

Introduction to Public Health

Module # 1

Concept of health, Public Health and PHC

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OBJECTIVES OF THE LECTURE

By the end of this lecture you will be able to:

- *Conceptualize*
 - *Health & its Dimensions*
 - *Public Health & its Objectives*
 - *Components of health*
- *Primary Health care & its components. Principles of Health care.*

Concept of Health

- “ Health is a state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity”
- The ability to lead a socially and economically Productive life.

Health Care

- “ multitude of services rendered to individuals, families and communities by the agents of the health services or professions, for the purpose of promoting, maintaining, monitoring or restoring health”

Primary Health Care

- In Alma-Ata declaration,1978:
- “ Essential health care based on practical,scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at evry stage of their development in the spirit of self determination.”

Components of Primary Health care

- There were 8 components/ elements:
- 1. Education about prevailing health problems and methods of preventing and controlling them.
- 2. Promotion of food supply and proper nutrition.
- 3. An adequate supply of safe water and basic sanitation.
- 4. Maternal and child care, including family planning.
- 5. Immunization against infectious diseases
- 6. Prevention and control of endemic diseases
- 7. Appropriate treatment of common diseases and injuries.
- 8. Provision of essential drugs.

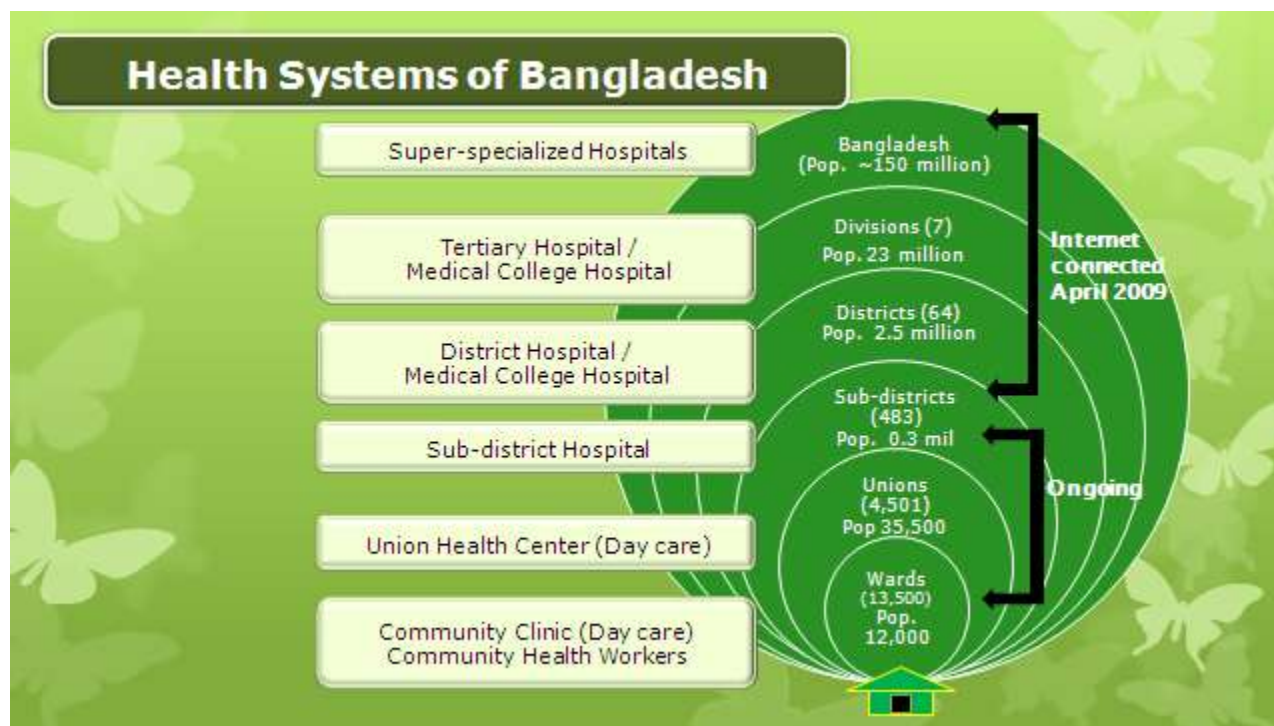
Principles of Health Care

- 1. Appropriateness
- 2. Adequacy
- 3. Availability
- 4. Accessibility
- 5. Affordability
- 6. Comprehensiveness:
- 7. Feasibility

