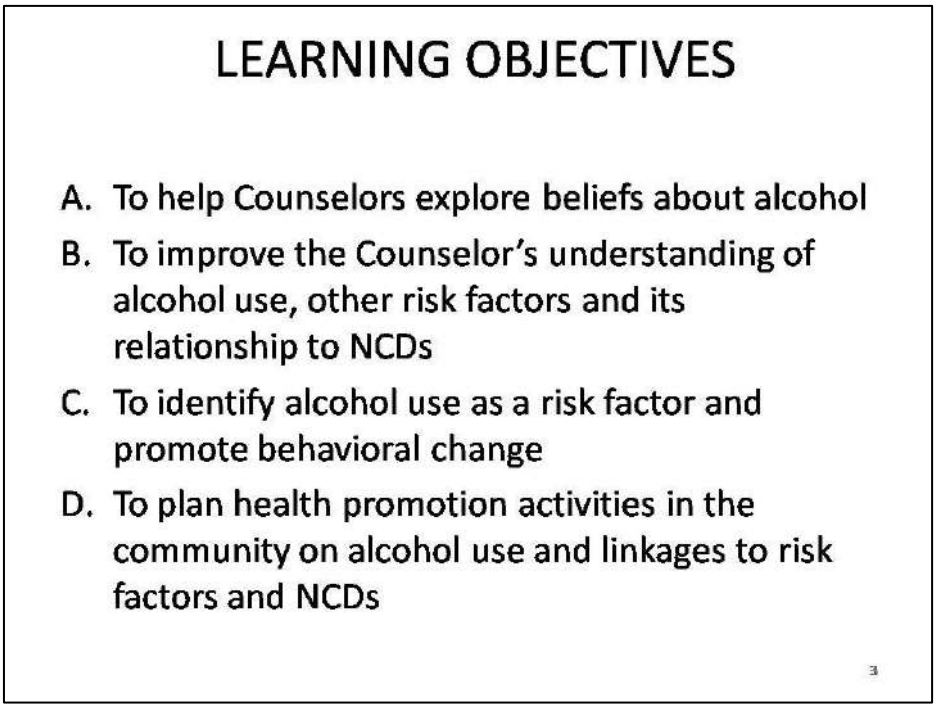
Slide 2



[41]Benegal V. India:Alcohol and Public health Addiction 2005, 100: 1051-1056

[42]Alcohol Alert, January report NIAAA 2007. www.pubs.niaaa.nih.gov/publications/AA71/AA71.htm

Slide 3



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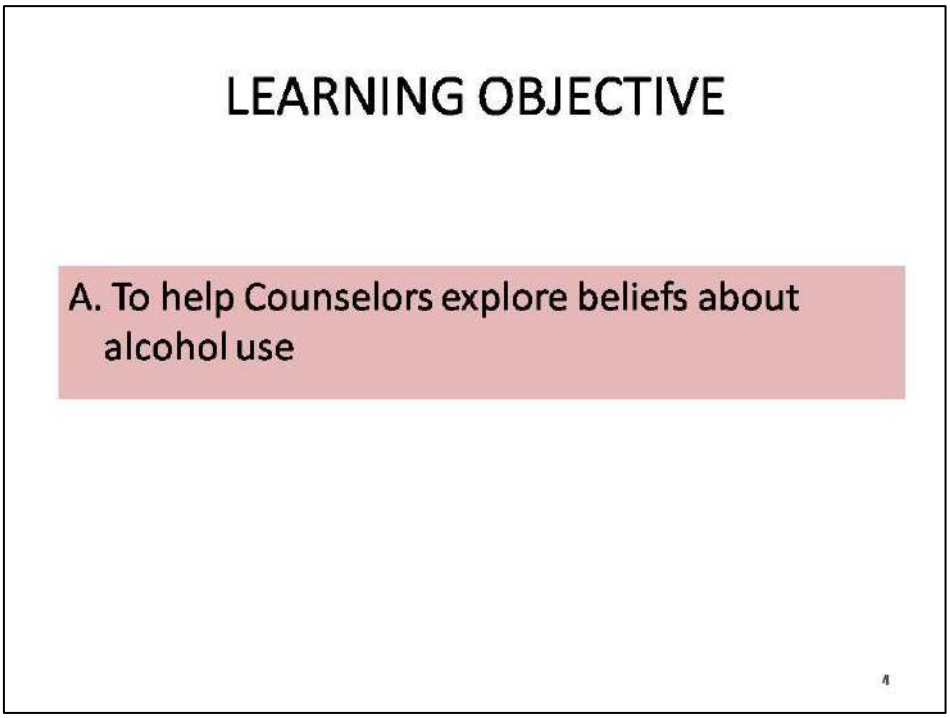


INSTRUCTION

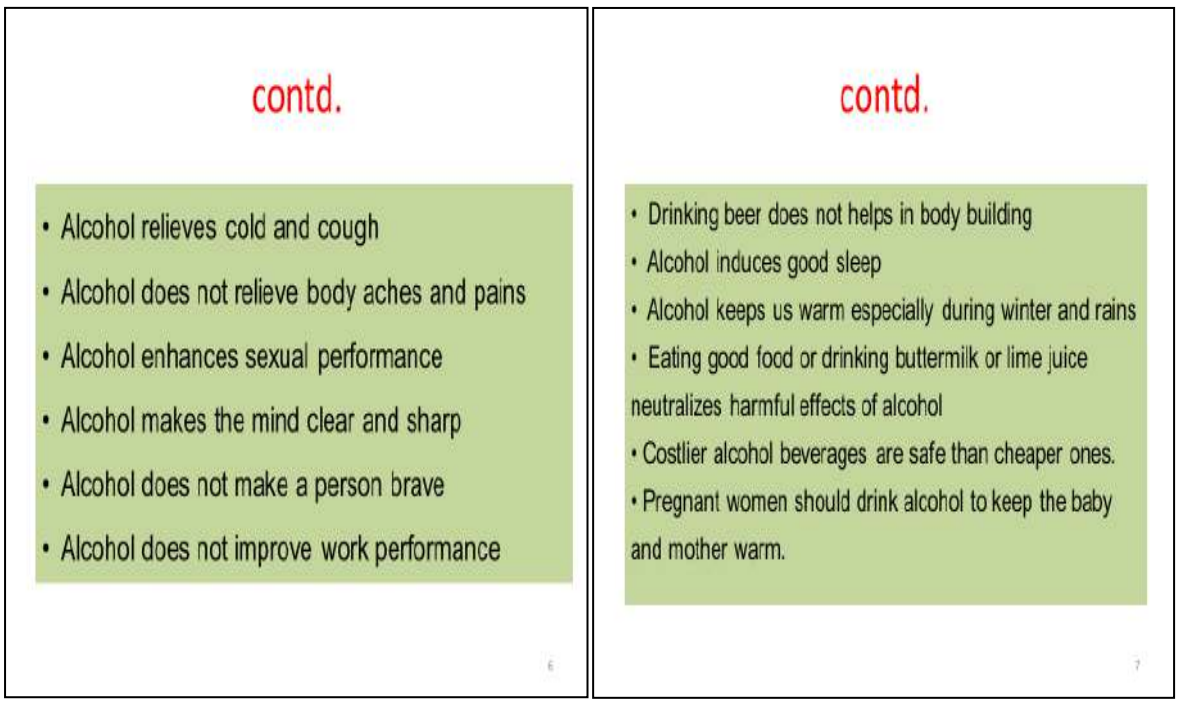
ACTIVITY (Group activity)

Read the questions on beliefs about alcohol. Divide participants into small groups. The groups will mark the correct response (true or false). The reasons for marking the response will be presented by the participants. Generate discussion in the groups.

Duration: 30 minutes.

Slide 5

Slide 6 and 7



The group will mark the correct responses and give reasons for it[43].

TRUE **FALSE**

1. Alcohol relieves cold and cough.
2. Alcohol does not relieve body aches and pains.
3. Alcohol enhances sexual performance.
4. Alcohol makes the mind clear and sharp.
5. Alcohol does not make a person brave.
6. Alcohol does not improve work performance.
7. Drinking beer does not help in body building.
8. Alcohol induces good sleep.
9. Alcohol keeps us warm especially during winter and rains.
10. Eating good food or drinking buttermilk, or lime juice neutralizes harmful effects of alcohol.
11. Costlier alcohol beverages are safer than cheaper ones.

ANSWERS:

1. Alcohol relieves cold and cough. FALSE
   Expected response: Alcohol produces a sensation of warmth throughout the body due to widening of blood vessels, which in turn causes stuffiness in the nose and loss of body heat. Alcohol produces a sense of well-being, which is wrongly interpreted as relief from the cold.

2. Alcohol does not relieve body aches and pains. TRUE
   Expected response: Alcohol does not relieve body pains. The feeling is just due to the general sense of well-being that alcohol produces.

3. Alcohol enhances sexual performance. FALSE
   Expected response: Chronic alcohol use decreases sexual desire and impairs the person's ability to perform the act. Intoxication can lead to poor judgment, about sexual activity, unprotected sex resulting in exposure to HIV and other sexually transmitted diseases.

4. Alcohol makes the mind clear and sharp. FALSE
   Expected response: Alcohol produces a sense of well-being but impairs the person's judgment (being able to decide what is right or wrong). This makes him feel that he is thinking and performing very efficiently, whereas he is not.

[43]Nattala P & Murthy P. Relapse prevention in alcohol dependence: A family-based approach. National Institute of Mental Health and Neuro Sciences, Bangalore, 2013. Publication No 87.

5. Alcohol does not make a person brave. TRUE

Expected response: Many shy people report that the use of alcohol reduces their shyness, and this helps them interact better with others. Still others say alcohol makes them feel brave and be more confident. Alcohol produces this effect by impairing judgment. The person cannot judge the appropriateness and consequences of his thoughts and actions. So he often ends up saying and doing things which he would consider wrong, when sober.

6. Alcohol does not improve work performance. TRUE

Expected response: This again is due to the false sense of well-being and faulty judgment produced by alcohol. In people who have been using alcohol for a long time and are dependent on it, withdrawal symptoms occur in the morning after drinking the night before, which impairs work performance. In such people, drinking alcohol temporarily relieves the symptoms of withdrawal which is mistaken for improved work performance. However, continuing to drink to relieve withdrawal would serve no useful purpose in the long run, as continued alcohol use would adversely impact health.

7. Drinking beer does not help in body building. TRUE

Expected response: Alcohol causes increase of body fat and decreases muscle mass in the long run. Beer belly (excessive fat around the abdomen) is commonly seen in drinkers. Alcohol actually leads to nutritional imbalance. It does not build body. Body building occurs when muscle mass increases, and not fat. So healthy diet and regular exercise builds body, not alcohol.

8. Alcohol induces good sleep. FALSE

Expected response: Alcohol disrupts the natural sleep cycle and decreases the efficiency of sleep. Following natural sleep, a person wakes up refreshed in the morning, whereas alcohol-induced sleep leaves the person tired and drowsy in the morning.

9. Alcohol keeps us warm, especially during winter and rains. FALSE

Expected response: Alcohol widens blood vessels which cause a sensation of warmth. This widening of blood vessels is harmful as it causes the body to lose heat, and actually reduces body temperature. This is dangerous in cold weather as it may lead to frostbite or even death due to hypothermia (reduced body temperature).

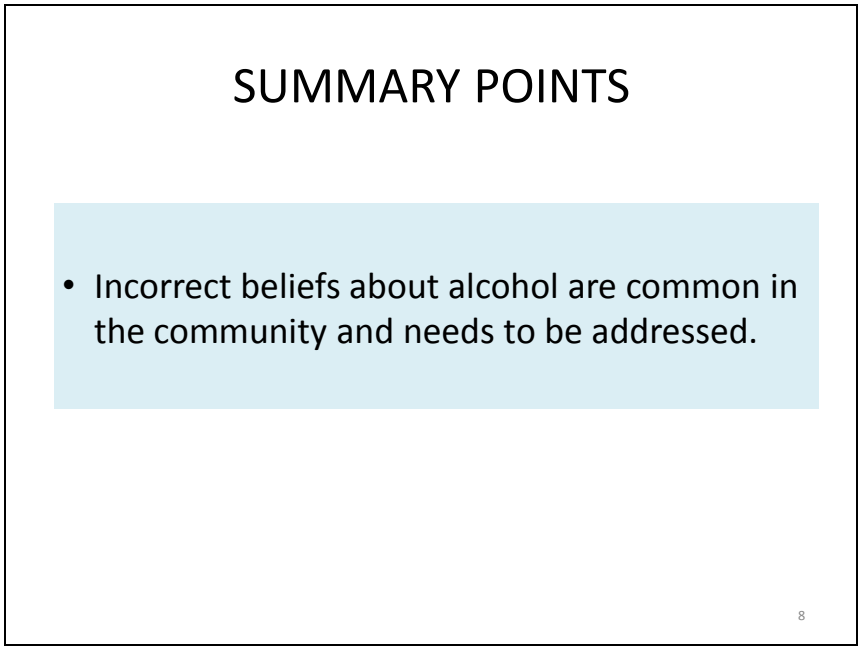
10. Eating good food, or drinking buttermilk or lime juice neutralizes the harmful effects of alcohol. FALSE

Expected response: Alcohol-related health damage depends on the amount of alcohol consumed, and cannot be set right just by food intake.

11. Costlier alcohol beverages are safe than cheaper ones. FALSE

Expected response: Nowadays alcohol is manufactured by various companies in different forms or under different brand names. It seems to be a popular notion that these are not as harmful as, say, country liquor or arrack, which is generally considered more crude but it is not so. It is the alcohol content in the beverage that is important. Damage from country liquor can also occur from various other toxic chemicals present in it apart from the alcohol.

Slide 8



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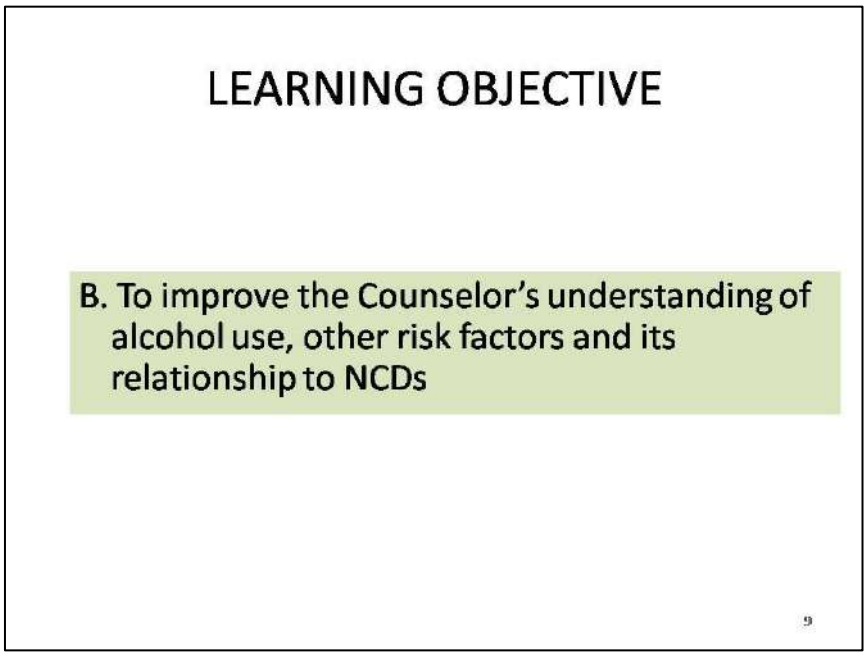
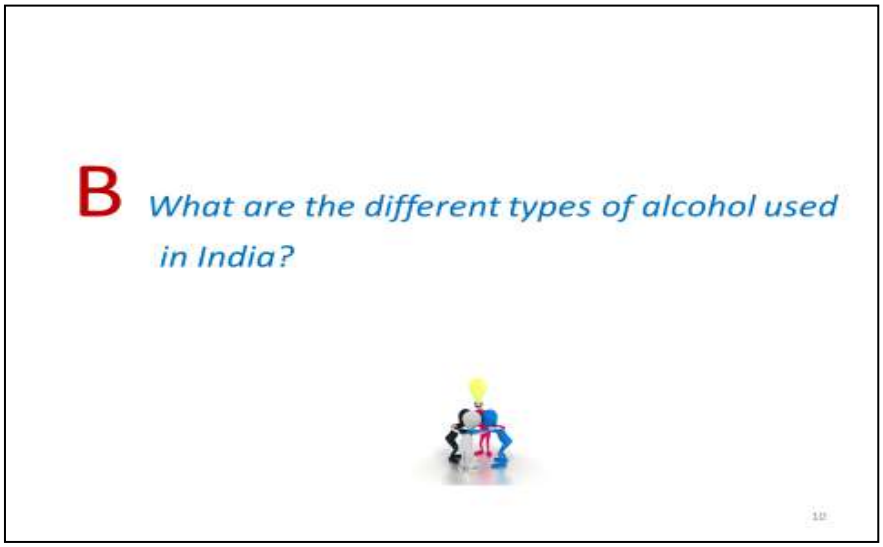


INSTRUCTION

The facilitator will initiate a discussion about the different types of alcohol use in the Indian context, its effects, and consequences. The linkages of alcohol as a risk factor to various other risk factors like stress, diet, tobacco and physical inactivity and NCDs will be discussed.

Slide 10



Generate discussion and write responses on the board.

Slide 11

There are different types of alcohol that are generally used in India[44]. Country liquor is the most commonly consumed alcohol throughout the country, particularly in tribal belts, followed by Indian Made Foreign Liquor (IMFL)[45]. A study from southern India [46] shows that whisky (49%) and arrack (35%) are the preferred types of alcohol in urban areas. However, the preferences differed between rural (arrack) and urban (beer) areas.

Slide 12

Slide 13

How much drinking is too much?

[44]Addiction: What to know and how to get help. Deaddiction Centre, NIMHANS, 2009.www.nimhans.kar.nic.in/cam/CAM/Helping_persons_with_addiction_booklet.pdf

[45] Public Health Foundation of India. Alcohol Marketing and Regulatory Policy Environment in India. A Report. November 2013. www.iogt.org/presidentupdate/wp-content/blogs.dir/39/files/2013/12/PHFI-Alcohol-Industry-Report.pdf

[46]Girish N, Kavita R, Gururaj G, Benegal V. 2010. www.nimhans.kar.nic.in/cam/CAM/IJCM_174_09R6_corr_VB.pdf

It is not possible to define a safe limit of alcohol (quantity) because some people are more sensitive to alcohol than others. Therefore, there is no single answer that will fit everyone. An average of 1 to 2 drinks per day (30 ml of spirit/60 ml of wine) has shown lower risk of heart diseases in some countries, but not in developing and underdeveloped countries[47]. Even this may be risky in persons who have a family history of addiction, or underlying physical health problems. Counselors should not issue guidelines to drink because it may lead some persons to increase intake of alcohol or it may even motivate people to drink who are otherwise non- drinkers.

A note on risky patterns of drinking: harmful use of alcohol and alcohol dependence.

- Harmful use refers to the health damage that is physical or mental due to drinking.
- Dependence refers to the cluster of behavioural, cognitive and physiological phenomena that develops after repeated drinking. It is explained in detail later.

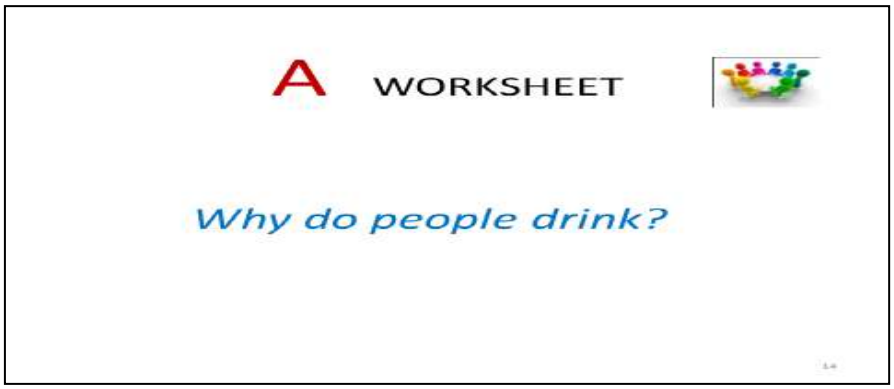
There are other risky patterns of drinking including drinking and driving, being under the influence of alcohol while working, binge drinking (drinking 4 or more drinks on one occasion).

Slide 14

ACTIVITY (GROUP WORK)

Duration: 30 minutes

Conduct group work. The participants will discuss as to why people drink, what the common reasons are given. Divide participants into small groups and give them chart paper and pens and 15 minutes to discuss. The participants will make a presentation (15 minutes). Generate discussion during the presentation.



[47] A. Roy, D. Prabhakaran, , P. Jeemon, K.R. Thankappan, V. Mohan, L. Ramakrishnan, P. Joshi, F. Ahmed , B.V.M. Mohan, R.K. Saran, N. Sinha , K.S. Reddy, on behalf of the Sentinel Surveillance in Industrial Populations Study Group. Impact of alcohol on coronary heart disease in Indian men. 2010. www.uniad.org.br/desenvolvimento/images/stories/arquivos/FINAL_Mans.pdf

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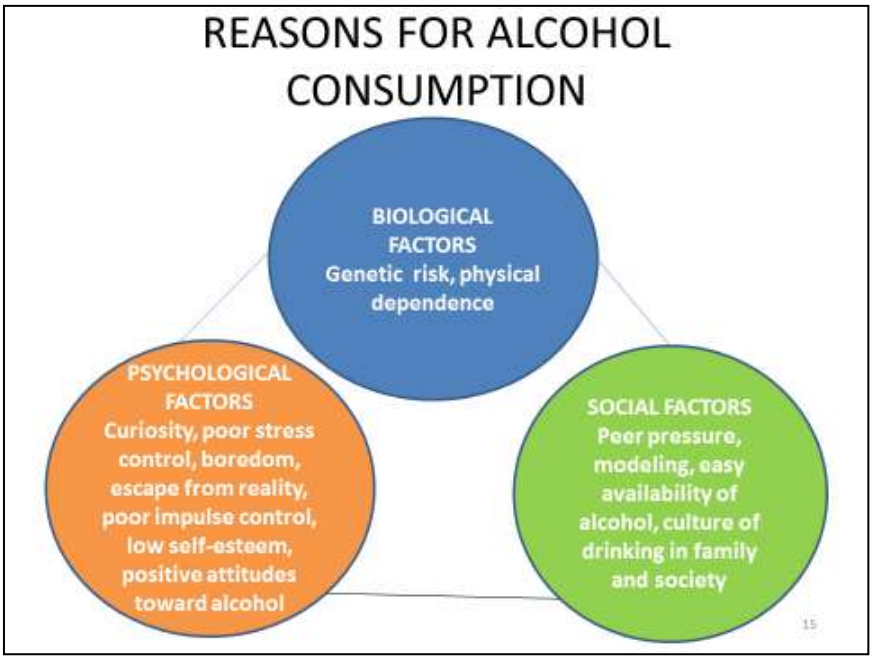

Reasons for alcohol consumption

People may use alcohol due to a variety of factors. Biological risk plays a major role in leading to alcohol addiction and passed down generations. Some persons are at greater risk to start using alcohol early. These include people who are impulsive (like wanting things immediately), those who enjoy doing risky activities and those who use alcohol to cope with stress. Some drink alcohol as a pastime often due to lack of recreational activities or hobbies. Social factors include peer pressure (friends who drink), mass media promoting alcohol use in cinema, television (role models like film stars), easy availability of alcohol in the market and permissive norms of drinking in the family and society. Many people report drinking for relief of body pain and stress[48].

The reward pathway (also known as the pleasure pathway) involves areas in the brain and the release of some brain chemicals. Certain parts of the brain get excited when the person drinks and the person initially gets this pleasurable feeling. As time goes by, the person needs to increase the amount of alcohol to get the same effect. This makes the person drink more. An early sign of addiction is the need to drink first thing in the morning, and getting withdrawal symptoms on suddenly stopping drinking.

[48]Nadkarni A, Dabholkar H and Patel V. The explanatory models and coping strategies for alcohol use disorders: An exploratory qualitative study from India, 2013. www. ncbi.nlm.nih.gov/pmc/articles/PMC3878642/

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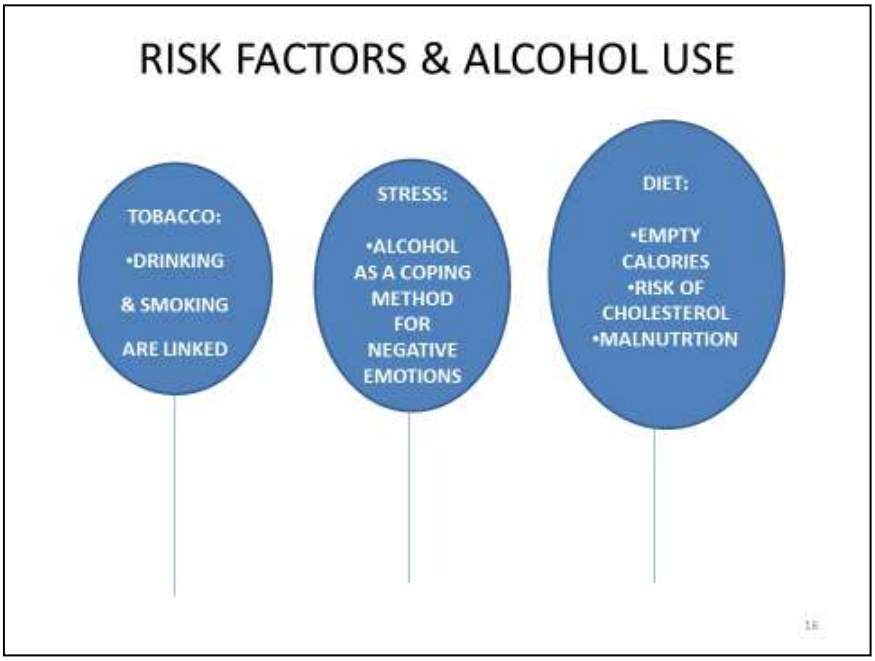


Alcohol and other risk factors

Tobacco: Studies have found that people who drink are more likely to smoke and people who smoke are more likely to drink. Many people with alcohol dependence indulge in smoking, putting them at high risk for tobacco-related complications including multiple cancers, lung disease, and cardiovascular disease.

Diet: Alcohol contains high levels of empty calories with no nutritional value. People who drink tend not to eat properly and are at risk for malnutrition. Alcohol also prevents the body from fully absorbing and using vitamins and nutrients in the diet. Alcohol consumption is associated with increased levels of cholesterol and fatty acids. One of the reasons for harmful effects of alcohol on health may be due to poor dietary habits[49]. For instance, persons who drink are likely to eat fried items like chips, *vadas, samosas and kabas*.

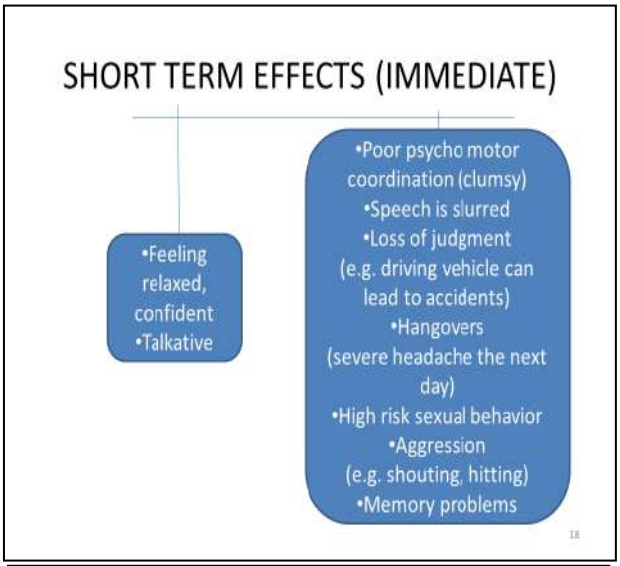
Stress: Alcohol use can become a way of coping with demanding working conditions, boredom, interpersonal conflicts, as well as managing emotions such as anger, fear, sadness and happiness. In other words, alcohol can become a way of dealing with any stressful situation or the only avenue for enjoyment and relaxation. The effect of many pressures throughout life can increase drinking[50].

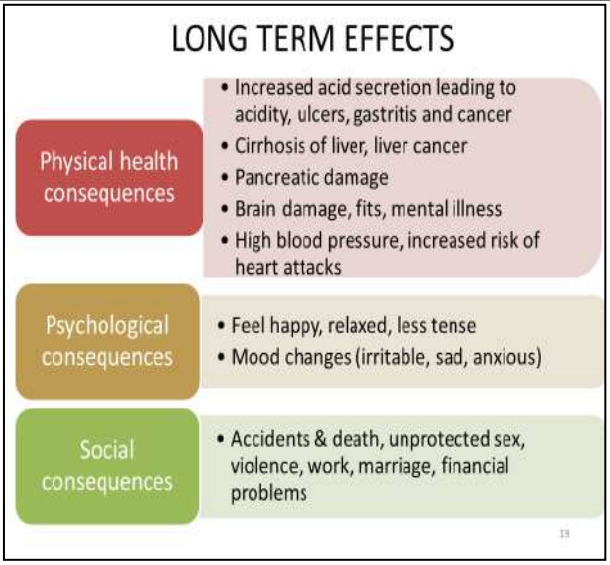
[49]American Society for Clinical Nutrition, 2001. www. ajcn.nutrition.org/content/74/4/549.abstract
[50] Anthenelli R, 2011. www.ncbi.nlm.nih.gov/pmc/articles/PMC3860387/

Slide 17

Generate discussion and write responses on the board.

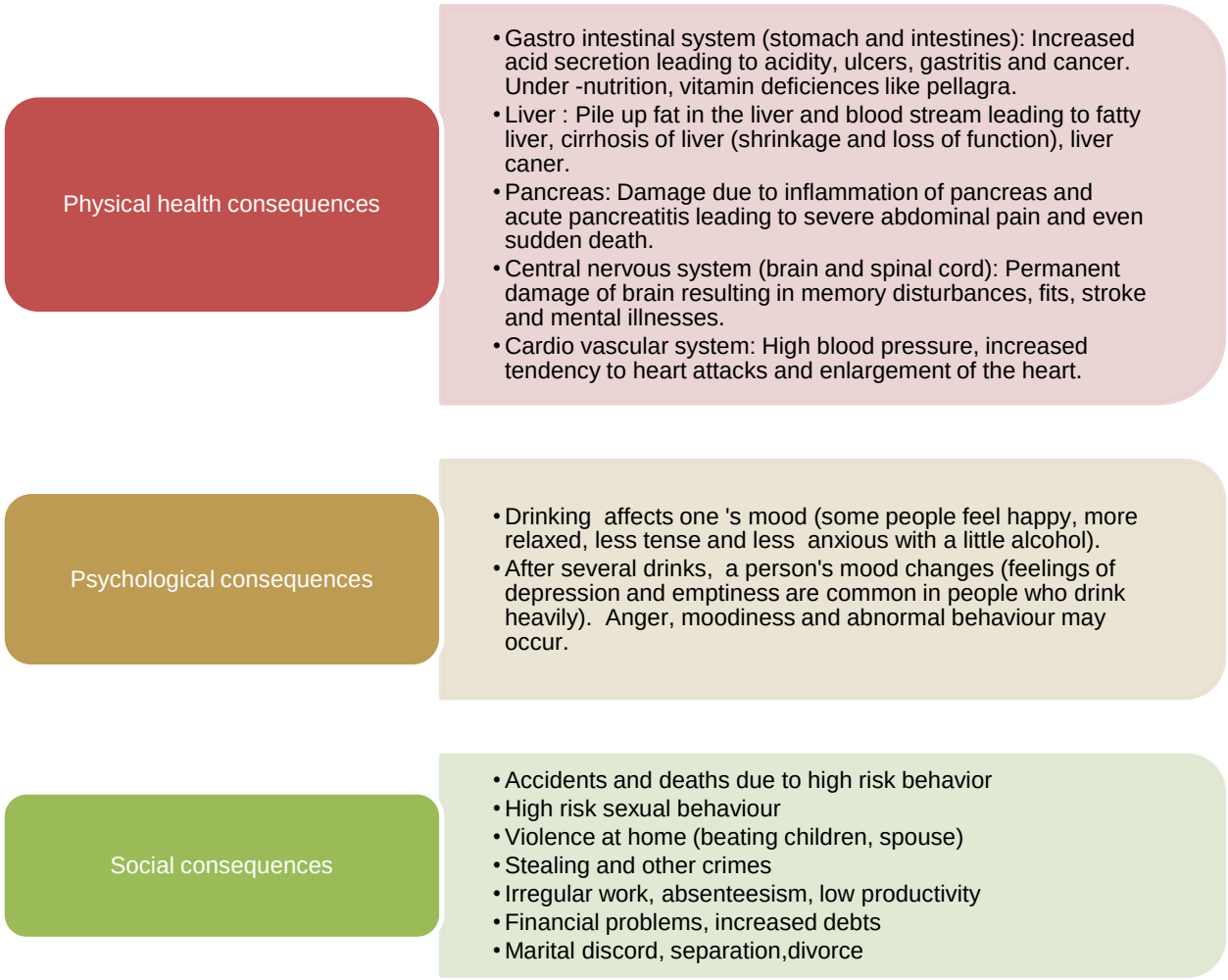
Slide 18 and 19





Effects of alcohol use

Alcohol is a central nervous system depressant. Unlike other foods, alcohol does not require digestion. When a person drinks, alcohol is absorbed directly into the blood stream through the walls of the stomach and the intestine. Once alcohol enters the bloodstream it circulates throughout the body. Alcohol is metabolized in the liver and is changed to carbon dioxide, water and a few calories of energy. A small amount of alcohol goes out of the body through breath, urine and sweat. Alcohol can have immediate as well as long term effects.



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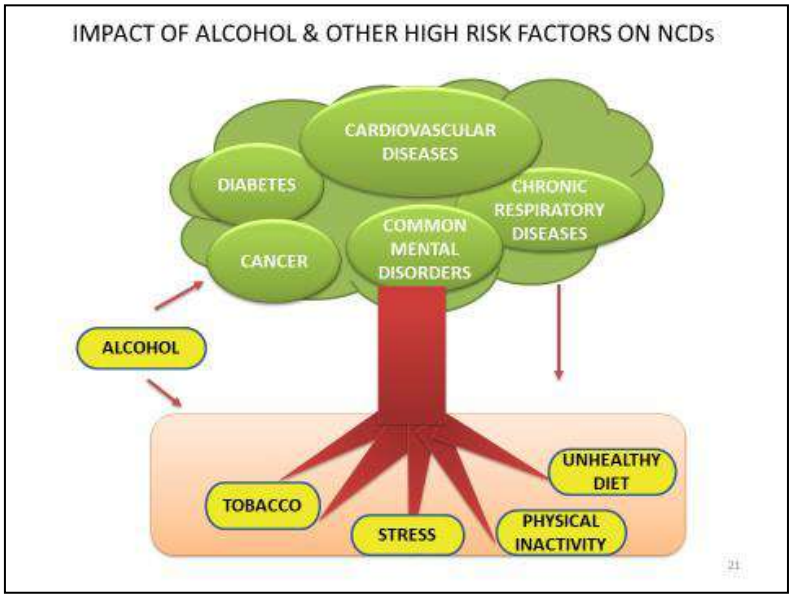


Alcohol and NCDs

There is a strong link between alcohol use and non-communicable diseases, particularly cancer, cardiovascular disease, stroke, liver disease, pancreatitis and diabetes and these findings support the World Health Organization's call to implement evidence-based strategies to reduce harmful use of alcohol.

Cardiovascular diseases: Alcohol weakens the heart muscles and decreases cardiovascular fitness. Heavy drinking can disrupt the electrical control patterns of the heart and can cause the heart to start beating with an abnormal rhythm, even in young people with no previous history of heart

disease. Alcohol hardens blood vessels and increases blood pressure (hypertension) and increases the risk for heart attacks.

Cancer: Cancer of the liver is one of the consequences of heavy drinking, which is very difficult to treat. Both cirrhosis (liver cells begin to die off and are replaced by scar tissue) and liver cancer can finally result in death, as the liver is a very important organ, and the body cannot survive without it. Mouth cancer, cancer of esophagus (food pipe, through which food travels from the mouth to the stomach), and gastric cancer (cancer of stomach) occur at high rates in heavy drinkers, due to the chemical effects of alcohol.

Diabetes: Alcohol seriously impairs blood sugar levels through liver damage and affects the hormones which keep blood sugar under control and leads to higher risk for developing diabetes.

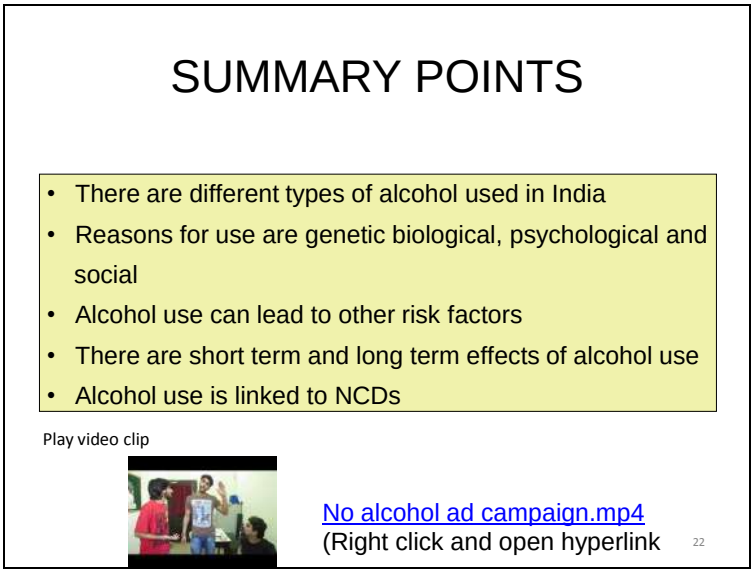
Mental disorders: Heavy use of alcohol can also alter various brain chemicals and hormonal systems resulting in risk of developing common mental disorders such as anxiety and depression. In heavy drinkers and in those who have a family risk of mental illness, psychotic disorders (severe forms of mental illness with false beliefs, suspiciousness and impaired judgment may occur).

Alcohol and communicable diseases: Alcohol is a risk factor even for communicable diseases like tuberculosis, HIV, Hepatitis B and Hepatitis C.

Slide 22

INSTRUCTION

Following the summary, play a short video on alcohol awareness and have a brief discussion on what the community needs to know about alcohol as a risk factor for NCDs.



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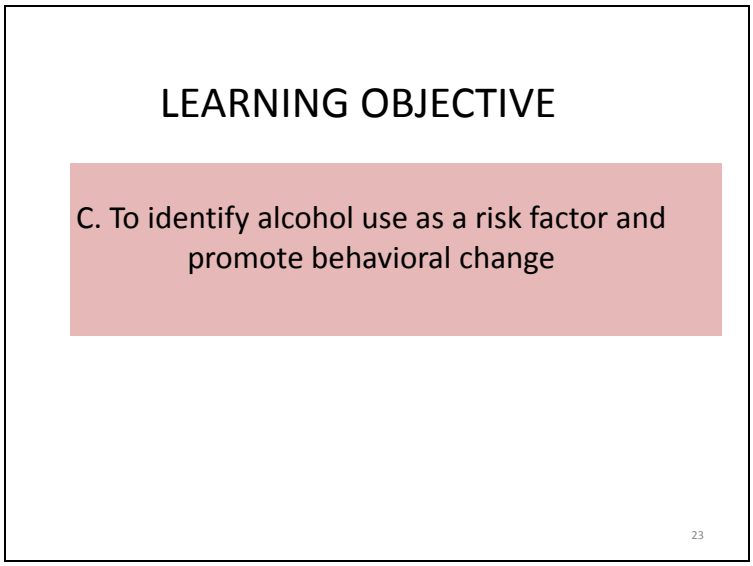
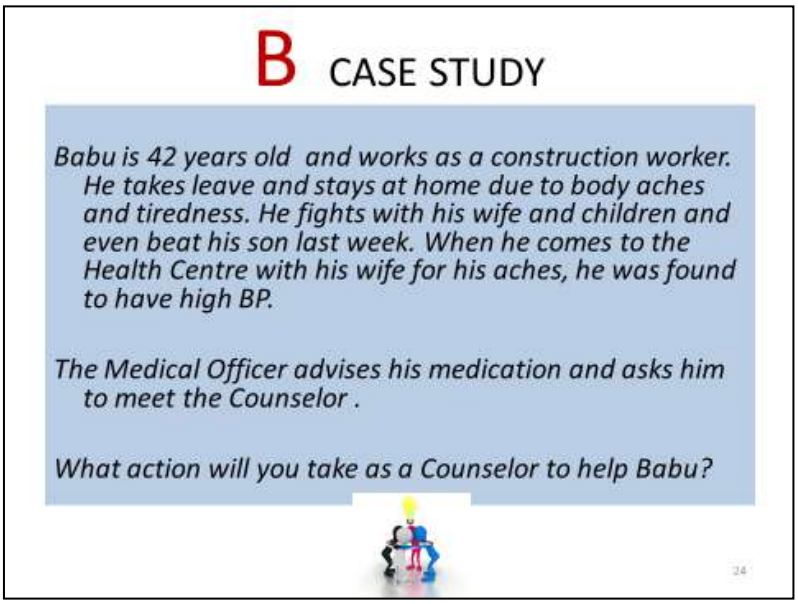


INSTRUCTION:

Use a case study and discuss how alcohol use can be recognized as a risk factor and how behavioural change can be promoted. The various steps to be taken by the counselor to help the patient with behaviour change and how AUDIT-C (a screening questionnaire) should be used will be discussed.

DISTRIBUTE HAND OUT 4.3. (METHODS TO IDENTIFY ALCOHOL USE AND PROMOTE BEHAVIOURAL CHANGE).

Slide 24



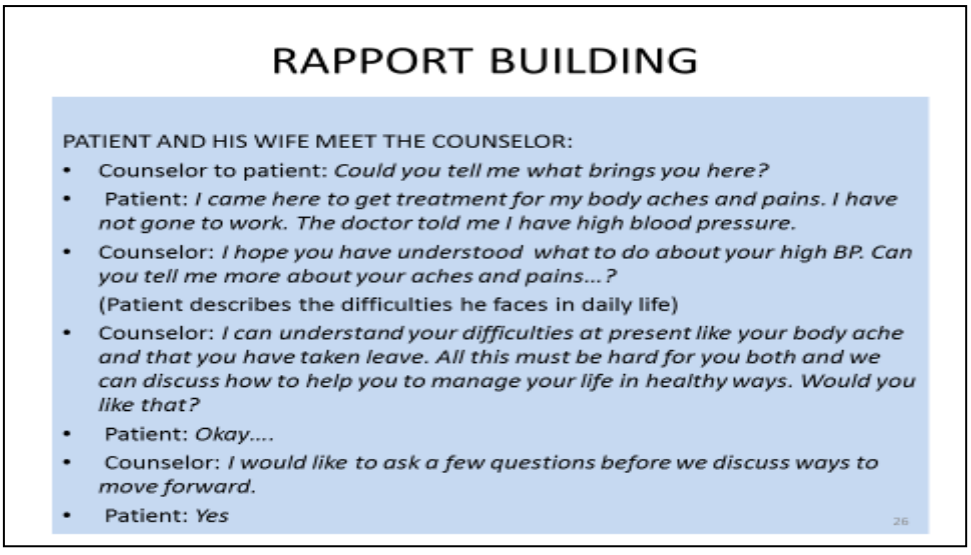
Generate discussion and write responses on the board.

Slide 25

RAPPORT BUILDING

Example of discussion between the patient and counselor is described below. Rapport building is used before any intervention in order to build trust with the patient before asking about alcohol use by the patient.

Slide 26



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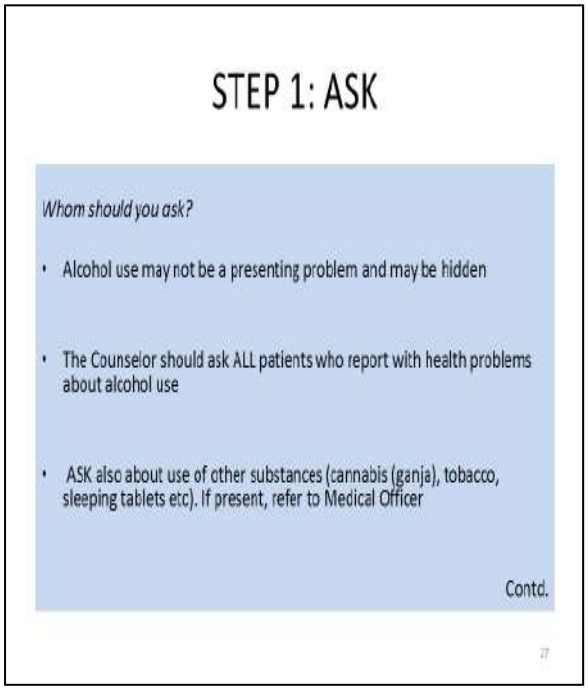
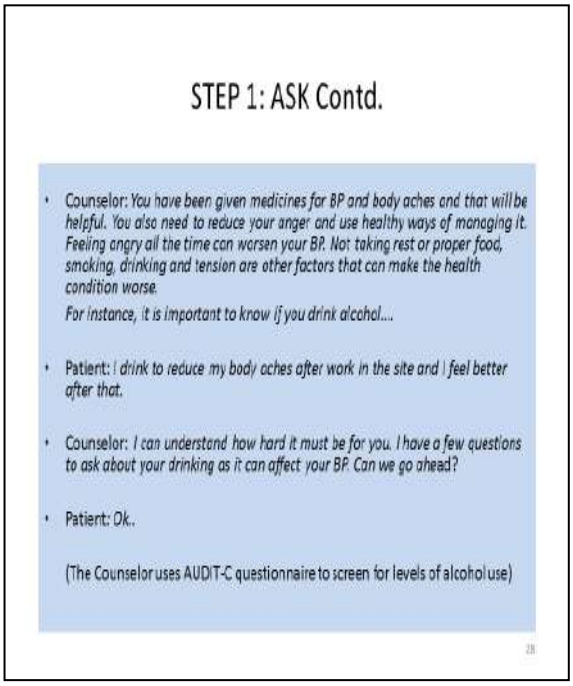




Whom should you ask?

Alcohol use may not be a presenting problem and may be hidden. Therefore, the counselor should ask about alcohol use to *all* patients who report with health problems. As alcohol use is common, the counselor should ask every patient about drinking habits (this includes men and women). ASK also about use of other substances (cannabis (ganja), tobacco, sleeping tablets etc). If present, refer to Medical Officer.

How to ask?

The box below is a verbatim of how the counselor asks the patient about his alcohol use before AUDIT-C is used[51]. AUDIT-C is a 3 item alcohol screen that can help identify persons who are hazardous drinkers or have active alcohol use disorders. It is a modified version of the 10 questions instrument.

ACTIVITY (Role play)

Total duration: 10 minutes

Sit in pairs and face each other. Nominate one person as the Counselor and the other as the patient. All Counselors will be given AUDIT-C. Before role play, give 5 minutes for reading and clarifying. The Counselor and patient start. Ask participants what they learnt from the activity and summarize.

[51]AUDIT- C Overview. www.dhcs.ca.gov/services/medi-cal/Documents/tool_auditc.pdf

Slide 29

A

WORKSHEET

ASSESS ALCOHOL USE

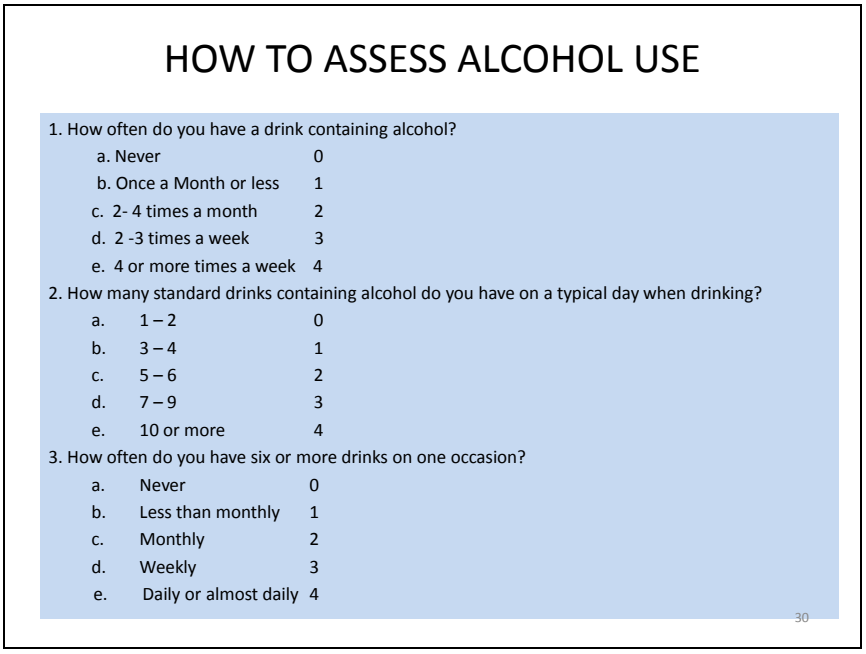
Sit in pairs – where one person Counselor and another as patient who is alcohol user. Use the questionnaire (AUDIT-C) given to assess the patient.

29

AUDIT –C.

This is an effective brief screening test for problem drinkers.

