

Preventive Dentistry and Dental Public Health

Introduction

HEALTH is a state of complete physical, mental and social well-being, and not a mere absence of disease or disability“

PUBLIC HEALTH the art and science of preventing disease, prolonging life and promoting physical and mental efficiency through organized community effort.

DENTAL PUBLIC HEALTH the science and art of preventing and controlling dental diseases and promoting dental health through organized community efforts,

Preventive Dentistry

It is a philosophy of dentistry. It comprises the various procedures used by *dentists, dental hygienists, physicians, nurses, teachers, and others* to develop scientific oral health knowledge and habits.

It consists of techniques which prevent the initiation of oral diseases and prevention of neglecting diseases sequel as oral and systemic infection and interference with normal growth and development.

Objectives of Preventive Dentistry:

it aims to prevent:

1. Disease predisposing factors.
2. The disease itself.
3. Factors which maintain disease in a chronic state.
4. Factors which evoke more severe manifestations of acute diseases.
5. Factors which permit the progressive advance of disease.
6. The concomitant effect.
7. The local and systemic complication of disease.
8. Factors which maintain disability resulting from disease.
9. Factors which interfere with rehabilitation.

Risk assessment

It is the *identification of individuals at high risk for any future disease* as caries, periodontal disease, etc.

Importance:

1-Define those in most in need.

2-Improves the effectiveness of preventive measures and levels of treatment.

Accordingly, preventive interventions should involve those individuals at higher risk than others and emphasizes the various levels of prevention.

These levels extend through from the prepathogenic period of the disease, period of the disease, to the period of the rehabilitation after the disease itself has gone.

levels of prevention

Primary

secondary

tertiary

I-True or primary prevention

Action taken prior to the onset of disease which removes the possibility that a disease will ever occur.

(Low cost, safe, and the individual is not yet exposed to pain and suffering)

occurs in the prepathogenic period and consists of health promotion and specific protection.

II- Secondary prevention

occur in the early period of pathogenesis. This involves early diagnosis and prompt treatment.

III-Tertiary prevention

comes later in the period of pathogenesis & includes Disability limitation (prevention of the extent, the sequel and complications of the diseases) and Rehabilitation.

The following model shows the application of this concept to dental caries.

LEVELS OF PREVENTION OF DENTAL CARIES

I- Period of Pre-pathogenesis:

A- health promotion

1. Health education in oral hygiene.
2. Good standard of nutrition.
3. Diet planning.
4. Periodic inspection

B- Specific protection:

1. Good oral hygiene.
2. Fluoridation of public water supplies.
3. Topical fluoride application.
4. Avoidance of sticky foods, particularly between meals.
5. Tooth brushing after eating.
6. Dental prophylaxis.
7. Treatment of highly susceptible but uninvolved areas in highly susceptible persons.
8. Preventive orthodontics.

II-Period of Pathogenesis

1- Secondary level of prevention

Early diagnosis and prompt treatment

1. Periodic detailed oral examination with X-ray.
2. Prompt treatment of incipient lesions.
3. Extension for prevention.
4. Attention to developmental defects.
5. Compulsory examination of school children.

2-Tertiary level of prevention:

a-Disability limitation

1. Treatment of well developed lesions.
2. Pulp capping
3. Root canal therapy.
4. Restoration of natural teeth
5. Extraction.
6. Orthodontic treatment.

b-Rehabilitation

* Replacement of lost tooth structure by appliances (bridge, partial)