**Disease control:** The term “disease control “describes operations aimed at reducing:

* The incidence of disease.
* The duration and the risk of transmission of disease.
* The effects of infection, including both the physical and psychosocial complications.
* The financial burden to the community.

**Example:** Malaria control.

**Elimination of disease:** It is defined as interruption of transmission of disease.

**Example:** Elimination of measles, polio and diphtheria from large geographic regions or areas.

**Disease eradication:**

Eradication literally means to “tear out by roots”. Eradication of disease implies termination of all transmission of infection by extermination of the infectious agent through surveillance and containment.

**Example:** Today smallpox is the only disease that has been eradicated.

Monitoring:

In management, monitoring refers to ‘the continuous oversight of activities to ensure the they are proceeding according to plan.

**Surveillance:**

It id defined as ‘the continuous scrutiny of the factors that determine the occurrence and distribution of disease and other conditions of ill health’.

Example:

* Epidemiological surveillance.
* Demographic surveillance.
* Nutritional surveillance.

Objectives:

1. To provide information about new changing trends in the health status of a population, morbidity, mortality, nutritional status or other indicators and environmental hazards, health practices and other factors that may affect health.
2. To provide feed-back which may be expected to modify the policy and the system itself and lead to redefinition of objectives, and
3. Provide timely warning of public health disaster, so that intervention can be mobilized.

**List the diseases under surveillance.**

**Diseases under surveillance by WHO:**

1. Louse-borne typhus fever.
2. Relapsing fever.
3. Paralytic polio.
4. Malaria.
5. Viral influenza-A
6. SARS.
7. Small pox.

**Risk factor of non communicable disease:**

1. Cigarette use and other forms of smoking.
2. Alcohol abuse.
3. Failure or inability to obtain preventive health services(e.g. hypertension control, cancer detection. Management of diabetes).
4. Life style changes (e.g. dietary patterns, physical activity).
5. Environmental risk factor (e.g. occupational hazards air & pollution, and procession of destructive weapons).
6. Stress factors.

**Non-communicable disease:**

These are a group of chronic diseases where the causative agents are not clearly identified, but a set of risk factors have been identified to be associated.

**Differences between communicable & non-communicable diseases:**

|  |  |  |
| --- | --- | --- |
| **Traits** | **Communicable disease** | **Non-communicable** |
| 1. **Transmission** | Transmitted from person to person | Nor transmitted person to person |
| 1. **Agent/ risk factor** | Agent responsible | There are some risk factor |
| 1. **Causative agent** | Usually single | Multifactorial |
| 1. **Disease cycle** | Yes | No |
| 1. **Incubation period** | Usually short | Long |
| 1. **Cellular alteration** | Usually reversible | Irreversible pathological alteration occurs |

**Common non-communicable disease prevalent in Bangladesh:**

1. **Cardiovascular diseases:**

* Coronary heart disease (CHD)/ ischaemic heart disease(IHD),
* Hypertension
* Rheumatic heart disease (RHD).

1. Cerebrovascular disease – Transient ischaemic attack (TIA) & stork.
2. Diabetes mellitus.
3. Cancer
4. Mental illness.
5. Blindness.
6. Accidents.

**Plan to prevent non-communicable diseases:**

The preventive attack of chronic non-communicable diseases is based on the knowledge that they are multifactorial in causation. So their prevention demands a complex mix of interventions. With the identification of risk factors. Health promotion activities aimed at primary prevention are being increasingly applied in the control of chronic diseases (e.g. elimination or reduction of risk factors, modification of lifestyle patterns).

**Present knowledge indicates that non communicable disease can be prevented through –**

1. Screening and health examination technique.
2. Application of improved method of diagnosis.
3. Treatment and rehabilitation.
4. Control of food, water and air pollution.
5. Reducing accidents.
6. Influencing patterns of human behaviour and life styles through intensive education.
7. Upgrading standard of institutional care.
8. Developing and applying better methods of comprehensive medical care including primary health care. Political approaches are also needed as in the case of smoking control, control of alcohol & drug abuse
9. The integrated programme for the prevention and control on non-communicable diseases.

**Principal cardiovascular diseases:** The principal cardiovascular diseases include-

1. Coronary heart disease (CHD) / ischaemic heart disease (IHD) / Coronary artery disease.
2. Hypertension.
3. Rheumatic heart disease (RHD)
4. Congenital heart diseases.