Slide 30



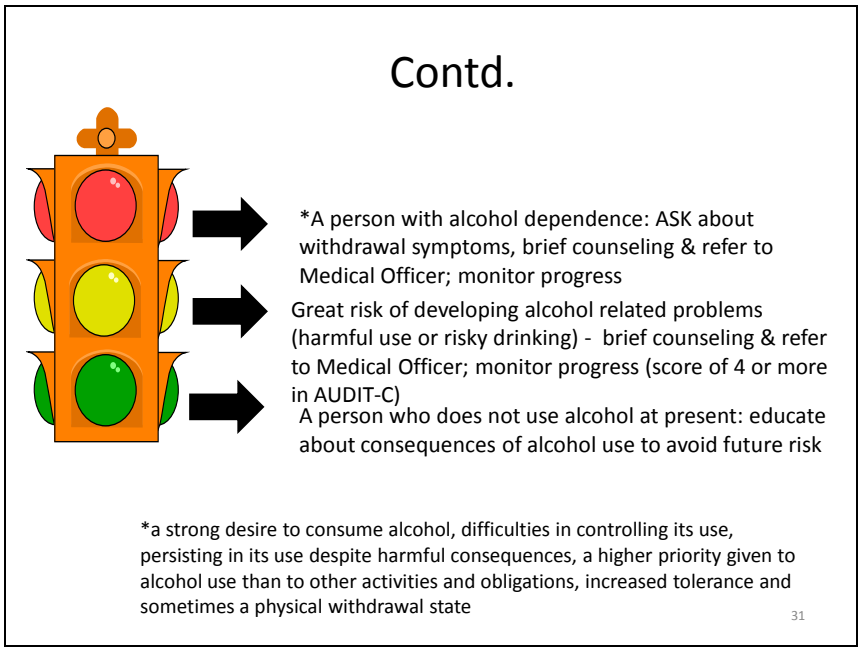
*One Standard drink:

- 30 ml. spirits (Commonly IMFL whisky, rum, brandy, gin or vodka)
- 110 ml (1/3 bottle) strong beer
- 330 ml (1/2 bottle) beer
- 1 glass of handia/toddy/local liquor/arrack/desisharab/fenny

INTERPRETATION OF THE SCORE:

- In men, a score of 4 or more is considered positive, optimal for identifying hazardous drinking or active alcohol use disorders.
- In women, a score of more than 3 is considered positive (same as above).
- Higher the score, the more likely that the patients drinking is affecting his or her safety

Slide 31



*The **traffic signal*** presented below is a symbol for levels of alcohol use and the harm it causes to the patient. The Counselor can use the traffic signal to explain how alcohol use can become a problem through the different colours. Based on AUDIT-C scores, the Counselor will take specific steps for harmful use and alcohol dependence (see box below) and use brief counseling. The counsellor should also educate regarding risky patterns of drinking including binge drinking (described later), driving or operating machinery under influence, etc.

STEPS TO BE TAKEN BY THE COUNSELOR:

- RED: Alcohol dependence: Ask about withdrawal symptoms (e.g. tremors of hands, tongue or eyelids, nausea, weakness, sweating, high BP, anxiety, depressed or irritable mood, sleeplessness and headache). Brief counselling & refer back to Medical officer if patient finds it difficult to stop because of significant withdrawal symptoms, including craving
- YELLOW: Harmful use: Brief counselling & refer to Medical officer (if required)
- GREEN: Not drinking at present: Educate about consequences of alcohol use to avoid future risk

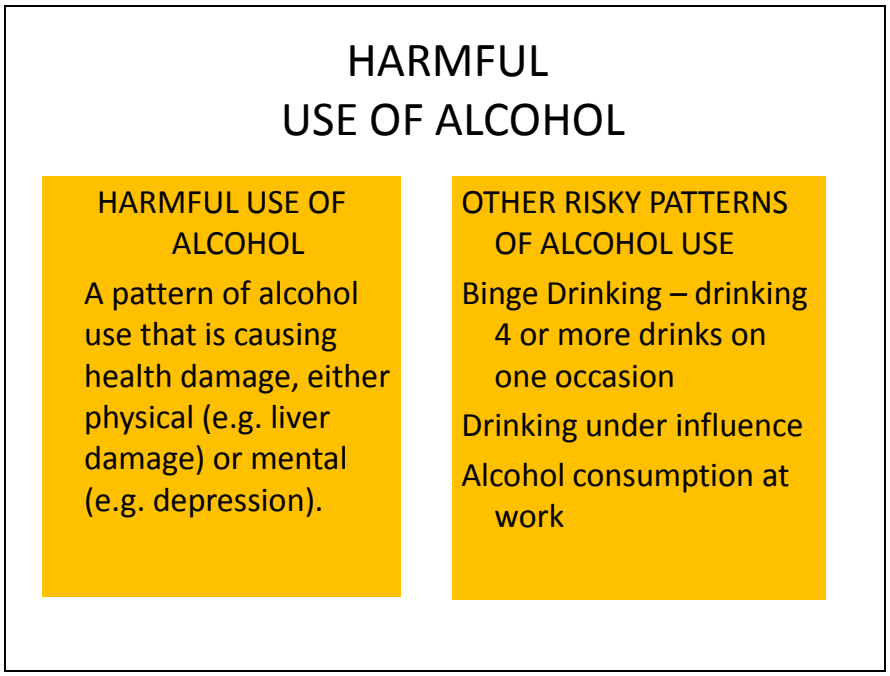
The box describes the most common alcohol use disorders, namely, harmful use and alcohol dependence[52].[53]

[52]World Health Organization. Global Status Report on Alcohol and Health. *ibid*
[53] ICD-10 Classification of Mental and Behavioural Disorders. www.who.int/classifications/icd/en/bluebook.pdf

Harmful use of Alcohol: A pattern of alcohol use that is causing damage to health, either physical (e.g. liver damage) or mental (e.g. depression).	*Alcohol dependence:* A cluster of behavioural, cognitive, and physiological phenomena that develop after repeated alcohol use and that typically include a strong desire to consume alcohol, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to alcohol use than to other activities and obligations, increased tolerance and sometimes a physical withdrawal state. These are all WHO definitions and only that may be provided. These sources all use the WHO definition

Other risky patterns of alcohol consumption include binge drinking, defined as consumption of four or more drinks in one sitting or on one occasion.

Slide 32



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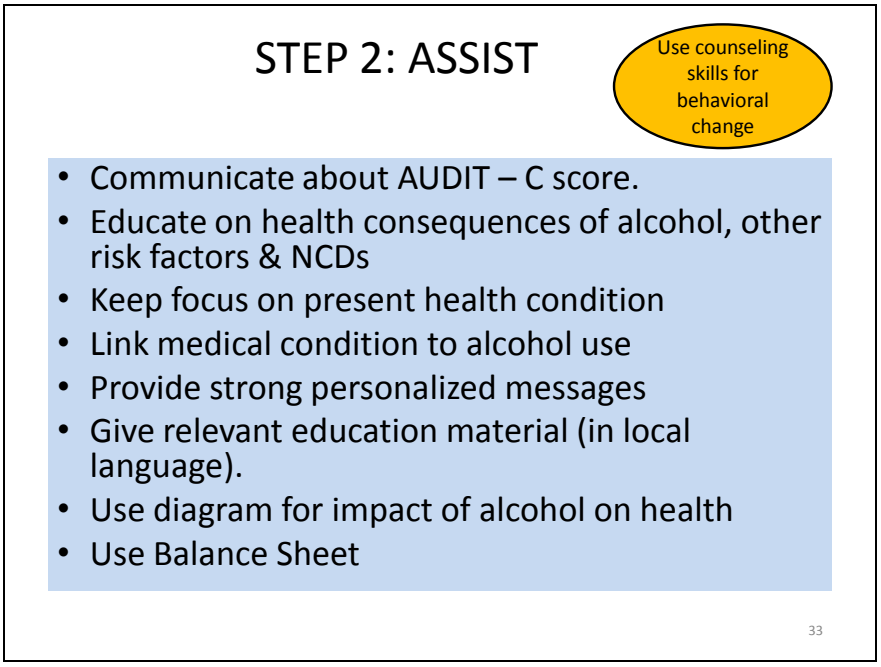
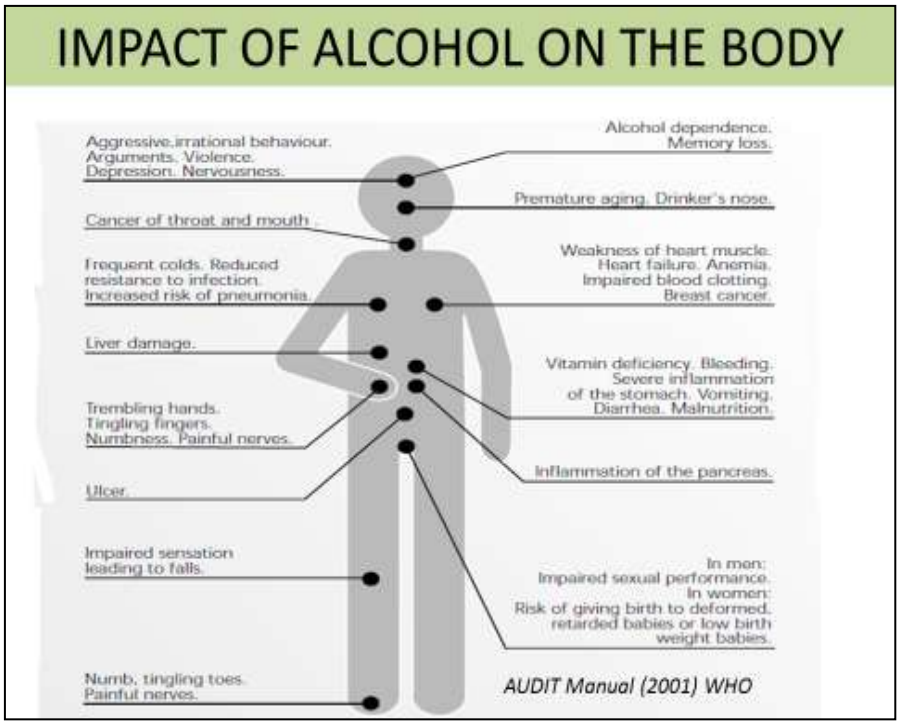


- The counselor will communicate to the patient about the AUDIT – C score. The traffic signal can be used to explain the alcohol problem.

- *Educate:* The health consequences of alcohol, other risk factors and NCDs will be discussed (use diagram). Where necessary, the counselor will inform the patient about the connection of alcohol, other risk factors and NCDs. Keep the focus of counseling on the present health condition. Link the medical condition to alcohol use and provide a strong personalized message. Give relevant education material (in local language). Show pictures to explain (see picture below). Most alcohol users are not aware of the health risks of alcohol and just have a general knowledge. The counselors information has greater impact when it is provided in the context of the patient disease status or risk, family or social situation (e.g. having school going children or poor living conditions and how the patient's poor health can affect the family).

Slide 34



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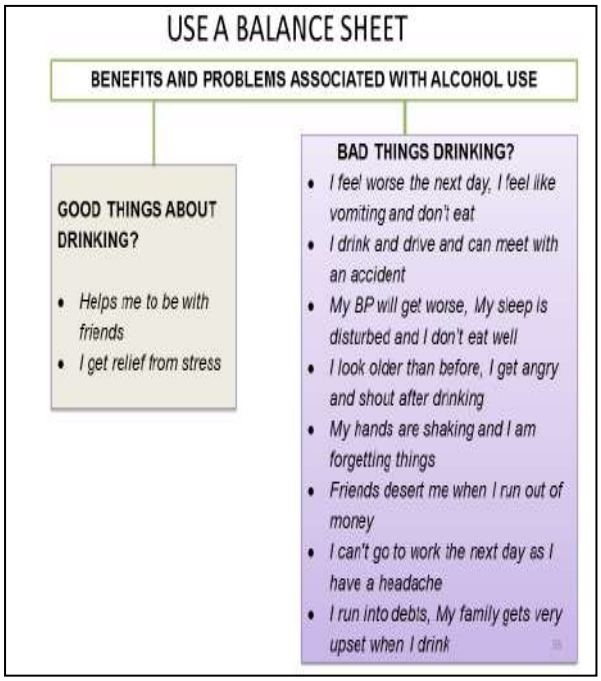
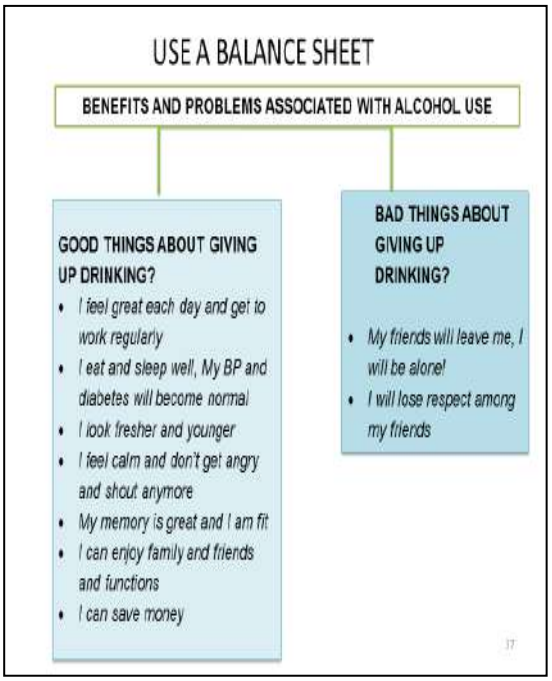
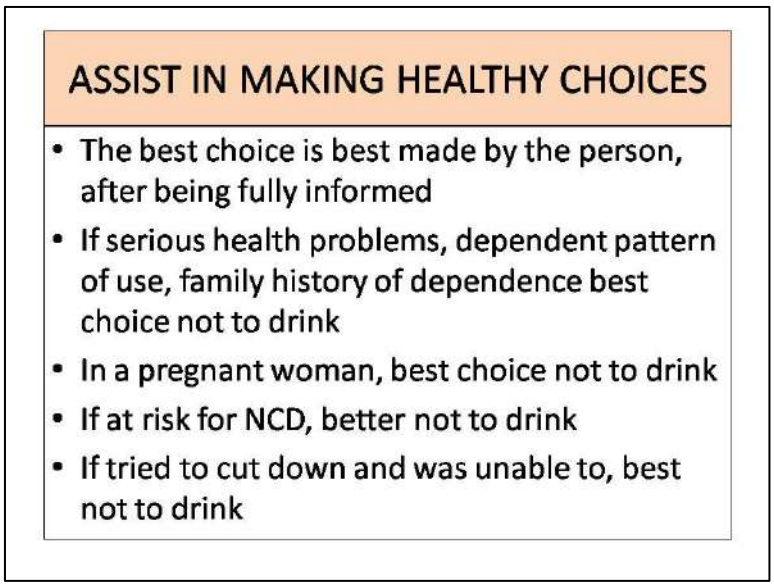
Slides 36 and 37





*The **Balance Sheet*** (given below) will be used to discuss the pros and cons of alcohol as a risk factor on health and daily life. The counselor can discuss with the patient using the balance sheet and motivate him/ her to change the use of alcohol as a risk factor. The balance sheet exercise often helps the patient to understand the problems emerging from drinking. The list of problems is invariably longer. As the patient goes through this exercise, the counselor will highlight what is most relevant for the patient. The aim is to make the message personally meaningful to the patient. As a counselor, the role is to be able to help the patient to favour the decision to change. Being direct is helpful (saying **'YOU MUST STOP'**). However, the counselor should not scare the patient away.

Slide 38



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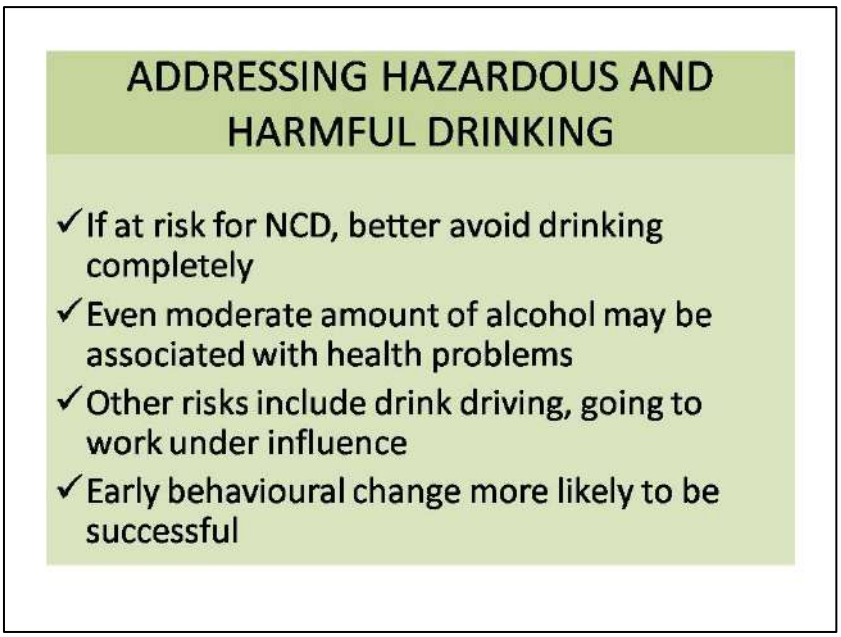

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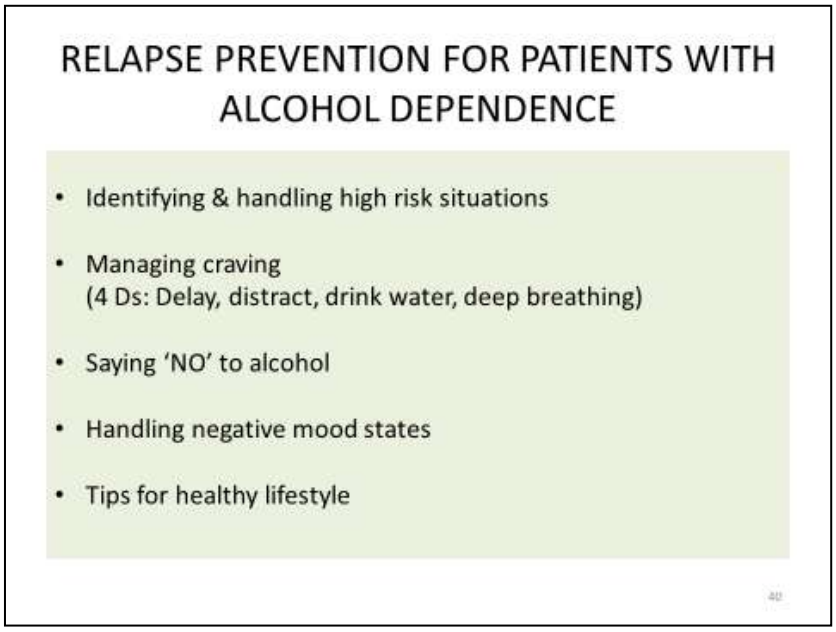


The counselor should discuss relapse prevention for patient's having alcohol dependence (red light). The following issues need to be discussed[54]:

[54]Murthy P, & Nikketha S. Psychosocial interventions for persons with substance abuse: Theory and Practice. National Institute of Mental Health and Neuro Sciences, Bangalore, 2007. NIMHANS Publication 64.

1. ***Identifying & handling high risk situations where a person can develop craving and relapse:***

- The sight of a bar or previous place where drinking occurred, meeting old friends who drink
- Occasions when there is drinking (functions, weddings, funerals, celebrations)
- Weekends or pay day
- Some environmental cues like eating non-vegetarian food
- Family or work related conflicts
- Boredom (feeling bored with time in hand)
- Negative emotions like frustration, sadness, depression
- Positive emotions (happiness, excitement, celebrations)

2. ***Managing craving (urge to drink)***

- 4 Ds: Delay, distract, drink water and deep breathing
- HALT (Hunger, Anger, Loneliness and Tiredness): Avoiding HALT situations reduces the likelihood of craving.

3. ***Drink refusal and saying 'NO' to drinking***

Refusal skills are a specific set of skills which are related to dealing with social pressure. Using a strong body language and confident tone of voice from the person while refusing to drink is encouraged. Some common drink refusal statements:

"No thanks, I have stopped drinking."
"Let us have tea of coffee instead."
"I have to work a double shift tomorrow."
"I have a headache."
"I was just leaving."

4. ***Handling negative mood states***

Negative mood states like anger, anxiety, fear, and sadness, guilt, getting upset or bored easily, irritability, tiredness and restlessness are associated with relapse. Poor sleep, general pain and a chronic health conditioncan are other factors that can lead to drinking as a form of coping.

Ways to handle them are as follows:

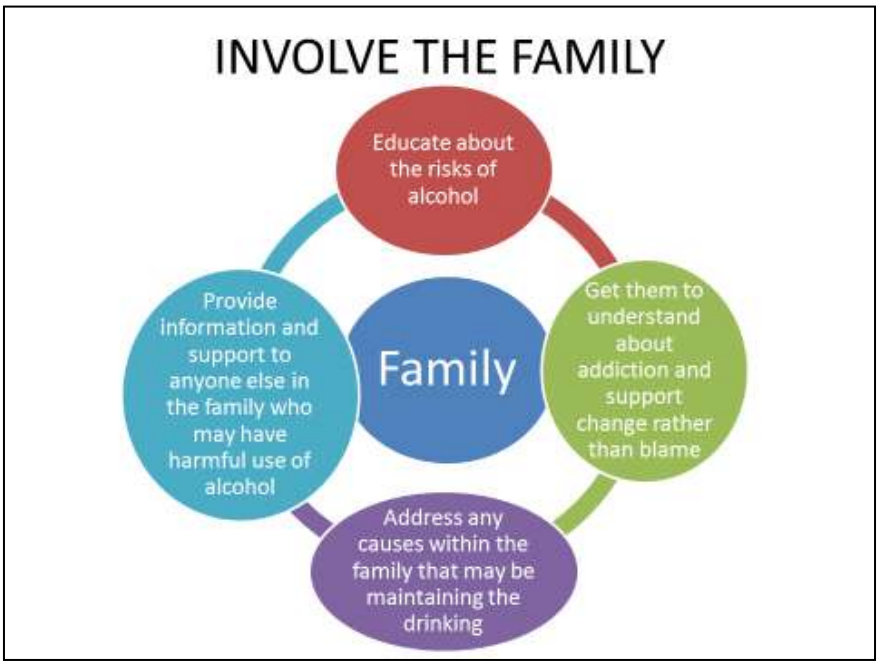
- First step is to become aware of one's self-defeating thoughts and depressed mood.
- Realizing adverse consequences of these negative thoughts.
- Creating opposite (positive) thoughts or challenging negative thoughts.

- Ignoring negative thoughts, not responding to them.
- Accepting oneself as one really is, with strengths as well as limitations.
- Having realistic self-expectations

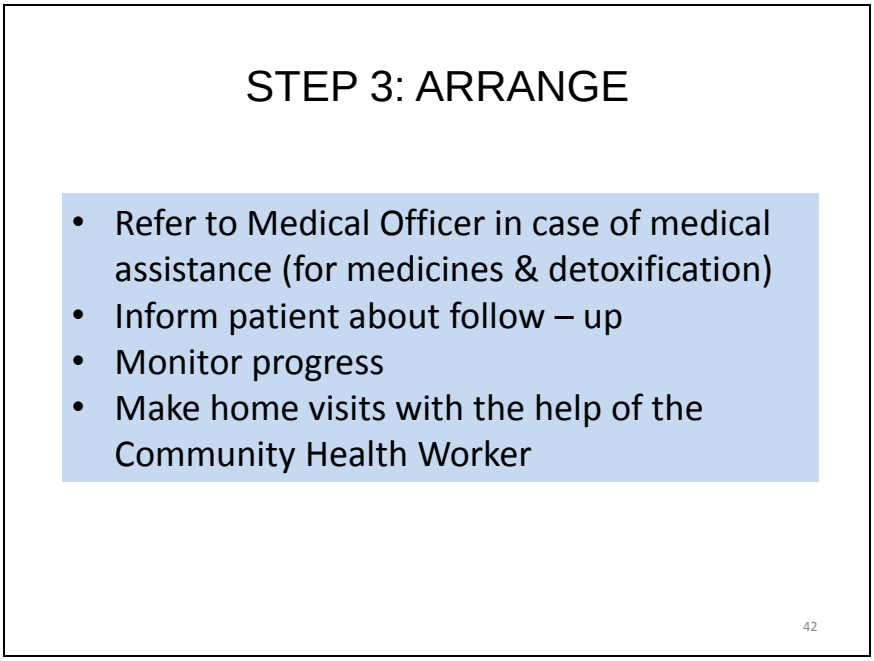
5. *Tips for healthy lifestyle (*what the counselor can discuss with the patient)

- Attitude is the key: be positive!
- Begin and end your day with prayer and/or reflection.
- Believe in yourself that you will get through your treatment, your hurdles, big or small.
- Cultivate a best friend whom you can really trust.
- Stay away from negative people who constantly criticize. Minimize peer influence that is adverse.
- Spend time with family and children.
- Take a healthy balanced diet
- Follow a regular fitness plan

Slide 41

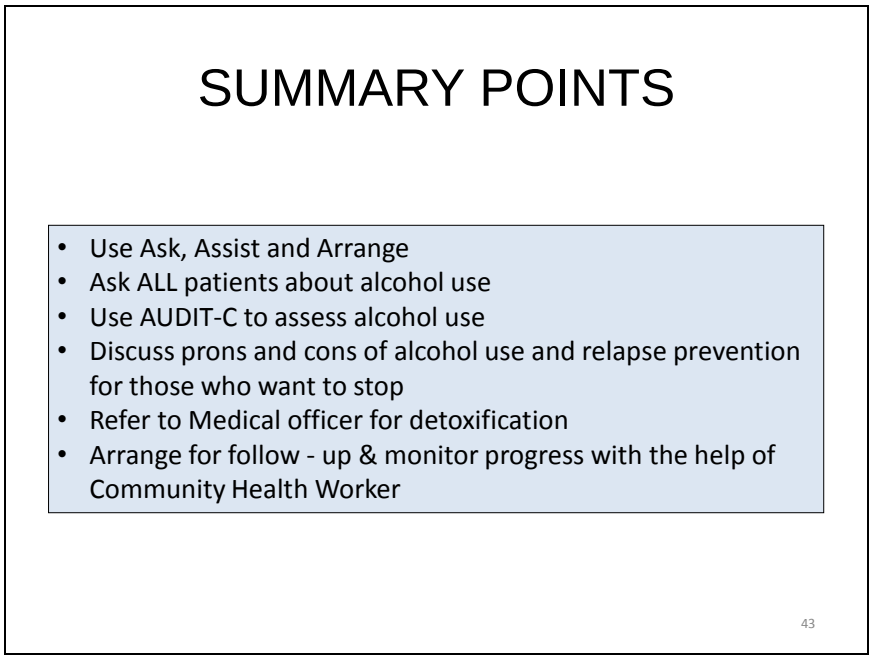


Slide 42. **Arrange**



- The counselor will refer the patient to Medical Officer in case of medical assistance for health related issues and detoxification for alcohol dependence
- Inform patient about follow up and monitor progress.
- Make home – visits with the help of the community health worker.

Slide 43



Slide 44

LEARNING OBJECTIVE

D. To plan health promotion activities in the community on alcohol use and linkages to risk factors and NCDs

44

INSTRUCTION

You will help each group to list out suitable methods for health promotion activities to address alcohol as a risk factor in the community. Each group will present their health promotion activity using chart papers.

Slide 45

A WORKSHEET (Group work)

Health promotion in the community on alcohol use

- *Choose a specific group in the community and plan a health promotion programme (youth, self - help groups, schools, women, farmers, workers , village panchayat, village health and sanitation committee etc.) and plan methods of health promotion*
- *Specify duration, content, methodology*

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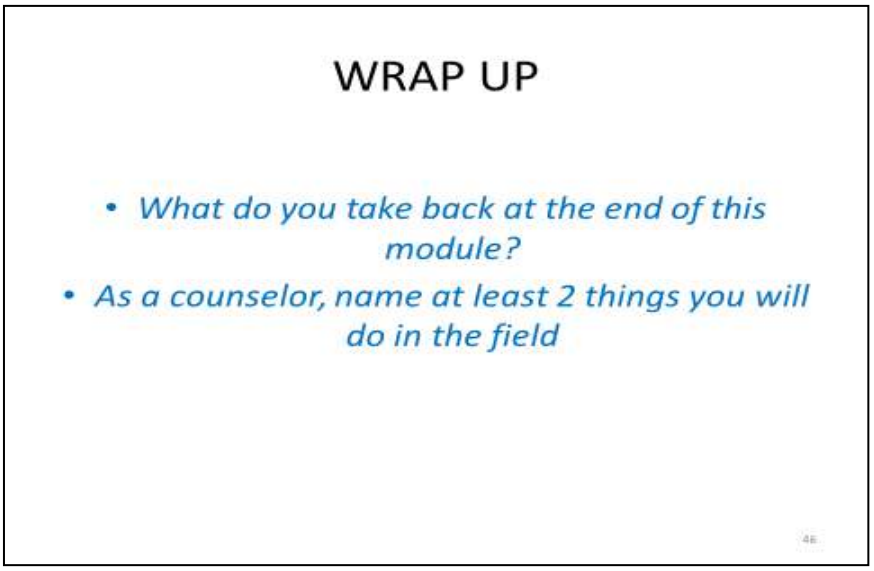
Slide 46



HAND OUTS

4.1. COMMON BELIEFS ABOUT ALCOHOL USE

4.2. NOTES ABOUT ALCOHOL USE

4.3. METHODS TO IDENTIFY ALCOHOL USE AND PROMOTE BEHAVIOURAL CHANGE

4.1. COMMON BELIEFS ABOUT ALCOHOL USE

- Alcohol relieves cold, cough, body aches and pains
- Alcohol enhances sexual performance.
- Alcohol makes the mind clear and sharp.
- Alcohol does not make a person brave.
- Alcohol does not improve work performance.
- Drinking beer does not help in body building.
- Alcohol induces good sleep.
- Alcohol keeps us warm especially during winter and rains.
- Eating good food or drinking buttermilk, or lime juice neutralizes harmful effects of alcohol.
- Costlier alcohol beverages are safer than cheaper ones.

4.2 NOTES ABOUT ALCOHOL USE

TYPES OF ALCOHOL

- Whisky, Brandy, Rum, Vodka & Gin
- Beers (different strengths) & Wine
- Arrack and toddy
- Hooch

HARMFUL USE OF ALCOHOL AND ALCOHOL DEPENDENCE

- Harmful use refers to the health damage that is physical or mental due to drinking.
- Dependence refers to the cluster of behavioural, cognitive and physiological phenomena that develops after repeated drinking.
- Other risky patterns of use include binge drinking, drink driving, drinking at work

EFFECTS OF ALCOHOL USE

Short term effects: Feeling relaxed, confident, talkative, poor psycho motor coordination (clumsy), speech is slurred, loss of judgment, severe headache the next day, high risk sexual behaviour, aggression and memory problems.

Long term effects:

- Physical health consequences: Increased acid secretion leading to acidity, ulcers, gastritis and cancer, Cirrhosis of liver, liver cancer, pancreatic damage, Brain damage, fits mental illness, High blood pressure and increased risk of heart attacks.
- Psychological consequences: Feel happy, relaxed, less tense or irritable, sad and anxious
- Social consequences: Accidents & death, unprotected sex, violence, work, marriage, financial problems

4.3 . METHODS TO IDENTIFY ALCOHOL USE AND PROMOTE BEHAVIOURAL CHANGE

Rapport Building

Step 1: Ask

- Ask about alcohol use to all the patients who report with health problems
- Also ask about use of other substances (cannabis (ganja), tobacco, sleeping tablets etc). If present, refer to Medical Officer.

- USE AUDIT –C (AUDIT Alcohol Consumption Questions- An effective brief screening test for problem drinkers)

1. How often do you have a drink containing alcohol?

a) Never 0
b) Once a Month or less 1
c) 2-4 times a month 2
d) 2-3 times a week 3
e) 4 or more times a week 4

2. How many standard drinks containing alcohol do you have on a typical day when drinking?*

a) 1-2 1
b) 3-4 2
c) 5-6 3
d) 7- 9 4
e) 10 or more 5

3. How often do you have six or more drinks on one occasion?

a) Never 1
b) Less than monthly 2
c) Monthly 3
d) Weekly 4
e) Daily or almost daily 5

One Standard drink:

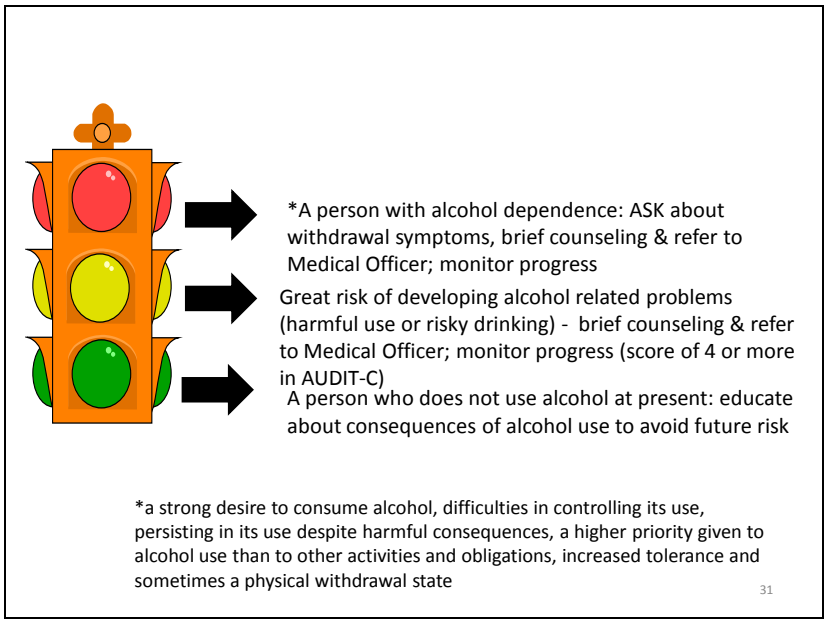
- 30 ml. spirits (Commonly IMFL whisky, rum, brandy, gin or vodka)
- 110 ml (1/3 bottle) strong beer
- 330 ml (1/2 bottle) beer
- 1 glass of handia/toddy/local liquor/arrack/desisharab/fenny

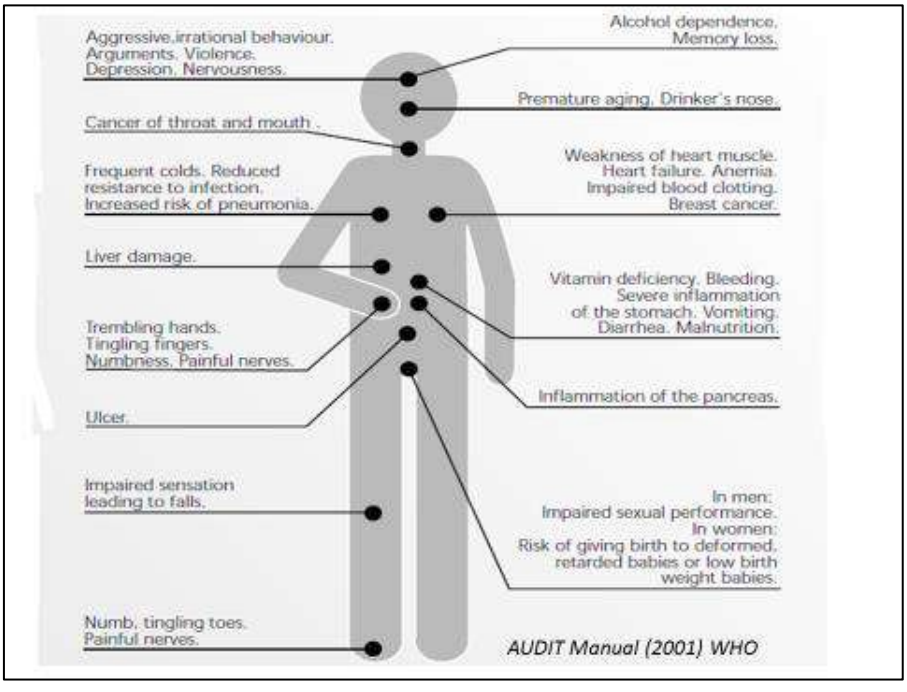
INTERPRETATION OF THE SCORE:

- In men, a score of 4 or more is considered positive, optimal for identifying hazardous drinking or active alcohol use disorders.
- In women, a score of more than 3 is considered positive (same as above).
- Higher the score, the more likely that the patients drinking is affecting his or her safety

Step 2: ASSIST

- Communicate about the AUDIT – C score using the traffic signal
- Educate: Link medical condition to present health condition and provide a strong and personalized message





- Use balance sheet to discuss the pros and cons of alcohol as a risk factor on health and daily life.

RELAPSE PREVENTION FOR PATIENTS WITH ALCOHOL DEPENDENCE

- Identifying & handling high risk situations where a person can develop craving and relapse
- Teach 4 Ds: Delay, distract, drink water and deep breathing
- Avoid HALT (Hunger, Anger, Loneliness and Tiredness)
- Say 'NO' to drink
- Handling negative mood states like anger, anxiety, and fear, and sadness, guilt, getting upset or bored easily, irritability, tiredness and restlessness are associated with relapse.
- Ways to handle: Become aware of one's self-defeating thoughts and depressed mood; realizing adverse consequences of these negative thoughts; creating opposite (positive) thoughts or challenging negative thoughts; Ignoring negative thoughts, not responding to them and accepting oneself as one really is, with strengths as well as limitations and having realistic self-expectations.

TIPS FOR HEALTHY LIFESTYLE

- Attitude is the key: be positive!
- Begin and end your day with prayer and/or reflection.
- Believe in yourself that you will get through your treatment, your hurdles, big or small.
- Cultivate a best friend whom you can really trust.
- Stay away from negative people who constantly criticize. Minimize peer influence that is adverse.
- Spend time with family and children.
- Take a healthy balanced diet
- Follow a regular fitness plan

Step 3: Arrange

- Refer the patient to Medical Officer in case of medical assistance for health related issues and detoxification for alcohol dependence
- Inform patient about follow up and monitor progress.
- Make home – visits with the help of the community health worker.

Unhealthy diet as a risk factor for NCDs

Session 5

Objectives of the session

By the end of this session, the participants will understand the following:

- The double burden of dietary diseases
- Constituents of a healthy diet
- Unhealthy diet as a risk factor for NCDs
- Identification of unhealthy dietary practices among patients
- How to motivate and support patients to change unhealthy dietary practices
- How to promote healthy dietary practices in the community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

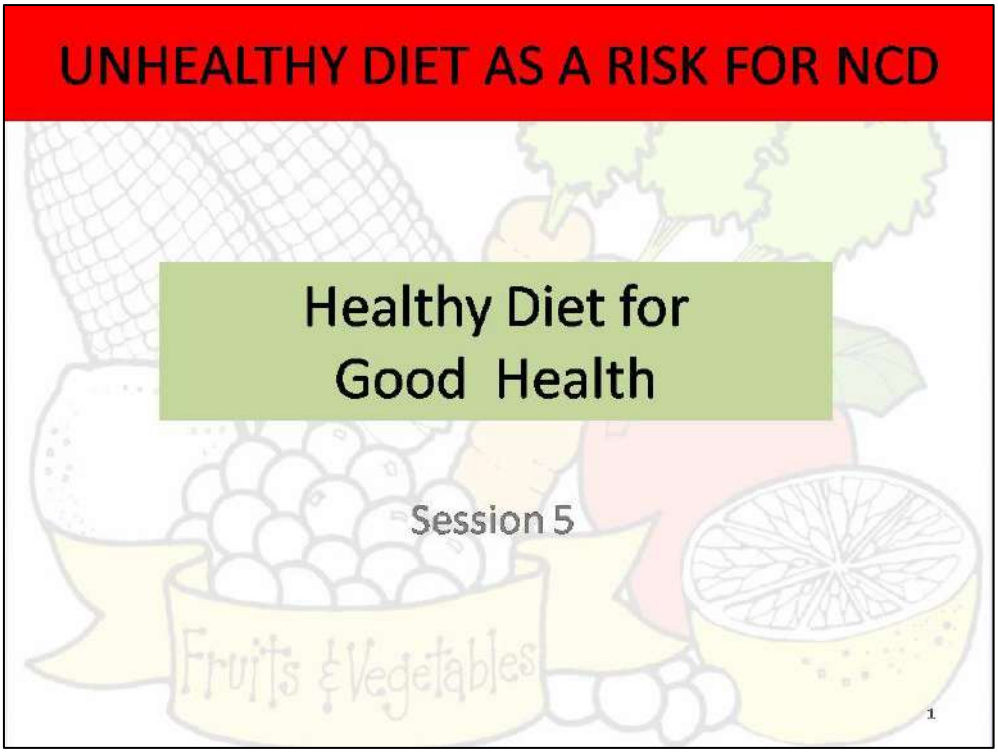
- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 



INTRODUCTION

Unhealthy diet is one of the leading causes of non communicable diseases such as diabetes, cardio-vascular diseases, and cancer. The effect of unhealthy diet both on premature death and disease is now recognized as a serious problem in developing countries. According to WHO[55] [56], dietary factors contribute to about 30% of all cancers in industrialized countries and also 30% in developing countries. There is a rapid change in traditional diet to energy rich, nutrient poor foods that are high in fat, sugar and salt and NCDs stem from such diets. In India, we face the problem of both under nutrition as well as excessive and unhealthy food consumption. Over- nutrition is becoming a problem especially in urban areas. In urban areas, more women suffering from diabetes and/ hypertension are obese compared to men with these conditions. One fourth of adult population and one fifth of school going children are overweight in India. Healthy diet reduces the risk of heart diseases, as well as Type 2 diabetes[57]. It is estimated that 30% of disease can be controlled with proper diet. Healthy diet also leads to a better quality of life and health, less psycho social problems and higher productivity.

[55] World Health Organization. Population nutrient intake goals for preventing diet-related chronic diseases. www.who.int/nutrition/topics/5_population_nutrient/en/print.html.

[56] Dietary guidelines for Indians (2nd ed.) National Institute of Nutrition (NIN), Hyderabad, 2010. www.ninindia.org/DietaryguidelinesforIndians-Finaldraft.pdf

[57] Sudha, V., Radhika, G., & Mohan, V. Current dietary trends in the management of diabetes. *Indian Journal of Medical Research, 2004: 120,* 4-8. www.medind.nic.in/iby/t04/i7/ibyt04i7p4.pdf

This session on diet starts with the first objective of helping the counselor to understand the importance of diet in general. The second objective is about role of diet as a risk factor to other risks leading to non communicable diseases. The third objective is to identify unhealthy diet among patients and promote behavioural change. The final objective is to plan for health promotion activities on healthy diet in the community.

Total duration: 3 hours and 30 minutes approximately.

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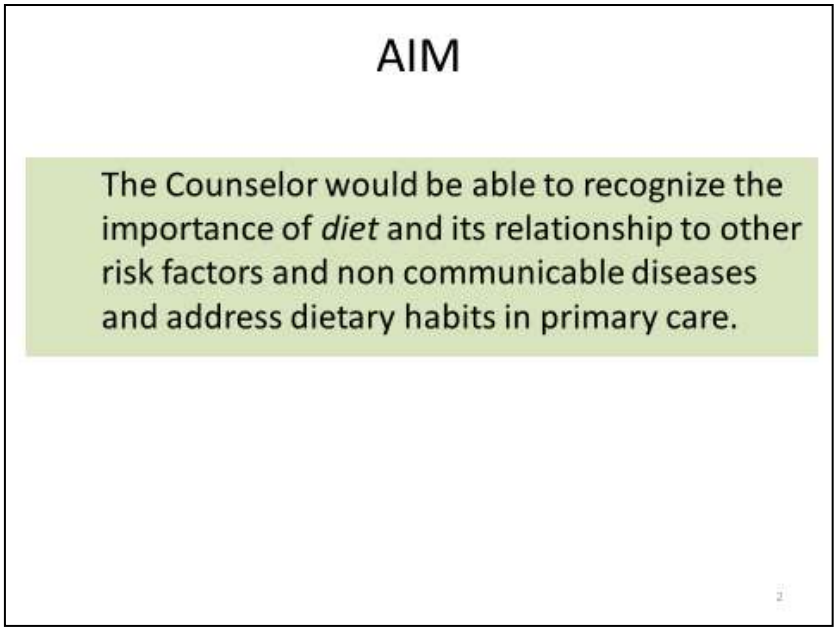

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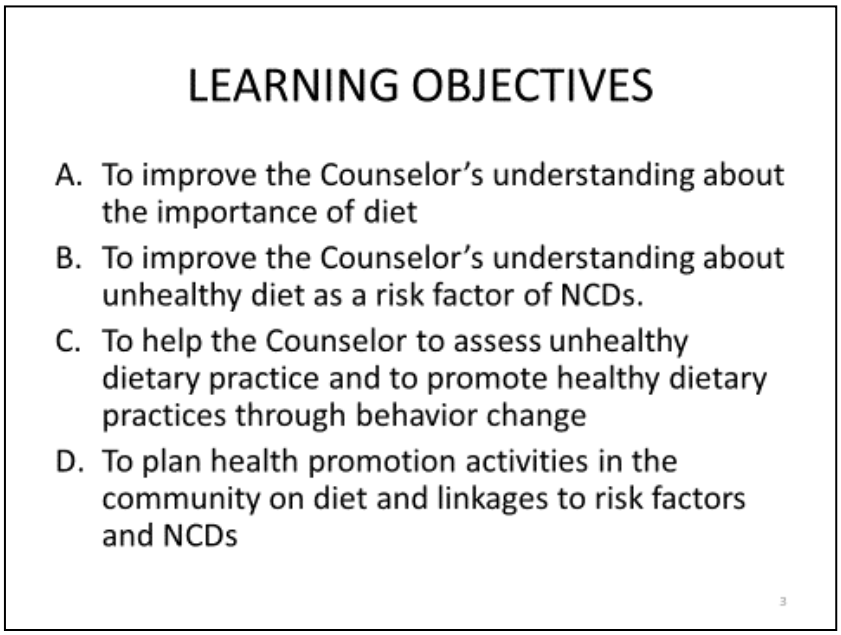

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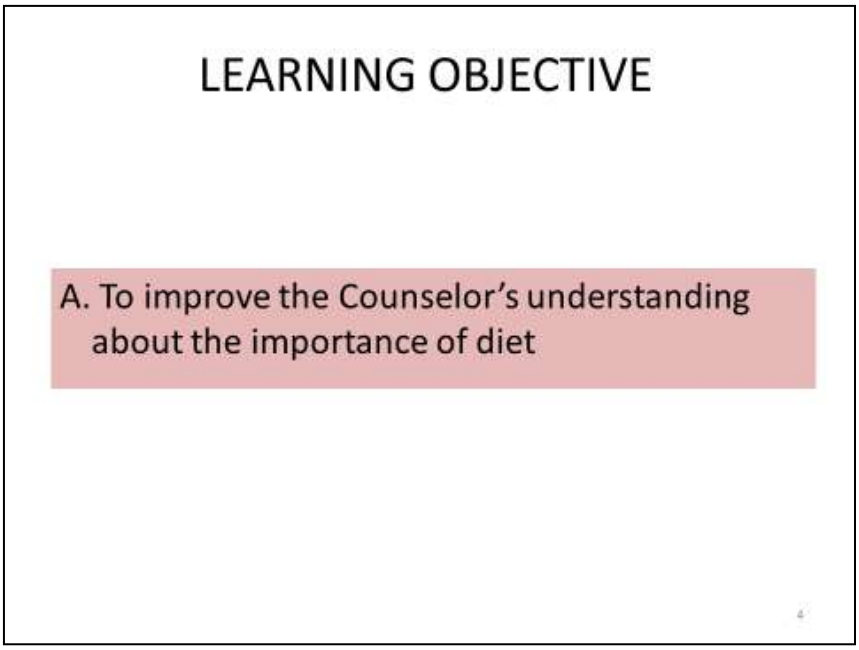


INSTRUCTION

There will be a discussion on healthy and unhealthy diet, four basic food groups and diet for different age groups. Start with an individual activity.

Slide 5

ACTIVITY (INDIVIDUAL WORK)

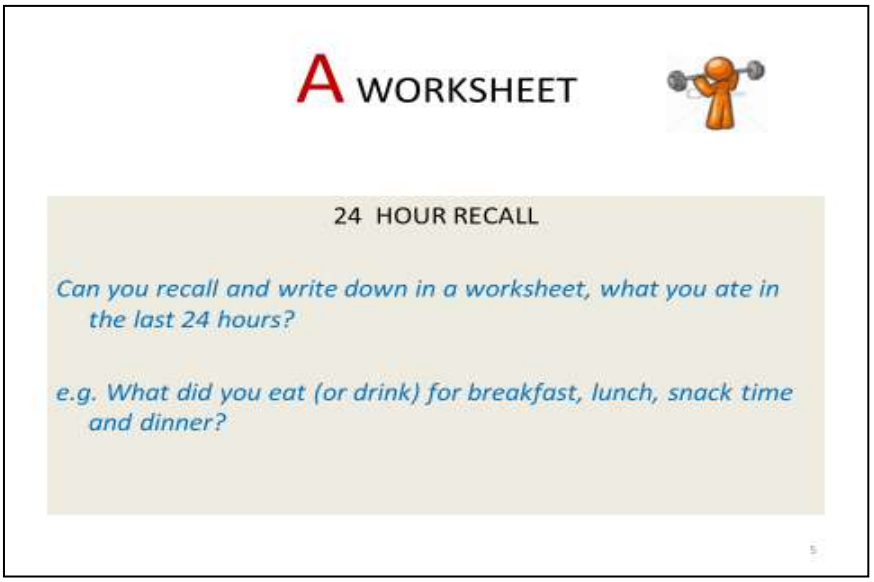
Duration: 15 minutes

24 HOUR RECALL

This is an individual activity where the participants record their own dietary intake based on the 24 hour recall method. Give papers and ask the participants to write what they ate in the past 24 hours. The participant will assume that the past 24 hours is a normal day (where there is no fasting or special diet). After completion, discuss what a healthy and unhealthy diet is and encourage participants to apply the information on what they have listed as their diet in the past 24 hours.

DISTRIBUTE HANDOUT 5.1 (HEALTHY DIET).

Slide 5



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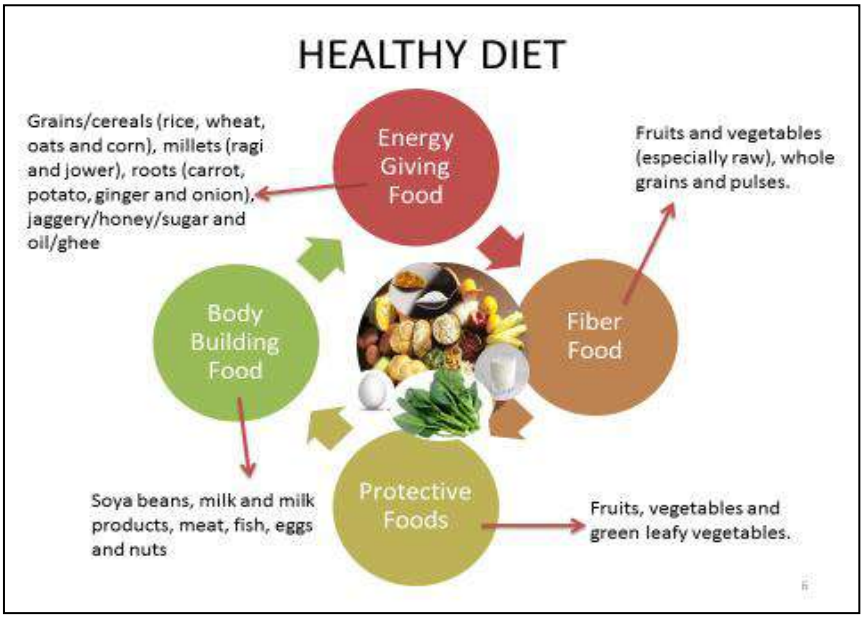


What is a healthy diet?

