

## Dental man power in the dental clinic

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.

### 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.

### Dental auxiliary

The person who permitted to help the dentist in treating patients under the dentist supervision. Their duty range from simple tasks such as sorting instrument to relative complex procedure.

### 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.

**The dentist develops knowledge:**

- 1) understanding of the patient's dental needs as they relate to the patient's total physical and emotional well-being.
- 2) Diagnostic skills with emphasis on conditions relating to the oral cavity.
- 3) Methods of prevention of dental disease
- 4) Techniques and proficiency in repairing and replacing diseased or missing teeth.
- 5) Methods of delivery of this dental health care which will enable him to use his professional skills and judgment to the maximum potential.

## **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.

## **1- Denturist**

Those who dental lab tech who are permitted to fabricate denture directly for patients without dentist prescription. They must be licensed and registered. Dental practice acts changed to allow them to treat the public directly for the fabrication of dentures.

## **2-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.

## **Operating auxiliary**

### **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.

The school dental nurse is listed by the New Zealand department.

- 1 - Oral examination.
- 2 - Prophylaxis.
- 3 - Topical fluoride application.
- 4 - Advice on dietary fluoride supplements.

- 5 - Administration of local anesthetic.
- 6 - Cavity preparation and placement of amalgam filling in primary and permanent teeth.
- 7 - Pulp capping.
- 8 - Extraction of primary teeth.
- 9 - Individual patient instruction in tooth brushing and oral hygiene.
- 10 - Classroom and parent-teacher dental health education.
- 11-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 plan 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.

### **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:

- 1- Cleaning of mouth and teeth with particular attention to calculus and stains.
- 2-Toical application of fluoride, sealants and other prophylactic solution.

- 2- 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.
- 5- Resource work in the field of dental health.

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

- 1 - Removing sutures.
- 2 - Placing, finishing and polishing restoration of amalgam and resin.
- 3 - Placing and removing matrix bands and rubber dams.
- 4 - Placing cavity liners.
- 5 - Retraction gingiva for impression taking.
- 6 - Fitting and removing orthodontic bands.
- 7 - Separating the teeth prior to binding by a dentist.
- 8-Cementing temporary crowns previously fitted by dentist.
- 9 - Placing temporary fillings.
- 10 - Applying pit and fissure sealant.
- 11 - Take impression forecast restoration or space maintainers or orthodontic.

#### **Advantage**

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

## **The productivity of the dentist**

It is difficult to measure the productivity of the dentist but it is known that the productivity will decrease with increase age; this is due to reduction in manual dexterity and the physically exerting nature of dental practice which leads to a reduction of hours worked. So to increase productivity of the dentist we should:-

- 1- Producing more care to the dentist,
- 2- The dentist work alone with no auxiliary help spent 60% of his time.
- 3- Changing in equipment design to permit the entire dental health to work efficiently in a seated position.
- 4- Introducing of ultra-high-speed hand pieces and evacuation method.

Although there has been increase in the dental population to be served there has been sufficient increase in the number of the dentist. The demand is to reduce the size of need itself through preventive care.

In 1948 the British Dental Association (BDA) recommended a ratio of one dental officer to 2000 person, but 10 year later and because of increased in caries incidence the recommended ratio became one dental officer to 1500 person.

--WHO recommendation was 1: 600

-- According to Iraqi Ministry of Health reports 1997 dentist / population ratio was 1: 6000.

--- Dentist per 1000 population 1.20 in 2005 according to the Ministry of Health in Iraq.

--- In Japan the ratio 76: 100000 (2004).

## **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**

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