# Community Dentistry for third class

Dental man power in the dental clinic

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Dental man power is a term used to describe the provider of dental care all of whom have different roles, functions, and period of training, combined to provide care to dental patients.

A dental auxiliary or ancillary is a person who is given responsibility by a dentist so that he/she can help the dentist render dental care, but who is not himself or herself qualified with a dental degree.

- Compared to the dentist, these new paraprofessionals undergo less intensive training for a shorter period of time.
- They had to carry out clearly defined jobs efficiently
- The term "Dental Ancillaries" has been used to describe them in Britain.

# Dentist

Is a person who graduate from dental college and licensed to practice dentistry under the laws of appropriate state. They are concerned with prevention and control of oral cavity diseases and they are legally entitled to treat patients independently and prescribe certain drugs and to employ and supervise auxiliary persons.

# The dental specialties

The educational requirements include:

- 1- Two or more years of college in liberal arts and sciences (more often this is four years of college with a bachelor of sciences degree).
- 2- Three or four years of dental school in program approved by the ADA. The degree DDS- doctor of dental surgery.

DMD- doctor of medical dentistry.

Training for dental specialist include two year of graduate

- **Dental Public Health** is that branch of dentistry which deals with the prevention and control of dental diseases, and promoting dental health through organized community efforts.
- **Endodontics** is that branch of dentistry which deals with the diagnosis and treatment of diseases of the pulp and periapical tissues.
- Oral Pathology is the branch of medicine which is based on knowledge of the essential nature of disease of the oral structures.

- Oral Surgery is that branch of dentistry dealing with the extraction of teeth, the treatment of fractures of the jaws and adjacent facial bones, and with other surgical procedures on the jaws, oral tissues, and adjacent tissues to treat or correct disease and other abnormal conditions.
- **Orthodontics** is that branch of dentistry which deals with the causes, prevention and treatment of the irregularities or malocclusion of the teeth and arches.

- **Pedodontics** is that branch of dental practice, limited to the treatment of children, which provides a program of-complete oral health care during the developmental period.
- **Periodontics** is that branch of dentistry dealing with the diagnosis, prevention and treatment of diseases of the tooth-supporting tissues: namely the periodontal ligament, gingiva, alveolar bone and cementum.
- **Prosthodontics** is that branch of dentistry dealing with the replacement of missing teeth and other missing or deformed oral structures by artificial substitutes.

# CLASSIFICATION

### WHO Classification

1. Non-operating auxiliaries

Clinical laboratory

(Assist the dentist in his clinical work )

(Assist the professional in technical laboratory procedures)

2. Operating auxiliaries

# Classification of dental auxiliary

According to the WHO classification in conference in New Delhi in 1967:

#### 1. Non-operating auxiliaries.

- a) Clinical: This is a person who assists the professional (dentist) in his clinical work but does not carry out any independent procedures in the oral cavity.
- b) Laboratory: This is a person who assists the professional by carrying out certain technical laboratory procedures.

#### 2. Operating auxiliary

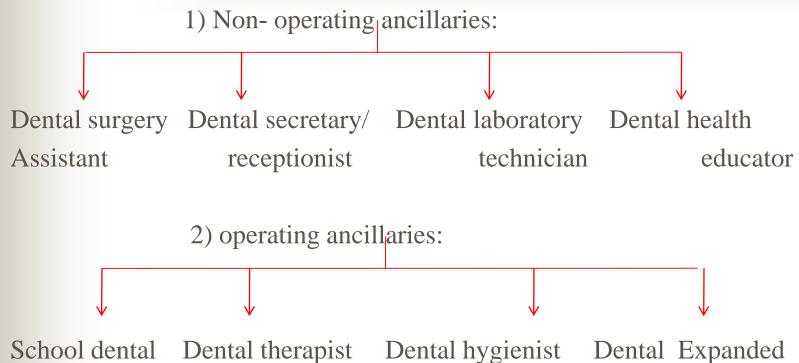
This is a person who, not being a professional is permitted to carry out certain treatment procedures in the mouth under the direction and supervision of a professionals.

# Non operating auxiliary

The WHO has listed the duties of dental assistants as follows:

- 1. Reception of the patient.
- 2. Preparation of the patient for any treatment he or she need.
- 3. Preparation and provision of all necessary facilities such as mouth wash.
- 4. Sterilization care and preparation of instruments.
- 5- Preparation and mixing of restorative materials
- 6- Care of the patient after treatment until he or she leave.
- 7- Preparation of the surgery for the next patient.
- 8- Assistance with X-ray work and processing and mounting of X-ray.
- 9- Instruction of the patient where necessary in correct use of the tooth brush.
- 10- After care of the person who had GA.

## Revised classification



School dental Dental therapist Dental hygienist Dental Expanded

Nurse function

ancillaries

### The dental health educator

A person who instructs in the prevention of the dental disease and who may also be permitted to apply preventive agent intra orally. Two additional weeks of training are given, after which ancillaries are allowed to conduct fluoride mouth rinsing programs to groups of school children. They are however not allowed to undertake any intra oral procedures.

# Non dental personal

They are teachers and community health workers who are being given a specific dental role in all aspect of dental health education and role health practice.

### DENTAL SURGERY ASSISTANT

- Non operating auxiliary
- Assist the dentist or dental hygienist in treating patients
- Not legally permitted to treat patient independently
- Also called as dental assistant, chair side dental assistant, clinical auxiliary.