According to the National Institute of Nutrition (NIN), healthy diet is one which provides all the nutrients and non-nutrients (dietary fibre, antioxidants and components produced by plants) in required amounts and proper proportions.

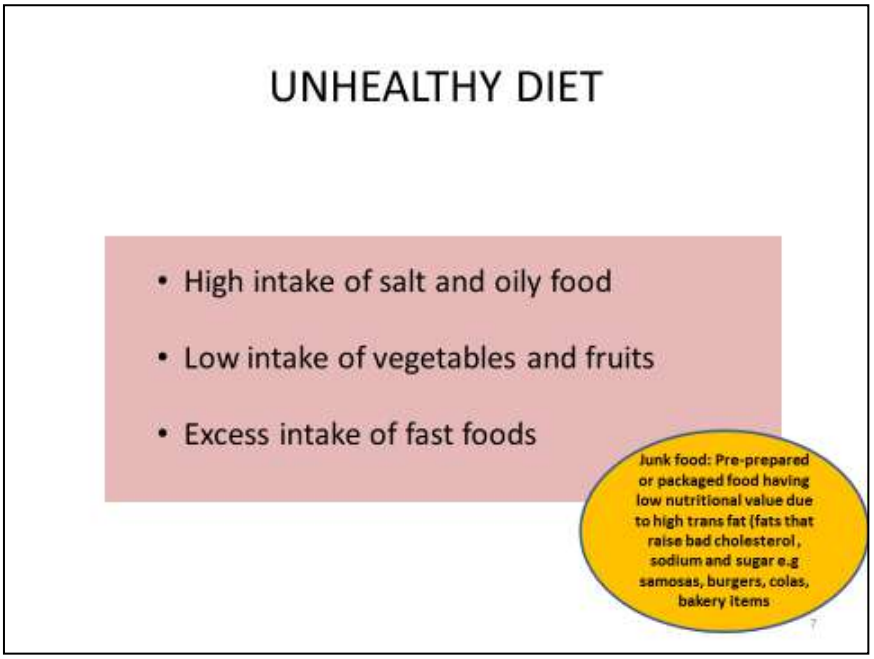
Healthy diet can easily be achieved through the blend of the four basic food groups:

1. *Energy giving food* includes grains/cereals (rice, wheat, oats & corn), millets (ragi & jowar), roots (carrot, potato, ginger and onion), jaggery/honey/sugar and oil/ghee.

2. *Body building food* includes pulses, soya beans, milk & milk products, meat, fish, eggs and nuts.
3. *Protective food* includes fruits, vegetables and green leafy vegetables.
4. *Fibre food* includes fruits & vegetables (especially raw), whole grains and pulses.

   The choice of what a person eats is based on convenience, habit, trends and income.

Slide 7



Unhealthy food is any food that is not regarded as being conducive to maintaining health. Unhealthy foods include fats (especially of animal origin), “fast” foods (which are low in fibre and vitamins), foods high in salt and tropical oils (e.g., fried potato crisps/chips, samosas, pakoras, kababs), and cream-based (“white”) sauces (which are high in fat).

In many Indian homes, dietary habits are controlled by cultural factors, financial situation and poor awareness about healthy diets. Vegetables and fruits are generally expensive and many families think of it as a luxury. Preserved foods like pickles and oily food are commonly used throughout the country. In urban areas, fast foods have taken over traditional foods and this is also occurring now in rural areas. In both urban and rural parts of India, regular snacking on unhealthy foods like samosas, kachoris, pakoda, bonda, vada, pani puri, bhujia, tikkis, kebabs, fafdas and so on has become a common feature. These snacks have become easily available in most places.
Many people still use unhealthy oils that contain saturated fats or rich in transfats (e.g. coconut oil and palm oil). It is now well recognised that sunflower oil, safflower oil, soya oil, groundnut oil and mustard oil are healthier than the conventionally used oils.

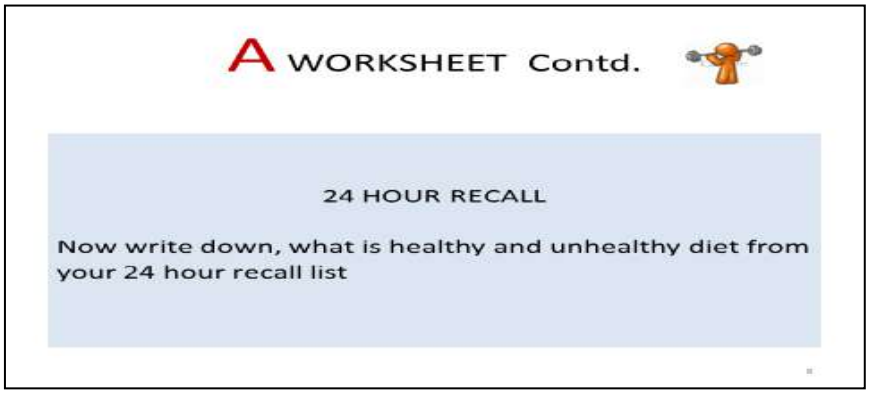
Slide 8

ACTIVITY (INDIVIDUAL WORK) Continued

24 HOUR RECALL

Duration: 15 minutes

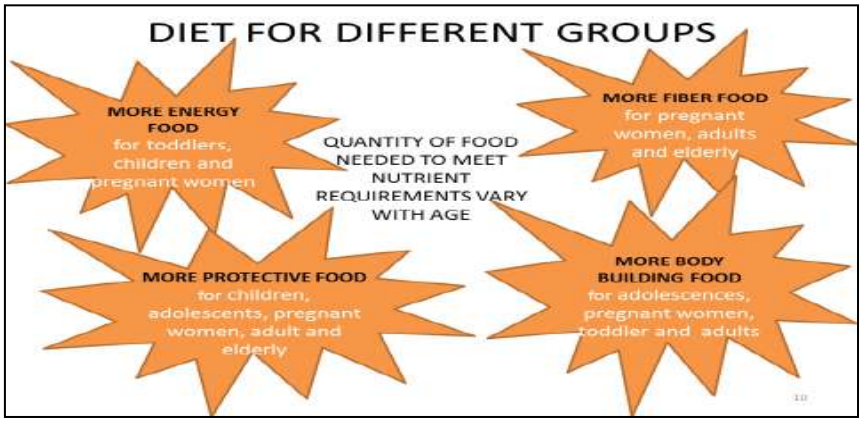
Continue the activity on 24 hour recall. Ask the participants to classify what they ate as healthy and unhealthy diet from their 24 hour recall list. Generate discussion on what is healthy or unhealthy among the participants based on what they ate. Keep the discussion lively and link it to your previous slide and summarize.



Slide 9

Generate discussion and write responses on the board.

Slide 10



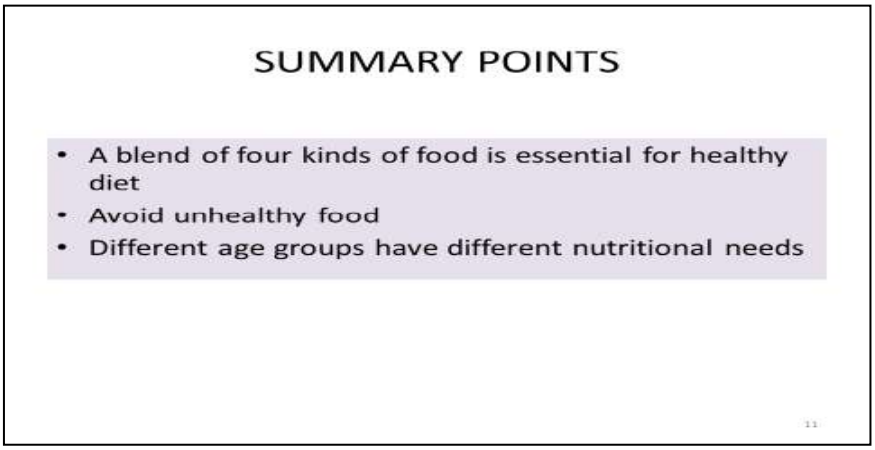
DISTRIBUTE HANDOUT 5.2 (DIET FOR DIFFERENT GROUPS).

Is a healthy diet same for all age groups?

The quantity of food needs to meet the nutrient requirements of a person and this varies with age.

- Toddlers, children & pregnant women need more energy foods
- Pregnant women, adults & elderly need more fibre foods
- Children, adolescents, pregnant women, adults and the elderly needs more protective food
- Adolescents, pregnant women, toddlers and adults need more body building food

Slide 11



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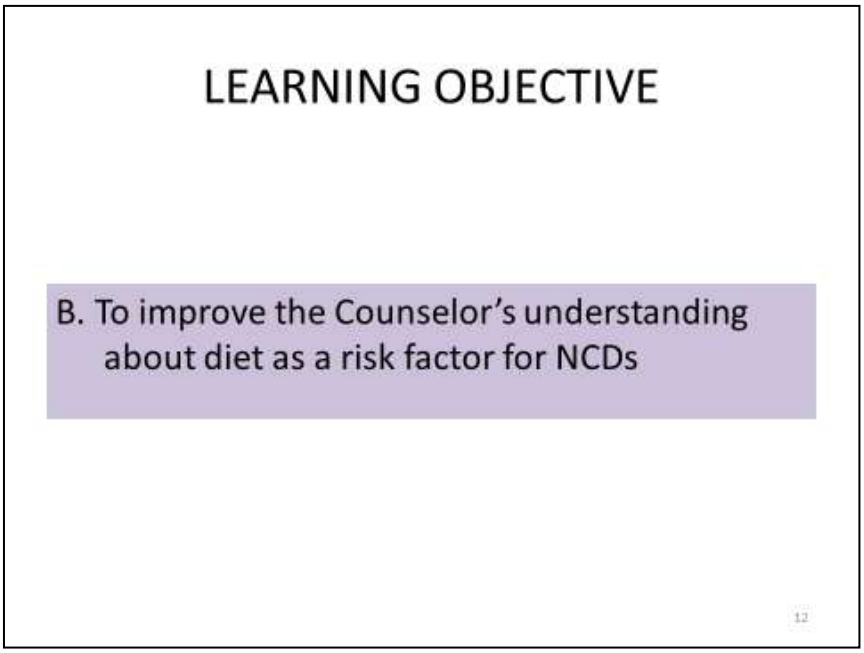
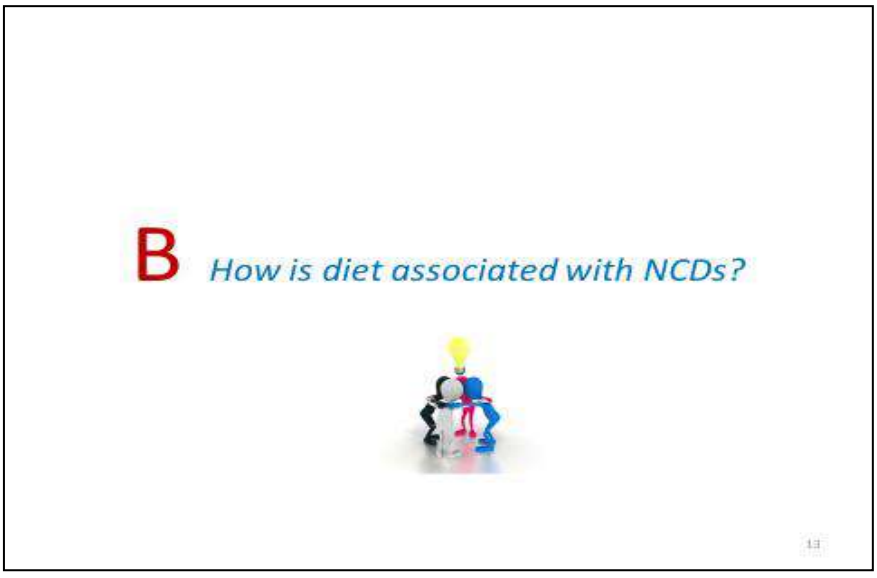


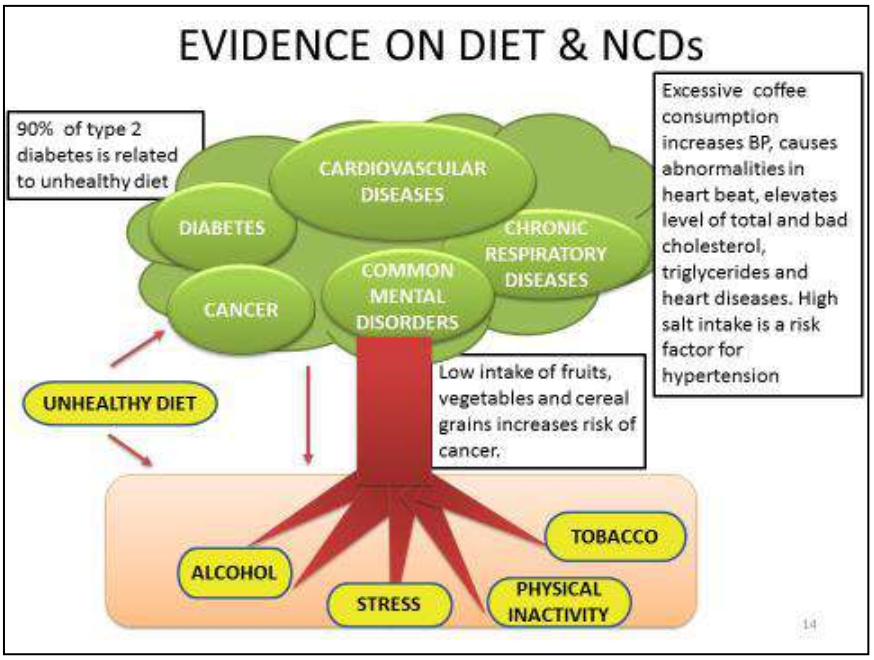
There will be a discussion on diet as a risk factor and its linkages to other risk factors and NCDs.

Slide 13



Generate discussion and write responses on the board.

Slide 14



There is evidence on diet for diet as a risk factor for NCDs such as diabetes[58], cancer[59] and cardiovascular diseases[60].

A healthy diet (fruits, vegetables, legume and whole grain) appears to be a protective factor for NCDs[61] and increase intake of fruits and vegetables reduces the risk of cancer, hypertension, diabetes, cardiovascular diseases, stroke and obesity.

Cancer: Intake of fruits, vegetables and cereal grains reduce risk of various lung cancers. Pumpkins and onions are found to be protective factors for cancer whereas animal protein foods and dairy products are found to be pre-disposing factors for cancer. Foods that contain antioxidants (orange, carrots, leafy vegetables and sweet potatoes), phytochemicals and omega-3 fatty acids (seafood) decrease the risk of cancer.

Cardiovascular diseases and stroke: Salt intake higher than 5 gms has been identified as a risk factor for hypertension. A diet that includes fruits, vegetables, walnuts, almonds, whole grains and soya been oil is effective in preventing primary and secondary coronary artery diseases[62]. One of the major risk factors for cardiovascular diseases is low HDL and high LDL cholesterol. Excess

[58] World Health Organization. Unhealthy diet and physical inactivity. NHM fact sheet:2009. www.who.int/nmh/publications/fact_sheet_diet_en.pdf

[59] Sankaranarayanan R, Varghese C, Duffy WS, Padmakumary G, Day EN, Nair MK. A case-control study of diet and lung cancer in Kerala, South India. *International Journal of Cancer,* 200*658,* 644-649.

[61] M. Tokunaga, T. Takahashi, R.B. Singh, D. Rupini, E. Toda, T. Nakamura, H. Mori, and, D.W. Wilson. Diet, Nutrients and Noncommunicable Diseases. The Open Nutraceuticals Journal, 2012, 5, 146-159. Retrieved from http://benthamscience.com/open/tonutraj/articles/V005/146TONUTRAJ.pdf

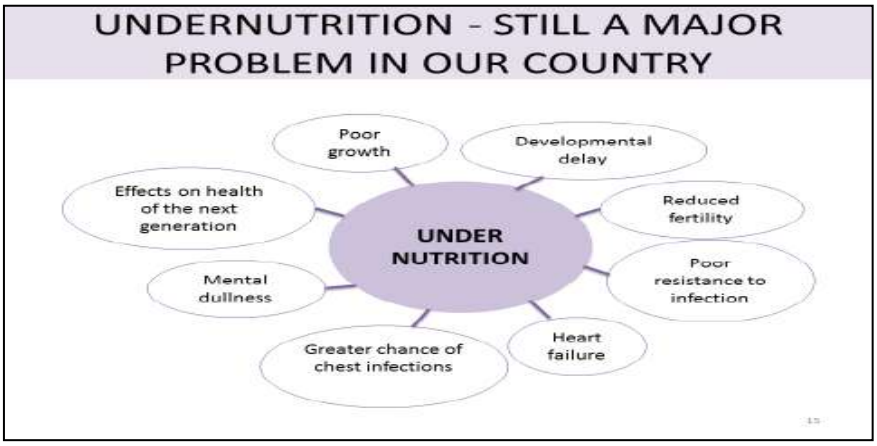
[62] Singh BH, Dubnov G, Niaz AM, Ghosh S, Singh R, Rastogi SS, Manor O, Pella D, Berry EM. Effect of an Indo-Mediterranean diet on progression of coronary artery disease in high risk patients (Indo-Mediterranean Diet Heart Study): a randomized single-blind trial. *The Lancet, 2002; 360 (9344),* 1455-1461.

coffee consumption is known to increase blood pressure, causes abnormalities in heartbeat, elevated level of total and LDL cholesterol (bad cholesterol), triglycerides due to high intake of oily food has a close bearing on heart diseases. Nutrition is important in prevention of stroke[63]. Cardiovascular problems can contribute to stroke.

Diabetes: Diet has an important role in diabetes. In 2014, 11% of adult men and 15% of adult women all over the world are obese[64]. Most adults are overweight because of poor eating habits and 90% of people with diabetes have type 2 diabetes closely related to being overweight and inadequate physical inactivity. Asian Indians have increased genetic risk for type 2 diabetes. This risk is worsened by dietary factors such as high calories, fat and sugar intake and unhealthy habits such as high intake of dietary fat and saturated fat, low consumption of fibre rich food, high intake of sweetened beverages such as colas and lack of physical activity.

High consumption of brightly coloured fruits and vegetables such as orange and tomatoes, whole grains and cereals and beans (phytochemicals) decrease risk for diabetes. Healthy diet controls the blood sugar.

Slide 15

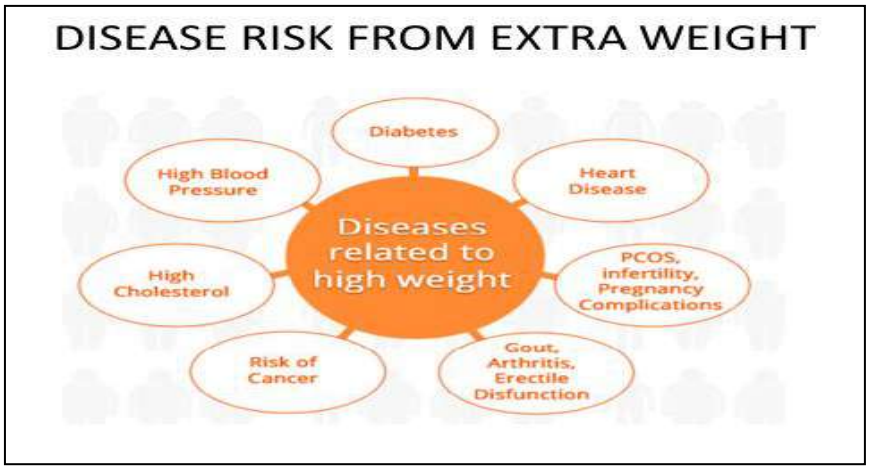


In our country, we face the double problem of undernutrition as well as overnutrition. Poverty is an important cause for poor nutrition. Use of alcohol and tobacco in many households diverts money that could have been used to provide a more nutritious diet to women and children. With an increasing elderly population, undernutrition among the elderly leading to health problems is likely to increase in our country. Many people hesitate to buy fruits as they are costly, and often considered a luxury.

The effects of undernutrition in the womb and in early childhood are known to cause growth slowing, mental slowing, greater proneness to infection, strain on the heart and many other health problems, it is also known now that childhood malnutrition is actually a risk factor for the development of NCDs later in life.

[63] Fisher, M., Lees., K., & Spence, D.J. (2006). Nutrition and Stroke prevention. *American Heart Association, 37,* 2430-2435.
[64] World Health Organization. Global Status Report on NCDs, 2014, ibid.

Slide 16



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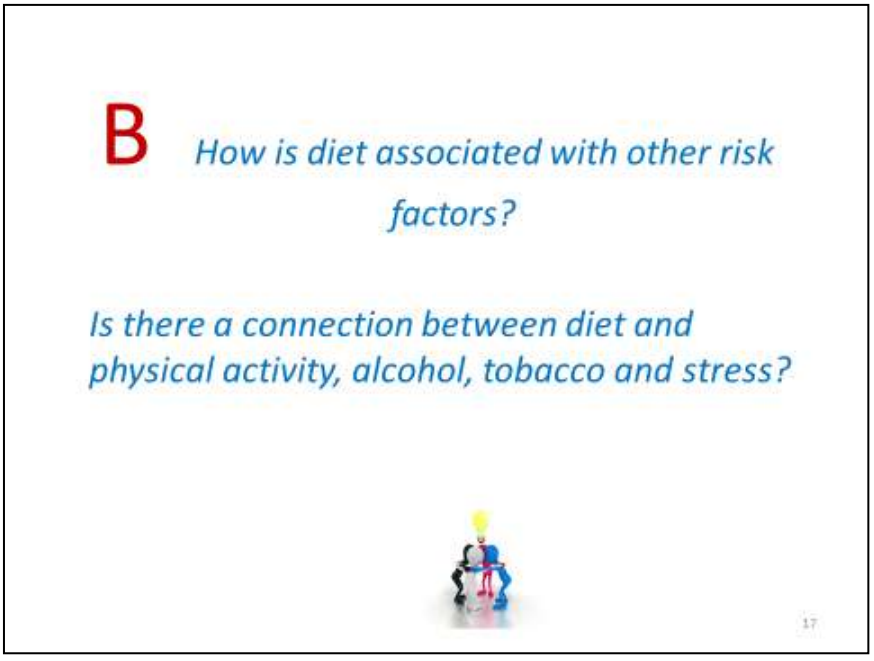
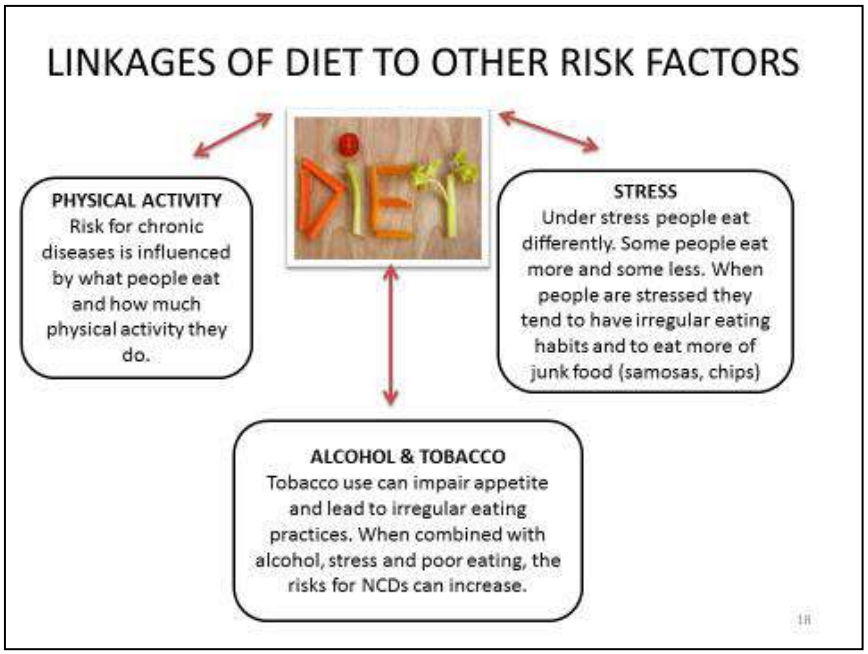


Generate discussion and write responses on the board.

Slide 18



Linkages of Diet to Other Risk Factors & NCDs

Physical activity and diet: According to NIN, Unhealthy diets and physical inactivity are the leading causes for NCDs. Diet and physical activity are important for various functions of the body and how the body processes carbohydrates and fats. Risk for chronic diseases is influenced by what people eat and how much physical activity they do. For muscles to develop and become strong, both physical activity and sufficient protein are important. Exercise alone or just a high-protein diet is inadequate. For bone mass and strength, calcium and vitamin D are required in the diet and physical activity makes the body incorporate them into bone tissue. In Indian adolescents, unhealthy diet and physical inactivity lead to four major non-communicable diseases: diabetes, cardiovascular diseases, osteoporosis and cancer and forms the major reason for more than 50 per cent morbidity and mortality[65].

Alcohol: Alcohol contains high levels of empty calories with no nutritional value. People who drink tend not to eat properly and are at risk for malnutrition. Alcohol also prevents the body from fully absorbing and using vitamins and nutrients in the diet and is associated with risk of cholesterol and fatty acids. For instance, persons who drink alcohol are likely to eat fried items (chips, *vadas,*

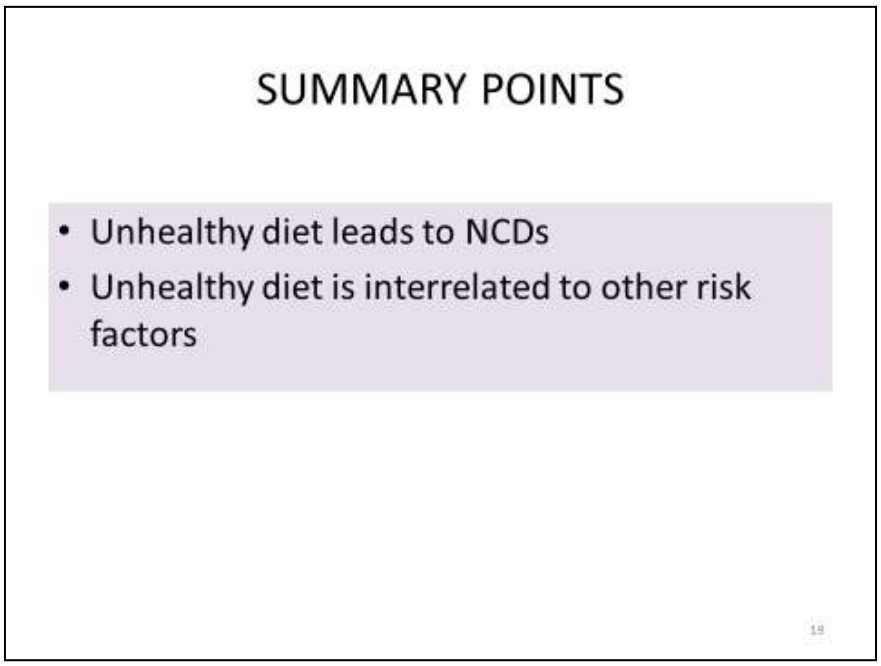
[65] Sivasankaran S. Outdoor physical activity and cardiovascular health. *Indian Journal of Medical Research,2012; 136 (2),* 301-303. www.ncbi.nlm.nih.gov/pmc/articles/PMC3461746/

samosas and kababs). One of the reasons for harmful effects of alcohol on health may be due to poor dietary habits[66].

Tobacco: Tobacco use can impair appetite and lead to irregular eating practices. When combined with alcohol, stress and poor eating, the risks for NCDs will increase.

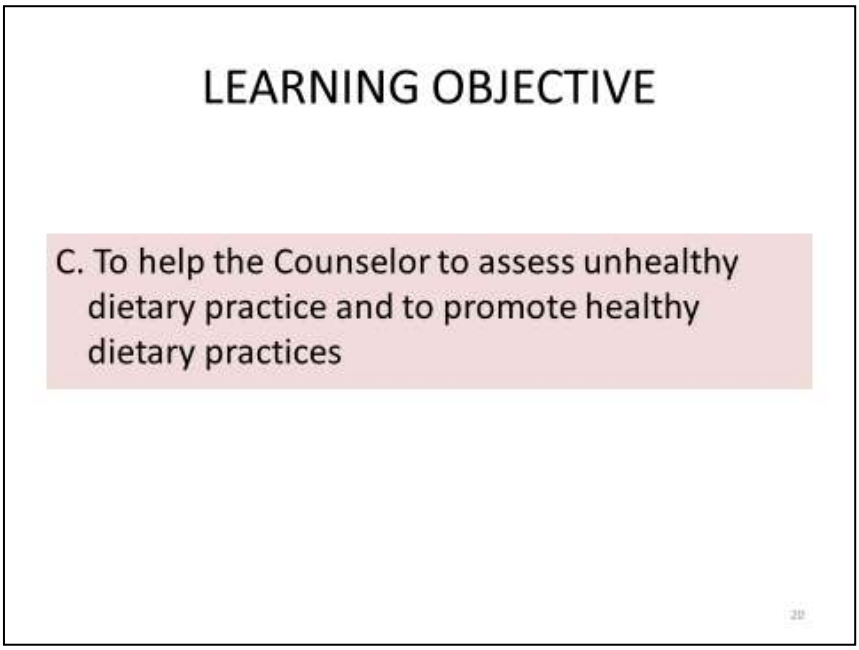
Stress: When people undergo stress they eat differently: what they eat and how much they eat is often affected. Among some persons, there is a tendency to eat more of food including junk food (samosas, chips) and some may not care about their diet at all and can skip meals or starve.

Slide 19



[66] Kesse E, Chapelon FC, Slimani N, Liere M, E3N Group. Do eating habits differ according to alcohol consumption? Results of a study of the French cohort of the European Prospective investigation into Cancer and Nutrition. American Journal of Clinical Nutrition.2001.www. ajcn.nutrition.org/content/74/3/322.abstract

Slide 20



INSTRUCTION

Through the group discussion participants will assess unhealthy dietary practice and to promote healthy dietary practices. Distribute Handout 5.3.(STEPS TO IDENTIFY USE OF UNHEALTHY DIET & PROMOTE BEHAVIOUR CHANGE).

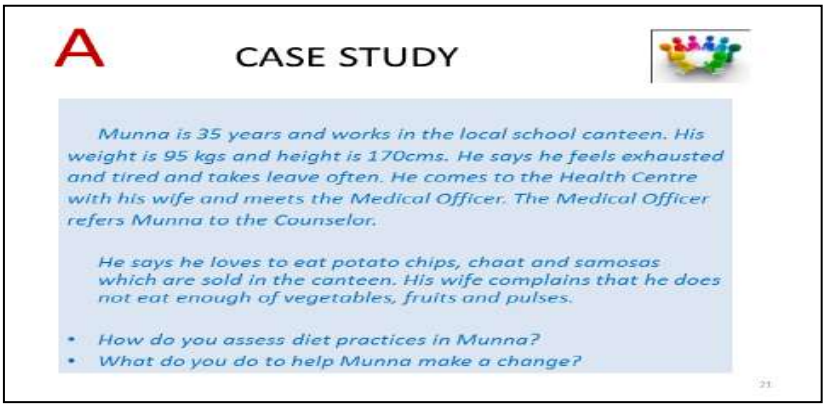
ACTIVITY

Interactive session with brainstorming and group work

Duration: 30 minutes

Conduct group work. The participants will discuss the case study. Divide participants into small groups and give them chart paper and pens and 15 minutes to discuss. The participants will make a presentation (15 minutes). Generate discussion during the presentation.

Slide 21



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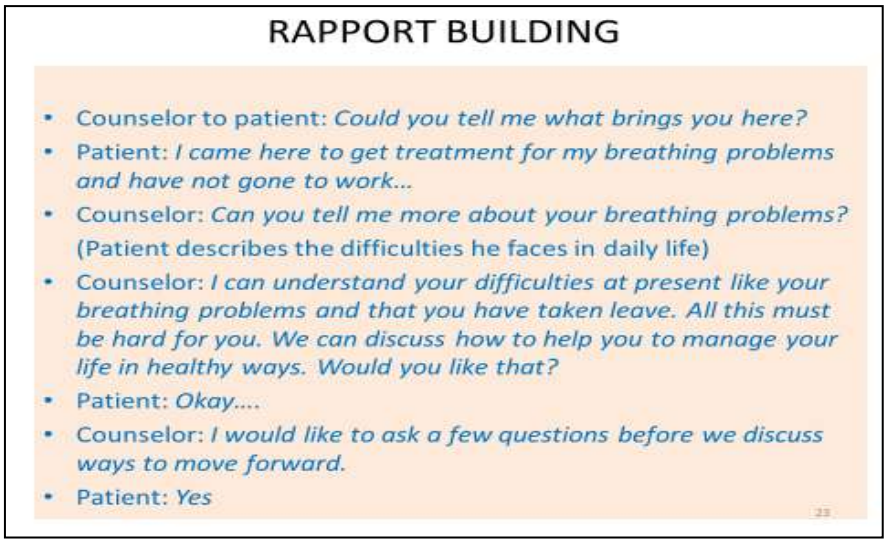
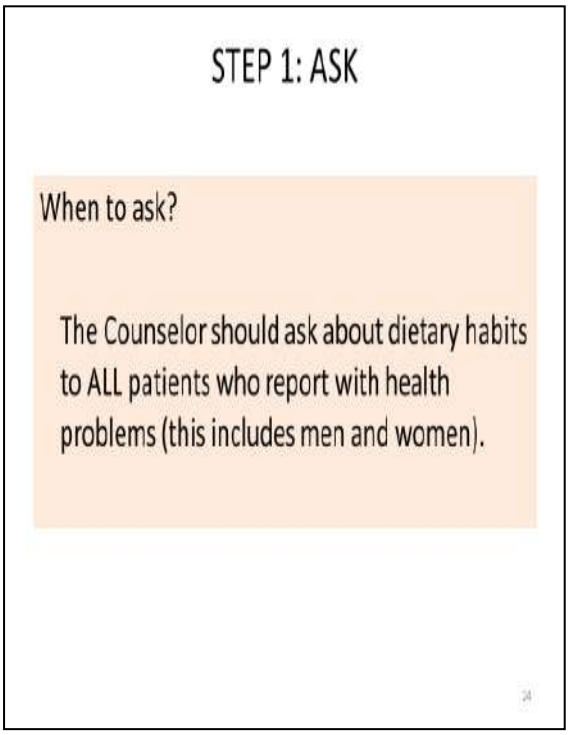
Slide 23

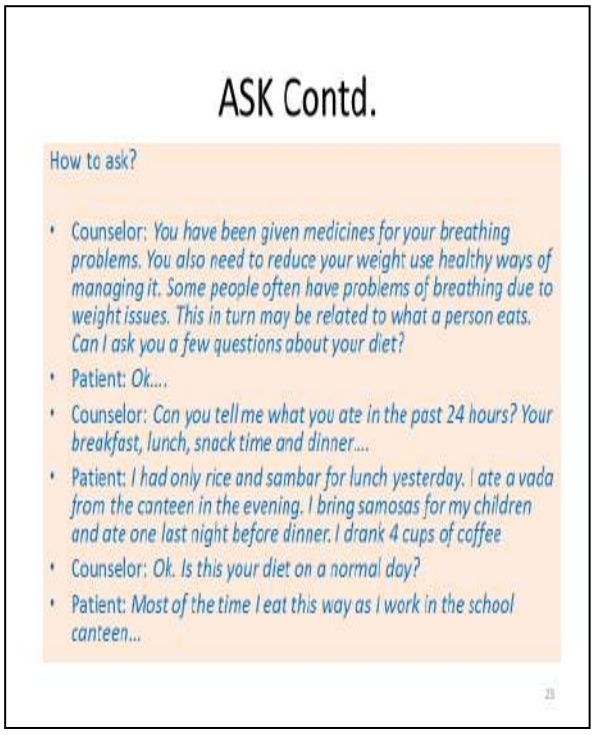


RAPPORT BUILDING

Example of a discussion between the patient and counselor is described above. Rapport building is the first step and is demonstrated through this verbatim. More questions will follow after this step.

Slide 24 and 25

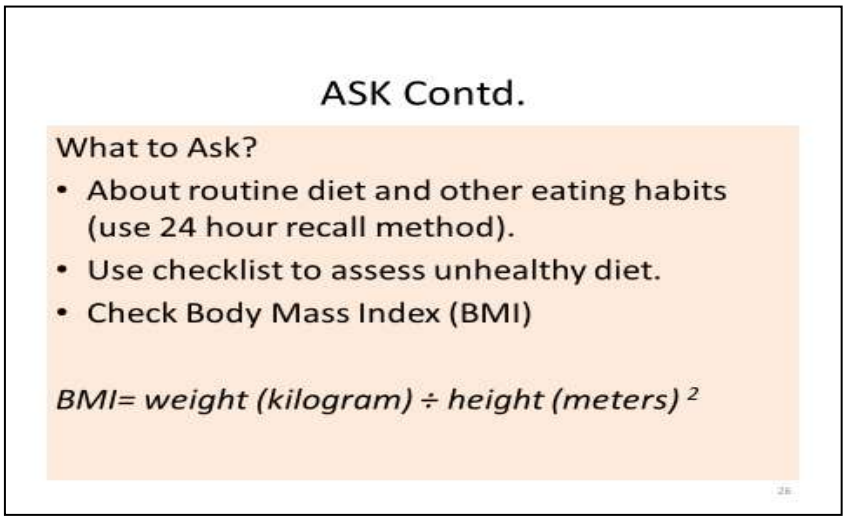




Poor dietary practices may not be brought up by the patient in the session with the counselor. Therefore, the counselor should ask about eating habits to ALL patients who report with health problems (this includes men and women). Women, particularly from low socio economic backgrounds who tend to ignore their own needs and put their family members' eating needs first (spouse, children) may be at greater risk for undernutrition.

After building rapport with the patient, the counselor proceeds to ask questions about his diet.

Slide 26



WHAT TO ASK?

1. Ask the patient about their routine diet (using 24 hour recall method) and use the unhealthy diet checklist and mark responses (checklist is given below).
2. Check Body Mass Index (BMI) by calculating the BMI & scoring it. The method to calculate BMI is given below and the scores are interpreted:

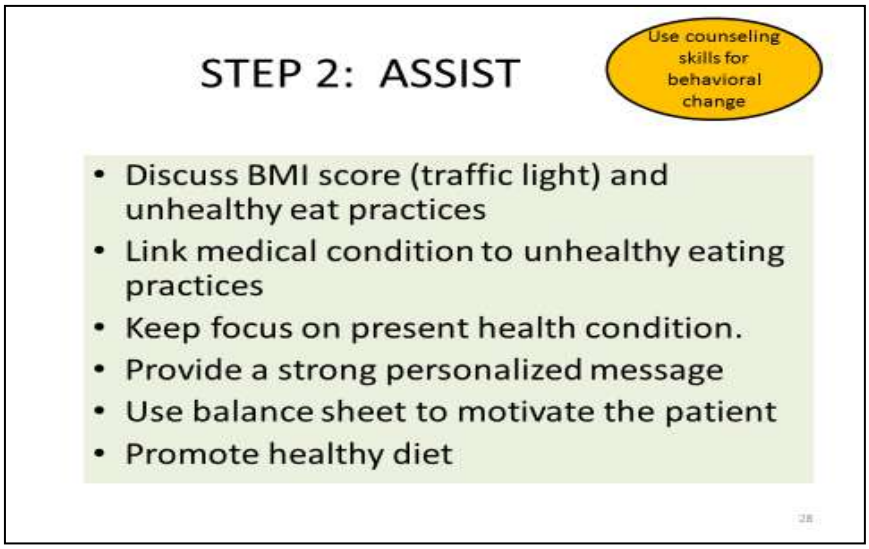
   BMI= weight (kilogram) ÷ height (meters) ^{2}

$<18.5^2$	Underweight
18.5 to 24.9^2	Normal
25 to 29.9^2	Overweight
$>30^2$	Obese

Slide 27

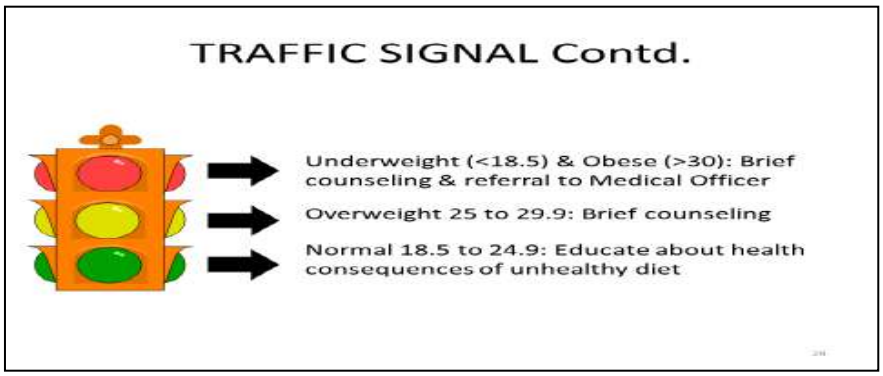
Use Slide to discuss checklist given above (unhealthy diet). This will be filled up based on what the patient said he/ she ate in the past 24 hours

Slide 28



The counselor will communicate to the patient about the BMI score using the traffic light (given below) and discuss what he ate based on the 24 hour recall method and checklist (unhealthy diet). The patient's diet and how it contributes to his current health condition is an important part of his discussion.

Slide 29



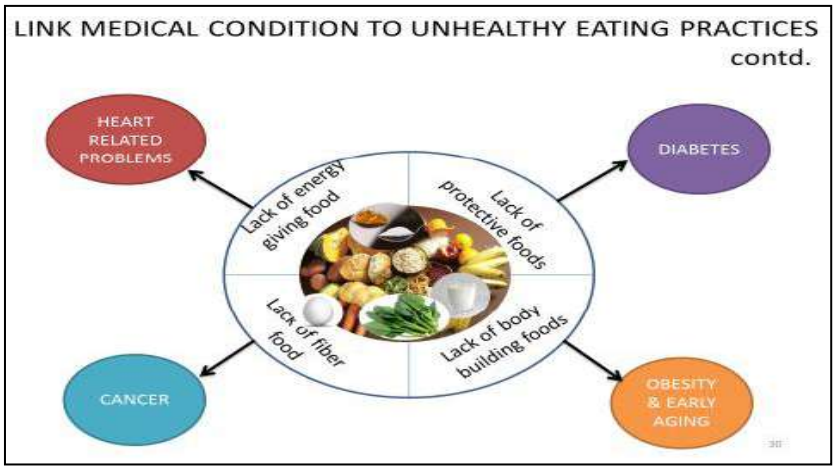
The **traffic signal** indicates what steps need to be taken by the counselor:

RED: Underweight (<18.5) & Obese (>30): Brief counseling & referral to Medical Officer

YELLOW: Overweight 25 to 29.9: Brief counseling

GREEN: Normal 18.5 to 24.9: Educate about health consequences of unhealthy diet

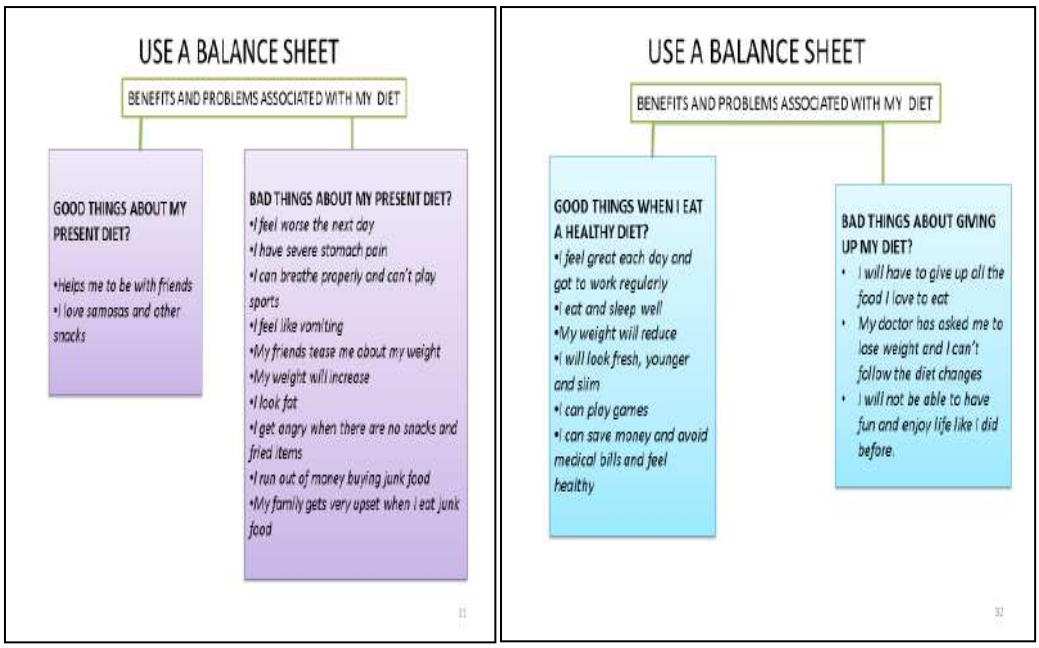
Slide 30



Educate the patient on the importance of diet: The health consequences of poor diet and other risk factors and NCDs can be discussed using the diagram. Where necessary the counselor can inform the patient about the connection of poor diet and the present health condition. Link the medical condition to diet and provide a strong personalized message. Most people are not aware of the health risks of poor diet and just have a vague knowledge. The counselor's information has greater impact when it is provided in the context of the patient disease status or risk, family or social situation (e.g. having school going children to support or poor living conditions and how the patient's health condition can impact family life).

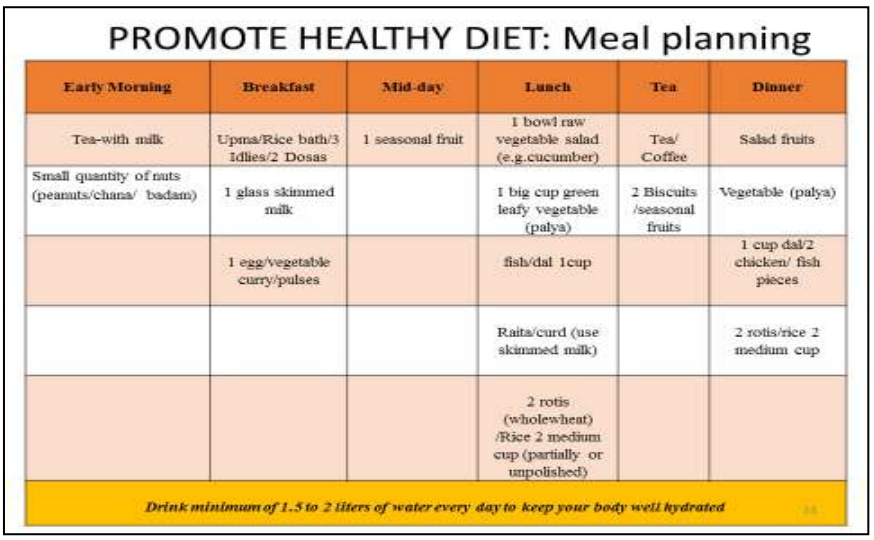
The patient needs to learn to be a wise consumer and recognize the truth behind market forces that push fast foods like fried snacks, noodles, aerated drinks, chips etc and make them a seemingly attractive and easy option.

Slide 31 and 32



The **Balance Sheet** (given below) will be used to discuss the pros and cons of unhealthy diet as a risk factor and health. The counselor can discuss with the patient using the balance sheet and motivate him/ her to change unhealthy eating as a risk factor. The balance sheet exercise often helps the patient to understand the problems emerging from poor eating habits. The list of problems is invariably longer. As the patient goes through this exercise, the counselor will highlight what is most relevant for the patient. The aim is to make the message personally meaningful to the patient. As a counselor, the role is to be able to help the patient to favour the decision to change. Being direct is helpful (saying 'YOU MUST EAT HEALTHY FOOD). But the counselor should not scare the patient away.

Slide 33



PROMOTE HEALTHY DIET: Meal planning

Early Morning	Breakfast	Mid-day	Lunch	Tea	Dinner
Tea-with milk	Upma/Rice bath/3 Idlies/2 Dosas	1 seasonal fruit	1 bowl raw vegetable salad (e.g.cucumber)	Tea/ Coffee	Salad fruits
Small quantity of nuts (peanuts/chana/ badam)	1 glass skimmed milk		1 big cup green leafy vegetable (palya)	2 Biscuits /seasonal fruits	Vegetable (palya)
	1 egg/vegetable curry/pulses		fish/dal 1cup		1 cup dal/2 chicken/ fish pieces
			Raita/curd (use skimmed milk)		2 rotis/rice 2 medium cup
			2 rotis (wholewheat) /Rice 2 medium cup (partially or unpolished)		

Drink minimum of 1.5 to 2 liters of water every day to keep your body well hydrated

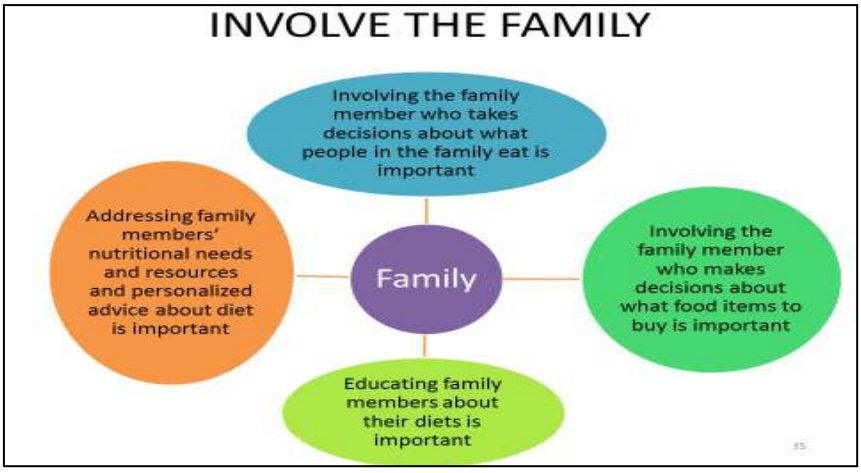
Based on the present health condition of the patient, use meal planning and the healthy plate (given below) to explain what to eat, how much to eat and what to avoid. The counselor and patient will discuss a diet plan keeping in mind the patient's economic and cultural background (what he can afford to eat).

The importance of breakfast: Breakfast is known as brain food and reserves energy for the entire day. Cereals, grains, millets, fruits, vegetables are ideal. Avoid fat and sugar.

