

□ INTRODUCTION TO PUBLIC HEALTH AND EPIDEMIOLOGY (2)

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□ At the end of each session the student should be able to:

- Describe natural history of disease
- Explain health status of populations
- Describe the achievements in epidemiology
 - Natural History of Disease
- It signifies the way in which a disease evolves over time from the earliest stage of its prepathogenesis phase to its termination as recovery, disability

or death, in absence of treatment or prevention.

- Each disease has its own unique natural history, which not the same in all individuals.
 - Natural History of Disease
- Two phases:
 - Prepathogenesis phase (the process in the environment)
 - Pathogenesis phase (the process in man)
 - Health status of populations
- Epidemiology is used to describe the health status of population groups.
- Knowledge of the disease burden in populations is essential for health authorities, who seek to use limited resources to the best

possible effect by identifying priority health programmes for prevention and care.

- In some specialist areas, such as environmental and occupational epidemiology, the emphasis is on studies of populations with particular types of environmental exposure.

- Evaluating interventions

- Epidemiologists evaluate the effectiveness and efficiency of health services.
- This means determining things such as:

- ▣ The appropriate length of stay in hospital for specific conditions.
- ▣ Value of treating high blood pressure.
- ▣ The efficiency of sanitation measures to control diarrhoeal diseases.
- ▣ The impact of reducing lead additives in petrol.

Achievements in Epidemiology ▣

- ▣ Smallpox
- ▣ Methyl mercury poisoning
- ▣ Rheumatic fever and rheumatic heart disease
- ▣ Iodine deficiency diseases
- ▣ Tobacco use, asbestos and lung cancer
- ▣ Hip fractures
- ▣ HIV/AIDS
- ▣ SARS