Levels of health Care

- Primary level of health care.
- Secondary level
- Tertiary level
- Special health care, Emergency health care etc.

Health Systems of Bangladesh



Philosophy of Health

- Health is a fundamental human right
- Health is intersectoral
- Health is an integral part of development
- Health and its maintenance is a major social investment
- Health involves individual responsibility, national responsibility and international responsibility.

Dimensions of Health

Health is multidimensional, e.g.

- Physical Dimension
- Mental dimension
- Social Dimension
- Spiritual Dimension
- Emotional Dimension etc.

Dimensions of Health

Major Dimensions of Health

- Physical dimension
- Mental Dimension
- Social Dimension

Minor Dimensions of Health

- Spiritual Dimension
- Emotional Dimension

Dimensions of Health

Physical Dimension: perfect functioning of the body

A physically healthy person may be conceived as one---

- (a) who has a normal anatomical profile.
- (b) who has a normal physiological profile
- © who has a normal biochemical profile
- (d) who possesses a normal nutritional profile

Dimensions of Health

Normal anatomical profile:

- (a) Skin, mucous membrane, eyes, nose, ears, hair, teeth, gums, complexion, trunk, extremities, frame and posture etc. are all normal.
- (b) Whose body organs are normal in size, shape and structure.

Dimensions of Health

- Normal Physiological Profile:
- (a) Vital parameters- (e.g.pulse, respiration,BP & temperature) are normal
- (b) Sleep, appetite, energy output, work efficiency & bowel movement
- © Sensation like touch, taste, hearing are normal
- (d) Processes like respiration,excretion, reproduction & metabolism are normal

Dimensions of Health

- Normal biochemical profile:
- (a) Blood, serum, plasma , CSF, urine, stool are biochemically normal.
- (b) Level of nutrients, hormones, enzymes, electrolytes etc. fall within the normal range.

Dimensions of Health

- Normal nutritional profile:

- (a) Height, Weight, body circumference at various levels fall within the normal range by age and sex.
- (b) Weight for age, Height for age and weight for height estimation during infancy and childhood have fallen within expected levels.

Dimensions of Health

Signs of physical health:

- Good complexion
- Clear skin
- Bright eyes
- Good appetite
- Sound sleep
- Regular activity of bowels and bladder
- Smooth, easy and coordinated movement
- All the special senses are intact

Dimensions of Health

Mental Dimension: a state of balance between the individual and the surrounding world.

Criteria of a mentally healthy person:

- Is free from internal conflict
- Is well adjusted
- Has a strong sense of self-esteem
- Knows himself/herself, his/her needs, problems and goals
- Knows his/her strength and weakness
- Has good self-control
- Faces problems and tries to solve them intelligently

Dimensions of Health

Social Dimension: harmony with other members of society

Emotional Dimension: it relates to feeling

Positive Health

Positive health is the notion of perfect functioning of the body and mind

Optimum Health

- When all the dimensions are in optimum level.

Negative Health

- When a person is having the health after recently discharge from a hospital after curing the health problems.
- It is not an asset.
- This person is at risk to become unhealthy.

Concept of Public Health:

Definition: “Public health is the science and art of preventing disease, prolonging life, and promoting health and efficiency through organized community effort (i) for the sanitation of the environment; the control of communicable infections; the education of the individuals in the principles of hygiene; the organization of medical and nursing services for the early diagnosis and preventive treatment of diseases (ii); and the development of social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health; so organizing the benefits as to enable every citizen to realize his birth right of health and longevity (iii).”
--- WHO

Concept of Public Health

Public health is "the science and art of preventing disease, prolonging life and promoting health."