Slide 34

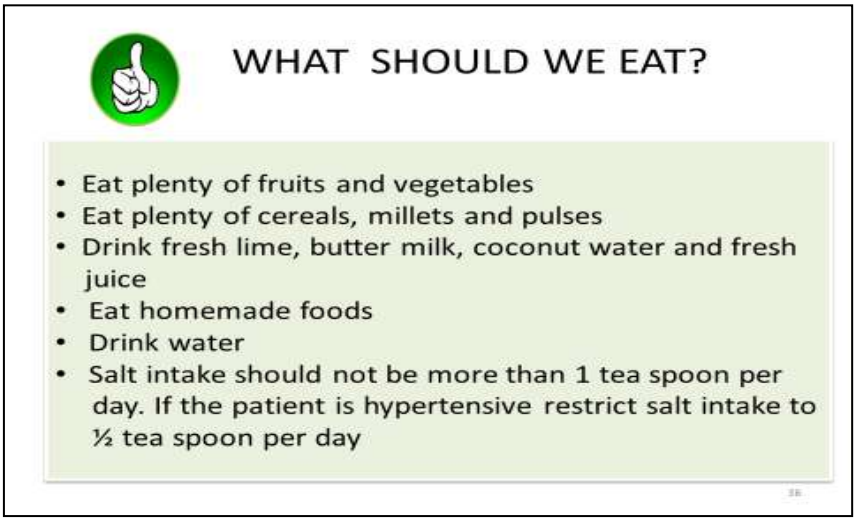
The healthy played is helpful to control lifestyle diseases. The proportions of what should be in a plate are illustrated and can be used for discussion with the patient.

Slide 35



It is often not enough to counsel only the treatment seeking person regarding dietary changes as key family members are also involved in this. Sometimes, it is the head of the household who decides what rations should be bought and even what should be cooked. In many families, the wife, mother or daughter cooks the meal and her awareness is important for healthy meal planning and dietary change. In a family where different family members are at different stages of development, it becomes important to have a discussion on this issue.

Slide 36



WHAT SHOULD WE INCLUDE IN OUR DIET?

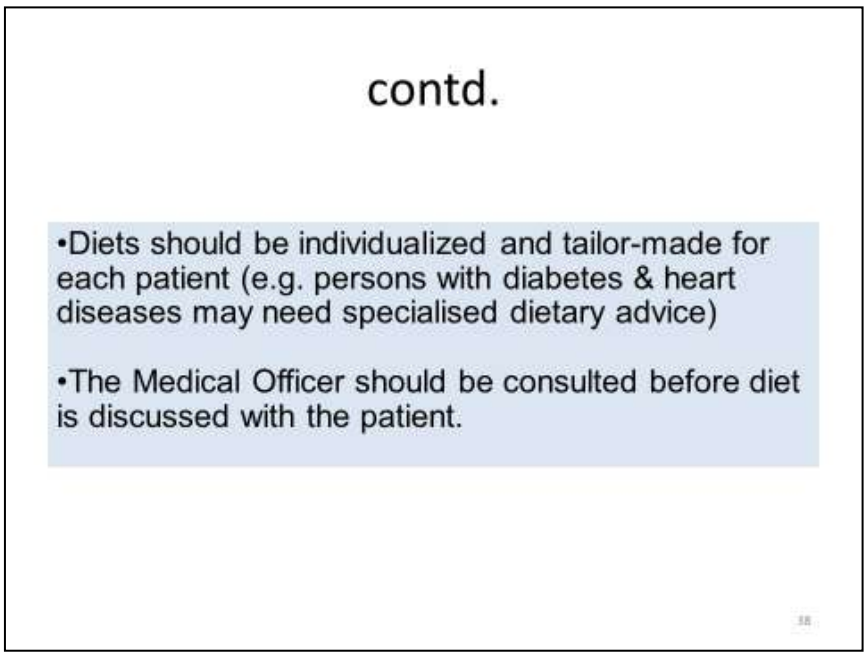
The counselor should give information to patients about what they should eat as part of their in daily life:

- Eat plenty of fruits and vegetables and sprouted grains (locally available & seasonal produce)
- Eat plenty of cereals, millets and pulses (whole grains, whole wheat roti, whole pulses and partially polished rice instead of fully polished rice)
- Drink fresh lime, butter milk, coconut water and fresh juice
- Eat homemade food that is fresh
- Drink 1-2 glasses skimmed milk and eat curd made of skimmed milk (remove cream)
- In case you are non-vegetarian, include 2-3 portions of fish/chicken per week
- Eat a small quantity of nuts everyday (peanuts, chana, badam)
- Drink plenty of water
- Salt intake should not be more than 5 gms per day. If the patient is hypertensive restrict salt intake to 3 gms per day.

Slide 37

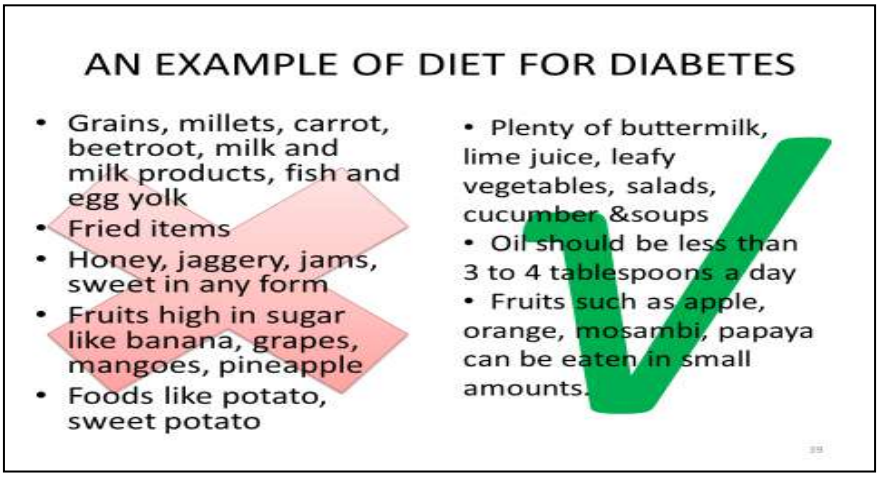
WHAT SHOULD WE AVOID IN OUR DIET? The counselor should discuss with the patients about what food should be avoided as far as possible:

Slide 38



This above is general advice on what to use and what to avoid in a balanced diet. Diets should be individualized and tailored for each patient (e.g. diabetes and heart diseases). The Medical Officer should be consulted before the diet is discussed with the patient.

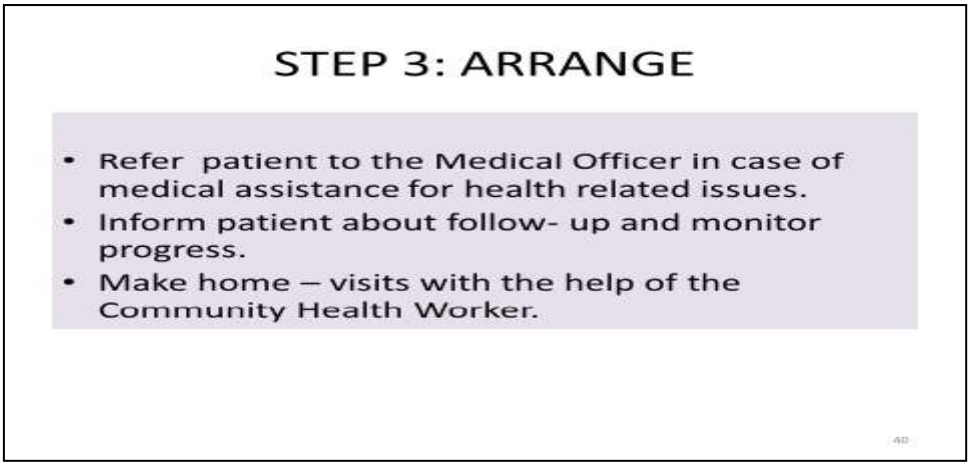
Slide 39



Diabetes: Plenty of buttermilk, lime juice, leafy vegetables, salads, cucumber, and soups are important. Grains, millets, carrot, beetroot, milk and milk products, fish and egg yolks should be avoided. Oil should be less than 3 to 4 tablespoons a day and fried items should be avoided. Fruits such as apple, orange, mosambi, papaya can be eaten in small amounts. Honey, jaggery, jams should be avoided. Fruits high in sugar like banana, grapes, mangoes and pineapple should be avoided. Foods like potato, sweet potato should be avoided.

Cardiac and hypertensive problems: Avoid fried food and reduce salt in foods such as pickles, chutneys, sauce, papads (upto 3 gms per day for hypertensive). Vanaspati, ghee, butter and coconut oil which are saturated fats should be avoided.

Slide 40



- The counselor will refer the patient to the Medical Officer in case of medical assistance for health related issues
- Inform patient about follow - up and monitor progress. Make home - visits with the help of the community worker.

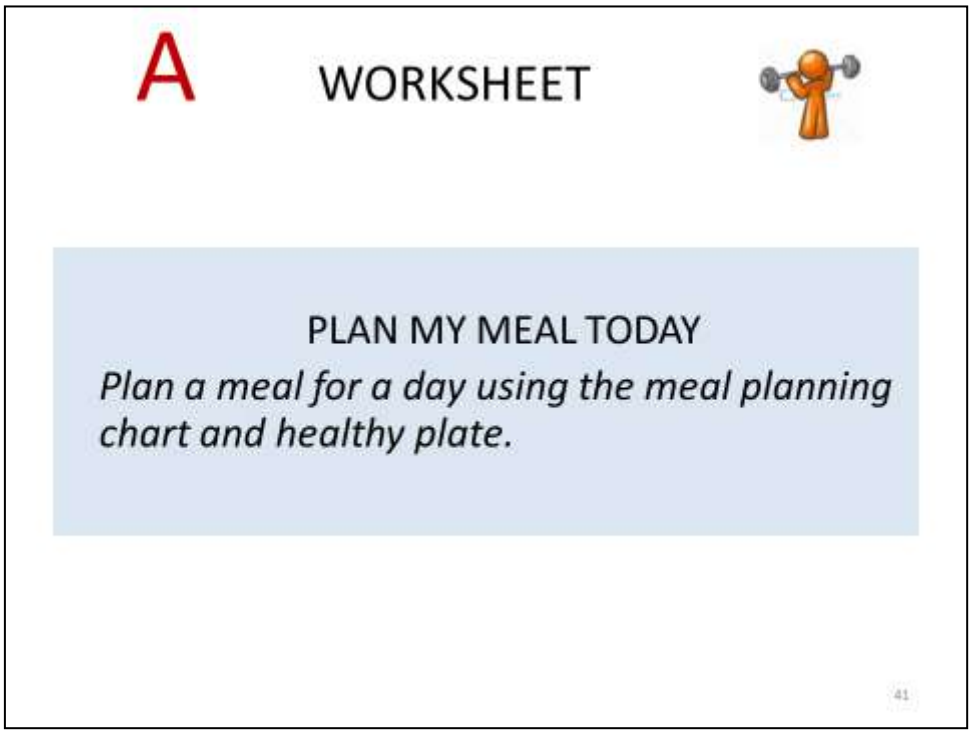
ACTIVITY (Individual work)

PLAN MY MEAL TODAY

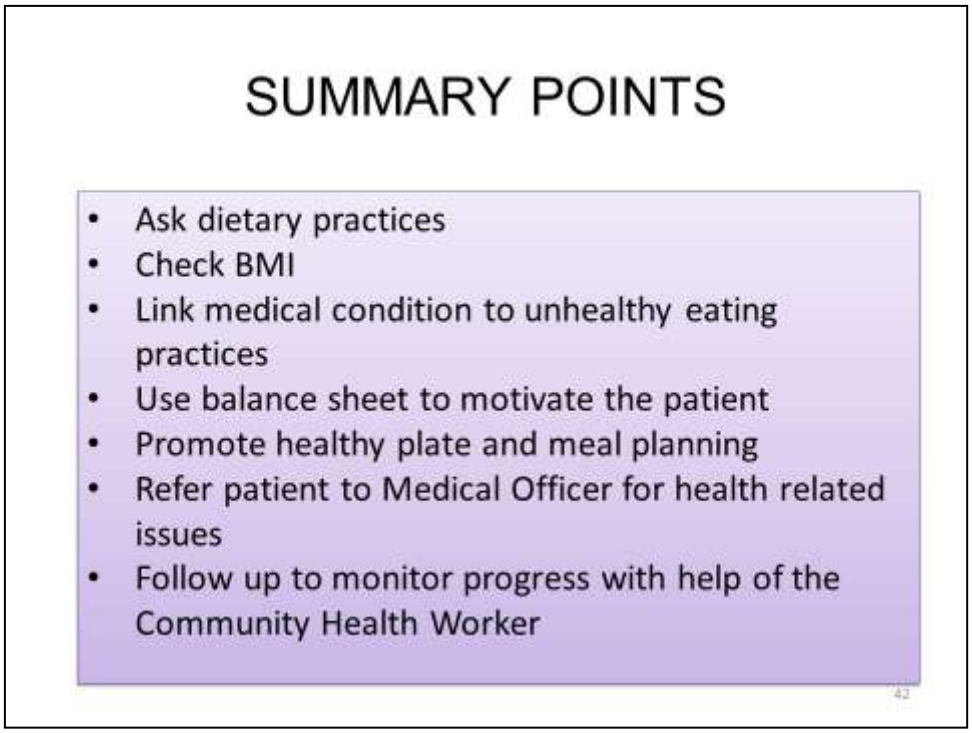
Duration: 15 minutes

Facilitate the participants to do an individual activity based on what they have understood about a healthy diet. Based on their understanding they will plan a meal for a day. There will be group discussion after the activity.

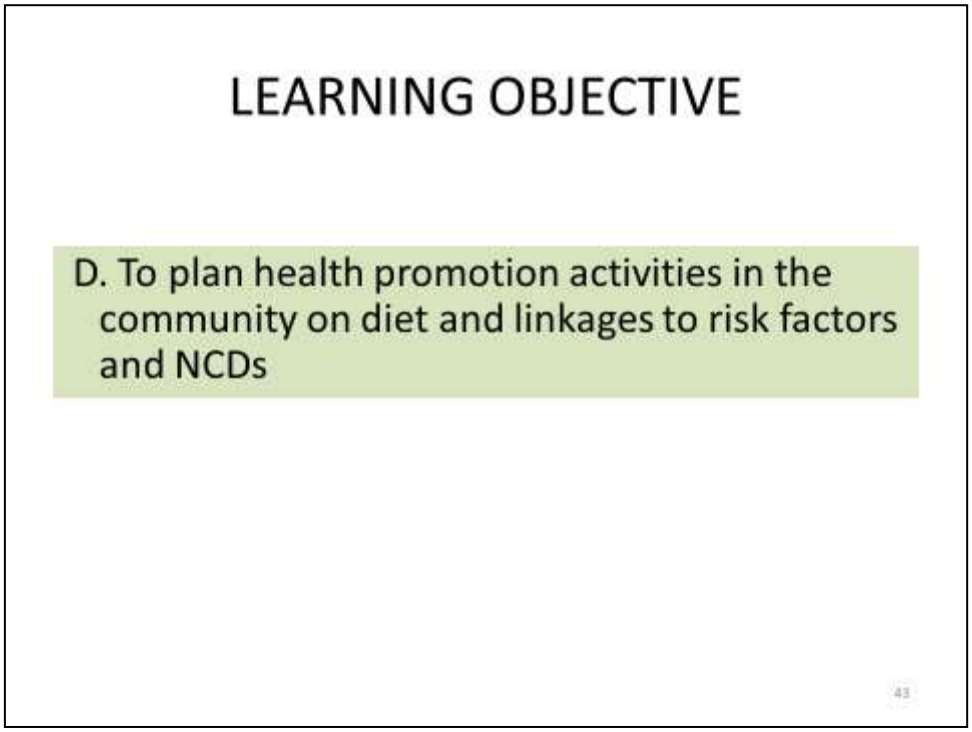
Slide 41



Slide 42



Slide 43



INSTRUCTION

Help each group to list out suitable methods for health promotion activities to address diet as a risk factor in the community.

Slide 44

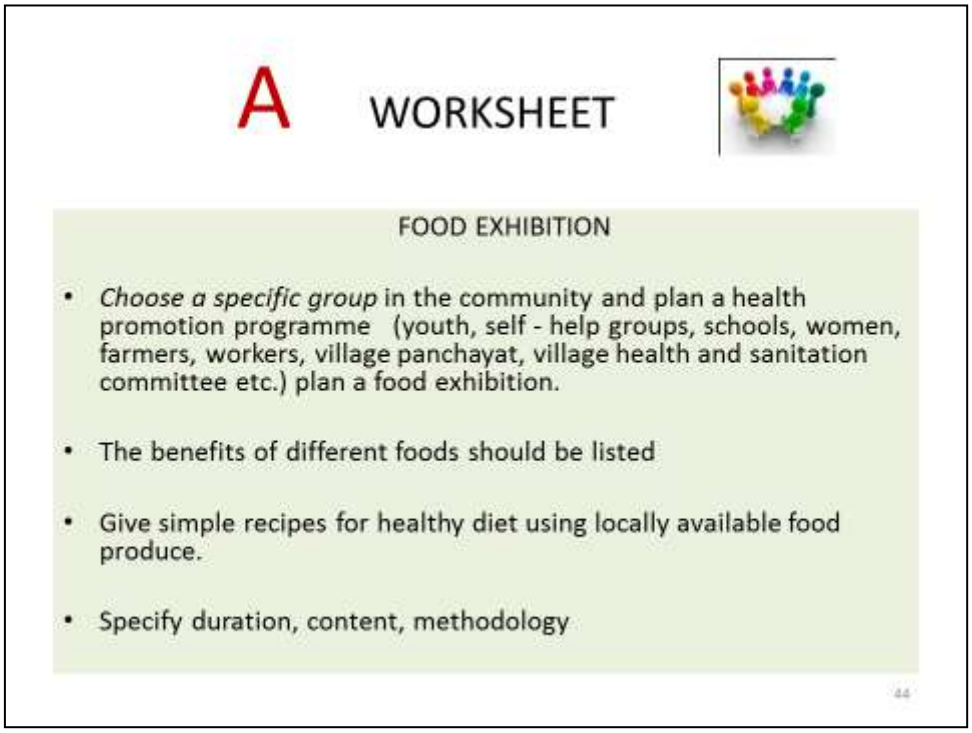
GROUP WORK

DIET AND HEALTH PROMOTION IN THE COMMUNITY

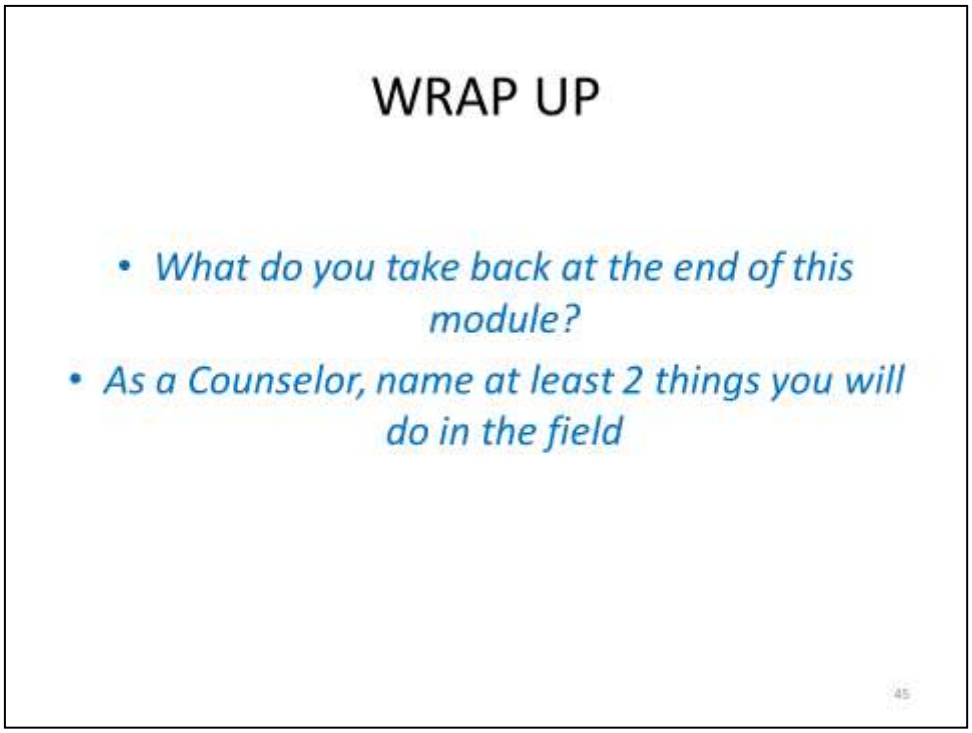
Duration: 30 minutes

Divide participants into small groups and ask them to nominate a representative make the presentation. Give each group chart papers and felt pens to prepare their presentation (30 minutes). Group discussion and presentation using charts follows (15 minutes). They will list out suitable methods for health promotion activities to address diet as a risk factor in the community. In the food exhibition:

- The benefits of different foods should be listed
- Simple recipes for healthy diet using locally available food product should be given.



Slide 45


WRAP UP
• What do you take back at the end of this module?
• As a Counselor, name at least 2 things you will do in the field
45

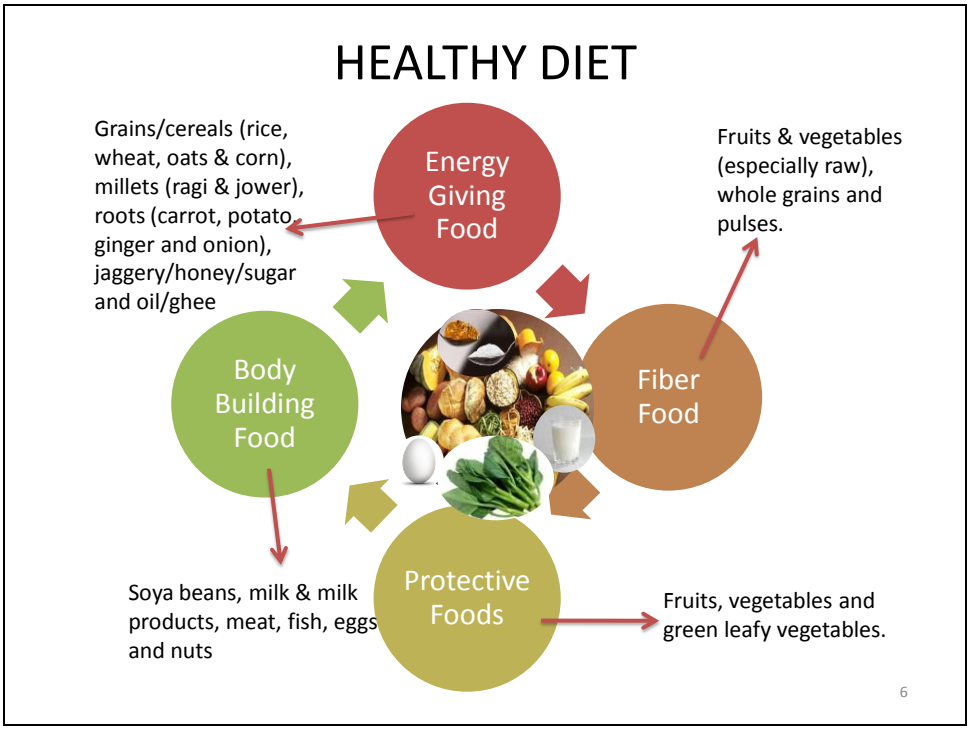
HANDOUTS

5.1. HEALTHY DIET

5.2. DIET FOR DIFFERENT GROUPS

5.3. STEPS TO IDENTIFY USE OF UNHEALTHY DIET & PROMOTE BEHAVIOUR CHANGE

5.1 HEALTHY DIET



5.2 DIET FOR DIFFERENT GROUPS

Is a healthy diet same for all age groups?

The quantity of food needs to meet the nutrient requirements of a person and this varies with age.

- Toddlers, children & pregnant women need more energy foods
- Pregnant women, adults & elderly need more fibre foods
- Children, adolescents, pregnant women, adults and the elderly needs more protective food
- Adolescents, pregnant women, toddlers (milk) & adults need more body building food

5.3 .STEPS TO IDENTIFY USE OF UNHEALTHY DIET & PROMOTE BEHAVIOUR CHANGE

RAPPORT BUILDING

STEP 1: ASK

- Counselor should ask about eating habits to ALL patients who report with health problems (this includes men and women).
- About routine diet and other eating habits (use 24 hour recall method).
- Use checklist to assess unhealthy diet.

Check list (Unhealthy diet)

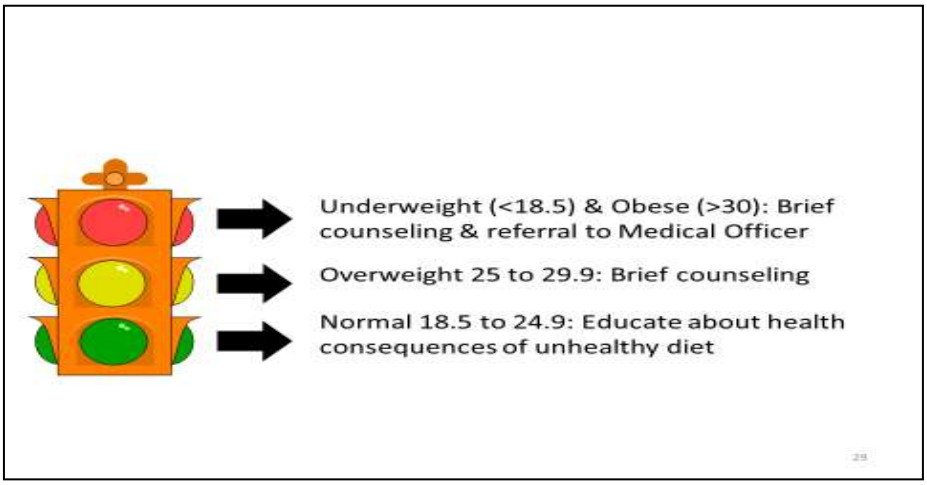
Sl No	Food items	Yes/No	If yes, then how often
1.	I drink pepsi/cola/sprite/soda/other aerated drinks.		
2.	I use excess sugar		
3.	I use excess salt		
4.	I eat papads/pickles/chips/salted biscuits		
5.	I use ghee/butter/vanaspathi		
6.	I eat fried foods (like chips, kabab, samosa, vada, gobi manchurian, fried fish, chats, bonda)		
7.	I eat junk food (like chocolates, ice cream, chips)		
8.	I eat polished items (white rice and maida)		
9.	I eat red meat		
10	I eat fast/processed food		
11.	I drink excess coffee and tea (more than 4 to 6 cups)		
12.	I drink tea/coffee at least for one hour before and after meals.		
13.	Others (if any, mention)		

- Check Body Mass Index (BMI)

BMI = weight (kilogram) ÷ height (meters) ^{2}

STEP 2: ASSIST

- Discuss BMI score (traffic light) and unhealthy eat practices.



- Educate
  - Link medical condition to diet
  - Keep focus on present health condition.
  - Provide a strong personalized message
  - Discuss meal planning (use diagram)

PROMOTE HEALTHY DIET: Meal planning

Early Morning	Breakfast	Mid-day	Lunch	Tea	Dinner
Tea-with milk	Upma/Rice bath/3 Idlies/2 Dosas	1 seasonal fruit	1 bowl raw vegetable salad (e.g.cucumber)	Tea/ Coffee	Salad fruits
Small quantity of nuts (peanuts/chana/ badam)	1 glass skimmed milk		1 big cup green leafy vegetable (palya)	2 Biscuits /seasonal fruits	Vegetable (palya)
	1 egg/vegetable curry/pulses		fish/dal 1cup		1 cup dal/2 chicken/ fish pieces
			Raita/curd (use skimmed milk)		2 rotis/rice 2 medium cup
			2 rotis (wholewheat) /Rice 2 medium cup (partially or unpolished)		

Drink minimum of 1.5 to 2 liters of water every day to keep your body well hydrated

- Use balance sheet to motivate patient (discuss good things and bad things about diet)
- Promote healthy diet.

WHAT SHOULD WE EAT?

- Eat plenty of fruits and vegetables
- Eat plenty of cereals, millets and pulses
- Drink fresh lime, butter milk, coconut water and fresh juice
- Eat homemade foods
- Drink plenty of water
- Salt intake should not be more than 6 gms per day. If the patient is hypertensive restrict salt intake to 3 gms per day.

WHAT SHOULD WE AVOID EATING?

- Aerated drinks like pepsi, cola, sprite, soda and other coloured drinks.
- Excess sugar & salt
- Papads, pickles, chips, salted biscuits and bakery biscuits
- Ghee, butter and vanaspathi
- Fried foods like chips, kababs, samosa, vada, gobi manchurian, fried fish, chats and bondas
- Junk food like chocolates, ice creams and chips
- Polished items such as white rice and maida
- Red meat
- Fast/processed food
- Excessive use of coffee and tea
- Tea and coffee at least for one hour before and after meals.

5.4. A GUIDE TO SUBSTITUTE UNHEALTHY FOODS WITH HEALTHY FOODS

healthy diet...

MY INDIA
HEALTHY INDIA

Choose alternative foods for healthy living

ITEMS	ALTERNATIVES
Parantha (200 Kcal)	Plain roti (80 Kcal)
Pulao/fried rice (170 Kcal/75gm)	Plain boiled rice (80 Kcal/75gm)
Fried vegetables (140 Kcal/l00gm)	Baked vegetables (50 Kcal/l00gm)
Fried or curried chicken or fish preparation (250 Kcal/135gm)	Grilled (tandoori) chicken/fish (160 Kcal/135gm)
Fried eggs: Omellete (120 Kcal)	Poached/half boiled egg (60 Kcal)
Dressings with salad oil/ mayonnaise (100cal/1 tbsp/14gm)	Dressing with Lemon juice (0 Kcal)
Sour cream (210 Kcal/l00gm)	Yoghurt (60 Kcal/l00gm)
Regular sugar (20 Kcal/1 tsp)	Caramelized sugar (5Kcal/1 tsp)
Regular pudding/ dessert (average 150 Kcal/serving)	Fresh fruit as a dessert (40 Kcal/piece)
Aerated soft drink (60-80 Kcal)	Plain soda with fresh lime (0 Kcal)
Whole milk (170 Kcal/glass)	Skimmed milk (80 Kcal/glass)
Sherbat (80 Kcal/glass)	Butter milk (40 Kcal/glass)

A day's sample menu for an adult

Bed Tea Breakfast	1 cup of tea or coffee 1 glass of low fat milk – (250ml), 2 slices of brown bread, 2 roti/ 2 idlis/ dosa or 1 bowl dalia/ oats/ porridge sprouted dal/paneer – 25gm or 2 egg white
Lunch	Clear soup, salad, roti 3 (preferably combination of wheat flour and chana in ratio of 4:1), rice 1 katori, whole dal 1 katori, curd 1 serving, green vegetables 1 serving, fresh fruit 1 (seasonal fruit)
Tea	1 cup of tea or coffee, biscuits 2–3/ sprouts/upma (1/2 katori)
Dinner	Salad, soup, roti 3, whole dal 1 katori, green vegetables 1 serving, soya nuggets/ paneer 1 serving or grilled fish/ chicken
Bed time	1 cup of low fat milk

Note: Total oil and fat (including that for cooking) 15-20gm (3-4 tea spoons) for the whole day

HEALTHY HABITS, HEALTHY LIFE, HEALTHY INDIA 5

Prepared by the Ministry of Health and Family Welfare, Govt of India, for health promotion among parliamentarians 2006

STEP 3: ARRANGE

- Refer patient to the Medical Officer in case of medical assistance for health related issues.
- Inform patient about follow- up and monitor progress.
- Make home – visits with the help of the community health worker.

Physical Inactivity as a risk for NCDs

Session 5

Objectives of the session

By the end of this session, the participants will understand the following:

- Health problems associated with physical inactivity and physical inactivity as a risk factor for NCDs
- Importance of regular and adequate physical activity
- Reasons for physical inactivity and barriers for physical activity
- How to identify physical inactivity among patients
- How to motivate patients to improve physical activity
- Strategies to promote physical activity in the community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

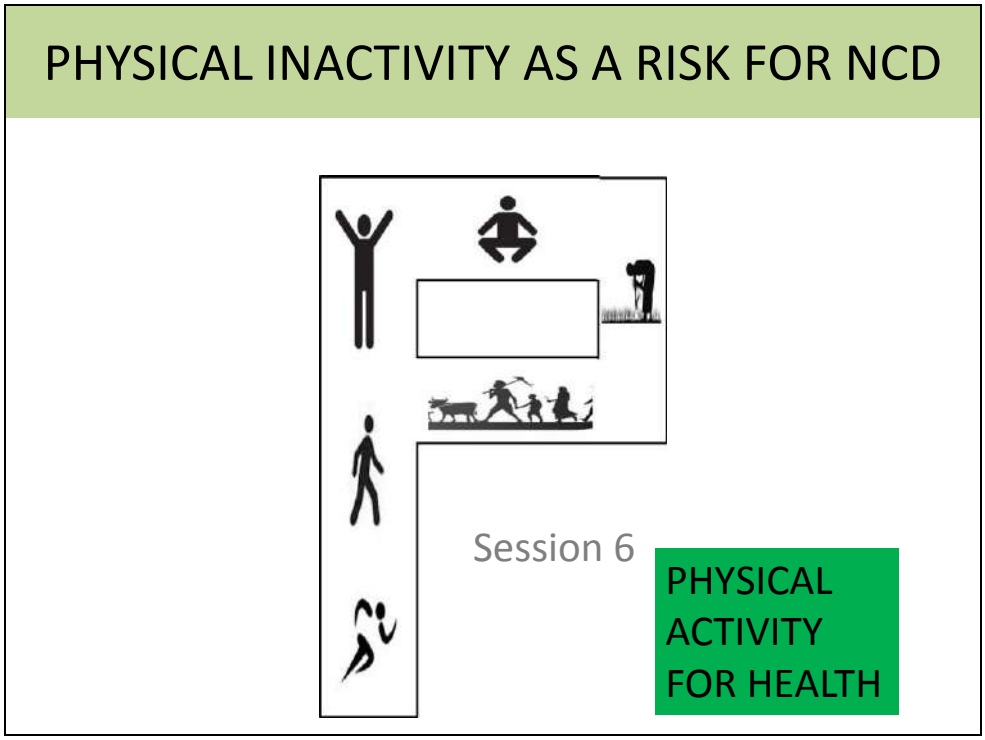
- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 



INTRODUCTION

Physical activity and regular exercise are important elements for body to be healthy. Without these, the body is at risk of developing illnesses. According to the World Health Organization (WHO), nearly one in four adults is physically inactive[67]. Among adolescents all over the world, more than 80% were insufficiently physically active. Women and the elderly tend to be less physically active than men. Adolescent girls are less active than boys. In developing countries, there is a shift from agriculture to urban and industrial societies. Increased physical strain or work pressure contributes to fatigue and tiredness. Lack of facilities for recreation and exercise, particularly in crowded urban areas further contributes to the problem.

Physical inactivity is considered the fourth leading risk factor for diseases contributing to global mortality. Lack of physical activity is identified as a major modifiable risk factor for non-communicable diseases (NCDs). Lack of physical activity is a contributing factor for lower back and neck pain, obesity, coronary heart disease, stroke, cancer, type 2 diabetes, hypertension, arthritis, osteoarthritis and osteoporosis. A review on diet and physical activity for prevention of NCDs in low and middle income countries suggests that Asia has the highest number of overweight children[68] and policy makers urgently need to develop a comprehensive policy to incorporate dietary quality and physical activity[69].

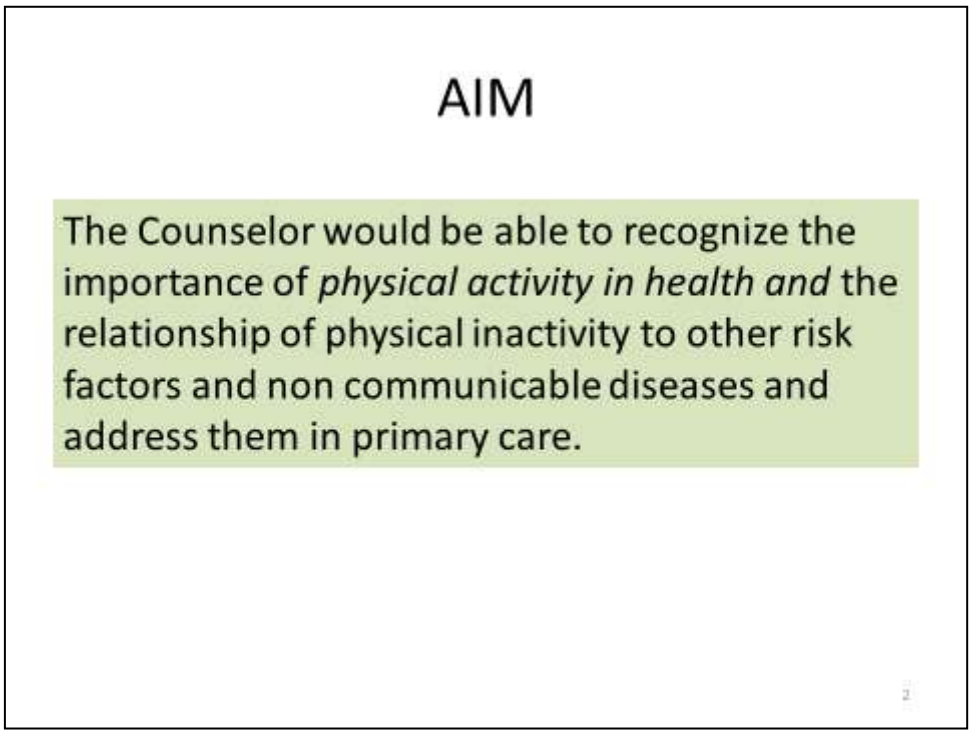
[67] World Health Organization. Global Status Report on NCDs 2014. www.who.int/nmh/publications/ncd-status-report-2014/en/
[68] World Health Organization. Global Strategy on Diet, Physical Activity and Health. www.who.int/dietphysicalactivity/pa/en/
[3] Lachat, C, Otchere, S, Roberfroid, D, Abdulai,A, Seret,F, Milesevic, Xuereb, G, Candeias, Kolsteren, P. Diet and Physical Activity for the Prevention of Non communicable Diseases in Low- and Middle-Income Countries: A Systematic Policy Review. 2013. www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001465

Unfortunately, in Indian context, there is a large gap in knowledge as far as physical activity is concerned[70].

In this session, the counsellor will be able to improve the understanding about the importance of physical activity; improve the understanding about lack of physical activity as a risk factor for NCDs; recognize lack of physical activity as an important area for promoting behavioural change among patients and to plan physical activity related programmes for health promotion in the community.

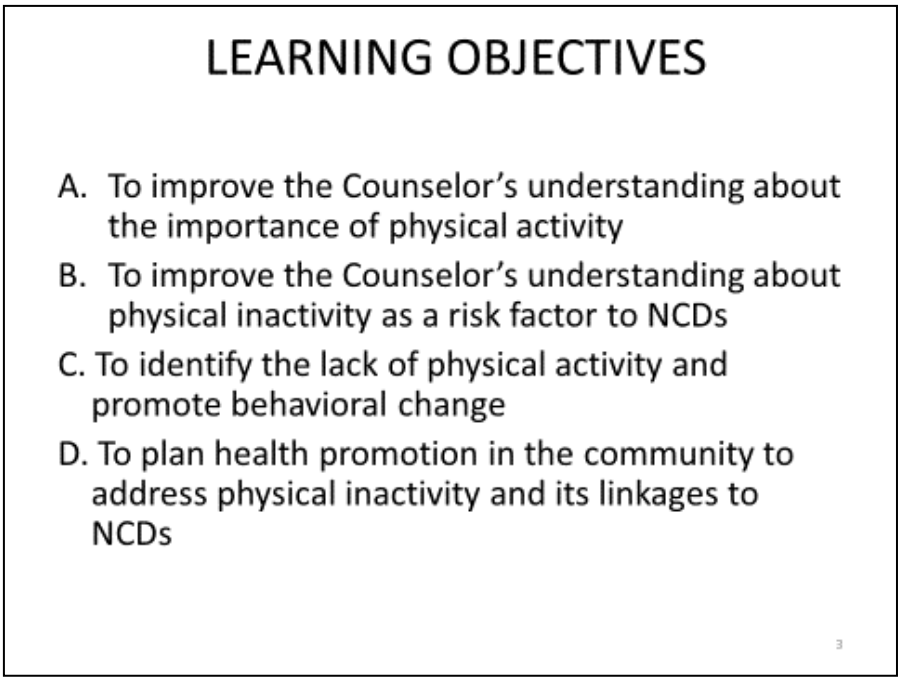
Total duration: 3 hours and 30 minutes

Slide 2

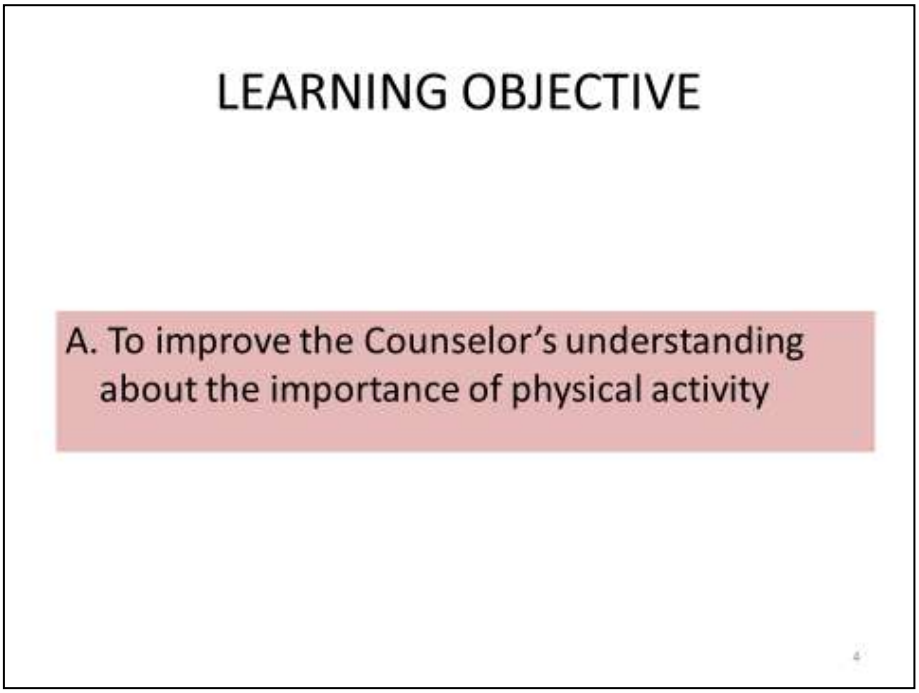


[70] Swaminathan S[1], Vaz M. Childhood physical activity, sports and exercise and non communicable disease: a special focus on India. Indian J Pediatr. 2013 Mar; 80 Suppl 1:S63-70.

Slide 3



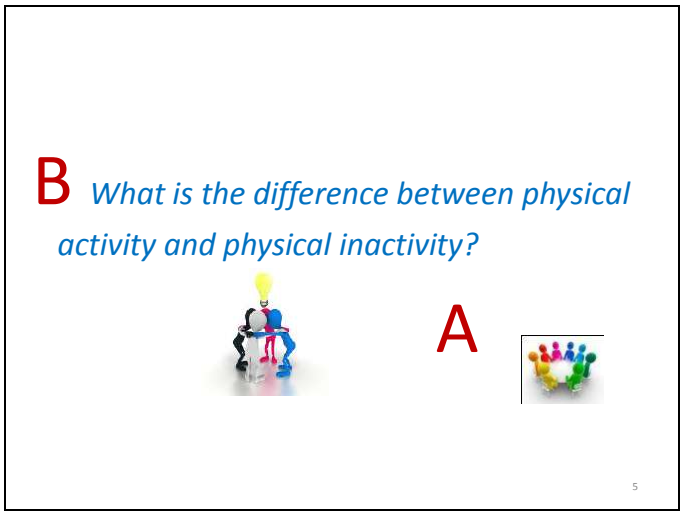
Slide 4



INSTRUCTION

There will be discussion on the range of physical activity and barriers that prevent these activities.

Slide 5

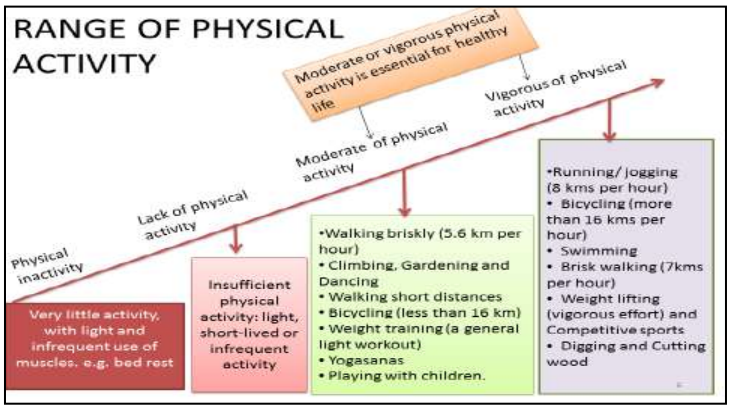


Generate discussion first through brain storming and write responses on the board.

INSTRUCTION

For the next group activity (5-6 in a group), keep a set of cards ready for each group. In every set, one card should have one activity mentioned on it (these are mentioned in slide 6, but you could mention more). Ask the participants to break out into groups and ask them to sort out the activities as **physical inactivity**, **insufficient physical activity**, **moderate physical activity** or **vigorous physical activity**. (5 minutes)

Slide 6



Range of Physical activity[71].

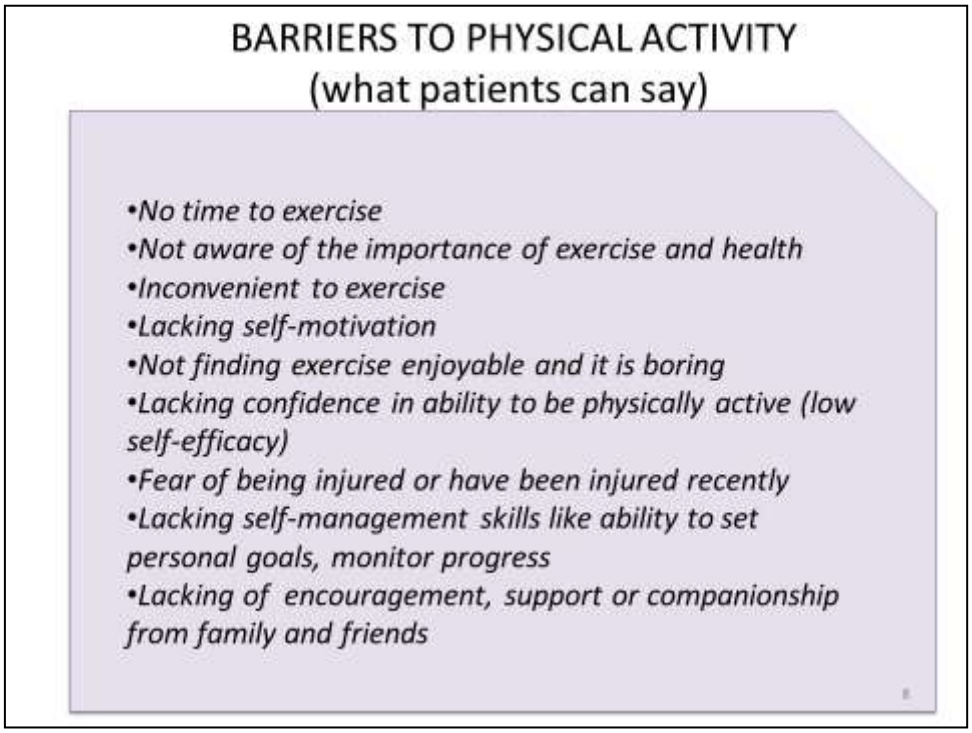
Distribute HANDOUT 6.1 (RANGE OF PHYSICAL ACTIVITY).

Slide 7 **ACTIVITY**

[71] National Institute of Nutrition. *Physical activity* guidelines for Indians. 2010, 2nd edition. www.ninindia.org/DietaryguidelinesforIndians-Finaldraft.pdf

Generate discussion and write responses on the board.

Slide 8



Use Slide 8 to discuss various barriers to physical activity that patients may report to the counselor[72] [73]:

- Do not have enough time to exercise

[72] Centre for Disease Control. Overcoming Barriers to Physical Activity. www.cdc.gov/physicalactivity/everyone/getactive/barriers.html
[73] Mayo Clinic. Barriers to fitness: Overcoming common challenges. www.mayoclinic.org/healthy-living/fitness/in-depth/fitness/art-20045099

- Not aware of the importance of exercise and health
- Find it inconvenient to exercise
- Lacking self-motivation[74]
- Do not find exercise enjoyable
- Find exercise boring
- Lacking confidence in ability to be physically active (low self-efficacy)
- Fear of being injured or have been injured recently
- Lacking self-management skills like ability to set personal goals, monitor progress
- Lacking of encouragement, support or companionship from family and friends

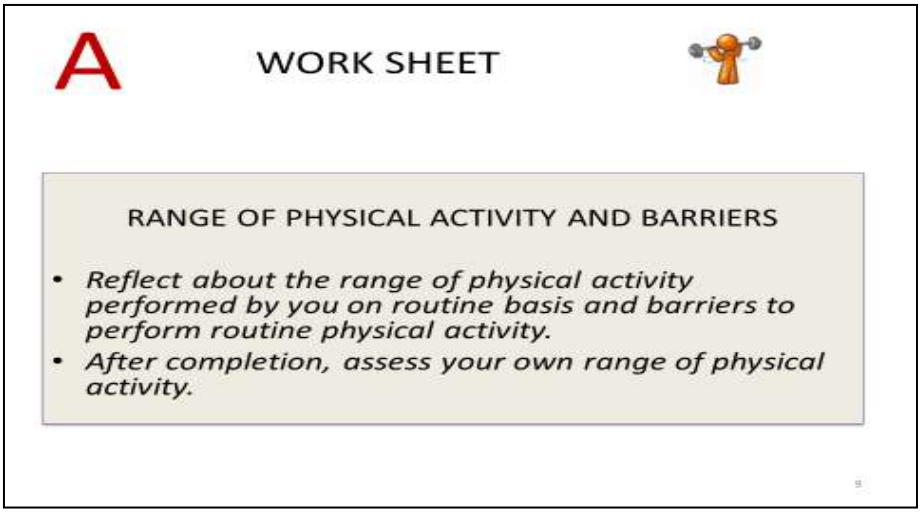
INDIVIDUAL ACTIVITY

RANGE OF PHYSICAL ACTIVITY AND BARRIERS

Duration: 15 minutes

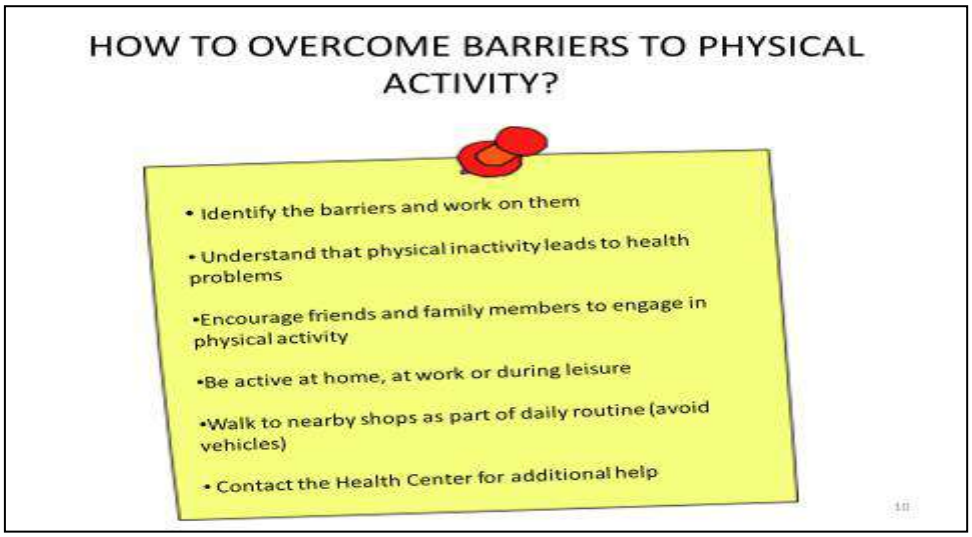
Ask participants to reflect upon their routine physical activity and classify them on the range of physical activity that was discussed (physical inactivity, lack of physical activity, moderate physical activity and vigorous physical activity). The barriers to perform physical activity will be listed by them. Once participants complete the activity, they will do a self-assessment of their routine physical activity.

