



CHRONIC NON-COMMUNICABLE DISEASES

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OBJECTIVES

BY THE END OF THIS SESSION, STUDENTS WILL BE ABLE TO:

- • Define NCD's.
- • Know the different types of NCD's.
- • Understand the risk Factors that lead to the occurrence of NCD's.
- • Distinguish between modifiable and non modifiable risk Factors of NCD's.
- • Understand the risks resulting from the NCDs.
- • Know the different ways to prevent and manage the NCD'S.



DEFINITION OF CHRONIC NON-COMMUNICABLE DISEASE

Is defined as “an impairment in body function or structure that necessitates a modification in person’s life-style or has persisted for a long length of time.”

DEFERENCE BETWEEN COMMUNICABLE AND NON-COMMUNICABLE DISEASE:-

- ***Communicable disease:*** a disease that can be spread to a person from another person, an animal or object. Examples: common cold, influenza, tuberculosis, etc.
- ***Non-communicable disease*** a disease that can NOT be spread from person to person. Examples: cancer, heart disease, liver cirrhosis, diabetes mellitus, hypertension..... etc.



CHARACTERISTICS OF NCDs:

- Diseases that cannot be passed from person to person (non contagious)
- Not caused by pathogens /no single etiology
- Multi-factorial causation – uncertain etiology
- Host cannot form immunity to these diseases
- NCD can affect any system of the body e.g. diabetes, HPT, SLE (multi-systemic)

CHARACTERISTICS OF NCDs CONT.:

- Insidious onset & usually have long latent period prior manifestation of signs & symptoms . Disease occur after prolonged exposure to etiologic factor(s)
- ***Exception: injuries***
- Non-reversible changes
- Modification In life-style.
- **NCDs are diseases of long duration and generally slow progression.**
- Some risk factors of NCDs are modifiable
- Many NCDs – cannot be completely cured
- -can only minimize signs & symptoms

EXAMPLES OF NCDs

- Diabetes
- Hypertension
- Cancers
- Mental & behavioral disorders (e.g. schizophrenia, Bipolar disease, OCD, depression)
- SLE ,Rheumatoid arthritis
- Migraine
- Heart disease
- Stroke
- Asthma
- Chronic kidney disease
- Osteoporosis
- Musculoskeletal & neurological disorders
- Muscular dystrophy, multiple sclerosis,
- Osteogenesis imperfecta
- Alzheimer's Disease
- Parkinson's disease
- Spina bifida
- *Injuries*
- *Hereditary diseases as: Down syndrome, thalassemia, sickle cell anemia.*

RISK FACTORS OF NCDs:


1. Hereditary factors (non modifiable)
2. Tobacco use (smoking)
3. Excessive alcohol consumption
4. Low fruit and vegetable intake
5. Obesity
6. Raised blood pressure
7. Raised cholesterol
8. Physical inactivity
9. Age (non modifiable)
10. Sex (non modifiable)
11. Air pollution
12. Unhealthy diet
13. Life style
14. Environmental risk factors

COMMUNICABLE VERSUS NON-COMMUNICABLE DISEASES

Communicable diseases

- Sudden onset
- Single cause
- Short natural history
- Short treatment schedule
- Cure is achieved
- Short follow up
- Back to normalcy

Non-communicable diseases

- Gradual onset
 - Multiple causes
 - Long natural history
 - Prolonged treatment
 - Care predominates
 - Prolonged follow up
 - Affect the quality of life as they need long period of management & treatment
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NON-INFECTIOUS

- While often referred to as "chronic diseases", NCDs are distinguished by their non-infectious cause.
- The World Health Organization (WHO) reports NCDs to be by far the leading cause of mortality in the world, representing over 60% of all deaths.



