

Public Health

Lec. 1

Winslow (1920) defined Public Health as "The art and science of preventing disease, prolonging life and promoting physical and mental efficiency, through organized community efforts".

Public

Knutson defined Public as "pertaining to the people of a community, state or nation".

Dental Public Health

The American Board of Dental Public Health modified Winslow's definition and defined **Dental Public Health** as "The science and art of preventing and controlling dental disease and promoting dental health through organized community efforts".

It is that form of dental practice which serves the community as a patient rather than the individual. Dental public health is concerned with:

1. The dental health education of the public.
2. The research and the application of the findings of research.
3. The administration of programs of dental care for groups.
4. Prevention and control of dental disease through a community approach.

The term "dental public health" is comparable and synonymous with community dentistry

Health

WHO defines Health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".

A community is a definite group of people or population having common organization, living in the same region or area following similar rules and regulations under the same environment.

PRINCIPLES OR GUIDELINES FOLLOWED IN DENTAL PUBLIC HEALTH PRACTICE

1. Public Health work is done in areas where group responsibility is recognized.
2. Public Health work relies on team effort.
3. Prevention of the diseases is the main goal. Reason Being - Ethical (prevention is better than cure)
 - Team Work
 - Cost Efficiency
4. Deals with the search for the cause of the disease (epidemiology)
5. Bio statistical methods give a comparative analysis of the population seen and form basis for further studies.
6. Public health worker deals with the healthy as well as the sick.
7. Health education & communication of the local population.
8. Payment of health care made easy.

The most common oral diseases in which dental public health concerned:

1. Dental caries.
2. Periodontal diseases.
3. To a comparatively lower extent oral cancer.
4. Developmental anomalies/acquired disorders of the oral structures.

TOOLS OF DENTAL PUBLIC HEALTH

1. Epidemiology.
2. Biostatistics.
3. Social Sciences.
4. Principles of administration.
5. Preventive dentistry.

Epidemiology

Is a scientific study of factors, conditions related to disease as they occur in people? The word Epidemiology is derived from -epi = in, on or upon, demos= people and logos = science. **Parkin** in 1873 defined Epidemiology as "the branch of medical science dealing with epidemics". Epidemiology is also defined as "the study of the distribution and determinants of health related events in population".

Biostatistics

Statistics is the science of compiling, classifying and tabulating numerical data and expressing the results in a mathematical or graphical form. Biostatistics is that branch of statistics concerned with mathematical facts and data relating to the biological events.

Social Sciences

Social Sciences usually include sociology, cultural anthropology and psychology. They frequently include economics, government and sometimes history as well.

Principles of Administration

The dentist with a leadership role in public health program needs to know many of the principles by which large enterprises are administered. There are two main areas into which administrative work may be divided: Organization and Management.

Organization deals with the structure of an agency and the way people are arranged into working groups within it.

Management is concerned with the handling of personnel and operations in such a way that the work of the agency gets done.

Preventive Dentistry

Procedure employed in the practice of dentistry and community dental health programs which prevent occurrence of oral disease and oral abnormalities.

Levels of Prevention

1. Primary prevention.
2. Secondary prevention.
3. Tertiary prevention.

Primary prevention includes: health promotion (health education) and specific protection, immunization, hygiene.

Secondary prevention includes early diagnosis and treatment.

Tertiary prevention involves disease control which includes disability limitation, which is prevention of the extent that the sequelae and complications of the disease are minimized.

PROCEDURAL STEPS IN DENTAL PUBLIC HEALTH:

Survey

The survey constitutes the first step in the present-day public dental health procedure. The focus of attention in a survey is the population rather than an individual. A survey on a dental disease or a condition in a community is initiated based on the chief complaint of the population.

Surveys are methods for collection of data, analyzing and evaluating them in order to determine the amount of disease problems in a community and also to identify cases that have not been identified.

Analysis

The second procedural step in dental public health is analysis of the data collected from a survey. Information collected through a survey is subjected to an analysis in order to define the characteristics of specific health problems in the community.

Program Planning

After the problem and its characteristics are analyzed, the next step is program planning. The main objective of any public health professional is to have the designed program accepted by the community and that the people show an interest in it.

Program Operation

This can be best illustrated with the example of water fluoridation in a community with higher prevalence of dental caries and a low level of fluoride content in their water supply.

Financing

Financing in public health programs are usually through the funds provided by the Governments or by the local authorities.

Program Appraisal

This is the: final step in any public health program where the effectiveness of the program is assessed.

SIMILARITIES BETWEEN PERSONAL & COMMUNITY HEALTHCARE

PATIENT	COMMUNITY
Examination	Survey
Diagnosis	Analysis
Treatment planning	Program planning.
Treatment	Program operation.
Payment for service	Finance
Evaluation	Approval

1. Examination I Survey

Purpose of survey is to determine the nature and extent of the problem, just as an examination is done when a patient comes to a dental clinic with a complaint.

2. Diagnosis / Analysis

It is the procedure of converting the information or raw data collected in the survey by meaningful figures or statistics in order to define the characteristics of specific community health problems.

3. Treatment Planning / Program Planning

Once diagnosis is made one can proceed to make plans for effective treatment.

4. Treatment / Program Operations

Execution of the program once the plan has been accepted by all the parties involved.

Just like a complex treatment requires referral of the patient to a specialist, similarly when a community health program has been adopted a varied group of payment disciplines constitute the public health team.

5. Payment / Program funding

Secondly how to manage! Private practitioner and the patient usually mutually agree on the payment of the dental service before the treatment plan is undertaken & it can be in the form of cash down payment or monthly billing.

6. Evaluation / Program appraisal

Similarly the data collected in the initial survey serves as a base line and is followed up by observing the efficacy, appropriateness, and possible side effects.