Slide 9

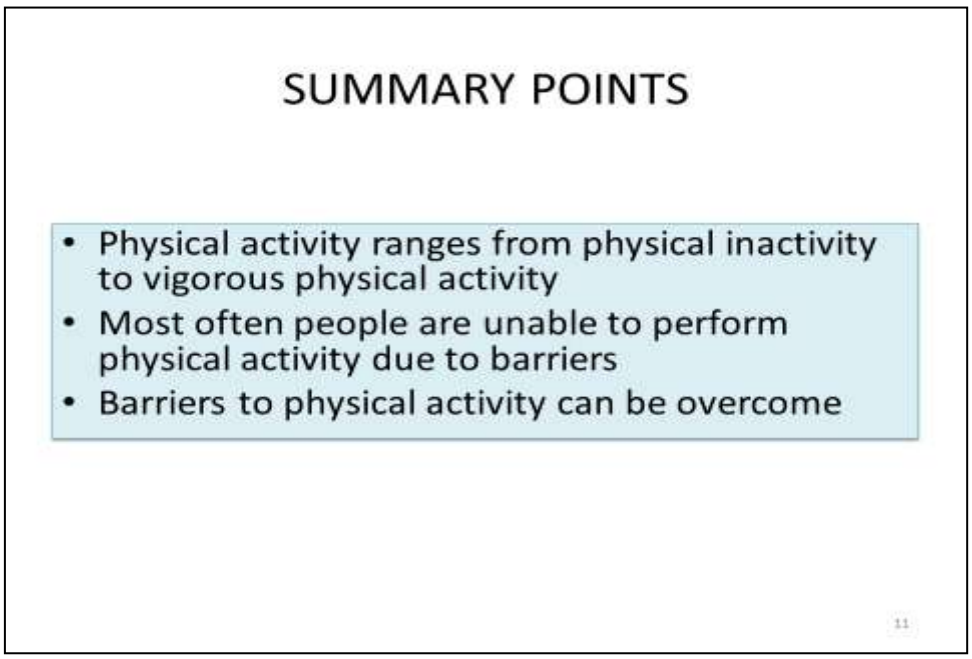


[74] University of Michigan School of Nursing. Confronting Barriers and Increasing Motivation www.sitemaker.umich.edu/worksitepa/barriers motivation

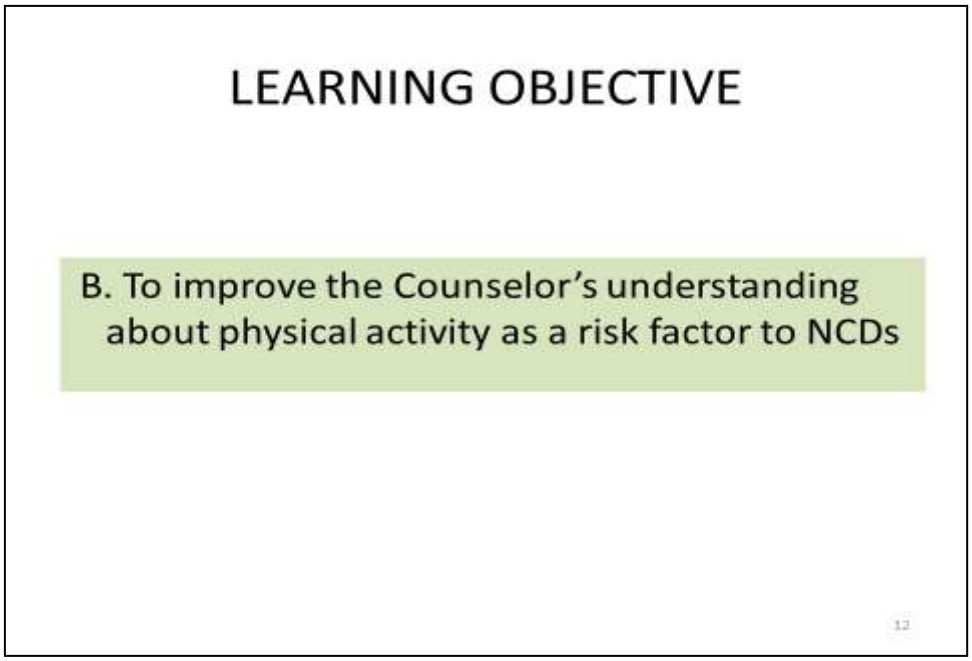
Slide 10



Slide 11



Slide 12



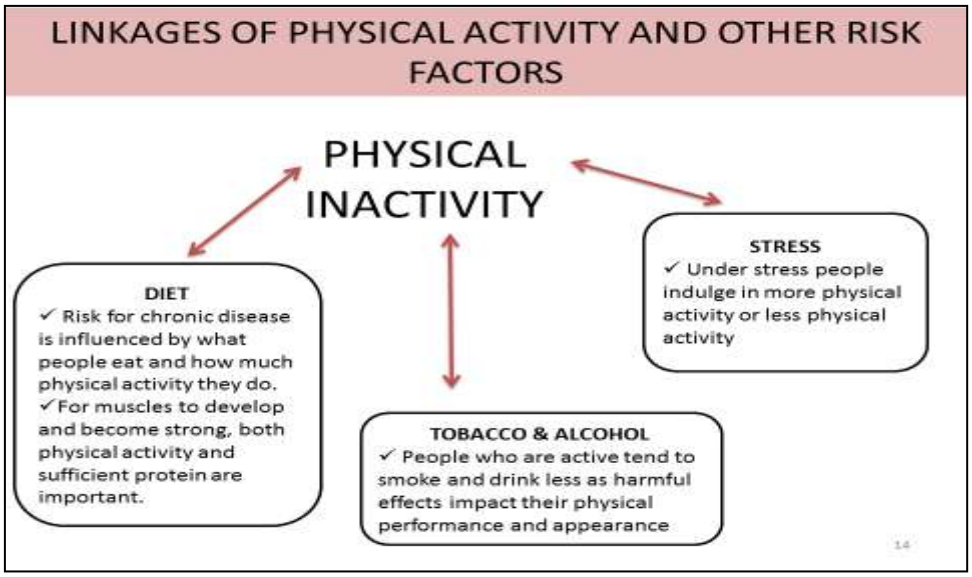
INSTRUCTION

There will be discussion on physical activity as a risk factor and its linkages to other risk factors.

Slide 13

Generate discussion and write responses on the board.

Slide 14



Physical activity creates beneficial effects on health and contributes to reducing the health risks related to poor eating habits, smoking, alcohol use and stress.

***Diet*:** Unhealthy diets and physical inactivity are leading causes for NCDs[75]. Diet and physical activity are important for various functions of the body and how the body processes carbohydrates and fats. The risk of chronic diseases is influenced by what people eat and how much physical activity they do and for muscles to develop and become strong, both physical activity and sufficient protein in diet are important. For bone mass and strength, calcium and vitamin D are required in the diet and physical activity makes the body incorporate them into bone tissue.

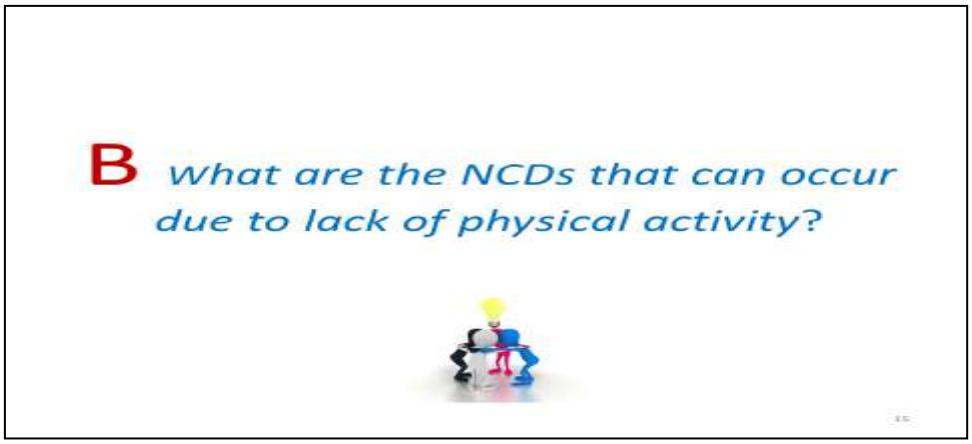
Tobacco and Alcohol: People who are active tend to smoke and drink less as the harmful effects impact their physical performance and appearance (like breathlessness, low stamina, and wrinkled skin). A study reports how the likelihood of smoking is greater among adolescents who have decreased physical activity[76]. Physical activity helps to counteract the feared weight increase sometimes associated with smoking cessation.

Stress: Exercise is a healthy way to manage stress even if it is for short periods (e.g. walking, exercising, yoga). It is a healthier option than smoking, overeating and alcohol use. Exercise and physical activity produce endorphins which are chemicals in the brain that act as natural pain killers. They improve the ability to sleep and helps reduce stress.

[75] World Health Organization. Global Status of Non communicable Diseases. 2010. www.who.int/nmh/publications/ncd_report_full_en.pdf

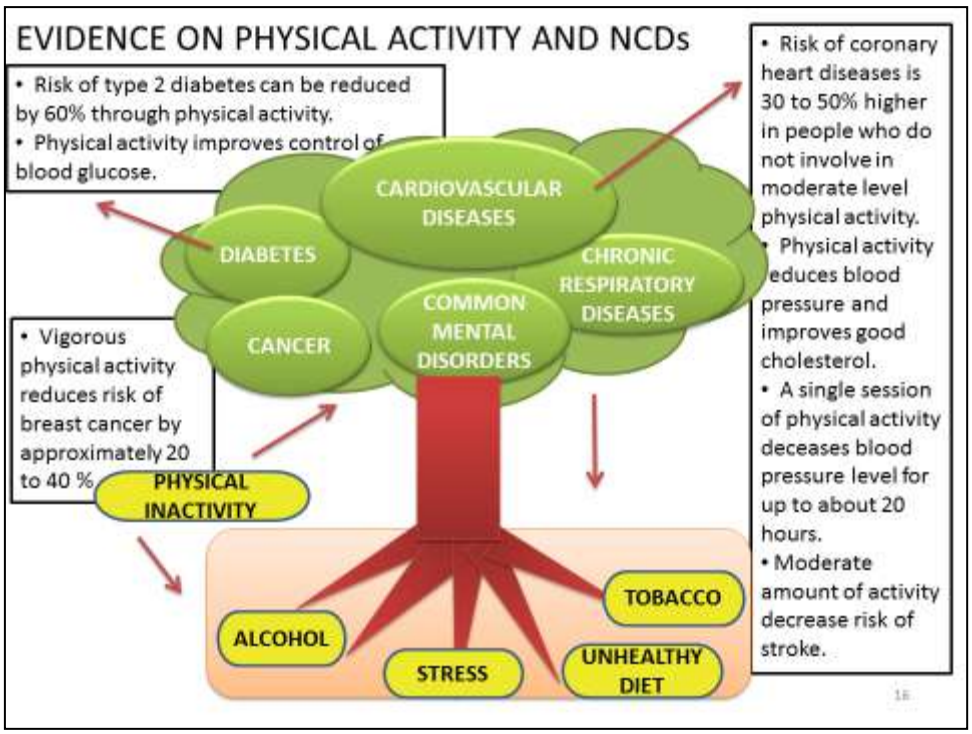
[76]Audrain-McGovern J, Rodriguez D, and Sass, J. Longitudinal Variation in Adolescent Physical Activity Patterns and the Emergence of Tobacco Use. Retrieved from J Pediatr Psychol. Jul 2012; 37(6): 622–633.

Slide 15



Generate discussion and write responses on the board.

Slide 16



Evidence on the relationship between physical activity and NCDs[77,78]

Physical activity is a key determinant of energy expenditure and thus is fundamental to energy balance and weight control. Physical activity reduces risk for cardiovascular diseases, obesity and diabetes. Physical activity reduces blood pressure, improves the level of high density lipoprotein,

[77] Claque J, Bernstein L. Physical activity and cancer. Curr Oncol Rep, 2012: 14 (6): 550-558.
[78] AHA Scientific Statement. Exercise and physical activity in the prevention and treatment of atherosclerotic cardiovascular disease. Circulation 2003;107:3109-3116.

reduces blood cholesterol levels, improves control of blood glucose in overweight people and reduces the risk for colon cancer and breast cancer among women.

***Physical activity & NCDs in India*:** Asian populations experience increased risk of type 2 diabetes (T2D) at lower body mass index values compared to other racial / ethnic groups and compared to other populations worldwide[79]. Indian population experiences the first episode of heart attack earlier in life. In healthy populations, research shows that physical inactivity is an independent risk factor for non-communicable diseases (NCD) such as obesity, diabetes, hypertension, cardiovascular disease, and cancers.

***Heart diseases and stroke*:** The high rates of coronary heart diseases and stroke are largely due to poor diet, lack of physical activity and tobacco use. The risk can be decreased substantially by increasing physical activity and exercise. Even a moderate amount of physical activity, such as a brisk walk for half an hour every day has been found to decrease the risk of stroke. Lack of physical activity increase the risk of hypertension by 30 per cent. Increasing levels of physical activity is good for reduction in blood pressure[80].

***Cancer*:** Factors like lack of physical activity combined with an unhealthy diet lead to overweight and obesity. This contributes for high and increasing incidence of cancer in genetically predisposed populations. Risk reduction for breast cancer by approximately 20 to 40% among those who do vigorous physical activity was reported.[81]

***Diabetes*:** In India, there is high prevalence of type 2 diabetes. Physical activity decreases the risk of developing type 2 diabetes by approximately 30 per cent by doing. 30 minutes of moderate to intense aerobic activity[82]. Losing weight through diet and becoming more active has shown to reduce the risk of developing Diabetes by approximately 60 per cent. Both moderate to vigorous aerobic activities and resistance training are effective to reduce and prevent diabetes.

***Common Mental Disorders*:** Research suggests that people who do not practice physical activity have a higher chance of having depression and anxiety compared to those who perform physical activity regularly[83].

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[79] Ma RCW and Chan JCN. Type 2 diabetes in East Asians: similarities and differences with populations in Europe and the United States. Ann NY Acad Sci, 2013; 1281 (1): 64-91.

[80] Integrating Health Promotion into Workplace OSH Policies. (2012).

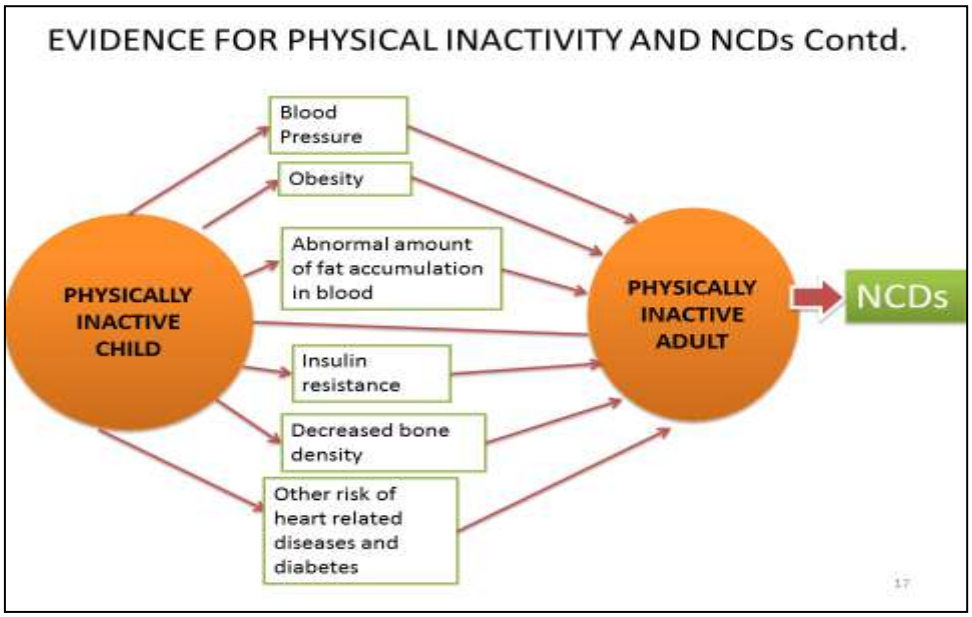
www.ilo.org/wcmsp5/groups/public/@ed_protect/.../wcms_178397.pdf

[81] Kravitz, L. The 25 most significant health benefits of physical activity and exercise. fitnesstogether.com/pointloma/site_downloads/The 25 most significant health benefits of physical activity.pdf

[82] Misra A, Nigam P, Hills AP, Chadha DS, Sharma V et al. Consensus physical activity guidelines for Asian Indians. Physical Activity Consensus Group. Diabetes Technol Ther. 2012 Jan;14(1):83-98.

[83] DeMello MT, Lemos Vde A, Antunes HK, Bittencourt L, Santos-Silva R, Tufik S. Relationship between physical activity and depression and anxiety symptoms: a population study. J Affect Disord, 2013; 149:241-6.

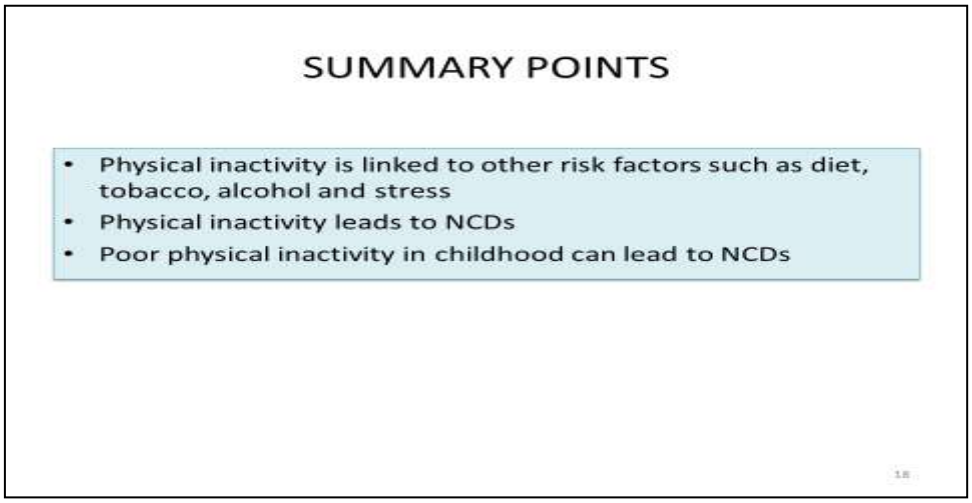
Slide 17



Childhood behaviours and their influences on health in adulthood

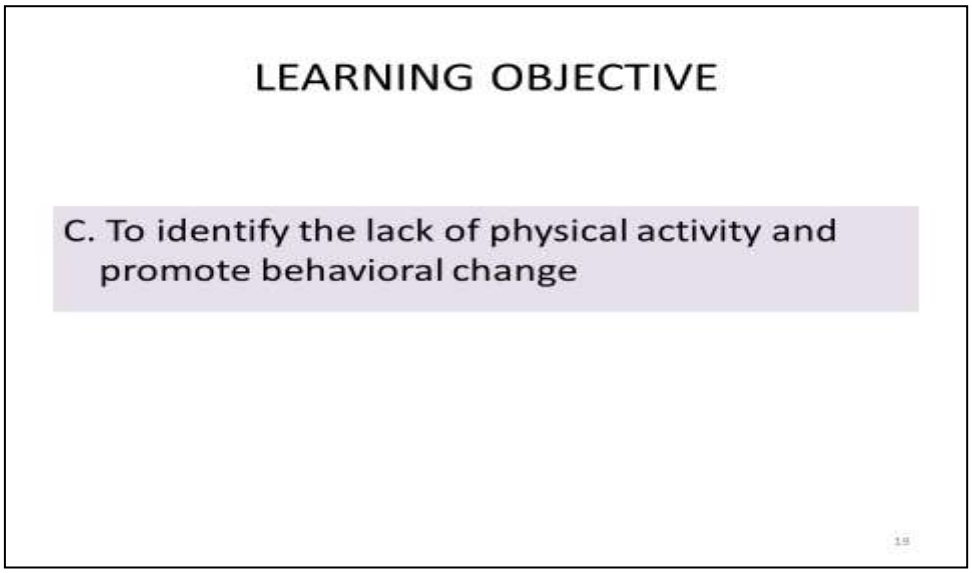
The diagram explains how physical inactivity in childhood leads to blood pressure, obesity, abnormal amount of fat accumulation in blood, insulin resistance, decreased bone density and other risk of heart related diseases and diabetes. These act as mediators for developing the risk of NCDs in adulthood[84].

Slide 18



[84] Swaminathan S, Vaz M. Childhood physical activity, sports and exercise and non communicable disease: a special focus on India. Indian J Pediatr, 2013 Mar;80 Suppl 1:S63-70.

Slide 19



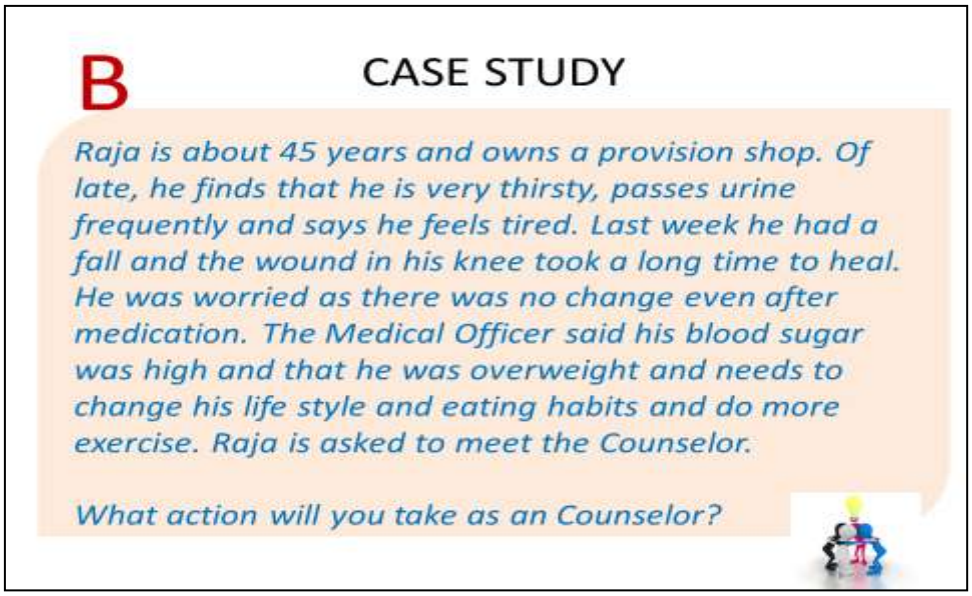
INSTRUCTION

The facilitator will initiate a discussion on how to identify physical inactivity or lack of physical activity and promote behavioural change. Distribute HANDOUT 6.2. (STEPS TO IDENTIFY PHYSICAL ACTIVITY AS A RISK FACTOR & PROMOTING BEHAVIOUR CHANGE).

Slide 20

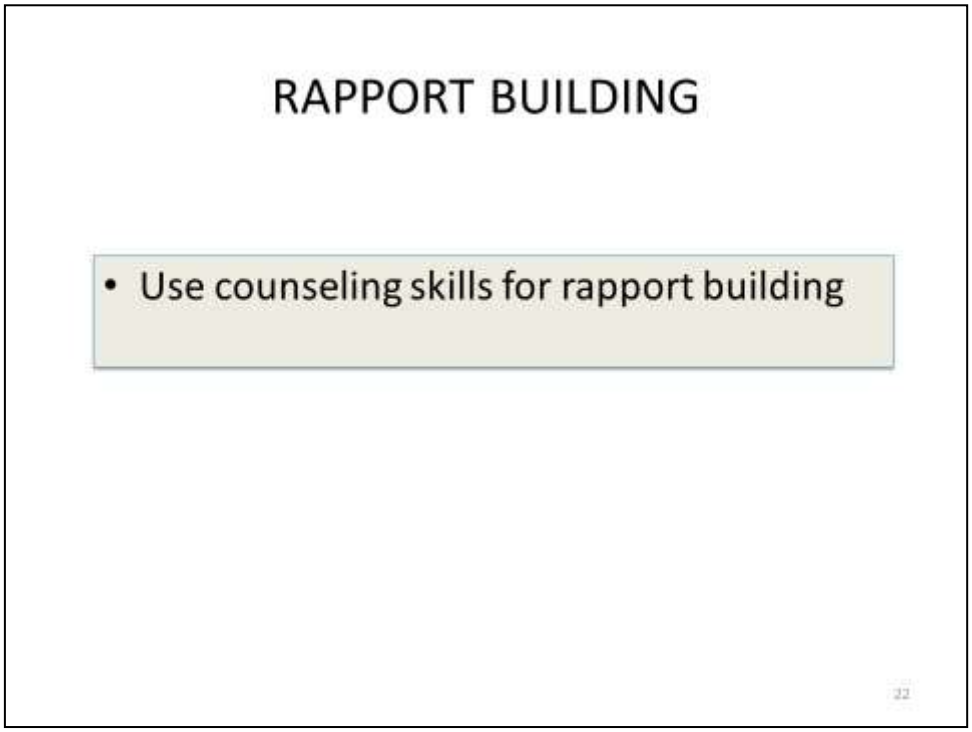
STEPS TO IDENTIFY THE USE OF PHYSICAL ACTIVITY AS A RISK FACTOR & TO PROMOTE BEHAVIOUR CHANGE:

Slide 21



Generate discussion and write responses on the board.

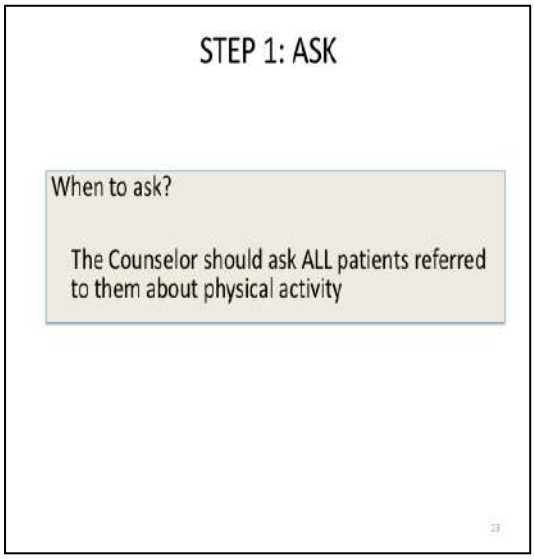
Slide 22

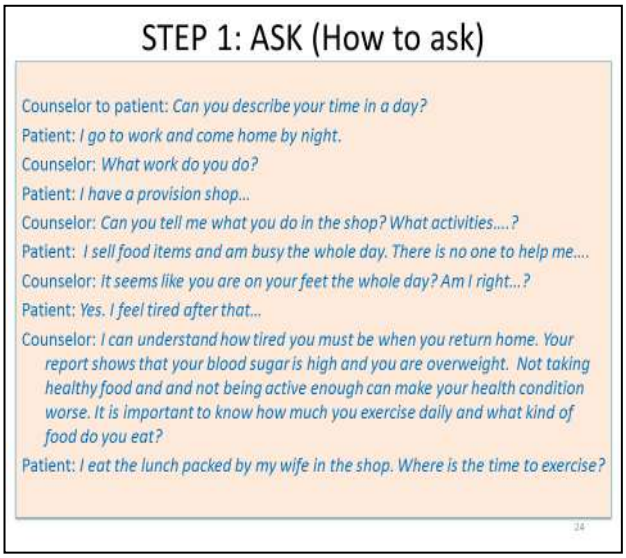


RAPPORT BUILDING

Use counseling skills for rapport building with the patient before proceeding with interventions.

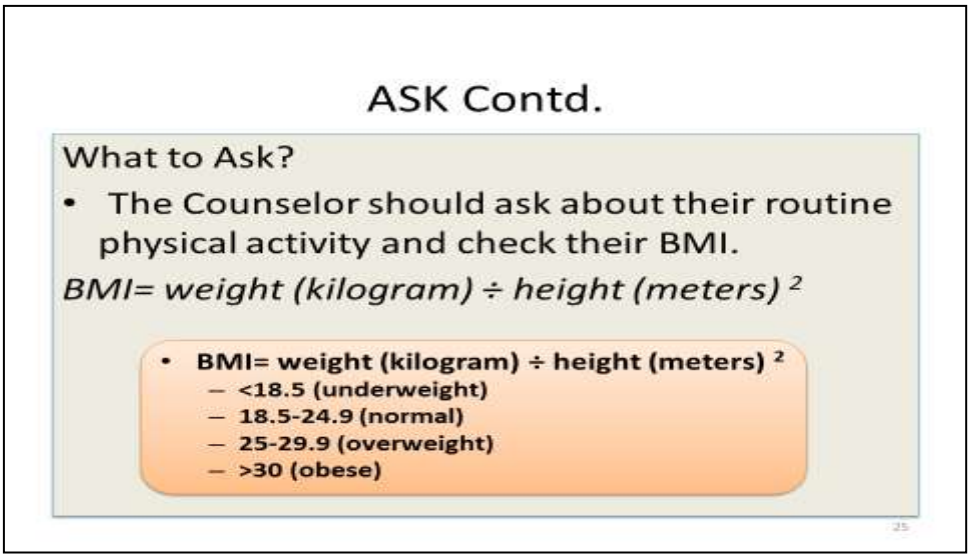
Slide 23





- Counselor should ask ALL patients referred to them about physical activity.
- Use Slide above for how to ask (verbatim on how the counselor should discuss with patients about their daily physical activity and the current health condition as given above)

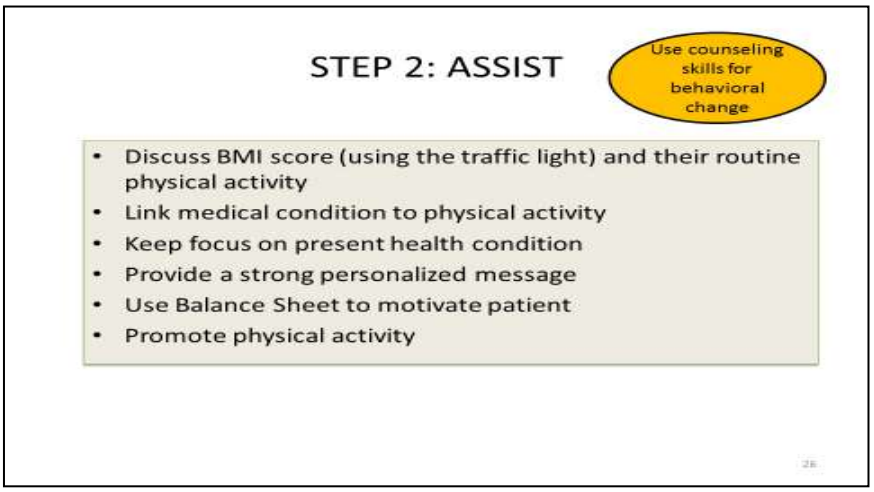
Slide 25



What to ask?

Counselor should ask patients about their routine physical activity and check the Body Mass Index (BMI) of the patient before brief counseling and use the scores for further discussion.

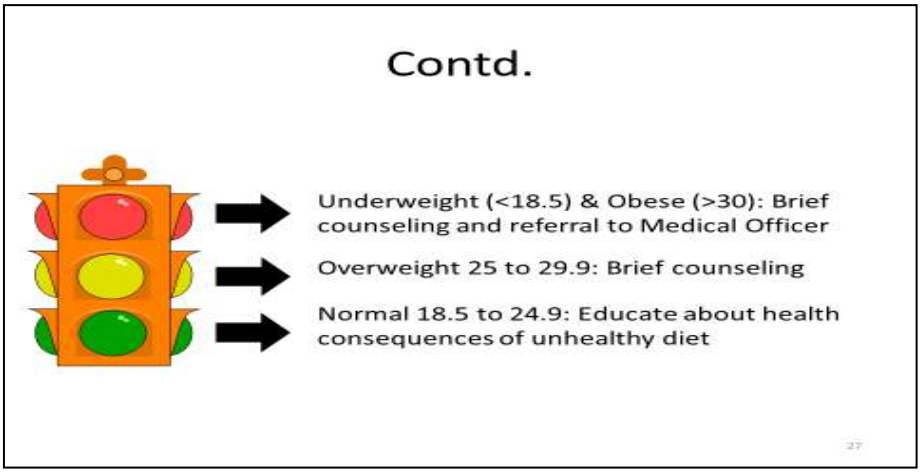
Slide 26



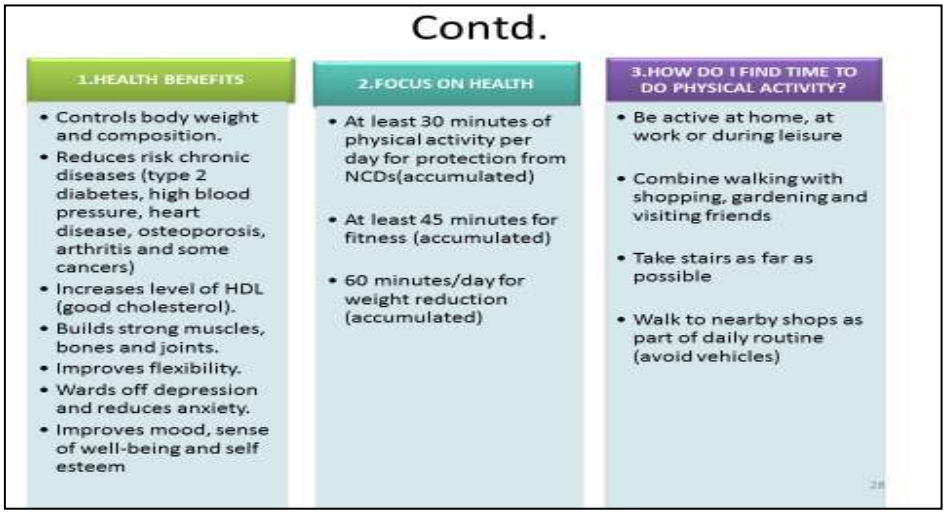
Brief counseling is suited for a person who is physically inactive or one who is not active enough. Brief intervention helps in prevention of more intensive problems. There will be short one-on-one counseling sessions. The counselor aims to help the patient to include physical activity to improve current health condition. The intervention should be individually tailored to suit each patient.

Educate the health consequences of physical inactivity and other risk factors and NCDs will be discussed (use BMI scores, the traffic signal & discuss health benefits of physical activity). The counselor should consult the Medical Officer about the types and levels of physical activity that the patient can be advised based on the current health condition. The counselor will inform the patient about the connection of poor physical activity, other risk factors and NCDs (present health condition).

Slide 27



Slide 28



Discuss the following and use brief counseling:

1. **HEALTH BENEFITS OF PHYSICAL ACTIVITY**

- Controls body weight and composition.
- Reduces risk chronic diseases (type 2 diabetes, high blood pressure, heart disease, osteoporosis, arthritis and some cancers)
- Increases the level of HDL (good cholesterol).
- Builds strong muscles, bones & joints.

- Improves flexibility.
- Wards off depression and reduces anxiety
- Improves mood, sense of well-being and self esteem

2. **FOCUS ON HEALTH**

Keep the focus of counseling on the present health condition. Link medical condition to physical activity and provide a strong personalized message. See box on how much physical activity is needed and advice patients to start slowly and work-up gradually as given below[85]*:*

- At least 30 minutes of physical activity per day for protection from NCDs (accumulated)
- It is recommended to carry out at least 45 minutes of physical activity of moderate-intensity for at least 5 days in a week. This amount of physical activity may reduce the risk some chronic diseases
- To lose weight, experts recommend that at least 60 minutes of moderate- to vigorous-intensity physical activity be taken on most days of the week.
- In addition, one should follow a nutritious eating plan and consume fewer calories. Therefore, it is essential to remember the body weight is affected by the balance of "calories-consumed" and "calories-burned." Those, who are on low calorie diets for body weight reduction should have moderate to vigorous intensity physical activities at least to 60-90 minutes daily
- Physical activity is essential for successful long-term weight management and will depend on current body mass Index (BMI) and health condition
- 60 minutes/day for weight reduction (accumulated)

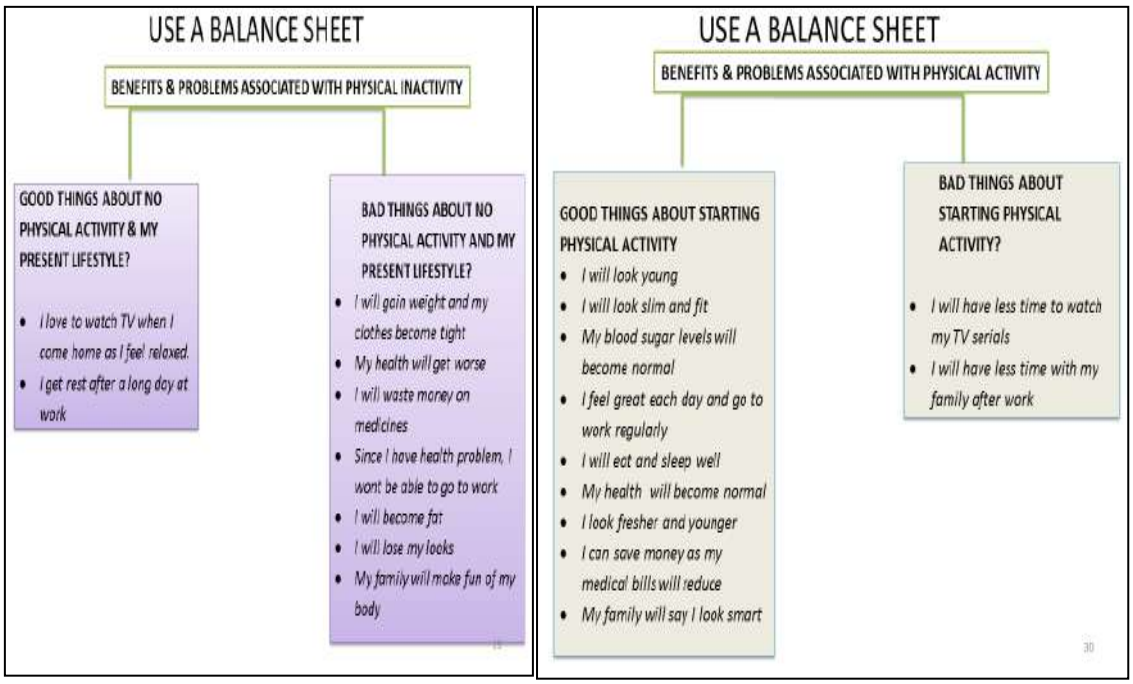
3. **HOW DO I FIND TIME FOR PHYSICAL ACTIVITIES?**

Patients should be encouraged to make exercise and staying active as a part of daily routine (at home, at work and during leisure time):

- Be active at home, at work or during leisure
- Gardening, housework (washing, mopping)
- Combine walking with shopping, gardening and visiting friends
- Take stairs as far as possible
- Walk to nearby shops as part of daily routine (avoid vehicles)
- Learn yoga and practice regularly
- Build habit of morning and evening brisk walk for recommended duration

[85] National Programme for Prevention &Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke: A Guide for Health Workers, 2011. Directorate General of Health Services. Ministry of Health and Family Welfare. Govt. of India.

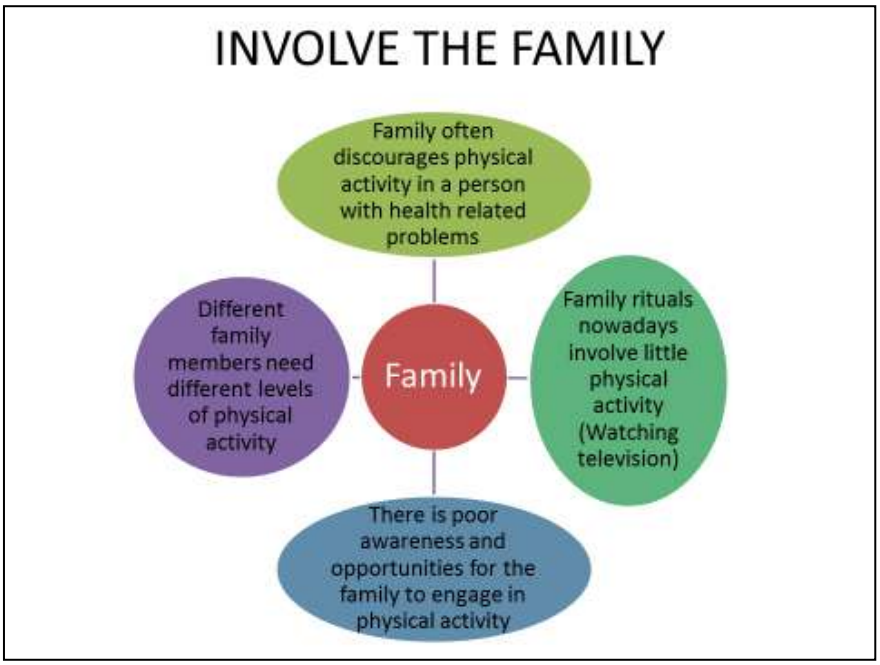
Slide 29 and 30



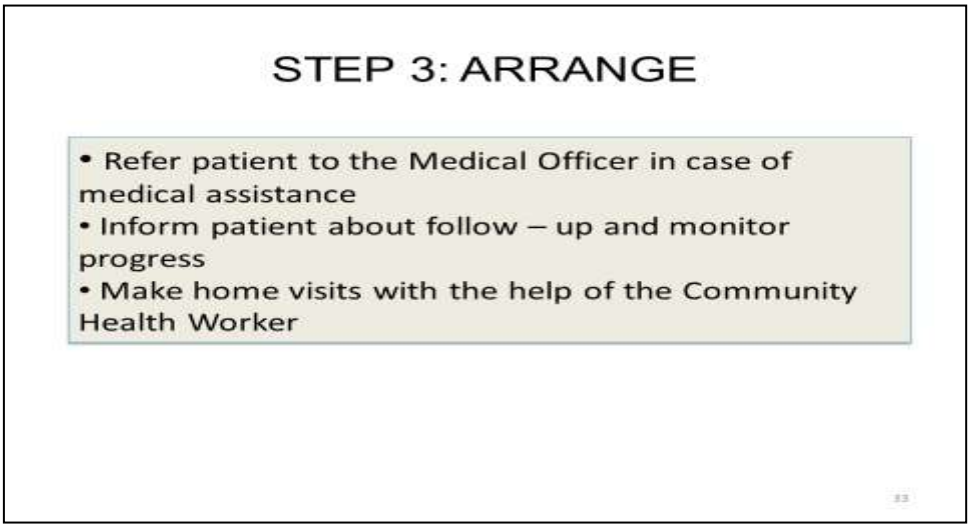
Discuss benefits and problems relating to physical activity using the balance sheet. The balance sheet exercise often helps the patient to understand the problems emerging from no exercise. The list of problems is invariably longer. As the patient goes through this exercise, the counselor will highlight what is most relevant for the patient. The aim is to make the message personally meaningful to the patient. As a counselor, the role is to be able to help the patient to favour the decision to change. Being direct is helpful (saying 'YOU MUST INCREASE PHYSICAL ACTIVITY'). But the counselor should not scare the patient away.

Slide 31

Slide 32



Slide 33



Slide 34

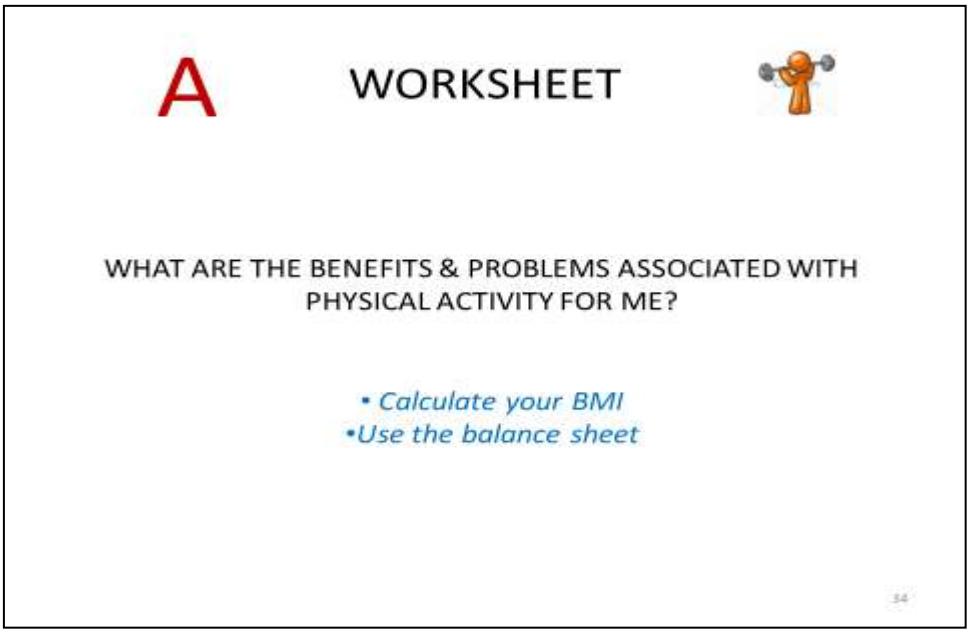
ACTIVITY (INDIVIDUAL ACTIVITY)

THE BENEFITS AND PROBLEMS ASSOCIATED WITH MY PHYSICAL ACTIVITY

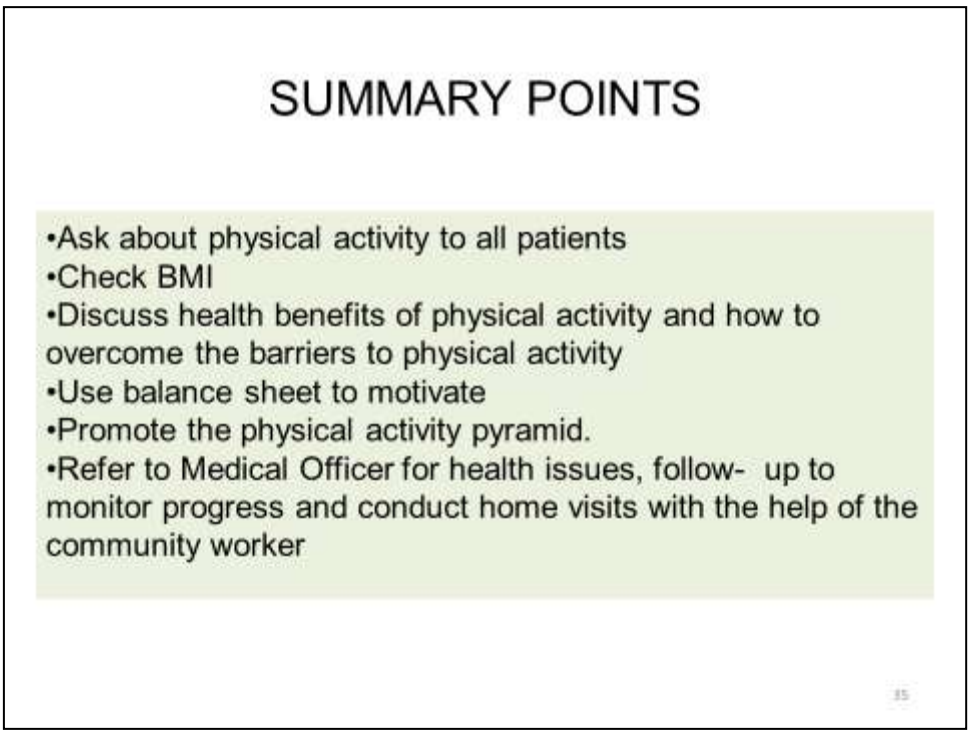
Duration: 30 minutes

Ask participants to calculate their BMI and use the balance sheet on themselves (provide a weighing scale and measuring tape). The participants will calculate their BMI and use the balance sheet on themselves. Each one will reflect about the benefits and problems that they experience with physical activity and after the activity, there will have a group discussion to reflect about the

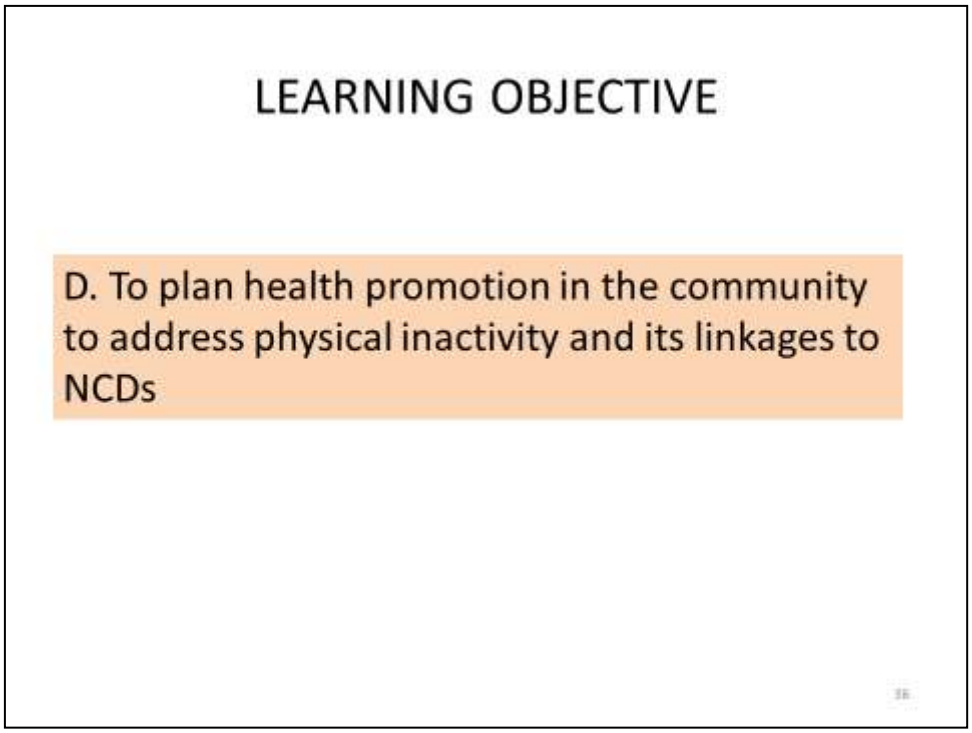
benefits and problems that they experience with physical activity. After the activity, have a group discussion and summarize.