#### **Duties of dental assistant**

- Reception of the patient
- Preparation of the patient for any treatment he/she may need
- Preparation and provision of all necessary facilities such as mouth washes and napkins
- Sterilization, care, and preparation of instruments



- Preparation and mixing of restorative materials including both filling and impression materials
- Care of the patient after treatment until he/she leaves including clearing away of instruments and preparation of instruments for reuse
- Preparation of surgery for the next patient.



## DENTAL SECRETARY/RECEPTIONIST

This is a person who assist the dentist with his secretarial work and patient reception duties.



## DENTAL LABORATORY TECHNICIAN

- Fulfills the prescription provided by dentist regarding the extraoral construction and repair of oral appliances and bridge work
- Also called as dental mechanic
- The formal training period covers as much as 2 years, in UK
   3-5 years.
- Duties include the laboratory part of:
  - 1. Prosthetic work
  - 2. Orthodontic appliances
  - 3. Crown and bridge.
  - 4. Implants.



# DENTAL HEALTH EDUCATOR

This is the person who instructs in the prevention of dental disease and who may be permitted to apply preventive agents intra-orally



#### Continued.....

- In some countries, duties of some dental surgery assistants have been extended to allow them to carry out certain preventive procedures
- In Sweden, two additional weeks of training are given, after which ancillaries are allowed to conduct Fluoride mouthrinsing programmes to groups of school children. They are not allowed to undertake any intraoral procedures.



## School dental nurse

A person who is permitted to diagnose dental disease and to plan and carry out certain specific prevention and treatment measure including some operative procedures in the treatment of dental carries in defined groups of people usually school children. The training extends to over a period of two years.

Dental nurse scheme was established in New Zealand in 1921 due to the extensive dental disease found in army recruits during first World war.

- Ø Oral examination.
- Ø Prophylaxis.
- Ø Topical fluoride application.
- Ø Advice on dietary fluoride supplements.
- Ø Administration of local anesthetic.
- Ø Cavity preparation and placement of amalgam filling in primary and permanent teeth.

- Ø Pulp capping.
- Ø Extraction of primary teeth.
- Ø Individual patient instruction in tooth brushing and oral hygiene.
- Ø Classroom and parent-teacher dental health education.
- Ø Referral of the patient to private practitioners for more complex services such as extraction of permanent teeth, restoration of fractured permanent incisors and orthodontic treatment.

# The dental therapist

A person who is permitted to carry out to the prescription and supervising dentist. Certain specified preventive and treatment measures including the preparation of cavities and restoration of the teeth.

They are like school dental nurses but their role is quite different as they are not permitted to diagnose and plane dental care. They are permitted to work based on the written treatment plan devised by the supervising dentist. The operative procedures including the administration to the local infiltration anesthesia, the supervising dentist give nerve block analgesia when it is required. The training of dental therapists for about two years.

#### **DUTIES:**

- Clinical caries diagnosis
- Technique of cavity preparation in deciduous and permanent teeth
- Material handling and restorative skills
- Vital pulpotomies under rubber dam in deciduous teeth and extraction of deciduous teeth under local anesthesia
- In the U.K, they may work in the local authority and hospital services and they are required to carry out their duties under the direction of a registered dentist



# The dental hygienist

Is an operating auxiliary licensed and registered to practice dental hygiene under the laws of appropriate state. They work under supervision of dentist. Training over period of 2 years.

The function of dental hygienist:

Dr.Alfred Civilion Fones is considered as the father of dental hygiene

- 1- Cleaning of mouth and teeth with particular attention to calculus and stains.
- 2-Toical application of fluoride, sealants and other prophylactic solution.
- 3- Examination of the patient as school children or industrial employees, so that they may be referred to dentist for treatment.
- 4- Instruction in oral hygiene.
- The hygienists are not trained to provide operative care, local anesthesia, extraction and pulp treatment.

# The expanded-function of dental auxiliary

- Training of 4 months duration was given to dental hygienist who had at least one year practical experience. They allow carrying out
- Ø Removing sutures.
- Ø Placing, finishing and polishing restoration of amalgam and resin.
- Ø Placing and removing matrix bands and rubber dams.
- Ø Placing cavity liners.
- Ø Retraction gingiva for impression taking.

- Ø Fitting and removing orthodontic bands.
- Ø Separating the teeth prior to binding by a dentist.
- Ø Cementing temporary crowns previously fitted by dentist.
- Ø Placing temporary fillings.
- Ø Applying pit and fissure sealant.
- Ø Take impression fore cast restoration or space maintainers or orthodontic.

## Advantage

- Increase productivity.
- Lower cost of care to the public.

#### **Four-handed in dentistry**

This term is given to the art of seating both the dentist and dental assistant in such way that both are within easy reach of the patient's mouth.

#### Advantage

- Ø Enable the dentist to keep his hands and his eyes in the field of operation.
- Ø The dentist with less fatigue and greater efficiency.
- Ø Decreasing the time of operation.
- Ø Dentist with dental assist can see or treat more patient than dentist without dental assist.
- Ø Quality of service and control of patient are both improved.
- Ø Appointment is shorter and this is important in the handling of young children and medically compromised patient.
- Ø This procedure will produce good patient cooperation.

#### BENEFITS OF USING AUXILIARIES

Educational benefits: While concentrating on treating the consequences of dental disease, provisions can be made to include prevention and educational activities in public dental health programme.

Preventive benefits: Dental services can be developed primarily on the basis of preventive approach, both for the community and the individual.

Economical benefits: With rapid population growth and increasing demand for dental care, more and more dentists are required, But unfortunately, this is an expensive process. Hence training an auxiliary is more economical, less time consuming and fewer burdens to the society

In general, this result in definite benefits to dentists, patients, auxiliaries and to whole community, financially, psychologically and ethically.