There are 2 distinct characteristics of public health:

1. It deals with prevention of a health problem rather than treating a health problem.
2. It deals with population-level, rather than individual-level health issues.

Public Health

- **Objectives:**

- a. Prevention of diseases and prolongation of life
- b. Promotion of health and efficiency
- c. Elevation of the standard of living, adequate for health maintenance
- d. Provision of the right to health and longevity

- **Areas of activity:**

- Environmental sanitation
- Health education
- Communicable disease control
- Medical and nursing care

Public Health

Historical Development

- **Phase I: Rise of Public Health:** Originated from England's industrial revolution, generated by mass migration of rural workers
- Edwin Chadwick, lawmaker-turned-reformer... wrote report of sanitation in 1842, organized community on sanitation issues
- British doctors: John Snow in 1854, and William Budd in 1873: epidemiologic studies on cholera and typhoid, respectively.
- Eventually: Public health movement rose in England and spread in Europe and America

Public Health

- **Historical Development (contd.)**
- Phase II: Retreat of Public Health: Towards end of nineteenth century,
- Robert Koch from Germany and Louis Pasteur from France introduced BACTERIOLOGICAL ERA
- Reinforced the Germ theory---- introduced vaccines..... Public health movement went to the backyard

Public Health

Historical Development (contd.)

- Phase III: Return of Public Health: After a few years, the germ-theory dogma reduced and multi-factor phenomenon came into place.
- Multifactorial causality and multiplicity of causes demanded a multipronged attack.

SCOPE OF PUBLIC HEALTH

- Environment control
- Communicable diseases control
- Non-communicable diseases control
- Personal health services to the vulnerable groups or segments of the population

How do Public Health Professionals Work?

Public health professionals try to prevent health problems from happening or re-occurring through

- 📌 **implementing educational programs,**

- 📌 **developing policies,**

- 📌 **administering services and**

- 📌 **Conducting research,** in contrast to clinical professionals, such as doctors and nurses, who focus primarily on treating individuals after they become sick or injured.

The field of public health

Environmental Health

The air we breathe; the water we drink; the complex interactions between human genetics and our surroundings. How do the built and natural environments influence our health and how can we reduce risk factors? These environmental risk factors can cause diseases such as asthma, cancer, and food poisoning.

The field of public health (Continued)

Because environmental health is so broad in scope, it is often broken down in academic and professional settings in areas of contact and medians. These areas are:

- air quality
- food protection
- radiation protection
- waste management
- hazardous waste management
- water quality
- noise control
- environmental control of recreational areas
- housing quality
- vector control

PREVENTIVE MEDICINE

- Definition: Preventive medicine may be defined as “the science and art of preventing diseases. prolonging life and promoting health and efficiency of groups of individuals, and individuals within these groups, through interception of the diseases process.
- Preventive medicine identifies weak links in the chain of natural history of disease and attacks those links to arrest diseases process before the involvement.

Public health and Preventive Medicine

Features	Public Health	Preventive Medicine
Objective	To prevent diseases, prolong life and promote health & efficiency through an organized community effort	To prevent diseases, prolong life and promote health & efficiency through interception of diseases process
Coverage	Services offered to entire population of a country	Services offered to groups of individuals and individuals within these groups
Emphasis	Stress laid on both personal and interpersonal measures of direct and indirect nature	Greater stress laid on personal level measures of direct nature
Functionaries	Well-organized health teams lead by Public health experts	Health professionals working individuals or in groups
Overlap	When practiced in group level, it approaches preventive medicine	When practiced of mass scale, it becomes public health
Operation	Deals with control, elimination and eradication of national health problems at national level	Deals with risk-intervention procedures in a variety of special clinics