Slide 35



Slide 36

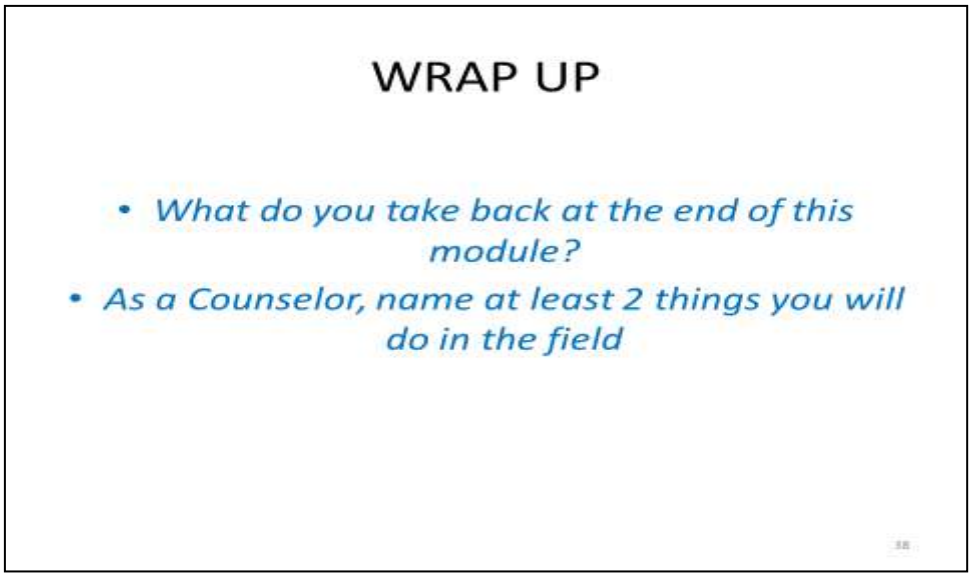


INSTRUCTION

Help each group to list out suitable methods for health promotion activities to address physical activity as a risk factor in the community. Each group will make presentation using chart papers and pens. Divide participants into small groups and ask them to nominate a representative make the presentation (30 minutes). Group presentation using charts will follow (15 minutes) and generate discussion & summarize.

Slide 37

Slide 38

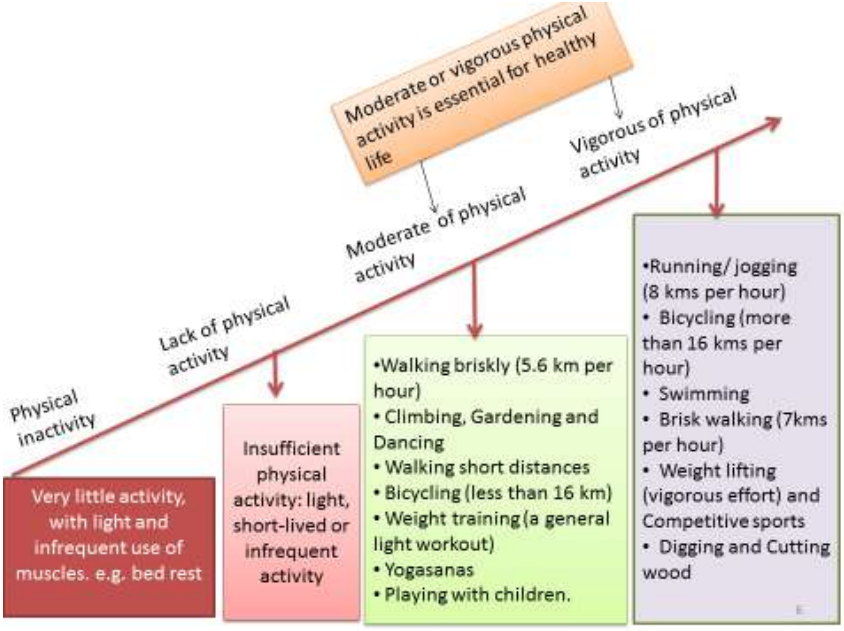


HANDOUTS

6.1. RANGE OF PHYSICAL ACTIVITY

6.2. STEPS TO IDENTIFY PHYSICAL ACTIVITY AS A RISK FACTOR & PROMOTING BEHAVIOUR CHANGE

6.1. RANGE OF PHYSICAL ACTIVITY



6.2. STEPS TO IDENTIFY PHYSICAL ACTIVITY AS A RISK FACTOR & PROMOTING BEHAVIOUR CHANGE

RAPPORT BUILDING

- Use counseling skills for rapport building

STEP 1: ASK

- Counselor should ask ALL patients referred to them about physical activity
- Counselor should ask about their routine physical activity and check their BMI.

BMI= weight (kilogram) ÷ height (meters) ^{2}

STEP 2: ASSIST

- Discuss BMI score (using the traffic light) and their routine physical activity.
- Educate
  - Link medical condition to physical activity.
  - Keep focus on present health condition.
  - Provide a strong personalized message

1. HEALTH BENEFITS OF PHYSICAL ACTIVITY

- Controls body weight and composition.
- Reduces risk chronic diseases (type 2 diabetes, high blood pressure, heart disease, osteoporosis, arthritis and some cancers)
- Increases the level of HDL (good cholesterol).
- Builds strong muscles, bones & joints.
- Improves flexibility.
- Wards off depression and reduces anxiety
- Improves mood, sense of well-being and self esteem

2. FOCUS ON HEALTH

Keep the focus of counseling on the present health condition. Link medical condition to physical activity and provide a strong personalized message. See box on how much physical activity is needed and advice patients to start slowly and work-up gradually as given below*:*

- At least 30 minutes of physical activity per day for protection from NCDs (accumulated).
- At least 45 minutes for fitness (accumulated).
- 60 minutes/day for weight reduction (accumulated).

3. HOW DO I FIND TIME FOR PHYSICAL ACTIVITIES?

Patients should be encouraged to make exercise and staying active as a part of daily routine (at home, at work and during leisure time):

- Be active at home, at work or during leisure
- Gardening, housework (washing, mopping)
- Combine walking with shopping, gardening and visiting friends
- Take stairs as far as possible
- Walk to nearby shops as part of daily routine (avoid vehicles)

- Use Balance Sheet to motivate patient (discuss good and bad things about doing physical activity)

- Promote physical activity

Specific advice for different age groups

The WHO recommends different 'doses' of physical activity for different age groups[86,87,88]

[86] World Health Organization. Global Strategy on Diet, Physical Activity and Health. 2011. www.who.int/dietphysicalactivity/factsheet_young_people/en/

[87] World Health Organization. Global Strategy on Diet, Physical Activity and Health. Information sheet: global recommendations on physical activity for health 18-64 years, 2011. www.who.int/dietphysicalactivity/publications/recommendations18_64yearsold/en/

[88] World Health Organization. Global Strategy on Diet, Physical Activity and Health. Information sheet: global recommendations on physical activity for health 65 years and above. 2011. www.who.int/dietphysicalactivity/publications/recommendations65yearsold/en/

Ages 5 to 17 years

Physical activity has many health benefits for children and youth. While 60 minutes per day of moderate to vigorous physical activity is recommended, more physical activity produces greater health benefits. Bone and muscle strengthening vigorous physical activity must be done at least 3 times per week. Apart from physical development, it also has psychological benefits by improving symptoms of anxiety and depression. It is also helpful in social development.

Ages 18 to 64 years

These guidelines can be followed by all adults, including those with disabilities. For pregnant and post partum women, as well as for those with diabetes, hypertension or heart disease, medical advice on the physical activity must first be obtained.

While at least 150 minutes of moderate intensity energy –spending exercise or at least 75 minutes of high intensity exercise is recommended per week, increasing this to 300 minutes per week of moderate intensity exercise or 150 minutes of high intensity physical activity can give additional health benefits. Every adult must do muscle strengthening activities of major muscle groups at least on 2 or more days each week.

Ages 65 years and older

As with adults, exercise has significant health benefits even in older adults. Exercise is beneficial even for those with disabilities and those who already have an NCD. For those with heart disease or diabetes, medical advice on what exercises may be undertaken should be obtained. While older adults should do at least 150 minutes of moderate-intensity or 75 minutes vigorous-intensity energy spending physical activity during the week, they can get additional health benefits by increasing this to 300 minutes each week of moderate-intensity or 150 minutes each week of vigorous intensity physical activity. Muscle strengthening activities must be carried out at least for 2 or more days per week.

STEP 3: ARRANGE

- Refer patient to the Medical Officer in case of medical assistance
- Inform patient about follow – up and monitor progress
- Make home visits with the help of the community health worker

Stress as a risk factor for NCDs

Session 7

Objectives of the session

By the end of this session, the participants will understand the following:

- Health problems associated with stress and stress as a risk factor for NCDs
- Causes of stress and its effects
- How to identify stress among patients
- How to differentiate stress and psychological distress from depression and anxiety disorders
- How to intervene for stress, common mental disorders and suicidal risk
- Strategies for mental health promotion in the community

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

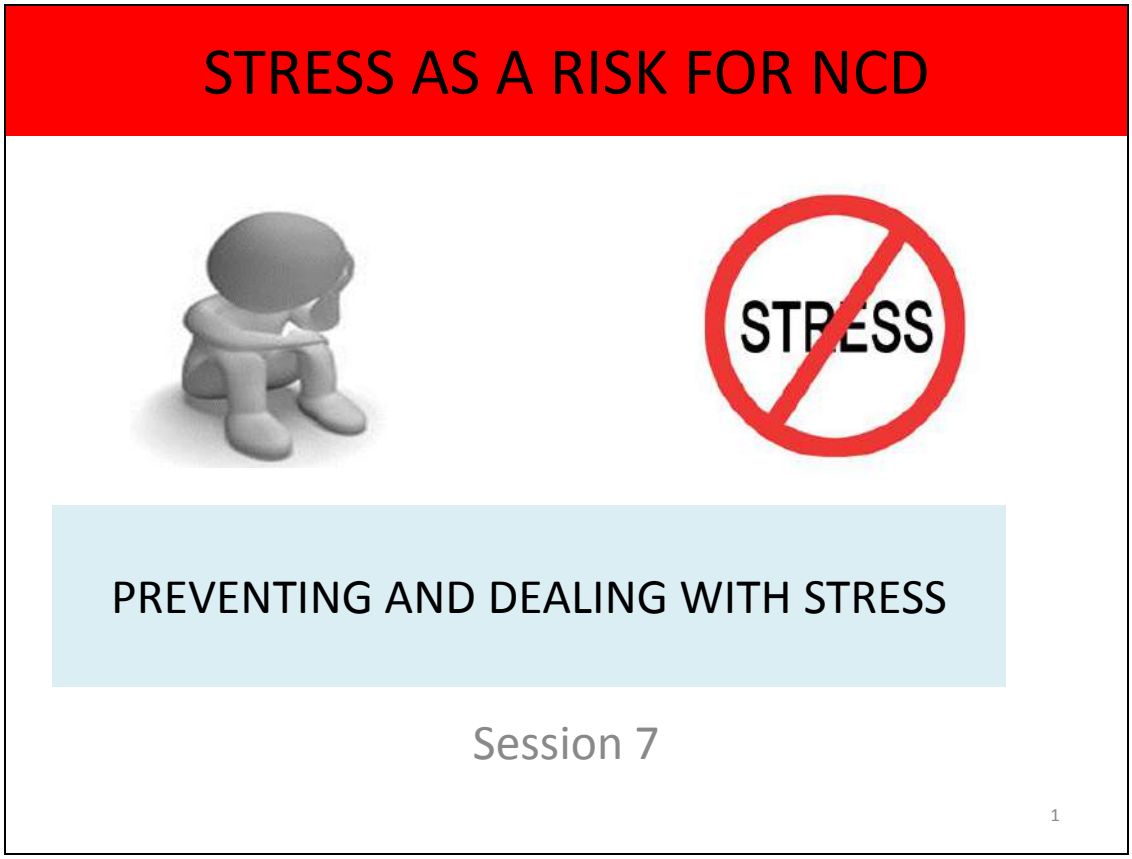
- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities**:*

  Activities during the training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol  ;
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol  ;
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 



INTRODUCTION

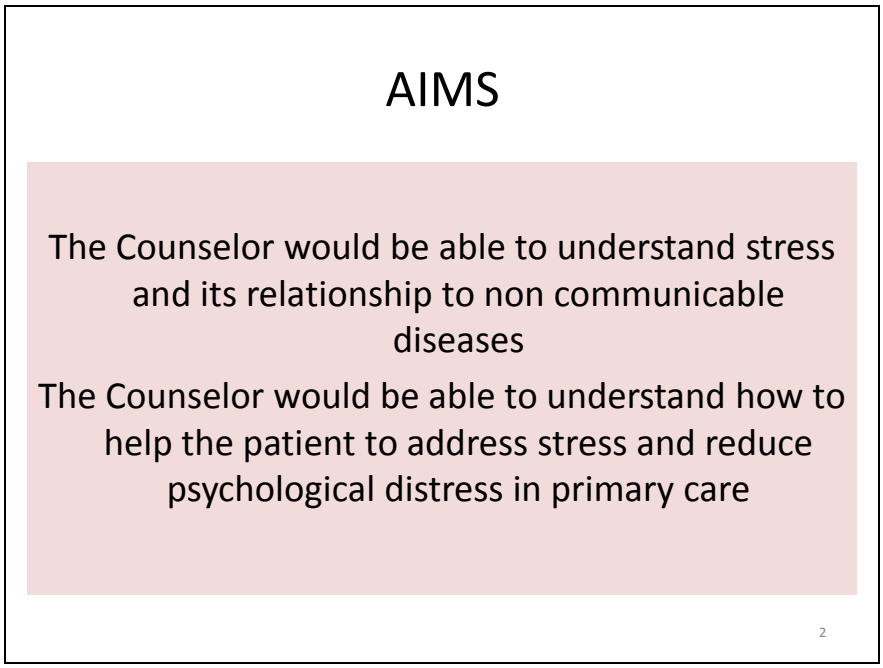
Stress is known to worsen physical ill-health and come in the way of effective control of many Non Communicable Diseases, including mental illness[89]. Many people use alcohol and tobacco as a way of coping with stress or psychological distress. Chronic NCDs and stress can each worsen the other. For example, stress may worsen the outcome and alter the recovery from a heart attack. Such conditions can also worsen the course of diabetes due to poor control of blood glucose levels. A person under stress may cope by using tobacco, drinking alcohol to reduce his tension, eating in an unhealthy manner and becoming physically lethargic. Stress can also worsen a person's illness outcome by delaying help seeking, poor treatment compliance, dropping out of follow-up and relapse of the NCD.

This session on stress helps the Counselor to understand what stress is, how it is linked to other risk factors and NCDs and how to address stress among patients. The first objective is to improve the Counselor's understanding of stress. This is followed by a session on how individuals respond to stress and how unhealthy ways of managing stress can lead to NCDs. Early identification and improving methods of care for stress management in patients at the health centre and in the community will be discussed. The session ends with planning health promotion activities in the community to enhance healthy ways of managing stress.

[89] Promoting mental health and wellness. Module 6. (2007). *www.wpro.who.int/philippines/publications/module6.pdf*

Total duration: 4hours 15 minutes approximately

Slide 2



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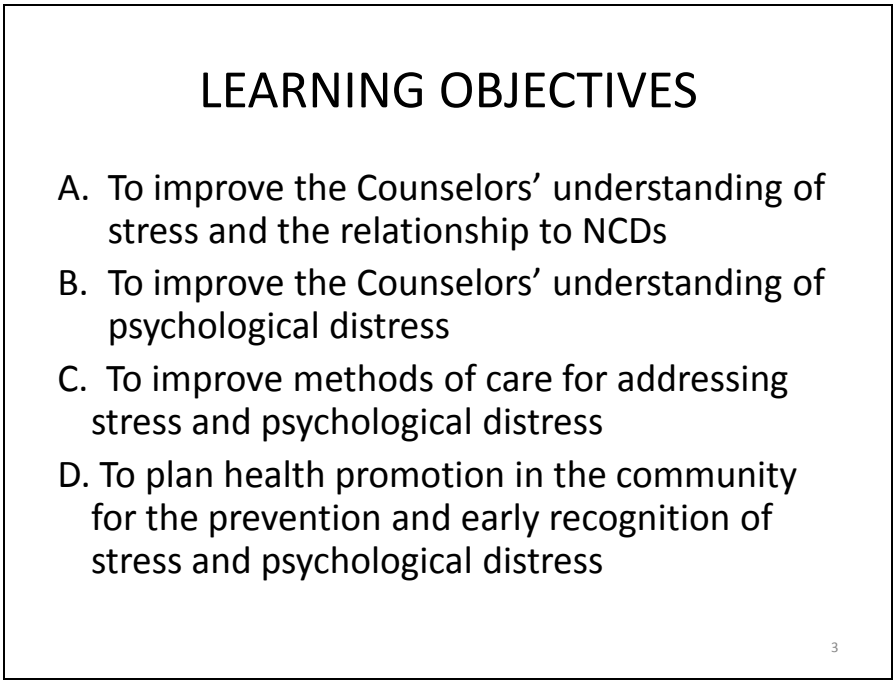


Slide 4

LEARNING OBJECTIVE

A. To improve the Counselors' understanding of stress and the relationship to NCDs

4

INSTRUCTION

Facilitate a discussion about how we can define stress, common causes of stress, and how stress may present among patients seen in primary care. When you discuss different aspects related to stress, generate discussion among participants to give examples from their field settings.

Slide 5 **ACTIVITY**

B *What do you understand by stress?*

5

Generate discussion and write responses on the board.

Slide 6

DEFINING STRESS

Stress is caused by an imbalance between demands made from the environment and the resources available to cope with those demands

6

Slide 7

UNDERSTANDING STRESS

- We *all* have undergone stress
- Some stress is important for motivation & productive work
- *Unhealthy stress:*

  Too much stress (high workload at home, at work, having little control over life)

  Too little stress (boredom, monotonous work, routine work)

7

All of us at some point or the other have undergone stress in our lifetime. A certain amount of stress is important for motivation and productive work[90]. However, stress can become unhealthy when it is too much (high workload at home or outside, deadlines, having little control) or too little (boredom, routine work). In this training session, our focus is on unhealthy stress.

Stress is not always necessarily harmful.

According to Hans Selye, who did a lot of work on stress in 1956: *"Stress is not necessarily something bad, as it all depends on how you take it..."*

Stress can be therefore negative, positive or neutral. Planning a pilgrimage to a temple can be very stressful but knowing that pleasure awaits at the end can be rewarding.

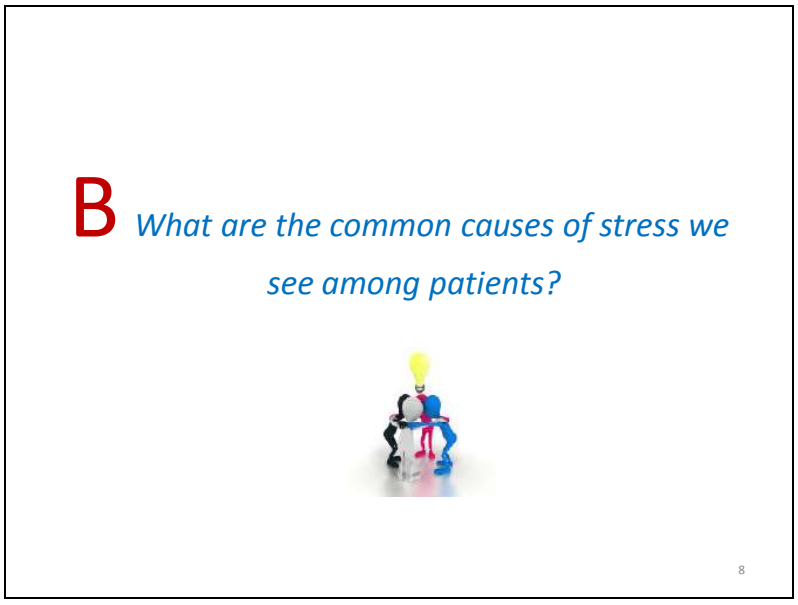
There are two types of stress:

a. Positive stress: A certain amount of stress can motivate a person to do better, achieve a target and feel good about it. Some examples include a sportsperson who is preparing for a running race, a student preparing for the final examination, a farmer waiting to harvest the field hoping for a good market price for the crop, parents preparing for marriage of their son or daughter.

b. Unhealthy stress or distress: Being unable to write the final exams due to tension, having serious difficulties in a married relationship or having a family member facing a serious illness are some unhealthy stress/distress situations.

Stress can affect our body and mind. It can lead to or worsen physical symptoms e.g. backaches, peptic ulcers, headaches, skin problems and low immunity. Psychological problems can cause or worsen physical illness, or be a reaction to physical illness.

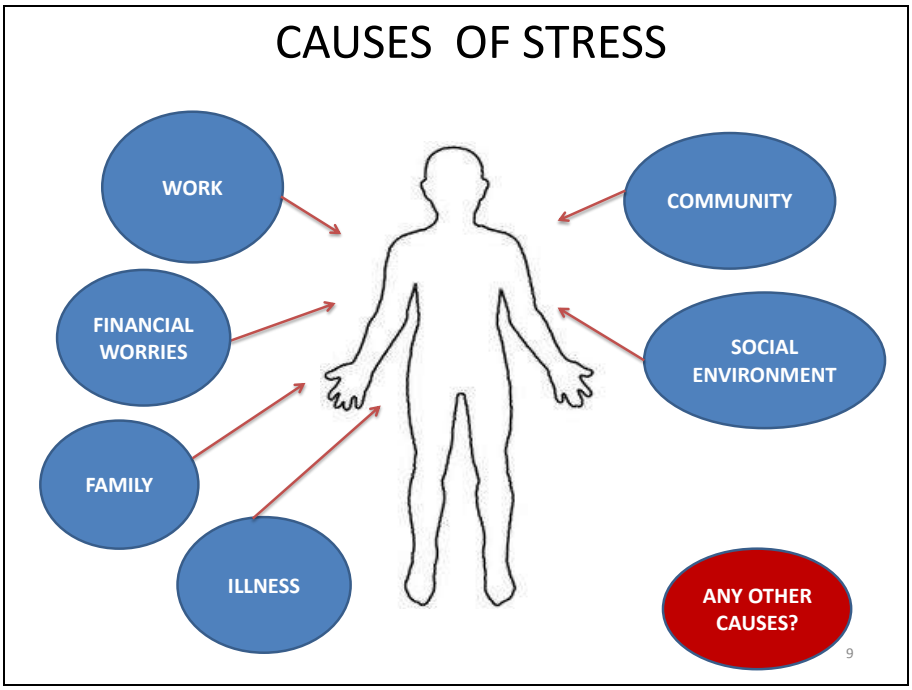
Slide 8



Generate discussion and write responses on the board.

[90] Integrating Health Promotion into Workplace OSH Policies, 2012.
www.ilo.org/wcmsp5/groups/public/@ed_protect/.../wcms_178397.pdf

Slide 9



There are many causes of stress. Stress can be generated from the family, social environment, a person's workplace or from the community. More than one cause may occur together and worsen the stress[91].

Family: Difficult relationships, violence, frequent quarrels with persons at home, death of a loved one, poor support from home may be sources of stress.

Work: Working in unsafe places, being alone at work and being in jobs where one has to face the public can be a source of stress. Workplace stress can be carried home and problems at home can affect work. Stress can be caused by events that are not only negative but also positive (like a promotion at work, which means a better pay but also more responsibilities).

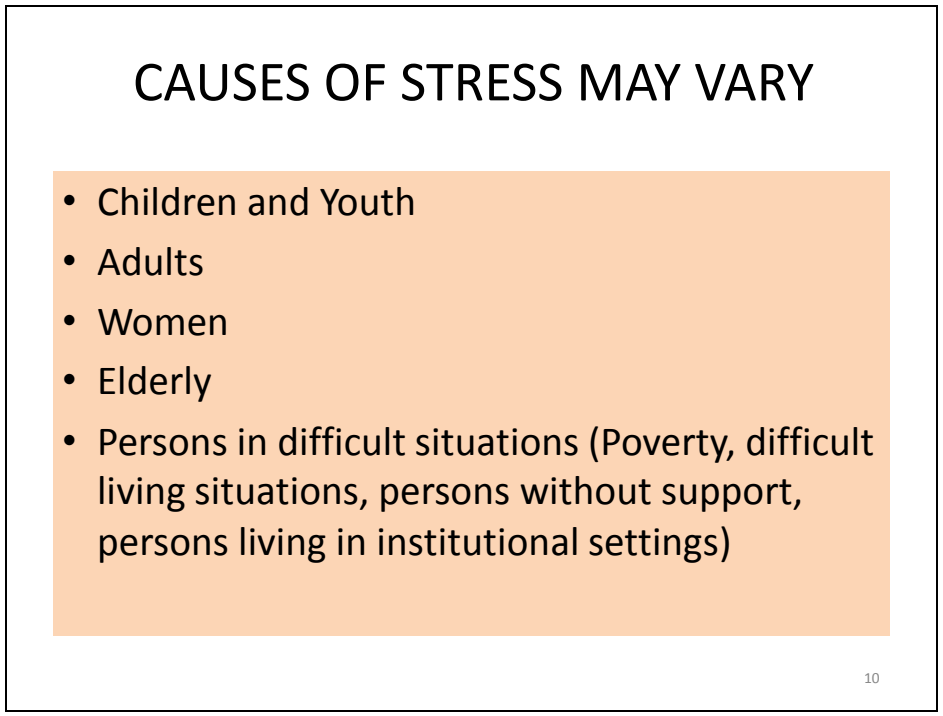
Community: Difficult living conditions, living alone, moving from one place to another for jobs, poor support from family or friends and financial difficulties can cause stress. In the Health Centre, we see many patients from different age groups and socio economic backgrounds. A person's gender, being unemployed and having a disability because of illness can all contribute to stress.

Mounting debts, chronic illnesses and injury can make living stressful. Importantly, each one's ability to withstand pressure, coping styles and perception of stress is different. Counselors at the Health Centre should remember that a person seeking help for a physical illness may not talk about stress and psychological distress due to shame and stigma[92], as well as fear that what they share

[91] Murthy P and Sankaran L. Workplace Well-Being: Integrating psychosocial issues with health. Published by The Printers (Mysore) Pvt. Limited and The National Institute of Mental Health and Neuro Sciences, Bangalore, 2007.
[92]Burden of disease: DALY (Part 4). http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_part4.pdf

will not be kept confidential. Patients may also feel that it is not necessary to talk about their stress because they are coming to the Health Centre for a physical illness. Therefore, the Counselor needs to learn how to identify stress psychological distress among patients.

Slide 10



It is important to remember that the causes of stress may vary depending on the person's age, gender, and background.

For a child, difficulties may arise when his/her basic needs like food, shelter, clothing, safety needs are not met. Loneliness, difficulty in studying, being teased by other children, fear and anxiety can all lead to stress. Loss of parents at an early age or separation can be very stressful. Relationship problems can lead to stress among older children. Some children who are impulsive by nature (acting without thinking), restless, find it difficult to obey rules, get easily anxious or upset are more likely to have difficulties dealing with stress.

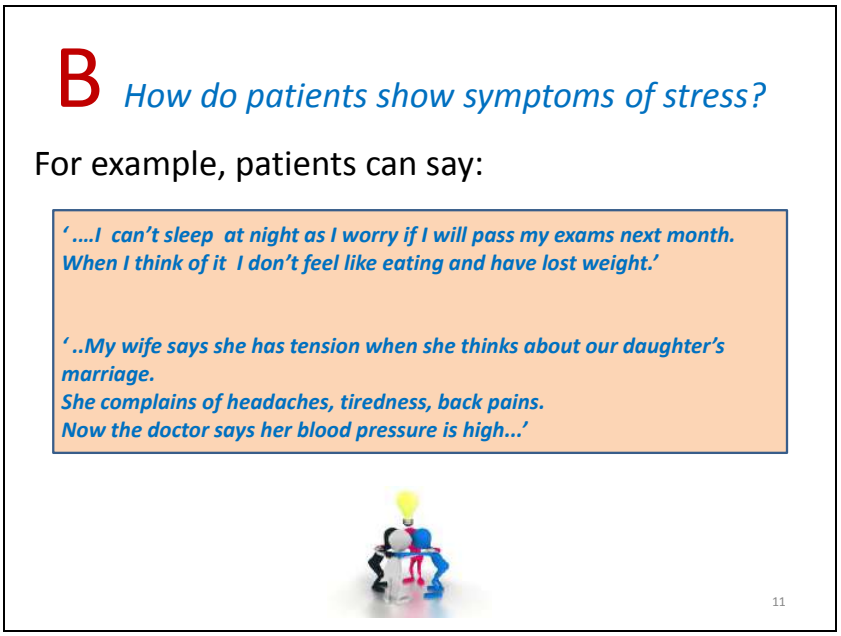
Women in India may face stress from various factors. In some sections of society, because of their unequal status, they do not have the freedom even to make choices of what to cook at home, what to buy or what to wear. The stress of running the household, looking after children when there is no support can be high. Among working women, having to do both the household work as well as working outside the home can be a significant source of stress.

For adult men, pressures at the workplace, financial difficulties, lack of adequate recreation and relaxation and relationships may be sources of stress.

For the elderly, financial difficulties, loneliness, lack of emotional support and inability to get health care can be important causes of stress.

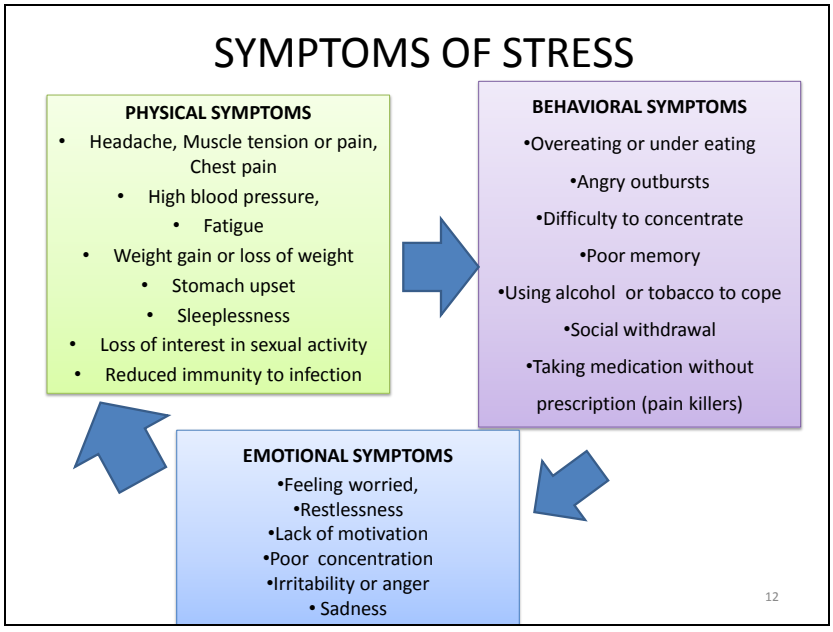
Distribute HANDOUT 7.1 (NOTES ABOUT STRESS)

Slide 11



Generate discussion and write responses on the board.

Slide 12



SYMPTOMS INDICATING STRESS

Stress may present in the form of **physical symptoms** such as headache, muscle tension or pain, chest pain, getting frequent infections, high blood pressure, fatigue, thirst, weight loss or gain, upset stomach, skin disorders, sleeplessness, or reduced interest in sexual activity.

Stress can also present in the form of **psychological symptoms**

Behavioural symptoms like overeating, becoming angry for no reason, poor concentration and memory and becoming withdrawn may also be symptoms of stress. Many people use tobacco drugs without prescription or drink alcohol excessively as a way of coping with stress.

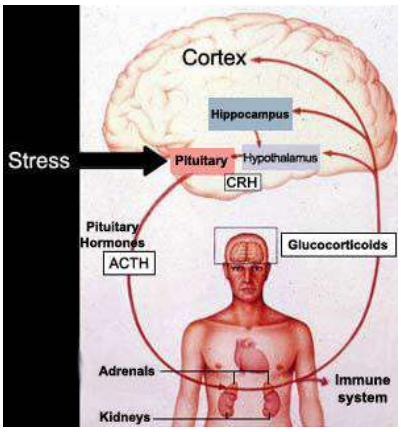
It may also present with **emotional symptoms** like anxiety, restlessness, lack of interest, irritability or anger, feeling sad or depression.

Psychological symptoms of stress can also include **disturbed thoughts,** such as thoughts of being useless, unwanted, unworthy or helpless.

DISTRIBUTE HANDOUT 7.2. CHECKLIST FOR STRESS

Slide 13

THE BODY'S RESPONSE TO STRESS



Thebrain.mcgill.ca

- Hypothalamus in the brain send signals leading to release of adrenalin and cortisol
- Adrenalin increases heart rate and blood pressure
- Cortisol increases release of sugar/glucose into blood
- Body's ability to fight infection can be reduced
- The person can experience dry mouth, sweating, rapid breathing
- When the stress passes, the body remains exhausted till the hormone levels return to normal

13

The person senses threat, danger and the brain sends signals to various parts of the body to 'fight or flee (run away)'. 'Fright' is another important aspect.

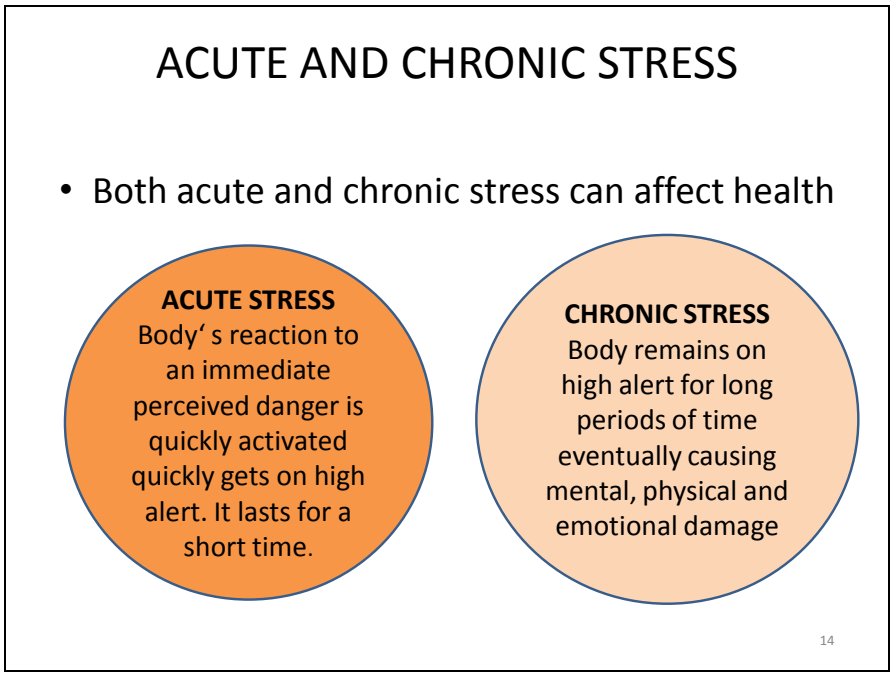
'Flight or fight' syndrome

WHAT HAPPENS TO THE BODY?

- A tiny part of the brain called the hypothalamus sets off an alarm in the body.
- The adrenal glands in the body releases a spurt of hormones called adrenaline and cortisol.
- Adrenaline increases blood pressure and heart rate goes up.

- Cortisol increases sugar (or glucose) into the blood stream and prepares the body to fight out or meet the situation altering responses in the immune system and digestive system.
- In some time, cortisol and adrenaline levels start dropping, heart rate and blood pressure return to normal levels. Blood is diverted from the digestive system, skin and other systems. The person's mouth becomes dry and talking becomes difficult.
- These are all bodily responses when a person senses danger.
- Once the perceived threat passes, hormone levels return to normal.
- The person becomes exhausted and rests till normalcy in the systems return. This is in the case of acute stress.

Slide 14

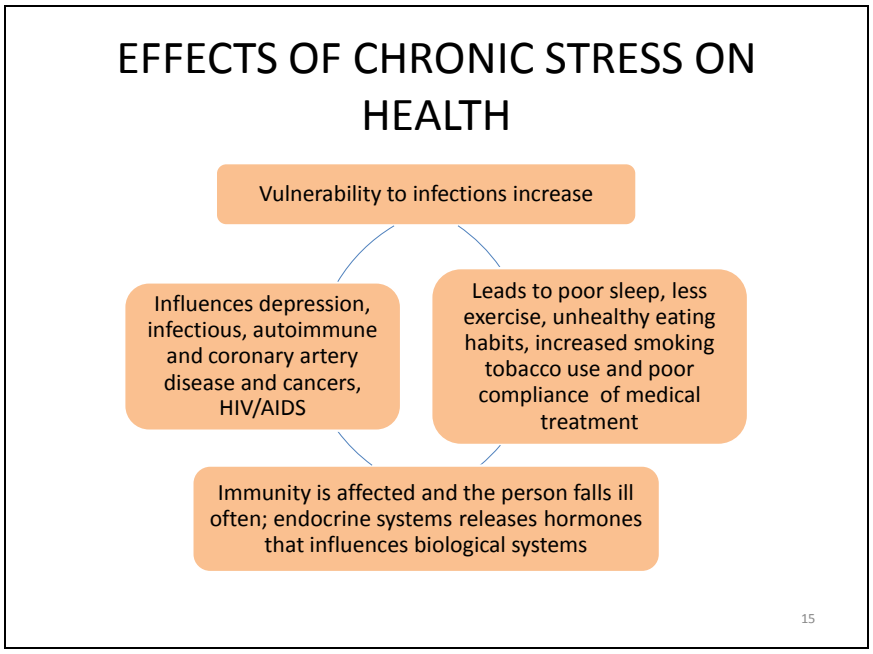


The main difference between acute stress and chronic stress is the length of time the body is in the state of arousal.

In cases of acute stress, the body's reaction to an immediate perceived danger or threat (real or imagined) is quickly activated and lasts for a short time.

In cases of chronic stress, the fight or flight response is present but the body remains on high alert for long periods of time eventually causing mental, physical and emotional damage. There is no relaxing time.

Slide 15



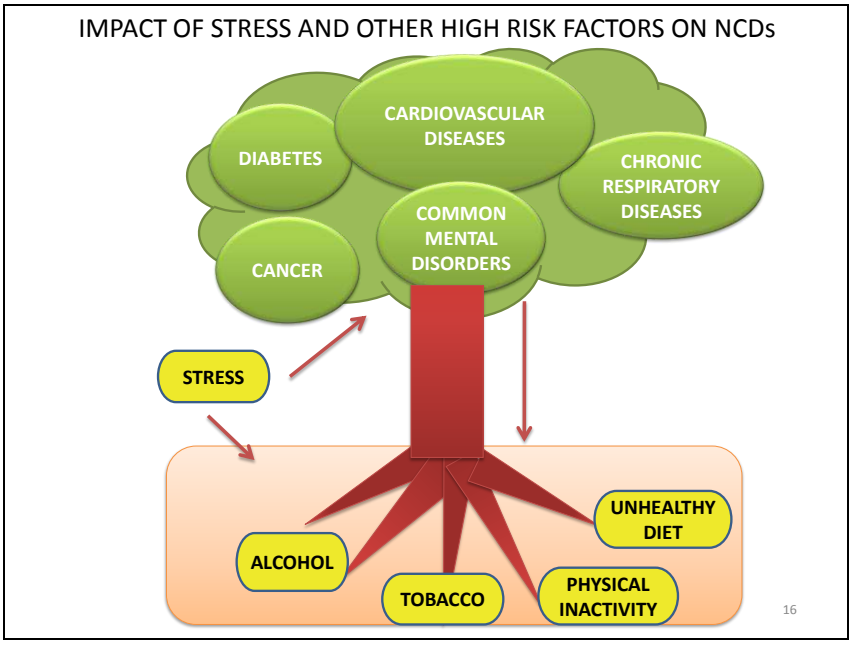
WHAT HAPPENS WHEN OUR NATURAL STRESS RESPONSE FAILS?

Some may say how they feel under constant attack or feel threatened (called chronic stresses).

Examples of chronic stress are living with a chronic disease, taking care of aged parents, work pressure and financial problems.

A person undergoing chronic stress is constantly exposed to the stress hormones like cortisol, not allowing any rest to the body. The stress hormones disturb the normal functions of the body and the person may not be able to sleep soundly, experience stomach upsets or muscle pains. The person may feel depressed or anxious. Chronic stress is well known to lead to high blood pressure and heart disease. Chronic stress also disturbs the body's ability to fight infection and makes the person more prone to develop various infections. Research has also shown a link between chronic stress and cancer.

Slide 16



Impact of stress and other risk factors on NCDs: The diagram illustrates how stress along with other risk factors can lead to non-communicable diseases.

Relationship between stress and health:

- Psychologists find that stress is a contributing factor in human disease[93]
- Feeling upset and sad is common among people diagnosed with a serious illness or physical disease
- Chronic stress triggers or worsens depression, cardiovascular disease and HIV/AIDS.

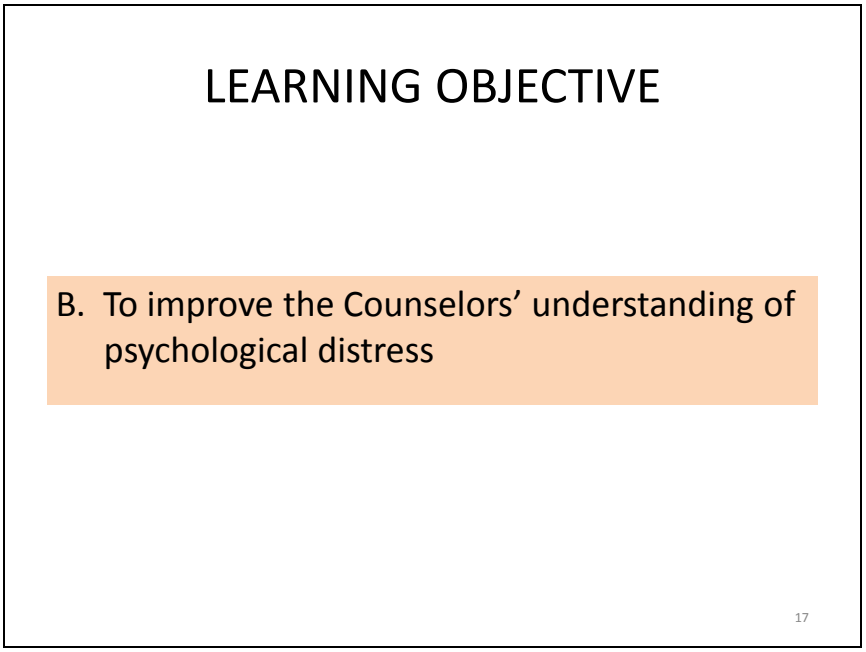
Two likely pathways of how stress contributes to disease:

The first is behavioural, where people under stress sleep poorly, less likely to exercise, adopt poor eating habits, use tobacco and do not comply with medical treatment.

Secondly, stress triggers a response by the body's endocrine systems releasing hormones that influence multiple other biological systems, including the immune system. Effects of stress are significant on depression, infections, autoimmune illnesses, coronary artery disease and at least some (e.g., viral) cancers.

[93] Stress contributes to Range of Chronic Diseases, Review Shows, 2007.
www.sciencedaily.com/releases/2007/10/07100916422.htm>

Slide 17



Here, it will be good to emphasize once again how stress and NCDs are related, how risk factors are related to one another, and how many factors in society, family, work and relationship can contribute to the development of stress.

DEFINING PSYCHOLOGICAL DISTRESS

INSTRUCTION

Here the facilitator tries to make the participants go back and focus on the emotional and behavioural reactions to stress that was discussed earlier.

The idea is to point out that mental well-being and distress lie on a continuum. Also, stress may lead to physical symptoms in some people, and psychological symptoms (emotion, thoughts and behaviour) in others. Often, persons under stress may have more than one type of symptom. The person's blood pressure can rise, he can become irritable, may overeat and lose the motivation to exercise. All these can be risk factors for NCDs.

SYMPTOMS OF PSYCHOLOGICAL DISTRESS

As earlier discussed, psychological or emotional distress generally stems from stress and gets better when the source of stress disappears or when the person learns to cope better.

Slide 18

Psychological Distress

- Emotional disturbances that may have an impact on social functioning and day-to-day living

Common symptoms

Feeling sad	Finding it difficult to sleep
No interest in activities	Poor appetite or overeating
Feeling restless	Weight loss or weight gain
Feeling tense	Decreased interest in sex
Lack of energy	
Poor concentration	
Anger or irritability	

These may disappear when the stress disappears or when the person learns to cope more effectively

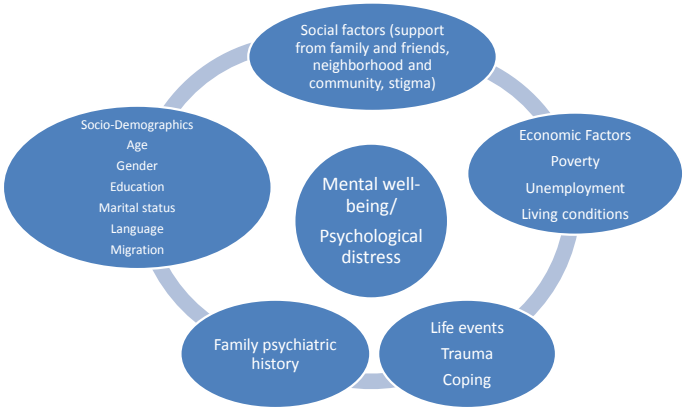
18

DISTRIBUTE HANDOUT 7.2. CHECKLIST FOR STRESS

There are many factors that influence mental well-being and psychological distress. A person's temperament, coping style, social support, as well as life events can influence the person's mental state.

Slide 19

Factors influencing mental well-being and distress

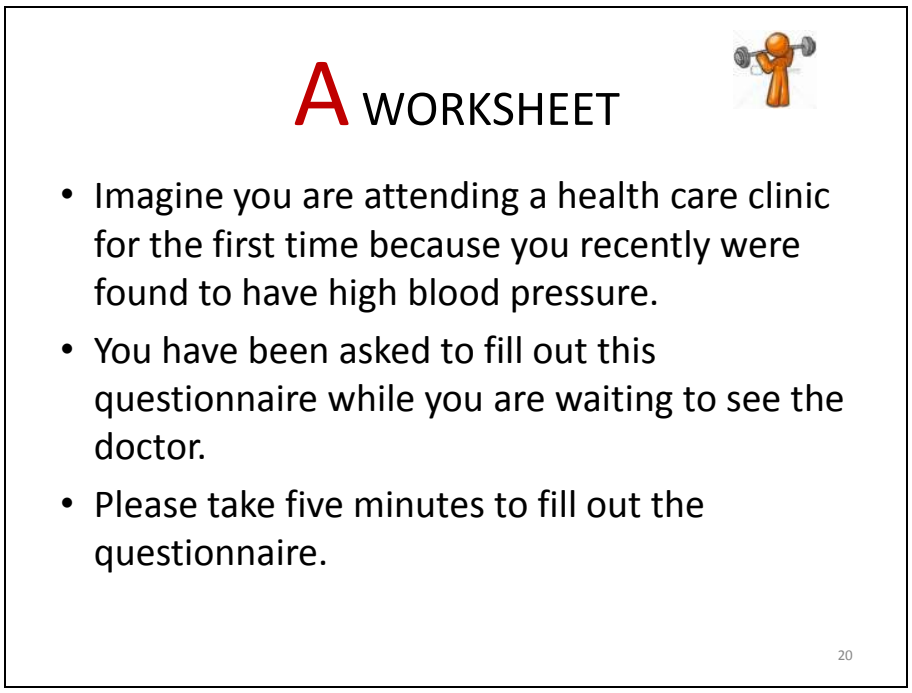


19

At one time or other, when faced with stress, it is common for us to experience symptoms of psychological distress. In many parts of the world, there have been studies to examine psychological distress levels among people in the community. A common approach to measure psychological distress that has been used all over the world is the Kessler Psychological Distress Scale.[94]

INDIVIDUAL ACTIVITY

Slide 20



DISTRIBUTE HANDOUT 7.3. PSYCHOLOGICAL DISTRESS QUESTIONNAIRE

INSTRUCTION

Ask the participants to take 5 minutes to fill out the questionnaire. When they have all completed it, ask them to total the scores.

Discuss the interpretation of the scores. A score of 20 or more indicates the presence of significant psychological distress.

[94] Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine, 2002; 32: 959-976

Community studies on psychological distress

Many studies across the world have found significant levels of psychological distress in the community. A study from Australia in 2007 found that 31% of men and women had significant psychological distress.[95] In a Canadian study on adolescents, 27% of students reported symptoms of psychological distress.[96] A review of 10 cohort studies in the United Kingdom covering 68,222 people found a dose-response relationship between psychological stress and increased risk for mortality from several major causes.[97] A study from India showed that subjective well-being was influenced by age, income, education, marital status, religion and work. Different factors seemed to influence subjective well-being between men and women.[98]

Recognizing depression and anxiety

Depression and Anxiety are two common mental disorders that are often not properly diagnosed and treated in primary care. When symptoms of psychological distress are present, it is important to identify whether there is an underlying depressive or anxiety disorder which requires treatment. The WHO mh GAP highlights that there is a treatment gap of 75% or more in developing countries with respect to the identification and treatment of many mental disorders.[99] Depression and anxiety disorders are common mental disorders and one among the NCDs. Stress can precipitate these disorders and many of the symptoms of psychological distress may be present in these disorders.