DEATH FROM NCD

- **Out of the 35 million people who died from NCDs in 2005, half were under age 70 and half were women.**
- **Every year, at least 5 million people die because of tobacco use and about 2.8 million die from being overweight.**
- **High cholesterol accounts for roughly 2.6 million deaths and 7.5 million die because of high blood pressure.**



PREVENTION OF CHRONIC NON-COMMUNICABLE DISEASES



ARE THEY PREVENTABLE?

- **Most NCDs are considered preventable because they are caused by modifiable risk factors.**
- **What does “modifiable” mean?**



FIVE IMPORTANT RISK FACTORS

- The WHO's *World Health Report 2002* identified five important risk factors for non-communicable disease in the top ten leading risks to health. These are:-
 - **Raised blood pressure.**
 - **Raised cholesterol.**
 - **Tobacco use (smoking).**
 - **Alcohol consumption.**
 - **Overweight.**



ELIMINATE THE RISK FACTORS

- It has been estimated that if the primary risk factors were eliminated, 80% of the cases of heart disease, stroke and type 2 diabetes and 40% of cancers could be prevented.



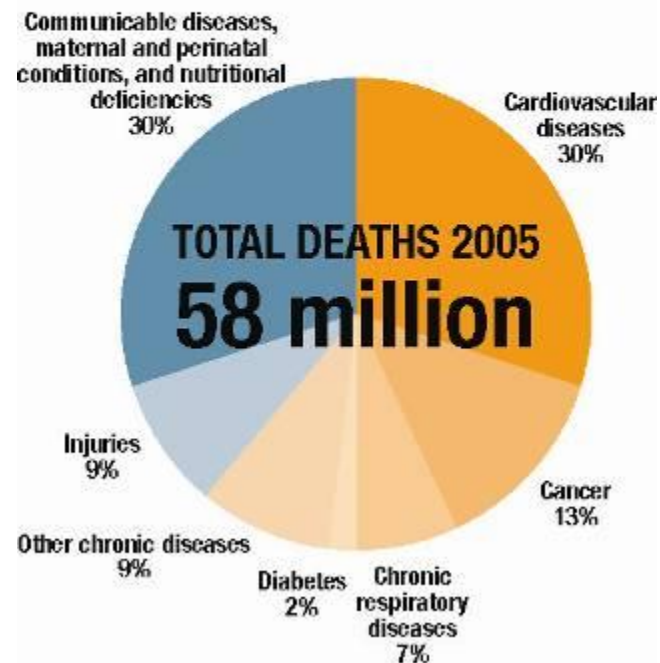
INTERVENTIONS(التدخل)

- **Interventions targeting the main risk factors could have a significant impact on reducing the burden of disease worldwide.**
- **Efforts focused on better diet and increased physical activity have been shown to control the prevalence of NCDs**



DEATHS BY BROAD CAUSE GROUP

Projected main causes of death, worldwide, all ages, 2005



Cardiovascular disease.
heart disease.
stroke.
Cancer.
Chronic respiratory diseases.
Diabetes.

Example of common Chronic NCDs

- Diabetes
- Hypertension
- Congestive Heart Failure
- Hyperlipidemia
- Asthma

QUIZ

- Write the scientific term

1- a disease that can be spread to a person from another person, an animal or object is:- ()

2-: a disease that can NOT be spread from person to person. Ex: cancer, heart disease, liver cirrhosis, etc. is:- ()

Choose the correct answer

1- All of the following are right about NCD except:

a- Sudden onset

b- Multiple causes

c-Long natural history

d-Prolonged treatment



2-All of the following are NCDs EXCEPT

- a)Heart disease
- b) hypertension
- c) Malaria
- d) caner tongue

3- Better diet and increased physical activity have been shown to control the prevalence of all the following except

- a)Chronic kidney disease
- b) hypertension
- c) Type 2 diabetes
- D) Tuberculosis.

4- The WHO's five important risk factors for non-communicable disease include all of the following except

- a) Sex
- b) high blood pressure
- c)smoking
- d)alcohol intake
- e)Over weight