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[95] Kilkkinen A , Kao-Philpot A, O'Neil A, Philpot B, Reddy P, Bunker S, Dunbar J. Prevalence of psychological distress, anxiety and depression in rural communities in Australia. Aust J Rural Health. 2007; 15(2):114-9

[96] D'Arcy C and Siddique CM. Psychological distress among Canadian adolescents. 1984; 14 (3): 615-628.

[97] Russ TC, Stamatakis E, Hamer M, Starr JM, Kivimaki M, Batty GD. Association between psychological distress and mortality: individual participant pooled analysis of 10 prospective cohort studies. BMJ 2012;345:e4933.

[98] Agarwal J, Murthy P, Philip M, Mehrotra S, Thennarasu K, John JP, Girish N, Thippeswamy V, Isaac M. Socio-demographic correlates of subjective well-being in urban India. Soc. Indic. Res 2011; 101: 419-434.

[99] World Health Organization. mhGAP intervention guide, 2010. http://whqlibdoc.who.int/publications/2010/9789241548069_eng.pdf

Slide 21

RECOGNIZING DEPRESSION AND ANXIETY

B *How do you recognize depression?*

How do you recognize anxiety?

21

Slide 22

HOW TO RECOGNIZE DEPRESSION?

A person with depression may experience:

- Low mood
- Loss of interest or pleasure
- Tiredness
- Disturbed sleep and appetite
- Poor concentration
- Feelings of guilt
- In severe depression, suicidal thoughts or acts.

Symptoms should be present for a month or more and every symptom should be present for most of every day. At least one of the above symptoms for most days (most of the time) for at least 2 weeks

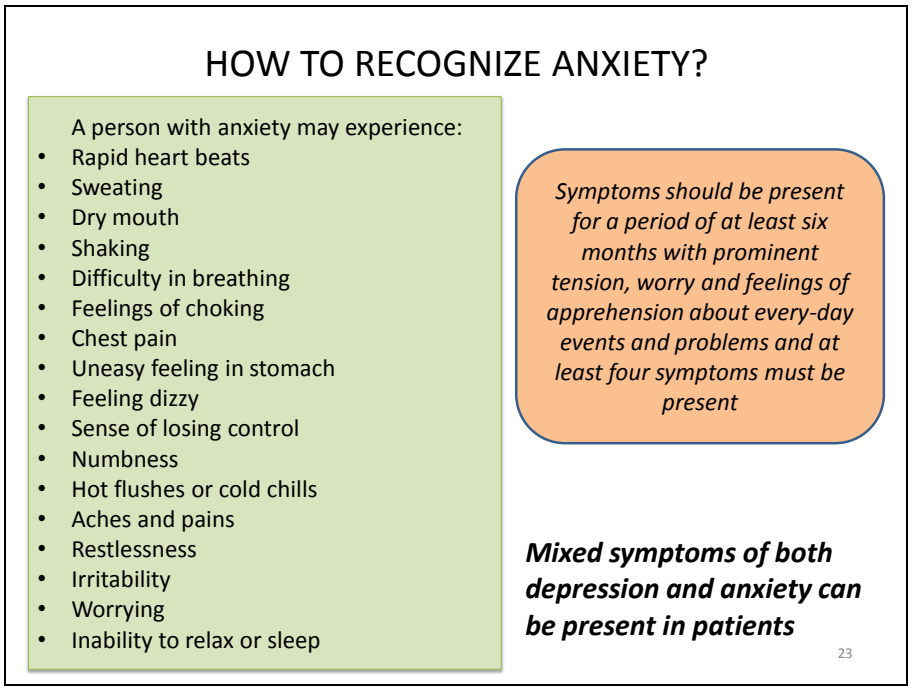
22

Generate discussion and write responses on the board.

The definitions for depression and anxiety are according to the ICD-10[100]

[100]World Health Organization. ICD-10 Classification of Mental and Behavioural Disorders. www.who.int/classifications/icd/en/bluebook.pdf

Slide 23



Mixed symptoms of both depression and anxiety can be present in patients. Anxiety and depression may also be seen in persons with NCDs.

India: Anxiety, depression and somatoform disorders are common mental disorders that are seen in primary health care settings reporting a prevalence of 21 to 42.3%.[101] A review of effective treatments for a mental health problem (depression) in low – resource settings based on clinical trials revealed the following:

Effectiveness of an intervention led by lay health Counselors in primary care settings was studied for persons suffering with depression and anxiety disorders. Interventions were case management and psychosocial interventions led by trained health Counselor, supervision by mental health specialists and medication from primary care physicians[102]. The findings were as follows:

- The lay Counselor can provide effective treatment for depression
- Anti-depressant drugs and brief psychotherapy were key interventions for common mental health disorders
- Strengthening protective factors and reduction of risk factors in schools helped

[101] Shankar BR, Saravanan B, Jacob KS. Explanatory models of common mental disorders among traditional healers and their patients in rural South India. International Journal of Social Psychiatry 2006; 52:221-33.

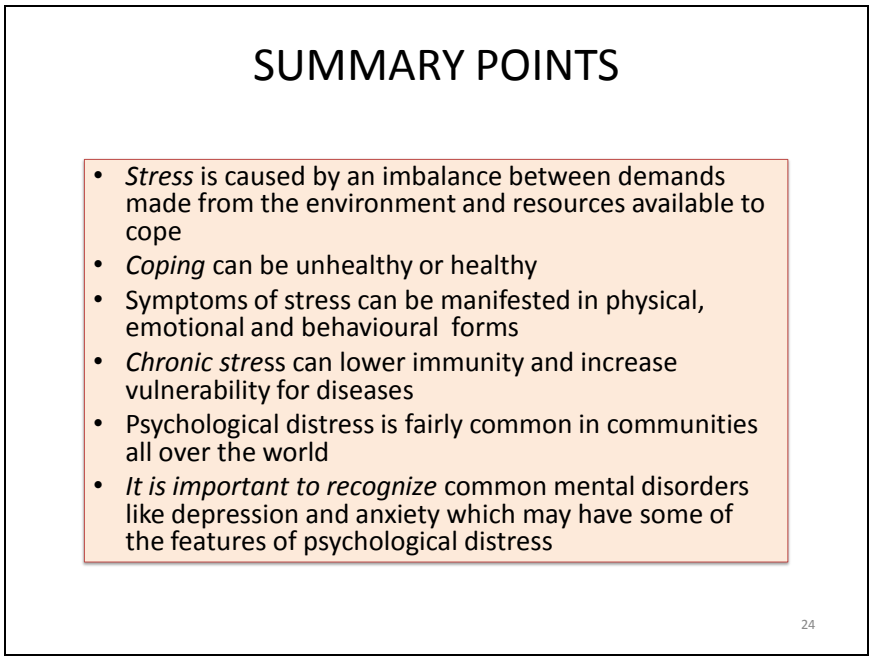
[102] Marina Marcus, M. Taghi Yasamy, Mark van Ommeren, and Dan Chisholm, Shekhar Saxena DEPRESSION: A Global Public Health Concern WHO Department of Mental Health and Substance Abuse. World Health Organization, Sixty-fifth World Health Assembly 2012. www.who.int/mediacentre/events/2012/wha65/journal/en/index4.html.

- School based programmes for children and adolescents helped promote problem solving skills, social skills
- Exercise programmes for the elderly were useful
- Information on childrearing strategies for parents having children with conduct problems improved parental wellbeing and reduced parental depressive symptoms (with improvement in children's outcomes).

WHAT WERE THE BARRIERS TO EFFECTIVE CARE?

- Lack of resources
- Lack of trained providers
- Social stigma associated with mental disorders.

Slide 24



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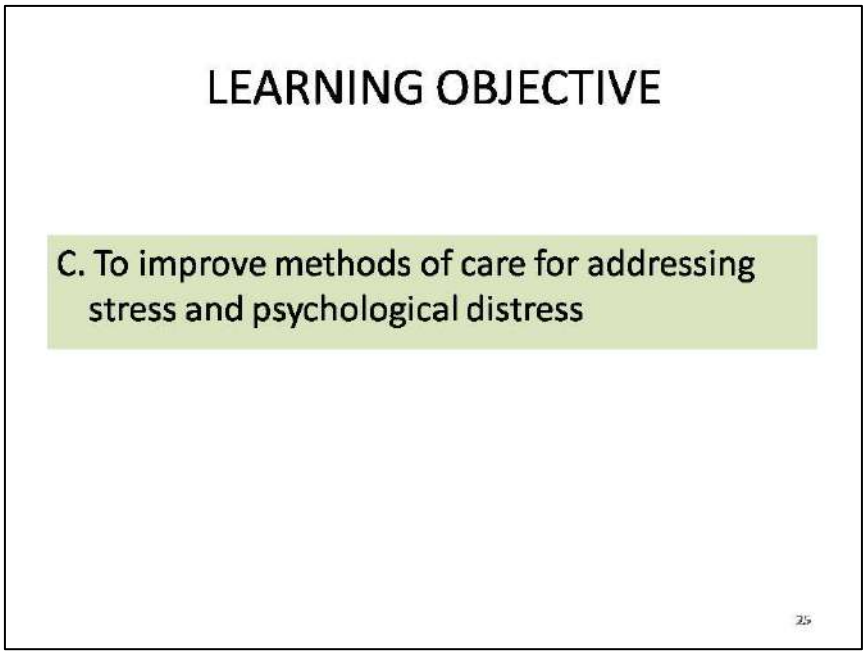

INSTRUCTION

Use case studies and facilitate discussion in groups. The four case studies are about individuals facing stress, anxiety and depression. Through group work the participants will discuss what steps they will take to address the presenting problem. Generate discussion and describe various methods used to address the problems.

ACTIVITY (Case studies)

Total duration: 30 minutes

Divide participants into 4 groups and let them nominate a representative to make the presentation. Read and distribute the four case studies where each group will have only one case study. Discuss in groups the various methods to address issues presented by the patients (15 minutes).

The group will make a presentation using charts (15 minutes). Facilitate discussion after the presentation.

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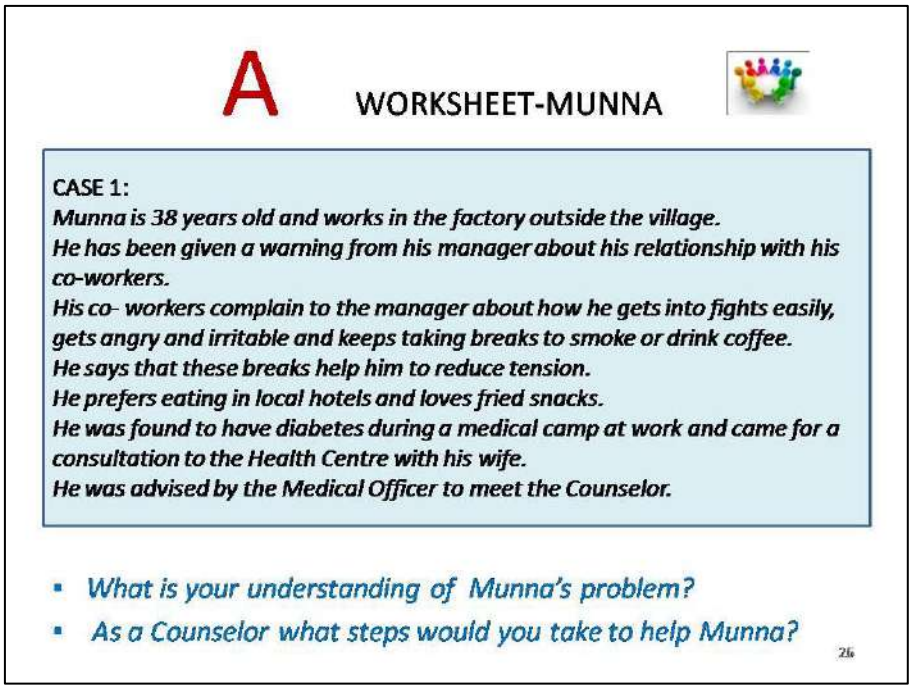

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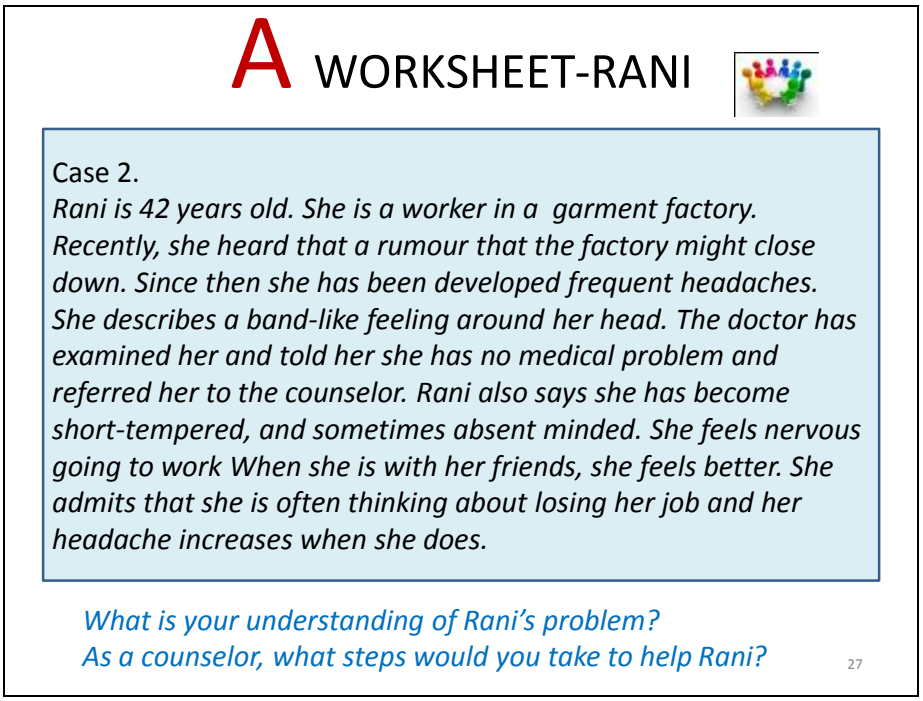

Slide 28

A WORKSHEET - SHEELA

CASE 2:

Sheela is 36 years, married. She is sad because she has no children.
She complains of heaviness and constant burning sensation in her chest. She was seen by the Medical Officer who investigates and assures her that she is perfectly healthy. When she sees the Counselor, she says that when she meets her in-laws she feels restless, starts sweating and her chest starts pounding.
She has started avoiding them as they bring up the topic of children.
Her mouth becomes dry and she cannot speak to them at times.
Of late, she feels unable to relax and has difficulty in sleeping. She says her husband is away most of the time (bus driver) and she has no one to talk to.
Her parents lives in the next village.

- *What is your understanding of Sheela's problem?*
- *As a Counselor what steps would you take to help Sheela?*

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A WORKSHEET - RAJU

CASE 3:

Raju is 42 years and has a vegetable farm. Since the last few weeks, he stays at home and says he is unable to go to work. He also smokes more beedis.
When his wife asks him to go to work he says he is tired and complains of general body ache. He hardly sleeps and says he does not feel like eating.
When his family asks him to come out with them to the temple or family functions, he refuses to do so.
His wife tells the Community Health Worker during her home visit that he has very little physical activity and does not sleep.
The wife says he has developed blood pressure during a previous visit to the doctor and is not regular with medicines or follow -up. The Community Health Worker refers Raju to the Health Centre. Raju, his wife and brother meet the Counselor at the Health Centre.

- *What is your understanding of Raju problem?*
- *As a Counselor what steps would you take to help Raju?*

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Distribute HANDOUTS:

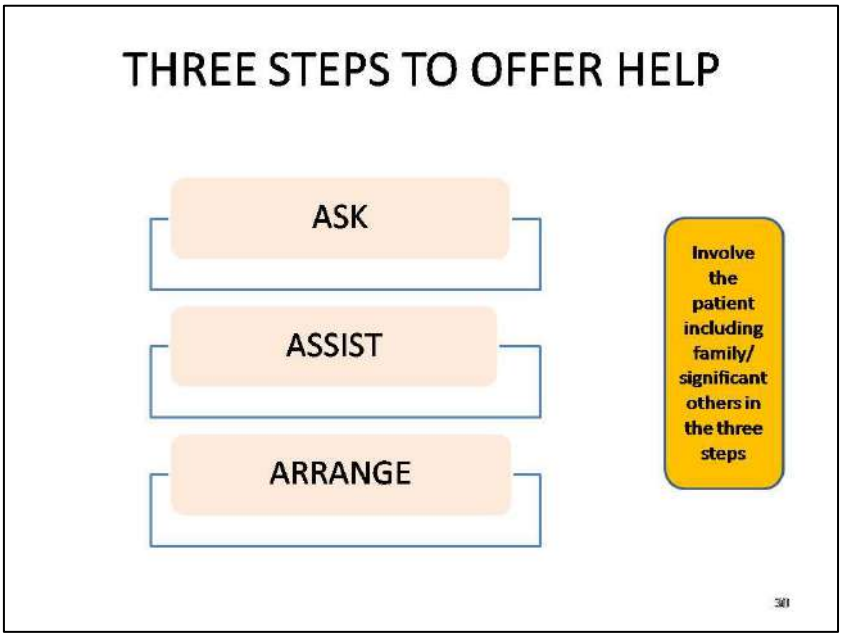
7.4 (CHECKLIST FOR STRESS)

7.5 (CHECKLIST FOR DEPRESSION)

7.6. (CHECKLIST FOR ANXIETY)

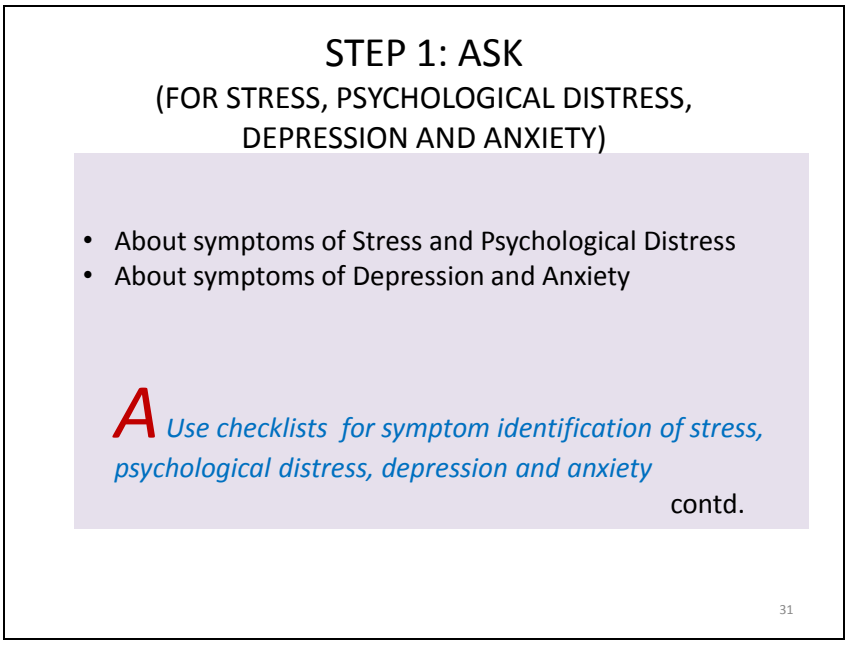
7.7 (STEPS TO OFFER HELP TO THE PATIENT)

Slide 30



It may be easy for a Counselor to remember these 3 easy steps which describe how a Counselor can help in recognizing stress and common mental health disorders among patients. Listening skills that you learned about in the session on counseling will help in bringing out mental health issues that may be troubling the person.

Slide 31



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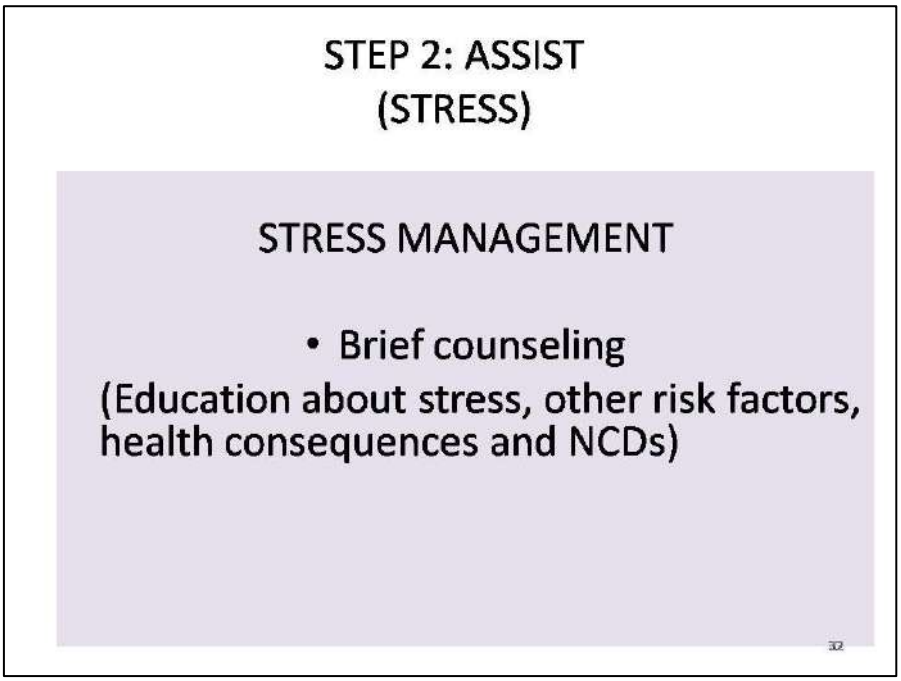

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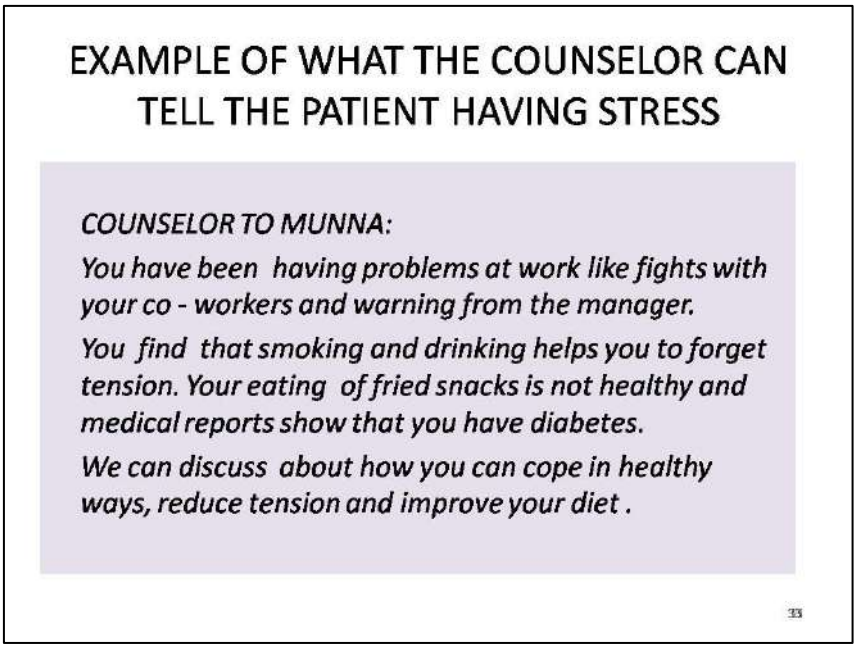
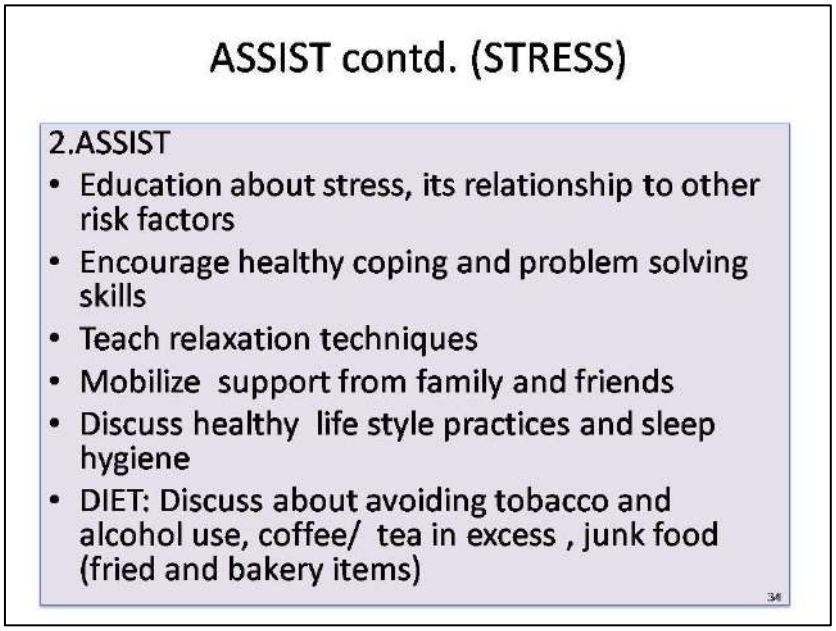


At this point, you can also discuss the group responses to Munna's case study and highlight the appropriate ways of responding.

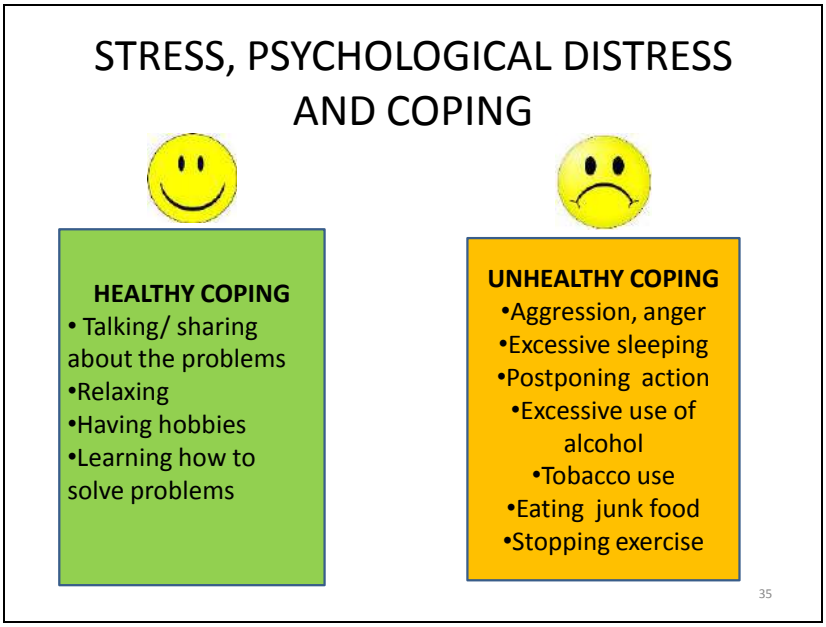
It is also important that the counselor provides a supportive environment so that the patient can share their psychological distress. Persons are more ready to share their psychological distress if they feel that the caregiver will listen, not judge and be supportive.

Slide 34



The best way to address stress is to prevent it from happening again. For this, the Counselor has to help the patient to identify the main problem as it will not be possible to simply eliminate all sources of stress. Wherever possible, specific causes of stress, its effects on the patient (physical and emotional problems) and methods to reduce stress are a part of intervention. Strengthening the individual's ability to cope adjusting external demands (where possible) is important. It is best to plan an intervention based on addressing the individual's specific problems.

Slide 35



UNHEALTHY COPING: Many people respond to stress by using alcohol, tobacco or other drugs, becoming physically active, eating poorly or eating unhealthy foods. These can contribute to NCDs. Other unhealthy ways of coping are becoming angry and irritated (beating, shouting). Others may respond to stress by sleeping too much, postponing work or day-dreaming. Some of these ways of coping can become an unhealthy life style and harmful to health. The Counselor can provide information about harmful lifestyles and promote healthy coping methods.

HEALTHY COPING: These may help the person to reduce stress without causing any side effects. Talking about the problem with someone (friend, relative, teacher, attending self- help groups), relaxing through physical activity (walking, sports, yoga, gardening and gym), having hobbies or just laughing the problem off may help a person. Changing the attitude towards stress, lowering expectations and prioritizing needs are ways to reduce stress. Meditation, attending spiritual discourses, visiting places of worship or cultural activities, having a supportive network of family and friends are also ways in which stress can be reduced.

Through this approach of addressing both general ways of coping and focusing on specific problems, the person learns to deal with the current problem and also learns healthy ways of coping which can be used if there are problems in future. Thus, the Counselor strengthens the person's immunity against future stress by teaching effective coping skills.

Slide 36

STEP 2: ASSIST (DEPRESSION)

- Brief counseling

(Education about depression and anxiety, other risk factors, health consequences and NCDs)

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Slide 37

EXAMPLE OF WHAT THE COUNSELOR CAN TELL THE PATIENT HAVING DEPRESSION

Counselor to Raju:

You are been having some difficulties of late. You said that you have been unable to go to work due to tiredness and body ache.

You have been finding it difficult to sleep and not keen to go out and say that you want to end your life.

Your family is concerned about your health especially your BP that has gone up.

The medicines have not been continued.

We can discuss ways to manage the current difficulties.

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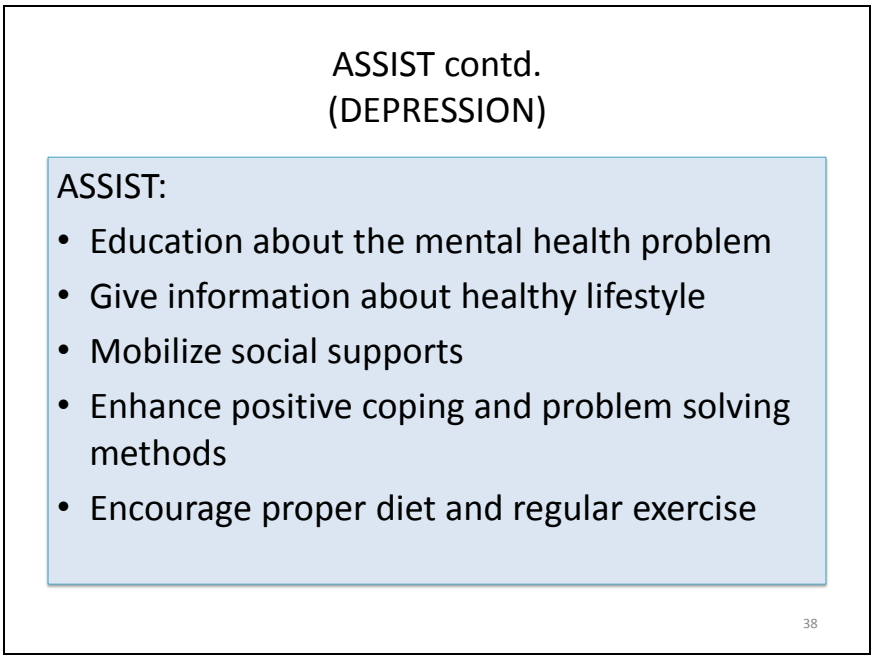

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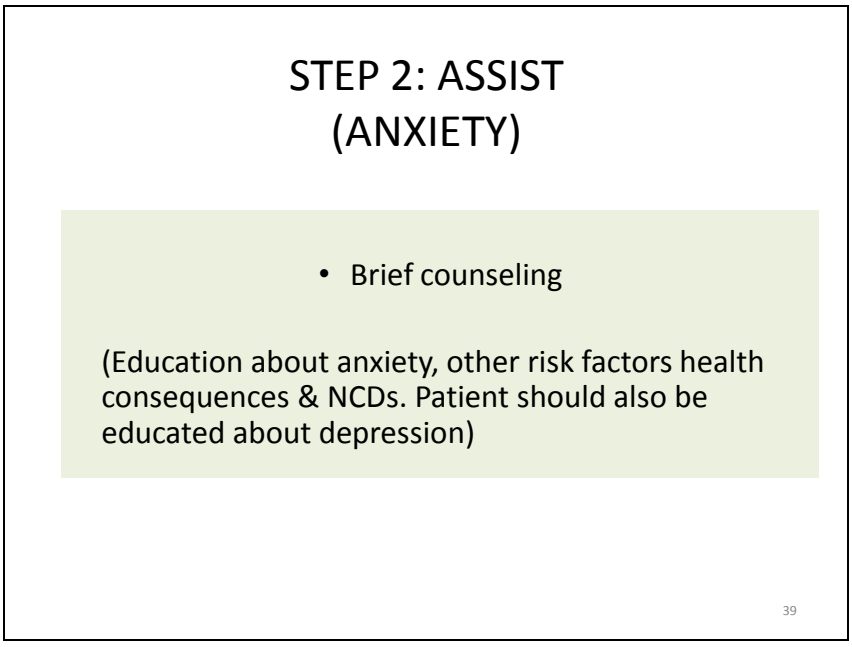

It is useful to explain to patients how becoming anxious can worsen a physical condition and that if one is able to recognize anxiety and learn simple techniques like slow breathing, a simple technique of relaxation, learning to distract oneself, both anxiety and its physical complications can be prevented. Many of the techniques suggested in stress management are also useful for managing anxiety.

Slide 40

EXAMPLE OF WHAT THE COUNSELOR CAN TELL THE PATIENT HAVING ANXIETY

Counselor to Sheela:

'You have been having chest pain, burning sensation in your chest, sweating, dry mouth, difficulty to relax and sleeping.

I can understand your sadness that you do not have children and about how this is coming in the way in your relationship with your in-laws.

Your medical reports show that you have no physical problems.

You are anxious about your current life situation and I can understand how you feel especially when you have no one to share your feelings.

We can work together and discuss ways in which we can reduce your anxiety and cope better.'

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Slide 41

ASSIST contd. (ANXIETY MANAGEMENT)

2.ADVISE

- Education about the mental health problem
- Teach relaxation techniques
- Mobilize support from family and friends
- Encourage healthy coping skills, problem-solving abilities
- Suggest lifestyle changes in diet and exercise

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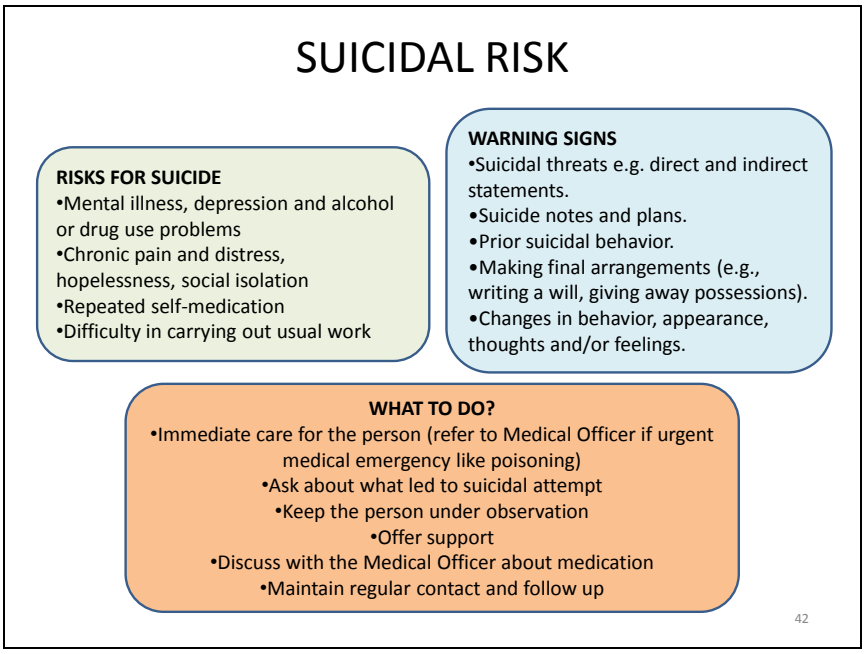
Slide 42



Depression is a common mental disorder. Depression can become chronic and create more problems in the person's daily life. In some cases, depression can lead to suicide[103]. Depression can come with symptoms of anxiety. Those having mild depression can have some difficulty in doing regular activities.

Risk factors for suicide are mental illness, depression and alcohol or drug use problems, chronic pain and distress, hopelessness and social isolation, repeated self-medication and difficulty in carrying out usual work[104].

Warning signs can be suicidal threats in the form of direct and indirect statements, suicide notes and plans, prior suicidal behaviour, writing a will, changes in behaviour, appearance, thoughts or feelings[105].

What the Counselor should do is to show care for the person and refer to the Medical Officer for emergencies. Ask the person directly if they are thinking about suicide and ensure that the person is not alone. Keep regular contact and follow up.

[103] World Health Organization. Public health action for the prevention of suicide, 2012. www.apps.who.int/iris/bitstream/10665/75166/1/9789241503570_eng.pdf

[104] World Health Organization.mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-Specialized Health Settings: Mental Health Gap Action Programme (mhGAP).www.ncbi.nlm.nih.gov/books/NBK138694/ mhgap on suicides, 2010.

[105] www.nasponline.org/resources/crisis_safety/suicideprevention.aspx

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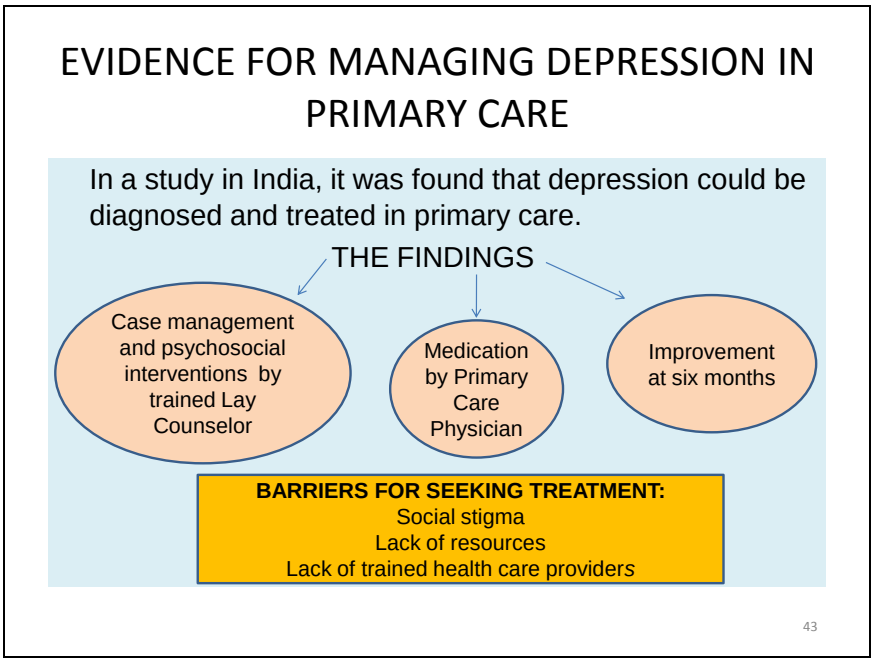
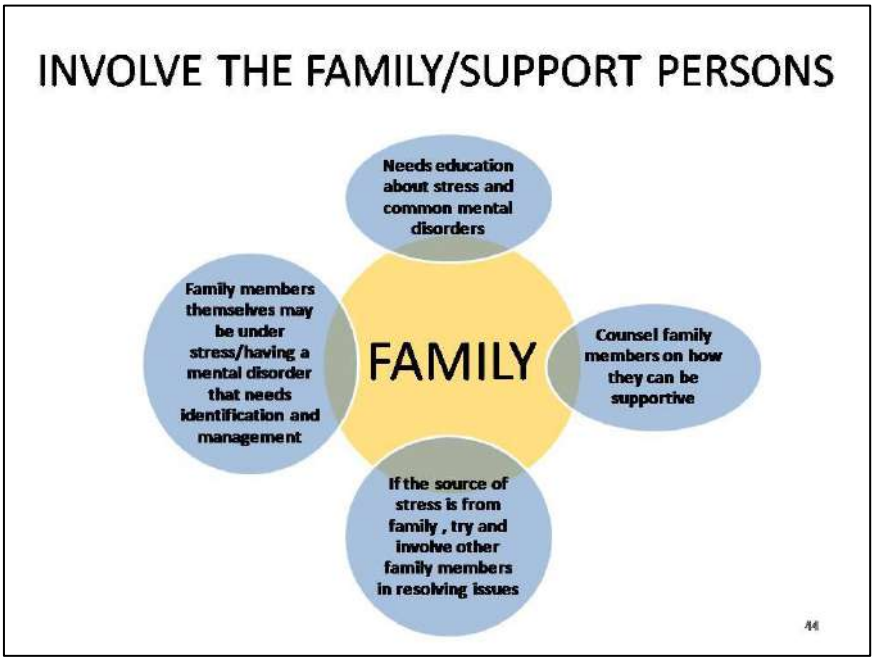


A study in India reveals the effectiveness of managing depression including anxiety in primary care[106].

Slide 44



[106] Patel V, Weiss HA, Chowdhary N, Naik S, Pednekar S, Chatterjee S, De Silva MJ, Bhat B, Araya R, King M, Simon G, Verdeli H, Kirkwood BR. ffectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial. Lancet. 2010 Dec 18;376(9758):2086-95. doi: 10.1016/S0140-6736(10)61508-5. Epub 2010 Dec 13.

WHY IS IT IMPORTANT TO INVOLVE FAMILY MEMBERS/ SIGNIFICANT OTHERS? Risk factors especially stress, tobacco and alcohol use can harm not only the patient but also to the family. Use of tobacco can affect the health of others inhaling the smoke. Experiences of stress in the patient can lead to frequent quarrels, physical abuse (hitting) and poor interpersonal relationships at home. Where alcohol use is concerned stigma or shame due to alcohol use in the patient can prevent the family from taking help. In such a case, the Health Centre plays an important role in the involvement the family/ significant others in the three steps to not only help the patient but also to improve family interactions. The patient's prior consent to involve the family/ significant others should be obtained.

HOW CAN WE HELP? Strengthening support systems for the patient, educating about coping and problem solving skills to family members and encouraging family rituals or activities that enhance quality of life for the patient including family members should be included in the Counselor's interventions. Referral of family members having risk factors themselves (especially stress) to the Medical Officer can be arranged. Interventions among couples have been shown to have better treatment outcome compared to individual interventions for alcohol related problems (Natala et al, 2010)[107].

It is important to involve the family member while intervening to address stress and common mental disorders. Often, the family member may not be aware that the individual is stressed or is suffering from a mental disorder. They may think the person is weak, not taking responsibility, or exaggerating. Clarifying about stress and common mental disorders helps them to be more understanding and supportive.

In some situations, the family members may be responsible for the stress that the person is facing. Whenever possible, the counsellor may offer to talk to the family members to address these issues.

Family members themselves may be facing stress or a mental disorder which has not been recognised. Involving the family may help in recognising and handling these problems.

[107] Nattala,P., K.S.Leung, Nagarajaiah,M.P.,and Murthy, P. (2010). Family member involvement in relapse preventions improves alcohol dependence outcomes: A prospective study at an addiction treatment facility in India. Journal of Indian Studies on Alcohol and Drugs, 71 (4): 581-587.

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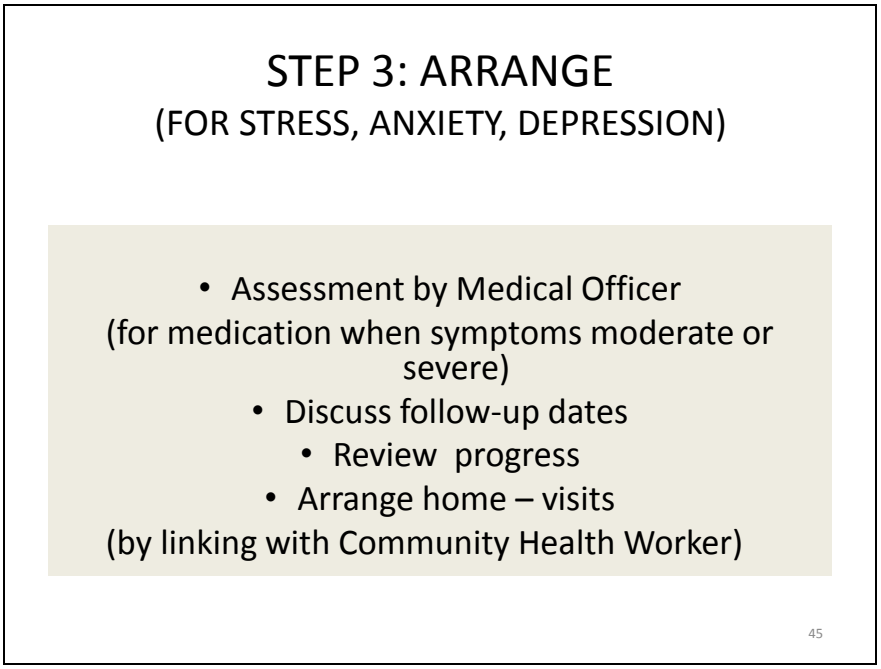

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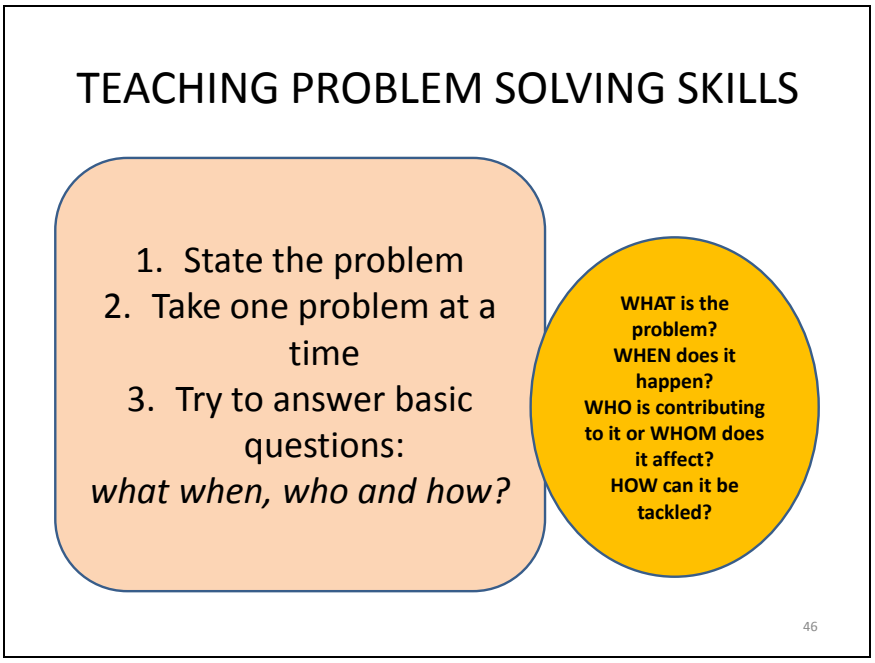
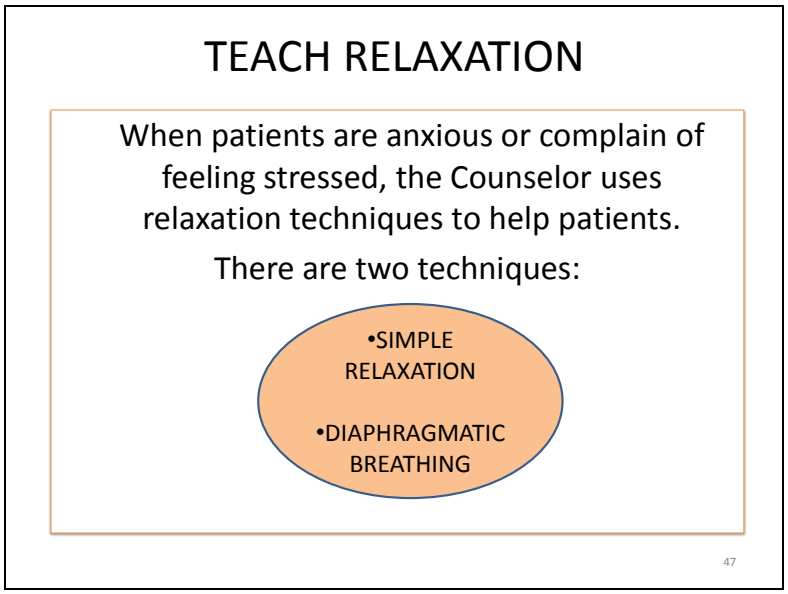


The Counselor should teach the 3 steps to learn the skill of problem solving. The patient should be encouraged to practice this skill and review can be done during follow -up.

DISTRIBUTE HANDOUT 7.6 (PROBLEM SOLVING SKILLS).

Slide 47



The Counselor can help the patient facing stress or anxiety about relaxation techniques. A demonstration can be done after ensuring no disturbance and privacy. The patient can be advised to practice it at home regularly and review can be done during follow- up.

DISTRIBUTE HANDOUT 7.7 (RELAXATION TECHNIQUES).

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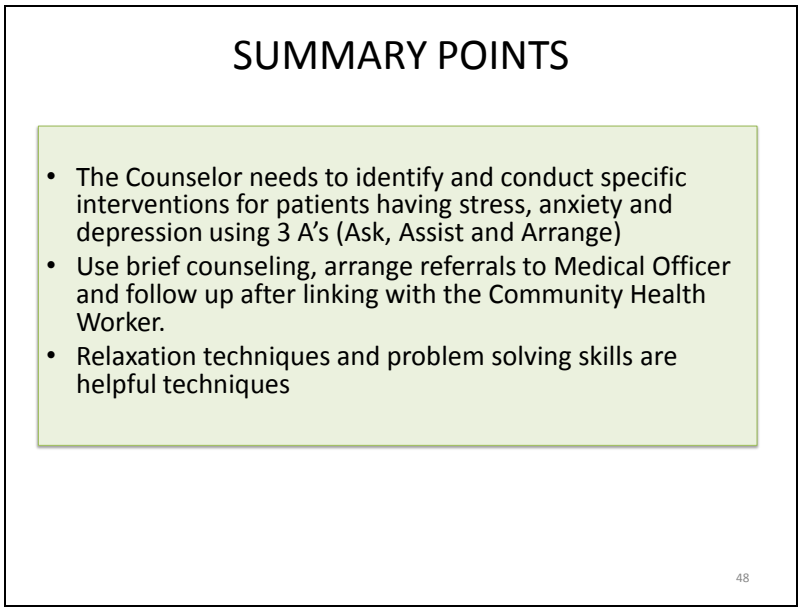

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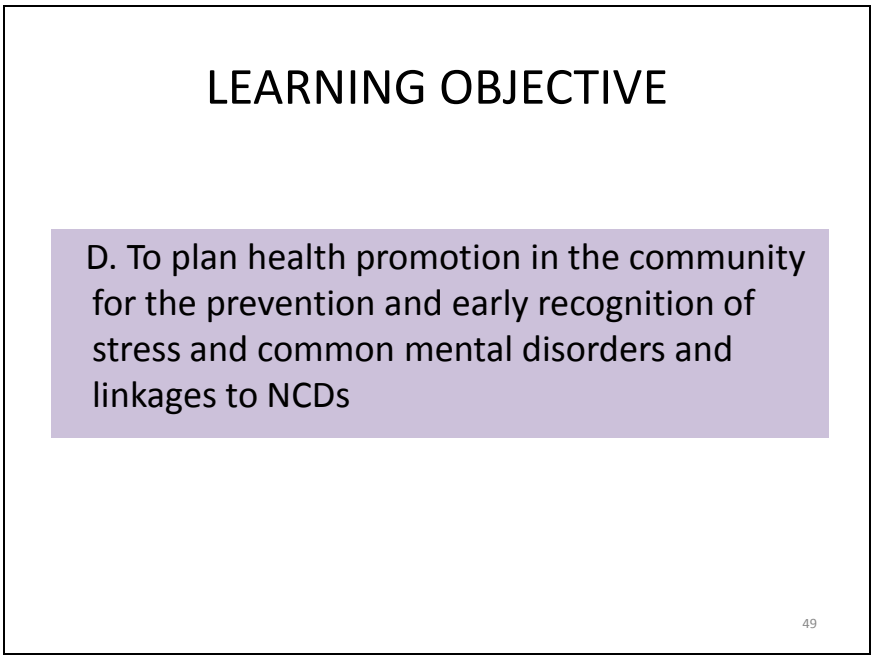

INSTRUCTION

Help each group to list out suitable methods for health promotion activities to address stress & mental health problems in the community. Each group will present their health promotion activity using chart papers and pens.

ACTIVITY (Group Work)

Total duration: 1 hour

Divide participants into small groups and ask them to nominate a representative to make the presentation and give each group chart papers and felt pens to make points (30 minutes to prepare presentation).

Facilitate discussion during presentation (30 minutes).

Slide 50

A WORKSHEET (Group Work)

Health promotion in the community on stress and common mental disorders

Choose a specific group in the community and plan a health promotion programme

(youth, self - help groups, schools, women, farmers, workers, village panchayat leaders, sanitation committees, etc)

- *Specify duration of activity, contents and methodology*

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WRAP UP

- *What do you take back at the end of this module?*
- *As a Counselor, name at least 2 things you will do in the field*

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In the wrap up, focus on the roles of the Counselor in the clinical setting and ways in which the Counselor can be involved in mental health promotion in the community. Encourage the Counselor to be aware of the multiple factors that can lead to stress and common mental health disorders in the community and to be a champion for health.

HANDOUTS

7.1. NOTES ABOUT STRESS
7.2. CHECKLIST FOR STRESS
7.3. PSYCHOLOGICAL DISTRESS QUESTIONNAIRE
7.4. CHECKLIST FOR DEPRESSION
7.5. CHECKLIST FOR ANXIETY
7.6. STEPS TO OFFER HELP TO THE PATIENT
7.7. PROBLEM SOLVING SKILLS
7.8. RELAXATION TECHNIQUES

7.1. NOTES ABOUT STRESS:

- *Stress* is caused by an imbalance between demands made from the environment and resources available to cope with those demands
- *Causes of stress* can be due to difficult interrelationships at home, work conditions, poor living conditions, socio-economic conditions and disability
- *Stress protec*ts human survival and is a natural mechanism
- 'Fight or flight syndrome' sends signals leading to physiological responses
- Coping of stress through abuse of alcohol, tobacco, eating junk food, stopping exercise can worsen health and lead to NCDs
- *Symptoms of stress, depression and anxiety* can be manifested in physical, emotional and behavioural forms
- Chronic stress can impact lower immunity and increase vulnerability to worsen diseases.

7.2. CHECKLIST FOR STRESS

PHYSICAL SYMPTOMS INDICATING STRESS

- Headache
- Muscle tension or pain
- Chest pain
- Reduced immunity to infection
- High blood pressure
- Fatigue
- Thirst
- Weight gain or loss of weight
- Stomach upset
- Skin disorders
- Back pain
- Sleeplessness
- Loss of interest in sexual activity

PSYCHOLOGICAL DISTRESS MANIFESTING THROUGH DISTURBANCES IN FEELING, THOUGHT AND BEHAVIOUR

EMOTIONAL SYMPTOMS

- Anxiety
- Restlessness
- Lack of motivation or focus
- Irritability or anger
- Sadness or depression

BEHAVIOURAL SYMPTOMS

- Overeating or under eating
- Anger outbursts
- Difficulty to concentrate or memory is impaired
- Abuse of alcohol and other drugs
- Tobacco use
- Social withdrawal

7.3. QUESTIONNAIRE FOR PSYCHOLOGICAL DISTRESS

Kessler's Psychological Distress Scale[108]

Please tick the answer that is correct for you:	All of the time (score 5)	Most of the time (score 4)	Some of the time (score 3)	A little of the time (score 2)	None of the time (score 1)
1. In the past 4 weeks, about how often did you feel tired out for no good reason?					
2. In the past 4 weeks, about how often did you feel nervous?					
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
4. In the past 4 weeks, about how often did you feel hopeless?					
5. In the past 4 weeks, about how often did you feel restless or fidgety?					
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
7. In the past 4 weeks, about how often did you feel depressed?					
8. In the past 4 weeks, about how often did you feel that everything was an effort?					
9. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?					
10. In the past 4 weeks, about how often did you feel worthless?					

[108] Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine, 2002; 32: 959-976.

7.4. CHECKLIST FOR DEPRESSION

Symptoms should be present for a month or more and every symptom should be present for most of every day. At least one of these following symptoms for most days (most of the time) for at least 2 weeks:

1. Persistent sadness or low mood; and/or ( )
2. Loss of interests or pleasure ( )
3. Fatigue or low energy ( )

If any of above present, ask about associated symptoms:

4. Disturbed sleep ( )
5. Poor concentration or indecisiveness ( )
6. Low self-confidence ( )
7. Poor or increased appetite ( )
8. Suicidal thoughts or acts ( )
9. Agitation or slowing of movements ( )
10. Guilt or self-blame ( )

The 10 symptoms then define the degree of depression and management is based on the particular degree

- **not depressed** (fewer than four symptoms)
- **mild depression** (four symptoms)
- **moderate depression** (five to six symptoms)
- **severe depression** (seven or more symptoms, with or without psychotic symptoms)

7.5. CHECKLIST FOR ANXIETY

The symptoms should be present for a period of at least *six months* with prominent tension, worry and feelings of apprehension, about every-day events and problems and *at least four symptoms* out of the following list of items must be present, of which at least one from items (1) to (4).

Autonomic arousal symptoms

(1) Palpitations or pounding heart, or accelerated heart rate. ( )
(2) Sweating. ( )
(3) Trembling or shaking. ( )
(4) Dry mouth (not due to medication or dehydration). ( )

Symptoms concerning chest and abdomen

(5) Difficulty breathing. ( )

(6) Feeling of choking. ( )

(7) Chest pain or discomfort. ( )

(8) Nausea or abdominal distress (e.g. churning in stomach). ( )

Symptoms concerning brain and mind

(9) Feeling dizzy, unsteady, faint or light-headed. ( )

(10) Feelings that objects are unreal (de realization), or that one's self is distant or "not really here" (depersonalization). ( )

(11) Fear of losing control, going crazy, or passing out. ( )

(12) Fear of dying. ( )

General symptoms

(13) Hot flushes or cold chills. ( )

(14) Numbness or tingling sensations. ( )

Symptoms of tension

(15) Muscle tension or aches and pains. ( )

(16) Restlessness and inability to relax. ( )

(17) Feeling keyed up, or on edge, or of mental tension. ( )

(18) A sensation of a lump in the throat, or difficulty with swallowing. ( )

Other non-specific symptoms

(19) Exaggerated response to minor surprises or being startled. ( )

(20) Difficulty in concentrating, or mind going blank, because of worrying/anxiety. ( )

(21) Persistent irritability. ( )

(22) Difficulty getting to sleep because of worrying. ( )

(Please note: if the participant has at least four symptoms, of which at least one from items (1) to (4) from the above list.

7.6. STEPS TO OFFER HELP TO THE PATIENT

STEP 1: ASK

- About symptoms of Stress and Psychological Distress
- About symptoms of Depression and Anxiety

Use checklists for symptom identification stress, depression and anxiety

STEP 2: ASSIST (STRESS MANAGEMENT)

Brief counseling;

- Education about stress, its relationship to other risk factors
- Encourage healthy coping and problem solving skills & ways to manage anger
- Teach relaxation techniques
- Mobilize support from family and friends
- Discuss healthy life style practices & sleep hygiene
- DIET: Discuss about avoiding tobacco & alcohol use, coffee/ tea in excess , junk food (fried & bakery items)

STEP 2: ASSIST (DEPRESSION)

Brief counseling:

- Education about the mental health problem:
- Give information about healthy lifestyle
- Mobilize social supports
- Enhance positive coping & problem solving methods
- Encourage proper diet and regular exercise

STEP 2: ASSIST (ANXIETY)

Brief counseling:

- Education about the mental health problem:
- Teach relaxation techniques
- Mobilize support from family and friends
- Encourage healthy coping skills, problem-solving abilities
- Suggest lifestyle changes in diet & exercise

STEP 3: ARRANGE (for stress, anxiety & depression)

- Referral to Medical Officer (when symptoms are moderate or severe)
- Discuss follow-up dates
- Review progress
- Arrange home visits

7.7. PROBLEM SOLVING SKILLS

Problem solving skills help a person who is in distress having too many problems. Feelings of being overwhelmed and despair can come in the way of finding proper solutions. When a person feels that his/ her problems are building up and nothing is under control, feelings of helplessness and dejection can develop.

STEPS:

1. State the problem: Assessing and defining the problem is the first step in problem solving.

2. Take each problem, one at a time.

3. Answer these questions to understand your problem and to tackle it.

- **What** is the problem?
- **Whom** does it affect? Or **who is** contributing to it?
- **Where** did or does it happen?
- **When** did or does it happen?
- **Why** does it happen?
- **How** can it be tackled (come up with many solutions or alternatives and implement them until goal is reached)

Only assessing wouldn't help, we should also set an objective. In its simplest and most useful form, an *objective is* a *clear statement regarding something that* an *individual is to* achieve or a *general goal* that *can* be *reached* by a *number of smaller steps.*

7.8. RELAXATION TECHNIQUES

When patients are anxious or complain of feeling stressed, the Counselor can use relaxation techniques to help patients. There are two techniques:

A. Simple Relaxation
B. Diaphragmatic Breathing

Instructions: Explain to the patient how relaxation will help him/ her manage stress. Help the patient to find a comfortable position before giving instructions. Use a comfortable bed to lie on or a chair to sit (head supported and rested). Ensure comfortable clothes, privacy and no disturbance.
Say to the patient (in a soft voice):

Counselor to the patient: 'Now let us discuss some of the relaxation techniques that are suitable for you'.

Relaxation Techniques	*Can I Practice this?*
1. Simple relaxation • *Assume a comfortable position in a quiet environment. Select some neutral, peaceful or pleasant thought or object and focus full attention on it, while at the same time maintaining a passive attitude.* • *Take several deep respirations and exclude unpleasant thoughts. Deep breathing exercises are a form of relaxation, and when practiced regularly, can bring about relief from stress.* • *Next, tighten in sequence the following muscle groups. Tense and relax the muscles group: 1. Dominant hand and arm, 2. Non-dominant hand and arm, 3. Facial muscles, 4. Shoulder and upper torso, 5. Abdominal muscles and 6. Legs and feet.* • *Following completion of the muscles tensing and relaxing, take several deep respirations, sit quietly for a few minutes and focus attention on the pre-selected thought or object.*	
2. Diaphragmatic breathing • *Sit comfortably, with loose clothes.* • *Place one hand on the upper part of your abdomen.* • *Slowly inhale through your nose. As you do so, push your stomach out and feel your diaphragm expand. Do not suck in your abdomen.* • *Now exhale through pursed lips, feeling your abdomen fall inwards. You may even push gently with your hand, allowing the abdominal muscles fall inwards, at the same time relaxing your neck, chest and shoulder muscles.* • *Repeat this exercise for 5-10 minutes, 3-4 times a day.*	

While practicing these techniques, please note the following:

- Concentrate fully on what you are doing. Do not allow any other thought to cross your mind.
- Do not fall asleep
- Wear comfortable clothes.
- Concentrate only on that part of the body engaged in tensing and relaxing.

Team work and developing an integrated approach to managing risk factors for NCDs

Session 8

Objectives of the session

By the end of this session, the participants will understand the following:

- The patient's journey to help seeking and the various points where risk factors can be identified and addressed
- The roles and responsibilities of team members in carrying out activities to prevent and reduce risk factors for NCDs
- The involvement of all care providers as a co-ordinated team to carry out activities in the clinic and community to prevent and reduce risk factors for NCDs

Organization of the session

- *Facilitator's reading material:* The facilitator should read the material before the session. Sources for specific information are quoted and included as references in the footnotes.

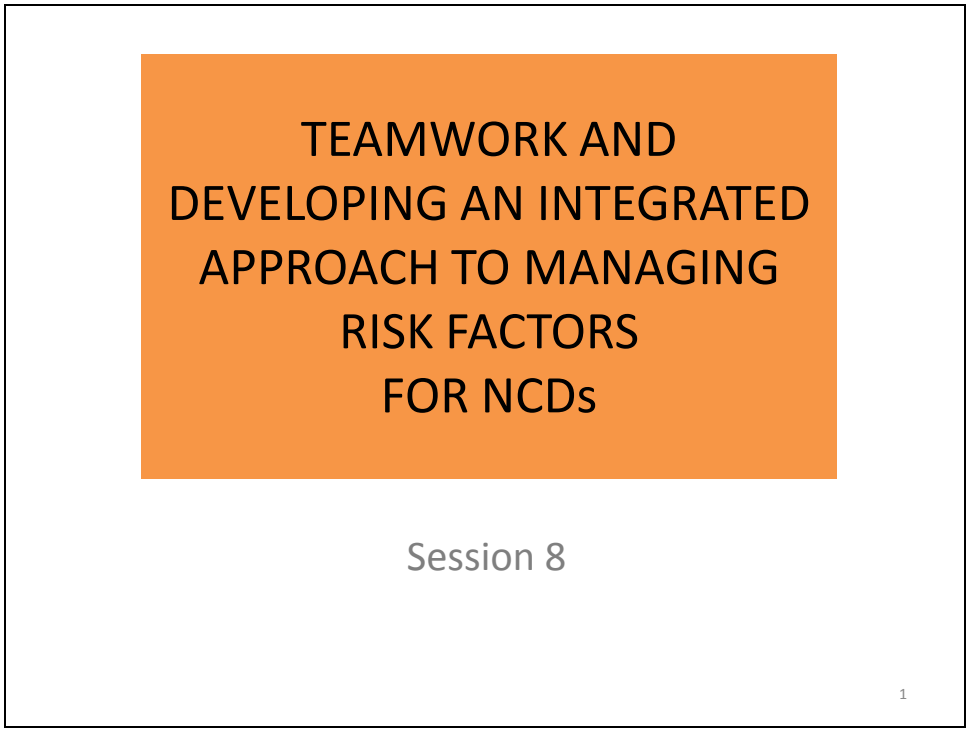
- *Handouts:* Copies of handouts will be made before the session and distributed either before or after the session. List of handouts are included at the end of each session.

- *Power point presentation:* A DVD containing the power point presentations accompanies the training manual. The slides for each session are reproduced in the manual to aid the facilitators.

- ***Activities****:*

  Activities during each training session may include:

  - **Brainstorming** or whole group interaction, indicated by the letter '**B**' and the symbol 
  - **Group activity** or discussion in small groups, indicated by the letter **GA** and the symbol 
  - **Individual Activity**, indicated by letter **IA** the symbol 
  - **Role Play** is indicated by the letter **RP** and symbol 



INSTRUCTION

Close the training by discussing how health care providers work as a team to address risk factors and leading to NCDs.

Activity (Group Work)

TEAMWORK IN ACTION

Total duration: 30 minutes

Divide participants into groups and give chart papers and pens for the activity. The group will nominate a representative and prepare the presentation (15 minutes). Ask the group how health care providers work as a team to help the patient from the time he/she enters the Health Centre. Arrows can be used to explain linkages among the team of health care providers in the given diagram (use Slide 3). Summarize after group presentations.

Slide 2

A WORKING AS A TEAM

How can we work as a team in primary care?

The team:

- Medical Officer
- Counselor
- Community Health Worker
- Health Centre
- District Hospital

(Duration: 30 minutes)

2

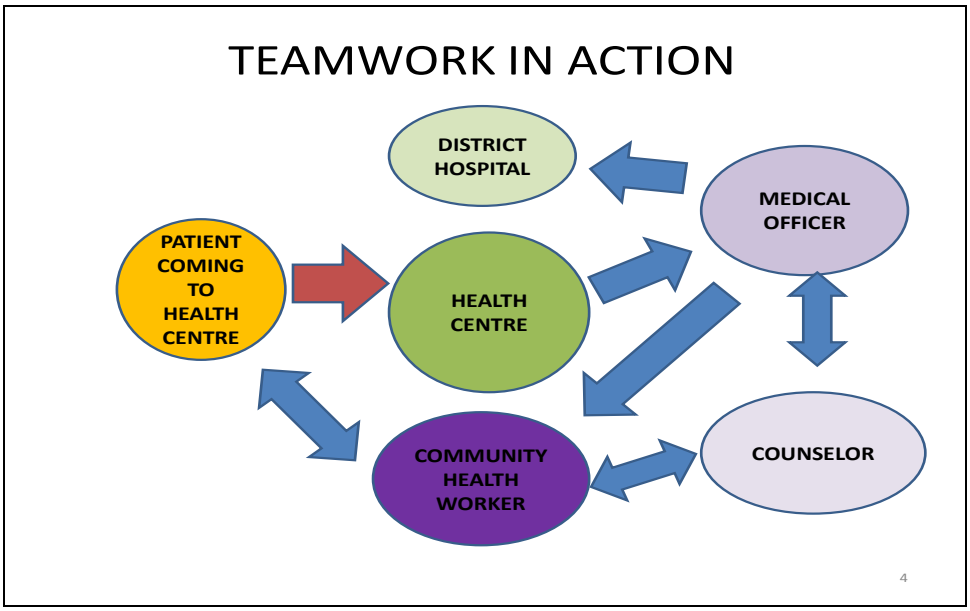
Slide 3

TEAMWORK IN ACTION (USE ARROWS)

3

Ask the groups to use arrows to depict linkages. Give 15 minutes for group work and 15 minutes for presentation. Discuss Slide 4 after group presentation.

Slide 4



There are many ways of interpreting the patient's journey to seek help. The patient can be referred by the Community Health Worker or come directly to the Health Centre after which he/ she is seen by the Medical Officer (including Nurse). The Medical Officer treats the patient and refers him/ her to the Counselor for further help. The Counselor after seeing the patient can refer the patient back to the Medical Officer for health related issues/ medication and link up to the Community Health Worker for home visits and follow-up.

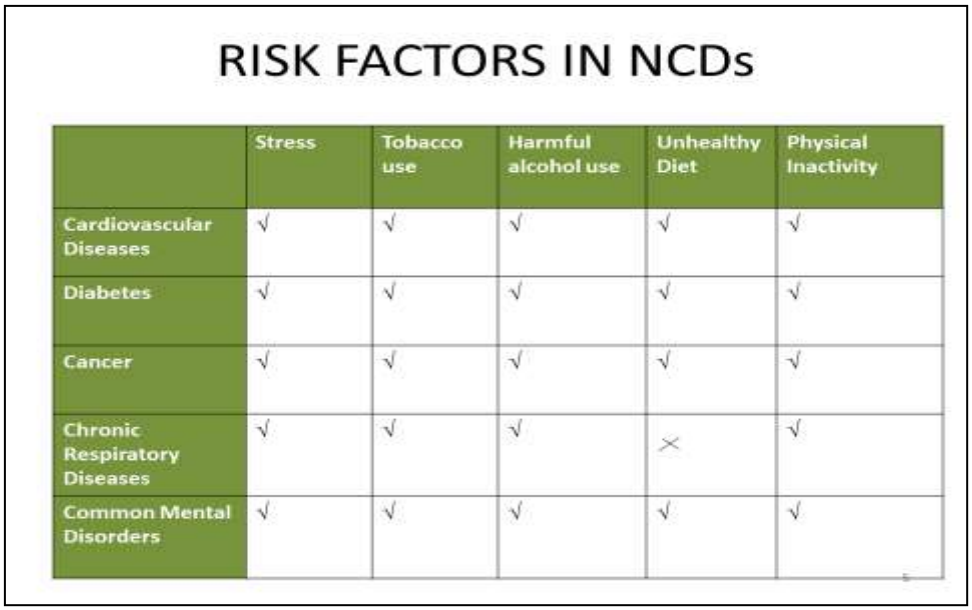
Use of contemporary technology

All team members can use contemporary technology to engage and maintain patients in follow-up. SMS messaging, phone calls, quit lines and internet-based communication can increasingly be exploited to improve contact with patients and provide them continued support.

Referral

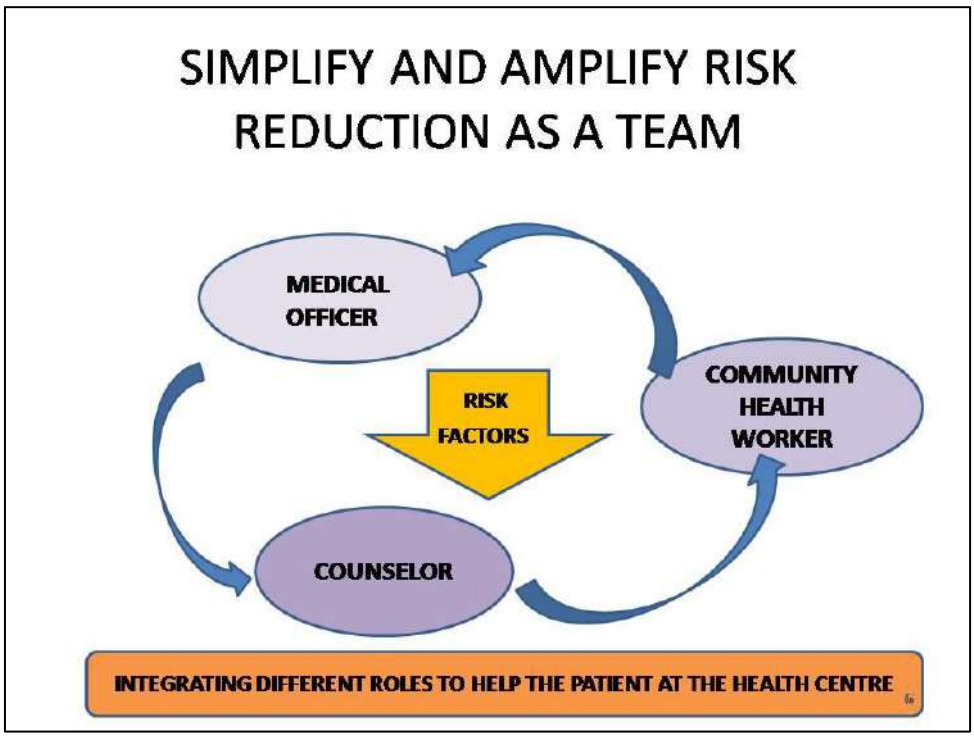
When there is a need for specialized care (beyond the capacity of primary care), the patient will be referred to the specialist/ District Hospital by the Medical Officer.

Slide 5



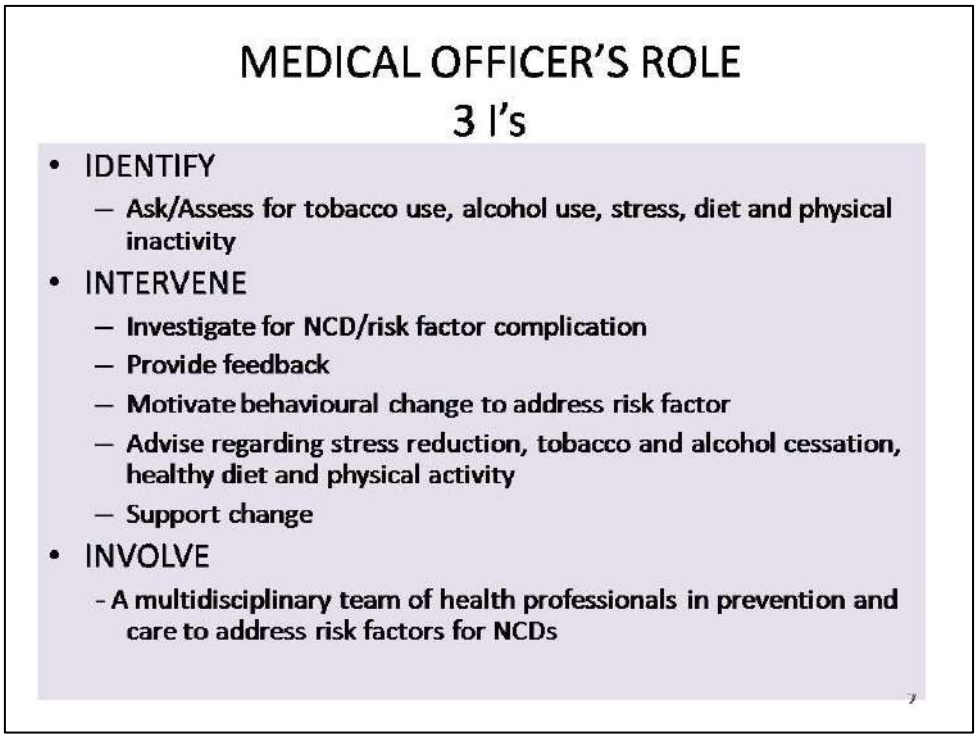
The more the risk factors, greater are the chances of developing NCDs.

Slide 6



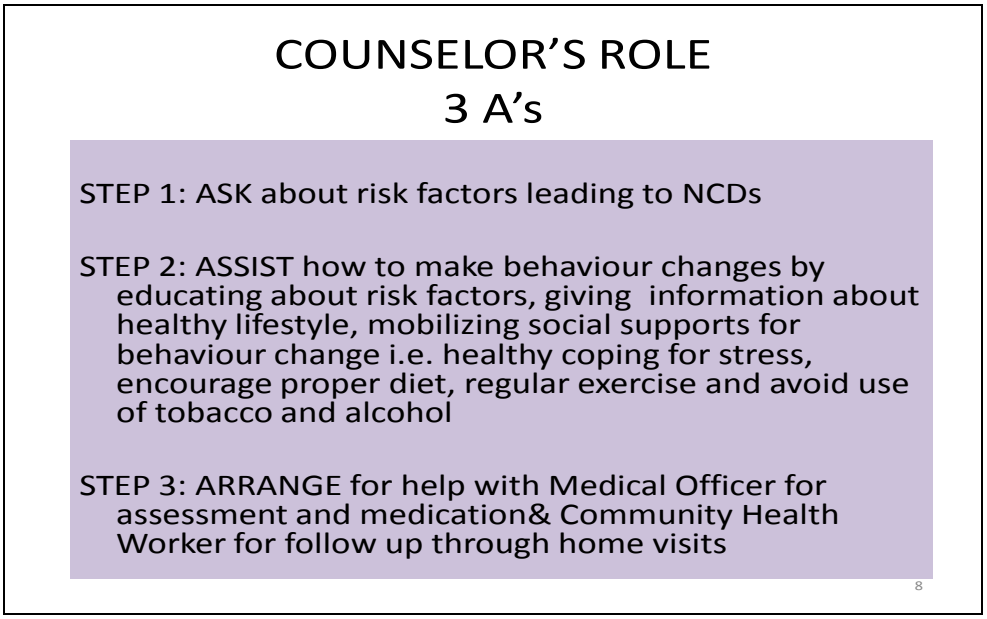
The importance of working together as a team is greatly beneficial for the patient to address risk factors for NCDs.

Slide 7



The Medical Officer will use the 3 I's approach when helping the patient.

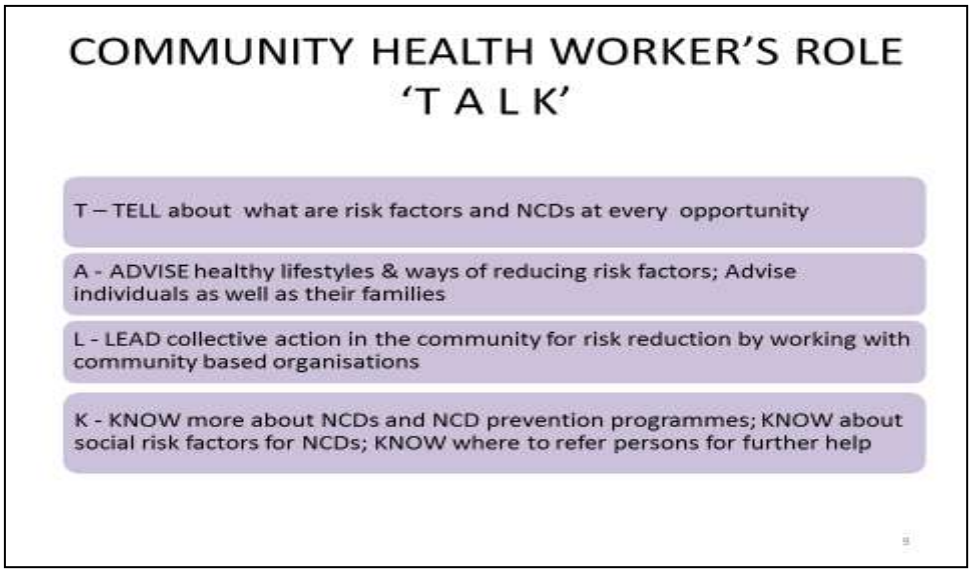
Slide 8



The Counselor will use the 3 A's approach when helping the patient.

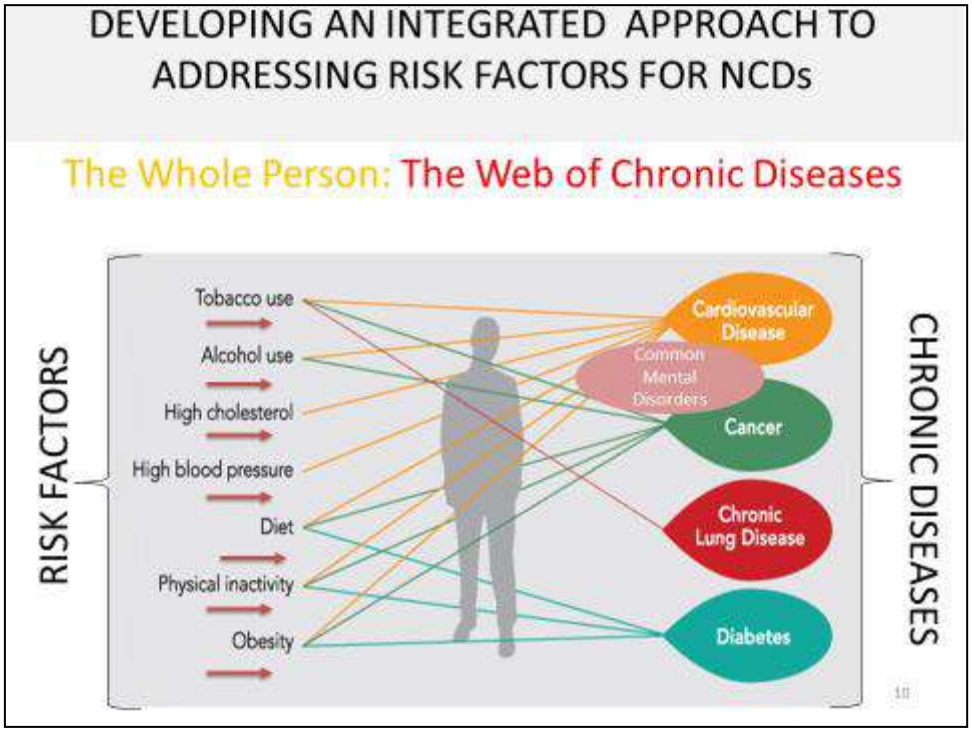
Discuss what information and in what format the Counselor will maintain records of the patient.

Slide 9



The Community Health Worker will use the TALK Model approach when helping the patient.

Slide 10



An integrated approach to addressing risk factors leading to chronic diseases is important.

Slide 11

What are the barriers or challenges you see as a health care provider to address risk factors leading to NCDs?

11

Ask the participants to share about challenges that health care providers can face in addressing and offering help for risk factors leading to NCDs. Encourage individuals to share how they can overcome barriers or have done so in the past.

Annexure 1

REDUCING RISK FACTORS FOR NON COMMUNICABLE DISEASES (NCDs)

IN PRIMARY CARE

Training Programme for Counselors

PRE TRAINING EVALUATION QUESTIONNAIRE (COUNSELORS)

NAME: **DATE:**

1. Non communicable diseases (NCDs) are:

a) Cancer, Tuberculosis, Cholera, Stroke, Migraine, Polio, Malaria
b) Cancer, Diabetes, Cardiovascular diseases Respiratory diseases, Depression and Anxiety
c) Swine Flu (H1N1), HIV/AIDS, Diabetes, Asthma, Typhoid , Dysentery, Depression
d) Mumps, Measles and Rubella

2. The five risk factors such as, tobacco and alcohol use, unhealthy diet, lack of physical exercise and stress are:

a) Isolated (have no connection with each other)
b) Interrelated
c) Should be managed individually
d) The only risk factors for NCDs

3. Physiological risk factors for NCDs are:

a) Raised blood pressure and blood glucose levels, obesity
b) Use of tobacco and alcohol and poor physical activity
c) Lack of exercise
d) Exposure to environmental smoke

4. The risk factors leading to NCDs that are modifiable are:

a) Family history of diseases
b) Gender
c) Managing stress and avoiding unhealthy diets

d) Age of a person

5. Qualities of an effective counsellor are:

a) Poor self – awareness, making problems known to all, over-involvement
b) Warmth, not -judging, genuine, empathy
c) Judging, not expressing interest or caring
d) Being distant, firm and talking down to the patient

6. Listening is an important skill used in counseling and consists of:

a) Looking at the patient when talking, using a kind tone, speaking slowly and clearly
b) Looking at your watch or mobile phone during sessions or yawning
c) Not looking at the patient but outside the room to see what's happening
d) Communicating to the patient at the start that you will spend only a limited time with the patient

7. Too much stress can lead to:

a) Depression and anxiety which are common mental health problems
b) Making a person drink alcohol and smoke a lot
c) Neglecting physical activity and healthy eating habits
d) All of the above

8. An important technique to address stress among patients is to:

a) Ask (for stress)
b) Assist (through education and brief counselling)
c) Arrange (to meet Medical Officer for assessment of symptoms of mental illness and treatment and Health Worker for home visits)
d) All of the above

9. Effective ways of coping with stress include:

a) Showing aggression and anger, eating junk food, gambling
b) Having hobbies, learning to solve problems and sharing about the problems
c) Excessive sleeping, postponing action

d) Avoiding the situation and withdrawing

10. Chewing tobacco or smoking a few cigarettes a day is not harmful.

    True/ False

11. Tobacco contains the chemical nicotine which makes the brain feel good making it harder to quit.

    True/ False

12. Alcohol induces good sleep and that is why it is recommended to have a small drink.

    True/ false

13. Eating good food or drinking buttermilk or lime juice neutralises the harmful effects of alcohol.

    True/ false

14. Common reasons why people consume alcohol include:

a) Social factors like peer pressure and easy availability of alcohol
b) Genetic risk (family history of alcohol use)
c) Poor stress control, curiosity
d) All of the above

15. Reasons why people commonly have unhealthy diet include all the following EXCEPT:

a) Good knowledge of the benefits of healthy eating and the risk of unhealthy eating
b) Lack of awareness of locally grown food that is seasonal and nutritious
c) Easy availability of fast food and advertisements
d) Tension and stress in daily life

.

16. Unhealthy diet and extra weight can lead to:

a) Typhoid , Hepatitis, malaria
b) Diabetes, cancer, heart disease
c) Cholera, diabetes, HIV/AIDS
d) Tuberculosis

17. Foods that we should consume to avoid risk for NCDs include:

a) Cereals, millets, homemade foods, skimmed milk, salt within 6 gms per day
b) Papads, pickles, salted biscuits, red meat, samosas
c) Ghee, butter, vanaspati, white rice, maida
d) Fast foods

18. Physical activity and exercise is important for:

a) Controlling body weight
b) Building strong muscles and bones
c) Improving mood
d) All of the above

19. The following are examples of physical activity EXCEPT:

a) Watching television throughout the day
b) Being active at home (washing, mopping)
c) Taking the stairs
d) Combining walking with shopping

20. In primary care to address risk factors for NCDs, a Counselor's primary role is to:

a) Ask, Assist, Arrange (3 A's)
b) Identify NCDs and provide intervention for NCDs
c) Carry out case finding in the community
d) Deliver public health lectures

Annexure 2

REDUCING RISK FACTORS FOR NON COMMUNICABLE DISEASES (NCDs)

IN PRIMARY CARE

Training Programme for Counselors

POST TRAINING EVALUATION QUESTIONNAIRE (COUNSELORS)

NAME: **DATE:**

1. Non communicable diseases (NCDs) are:

    a) Cancer, Tuberculosis, Cholera, Stroke, Migraine, Polio, Malaria
    b) Cancer, Diabetes, Cardiovascular diseases Respiratory diseases, Depression and Anxiety
    c) Swine Flu (H1N1), HIV/AIDS, Diabetes, Asthma, Typhoid , Dysentery, Depression
    d) Mumps, Measles and Rubella

2. The five risk factors such as, tobacco and alcohol use, unhealthy diet, lack of physical exercise and stress are:

    a) Isolated (have no connection with each other)
    b) Interrelated
    c) Should be managed individually
    d) The only risk factors for NCDs

3. Physiological risk factors for NCDs are:

    a) Raised blood pressure and blood glucose levels, obesity
    b) Use of tobacco and alcohol and poor physical activity
    c) Lack of exercise
    d) Exposure to environmental smoke

4. The risk factors leading to NCDs that are modifiable are:

    a) Family history of diseases
    b) Gender
    c) Managing stress and avoiding unhealthy diets
    d) Age of a person

5. Qualities of an effective counsellor are:

    a) Poor self – awareness, making problems known to all, over-involvement
    b) Warmth, not -judging, genuine, empathy
    c) Judging, not expressing interest or caring
    d) Being distant, firm and talking down to the patient

6. Listening is an important skill used in counseling and consists of:

    a) Looking at the patient when talking, using a kind tone, speaking slowly and clearly
    b) Looking at your watch or mobile phone during sessions or yawning
    c) Not looking at the patient but outside the room to see what's happening
    d) Communicating to the patient at the start that you will spend only a limited time with the patient

7. Too much stress can lead to:

    a) Depression and anxiety which are common mental health problems
    b) Making a person drink alcohol and smoke a lot
    c) Neglecting physical activity and healthy eating habits
    d) All of the above

8. An important technique to address stress among patients is to:

    a) Ask (for stress)
    b) Assist (through education and brief counselling)
    c) Arrange (to meet Medical Officer for assessment of symptoms of mental illness and treatment and Health Worker for home visits)
    d) All of the above

9. Effective ways of coping with stress include:

    a) Showing aggression and anger, eating junk food, gambling
    b) Having hobbies, learning to solve problems and sharing about the problems
    c) Excessive sleeping, postponing action
    d) Avoiding the situation and withdrawing

10. Chewing tobacco or smoking a few cigarettes a day is not harmful.

True/ False

11. Tobacco contains the chemical nicotine which makes the brain feel good making it harder to quit.

True/ False

12. Alcohol induces good sleep and that is why it is recommended to have a small drink.

True/ false

13. Eating good food or drinking buttermilk or lime juice neutralises the harmful effects of alcohol.

True/ false

14. Common reasons why people consume alcohol include:

a) Social factors like peer pressure and easy availability of alcohol
b) Genetic risk (family history of alcohol use)
c) Poor stress control, curiosity
d) All of the above

15. Reasons why people commonly have unhealthy diet include all the following EXCEPT:

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20. In primary care to address risk factors for NCDs, a Counselor's primary role is to:

a) Ask, Assist, Arrange (3 A's)
b) Identify NCDs and provide intervention for NCDs
c) Carry out case finding in the community
d) Deliver public health lectures

Annexure 3

REDUCING RISK FACTORS FOR NON COMMUNICABLE DISEASES (NCDs)

IN PRIMARY CARE

Training Programme for Counselors

Training Feedback Evaluation Form

Date: _____

Trainers: _____

Kindly indicate your level of agreement with the statements below:

		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	The objectives of the training were clear					
2	The workshop was interactive and actively involved the participants					
3	The topics were relevant					
4	The content was organised and easy to follow					
5	The practical exercises were useful					
6	The handouts were useful					
7	I will be able to use what I have learned in the training in my work					
8	The trainer was knowledgeable in the areas					
9	The trainer was well prepared					
10	The training was useful					
11	The time allotted to the training was useful					
12	The meeting room and facilities were adequate					
13	The administrative arrangements were satisfactory					

Annexure 4

REDUCING RISK FACTORS FOR NON COMMUNICABLE DISEASES (NCDs)

IN PRIMARY CARE

Training Programme for Counselors

Evaluation Questionnaire- Response Key

Question No	Correct Response	Additonal Information
1	**b**	NCDs are conditions that affect both the urban and rural population in India affecting them in their productive lives and remain for a long duration. Once they develop, they become costly to treat both for the person and health care providers. These are different from communicable diseases that spread via an agent (animal, insect) or environment to a person.
2	**b**	The five risk factors are interlinked with NCDs and one risk factor can trigger another. E.g. stress can lead to coping through tobacco and alcohol use to reduce tension. Risk factors are preventable through lifestyle changes and counseling plays an important role.
3	**a**	Physiological factors are being overweight, obesity, blood pressure, raised blood glucose and raised cholesterol and are modifiable through lifestyle changes. Behavioural risk factors are tobacco use, unhealthy diet, physical inactivity, alcohol use and stress, all risks that can be modified. Environmental factors are air pollution, food preservatives, artificial colour, and indoor smoke from fuels.
4	**c**	Risk factors can be classified as modifiable and non- modifiable. How we tackle stress in our daily lives and learn to cope, how to eat healthily and avoid junk food are modifiable with life style changes. However, age, gender, family history of diseases is non- modifiable.
5	**b**	These are important qualities for Counselors that help in building a therapeutic relationship that is helpful in bringing about behaviour change
6	**a**	Listening is important in counselling and has both verbal and non-verbal parts. Paying attention, using our eyes and body (non-verbal) are skills used in counselling.

7	**d**	Stress is known to lead to depression, anxiety and worsen physical health and come in the way of effective control of many NCDs. Many use tobacco and alcohol for coping with stress and neglect their healthy eating habits and reduce exercise. Chronic NCDs and mental health problems worsen each other and can delay help seeking and lead to poor compliance to treatment.
8	**d**	All risk factors including stress are best handled in a multidisciplinary team approach. In primary care, this involves the community health worker, counsellors, nurses, medical officers and other health care providers.
9	**b**	There are ways of coping with stress in a healthy manner. Changing our attitude towards stress, lowering expectations and prioritizing needs are ways to reduce stress. The person learns to deal with current problems and also healthy ways of coping to tackle problems in future.
10	**False**	Nobody will fall and die as soon as they smoke a cigarette. The person may die of heart disease, cancer, stroke or some other tobacco related disease. The death may be attributed only to that disease and not to tobacco. Smoking or tobacco use is responsible for nearly 50% of all heart attacks; 30% of all cancer deaths and 87% of lung cancers each year. Smokers also have a greater risk of becoming impotent compared to those who have never smoked.
11	**True**	Nicotine is the chemical in tobacco that lead to pleasure by releasing dopamine in the brain. Gradually the brain needs more nicotine to experience the same pleasure and sense of well - being. Over time when the brain does not get nicotine, distressing signals are sent from the brain in the form of craving, restlessness and irritation.
12	**False**	Alcohol disrupts the natural sleep cycle and decreases the efficiency of sleep. The person wakes up feeling tired and drowsy in the morning. It is safer and better to learn sleep hygiene methods than to resort to alcohol or other drug use to improve sleep.
13	**False**	Alcohol –related health damage depends on the amount of alcohol consumed and the underlying health condition and cannot be set right by just food intake.

14	**d**	There are many reasons why people consume alcohol. Biological risk plays a major role in developing addiction and this is a disease that can be transmitted across generations. Lack of hobbies, hanging out with friends who drink, permissive norms of drinking at home and in the community, getting relief from body pain and stress are common reasons for initiating alcohol use.
15	**a**	Lack of time to prepare healthy food, not finding time to eat, poor knowledge about diet, unable to make changes or maintain changes in diet, attractive advertisements and easy availability of packaged foods are some barriers that prevent a healthy diet.
16	**b**	According to WHO (2010), dietary factors contribute to about 30% of all cancers in both industrialised and developing countries. There is a rapid change in traditional diet practices to energy rich, nutrient poor foods that are high in fat, with excess of sugar and salt all contributing to weight gain and risk to diabetes and heart disease.
17	**a**	Promote a healthy diet by eating fibre in foods items for roughage, eating at home, less salt and sugar items as excessive consumption of these increase the risk for NCDs. Diets should be individualised and tailored for each patient after consulting with the Medical Officer.
18	**d**	Physical activity and regular exercise are important for the body to be healthy. According to the WHO, more than half the world's population is not doing enough exercise. Physical inactivity is considered the fourth leading risk factor for diseases contributing to global mortality and is a modifiable risk factor for NCDs.
19	**a**	Physical activity is a key determinant of energy expenditure and is thus fundamental to energy balance and weight control. Combining physical activity as part of our daily lives in a method to stay active (e.g. using stairs, home - based active work)is important to be healthy and avoid risks for NCDs.
20	**a**	The Counselor will ASK about risk factors leading to NCDs. ASSIST the person in making behavioural changes by educating about risk factors, healthy lifestyles,

		motivating and sustaining change and mobilising social supports for behaviour change. ARRANGE refers to seeking help from Medical Officer or other treatment providers for assessment and medication and Community Health Worker for follow up through home visits.

Annexure 5

NATIONAL MEETING OF EXPERTS FOR DEVELOPING TRAINING MANUALS TO ADDRESS PSYCHOLOGICAL/BEHAVIOURAL RISK FACTORS FOR NCDs

(NIMHANS, BANGALORE- 6th & 7th Feb 2014)

Ms. Aruna	ASHA worker,Kolar
Dr. Vivek Benegal	Professor & Head, Centre for Addiction Medicine, NIMHANS, Bangalore
Dr P Satish Chandra	Director/Vice-Chancellor and Professor of Neurology, NIMHANS, Bangalore
Dr. Prabhat Kumar Chand	Assoc Professor of Psychiatry, NIMHANS
Dr. Sudipto Chatterjee	Psychiatrist, Sangath, Goa
Dr George A. D'Souza	Professor & Head, Department of Pulmonary Medicine, St John's Medical College and Research Institute, Bangalore
Dr. N Girish	Additional Professor, Dept of Epidemiology.NIMHANS, Bangalore
Dr. Bipin Gopal	State Programme Officer (NCD),Trivandrum
Dr. Pradeepa R Guha	Sr. Scientist & Head, Research Operations, Madras Diabetes Research Foundation, Chennai
Dr. Vivek Gupta	Assistant Professor, Department of Epidemiology, NIMHANS, Bangalore
Dr. G. Gururaj	Professor and Head, Dept of Epidemiology, NIMHANS, Bangalore
Mr. Khaja Husain	NCD Counselor, Kolar
Dr. Jagannath P	State Consultant, National Tobacco Control Programme, Anti-Tobacco Cell, Bangalore
Dr Pradeep Joshi	National Professional Officer, WHO country office to India, New Delhi
Dr Arun Kandasamy	Assistant Professor, Dept. of Psychiatry, NIMHANS, Bangalore
Dr. Prakash Kumar	State Programme Manager, National Rural Health Mission, Directorate of Health & Family Welfare Services, Bangalore
Mr. Prem Kumar	Social Worker, Centre for Addiction Medicine, NIMHANS,Bangalore
Dr. C. Kuppaswamy	District Programme Officer, District Surveillance Unit, S.N.R Hospital Compound, Kolar
Dr. A Laxmaiah	Sr.Deputy Director (Scientist 'F'- Epidemiology) HoD, Division of Community Studies and Officer-In-Charge of NNMB National Institute of Nutrition, Hyderabad
Dr. Sathya Prakash Manimunda	Scientist-D (Medical), NCDIR (ICMR), Bangalore
Dr. C.N.Manjunath	Director and Prof. & Head of Cardiology, Sri Jayadeva Institute of cardiovascular Sciences and Research, Bangalore

Ms Tresa Mary	Research Associate, NCD Project, NIMHANS, Bangalore
Dr Vinalini Mathrani	Research Consultant, Health & Education, Bangalore
Dr. Sailesh Mohan	Senior Research Scientist & Adjunct Associate Professor, Public Health Foundation of India, New Delhi
Dr. Ashish Mohinde	Resident in Psychiatry, NIMHANS, Bangalore
Dr Pratima Murthy	Professor of Psychiatry, Centre for Addiction Medicine, NIMHANS, Bangalore
Dr. Prashanthi Nattala	Asst Prof. Dept of Nursing, NIMHANS, Bangalore
Ms. Nethravathi	Research Associate, NIMHANS, Bangalore
Dr. R. Dhanasekara Pandian	Additional Professor, Dept of Psychiatry Social Worker, NIMHANS, Bangalore
Mr. Dhanya Prasad	Social Worker, Centre for Addiction Medicine, NIMHANS, Bangalore
Dr. Jayashree Ramakrishna	Prof. & HOD, Dept of Health Education, NIMHANS
Dr. P Ravi	Registrar and Professor of Neurovirology, NIMHANS, Bangalore
Dr. Vishal Rao	Senior Consultant- Oncologist, Head Neck Surgeon, Bangalore
Ms. Rukmini	ASHA worker, Kolar
Mr. Sadananda	Program Assistant , Kolar
Dr Lakshmi Sankaran	Consultant, NCD Project, NIMHANS, Bangalore
Dr. Narasimha Setty	Director, Karnataka Institute of Diabetology, Bangalore
Dr. Manoj Kumar Sharma	Assoc Prof, Dept of Clinical Psychology, NIMHANS, Bangalore
Ms. Shilpa	Social Worker, Centre for Addiction Medicine, NIMHANS, Bangalore
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