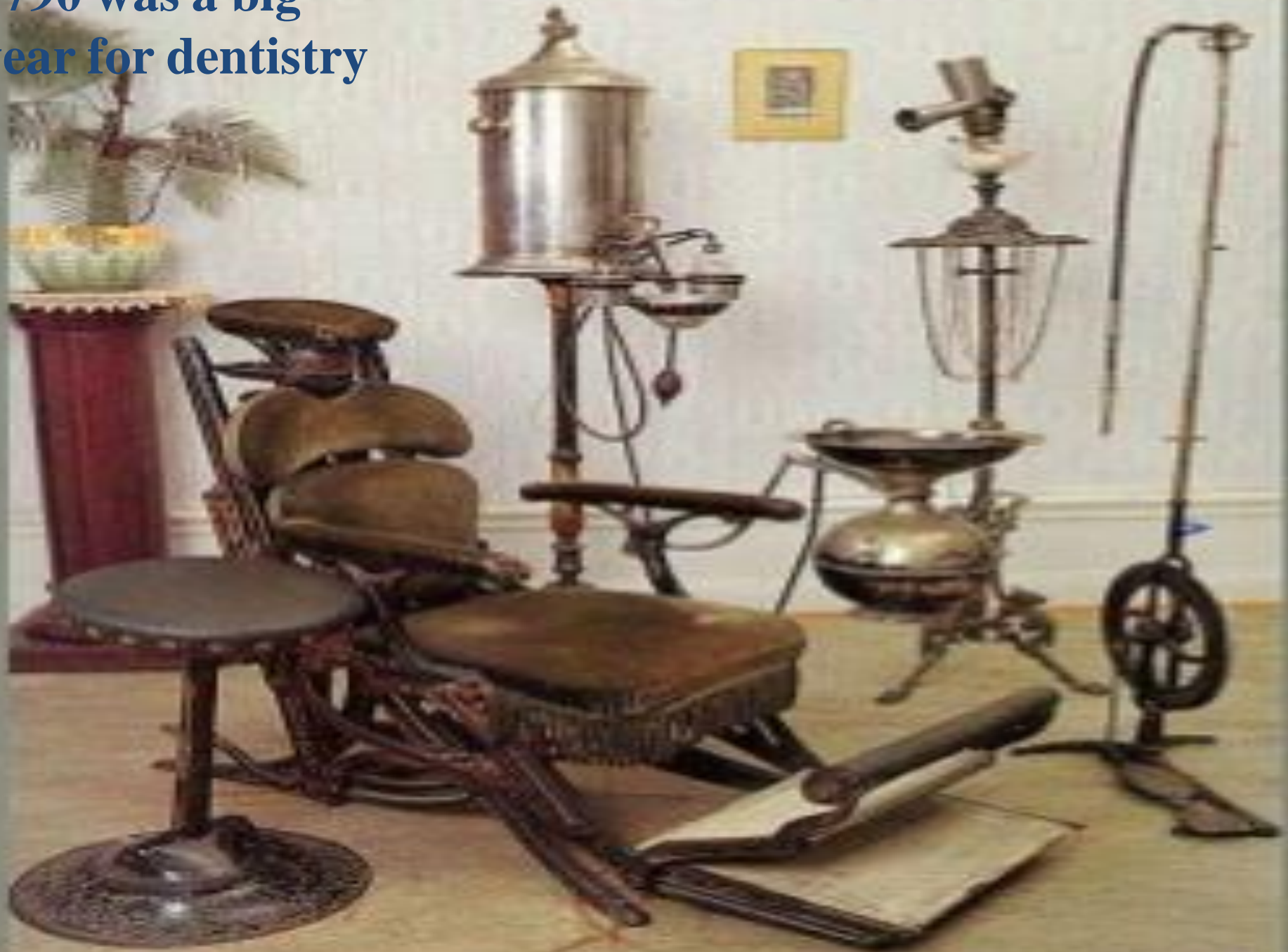


Practical community dentistry

Dr .Lamya Alazzawi

Lab:1

1790 was a big
year for dentistry



Ergonomics Guide Lines

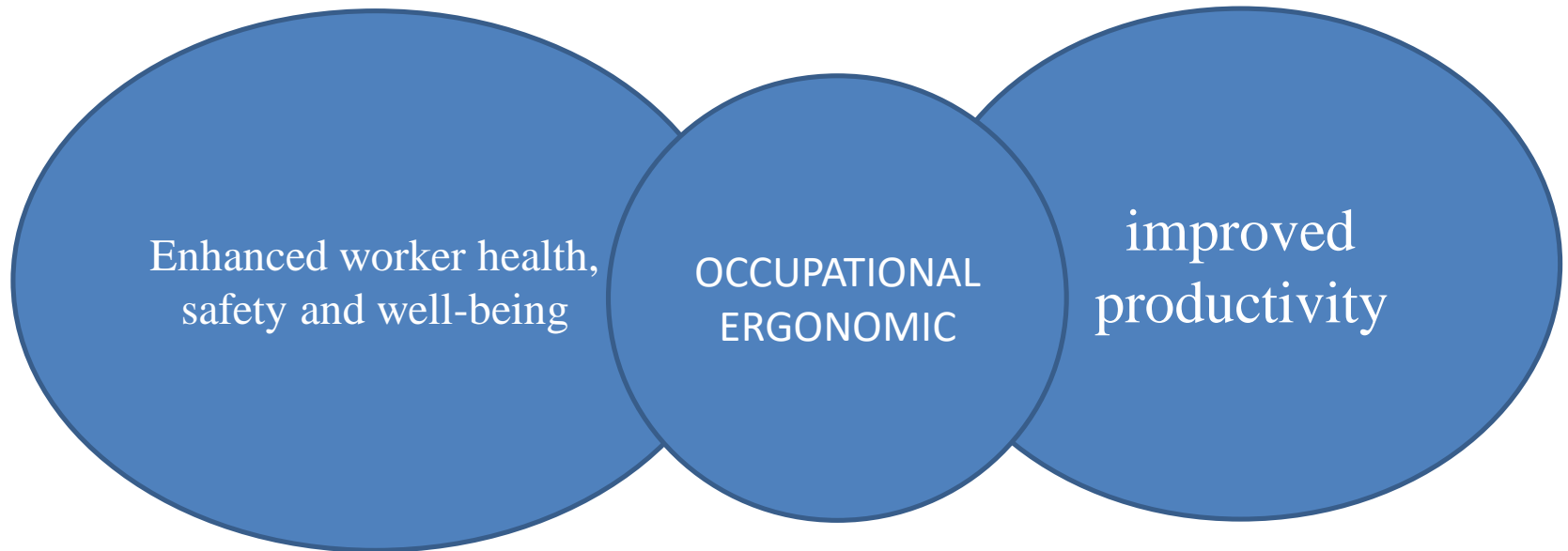
we often think of the equipment we wear, hold, or sit upon. However, the equipment that surrounds us can have just as great an impact as the equipment that is in constant contact with our bodies



In order to apply ergonomics

We therefore need information about the:

- Human operator
- Task
- Overall work setting including equipment, environment and the organization of the work



Two fold objective of occupational ergonomics.

Elements in occupational ergonomics

- 1. Worker: The human element of the workplace
- Arrange of characteristics need to be considered age health residual disabilities; physical and mental capacities; experience and skills; education and training.

- 2. Job/task design:

What the employee is required to do, and what they actually do

- 3. Equipment design:

Work stations, tools and equipment

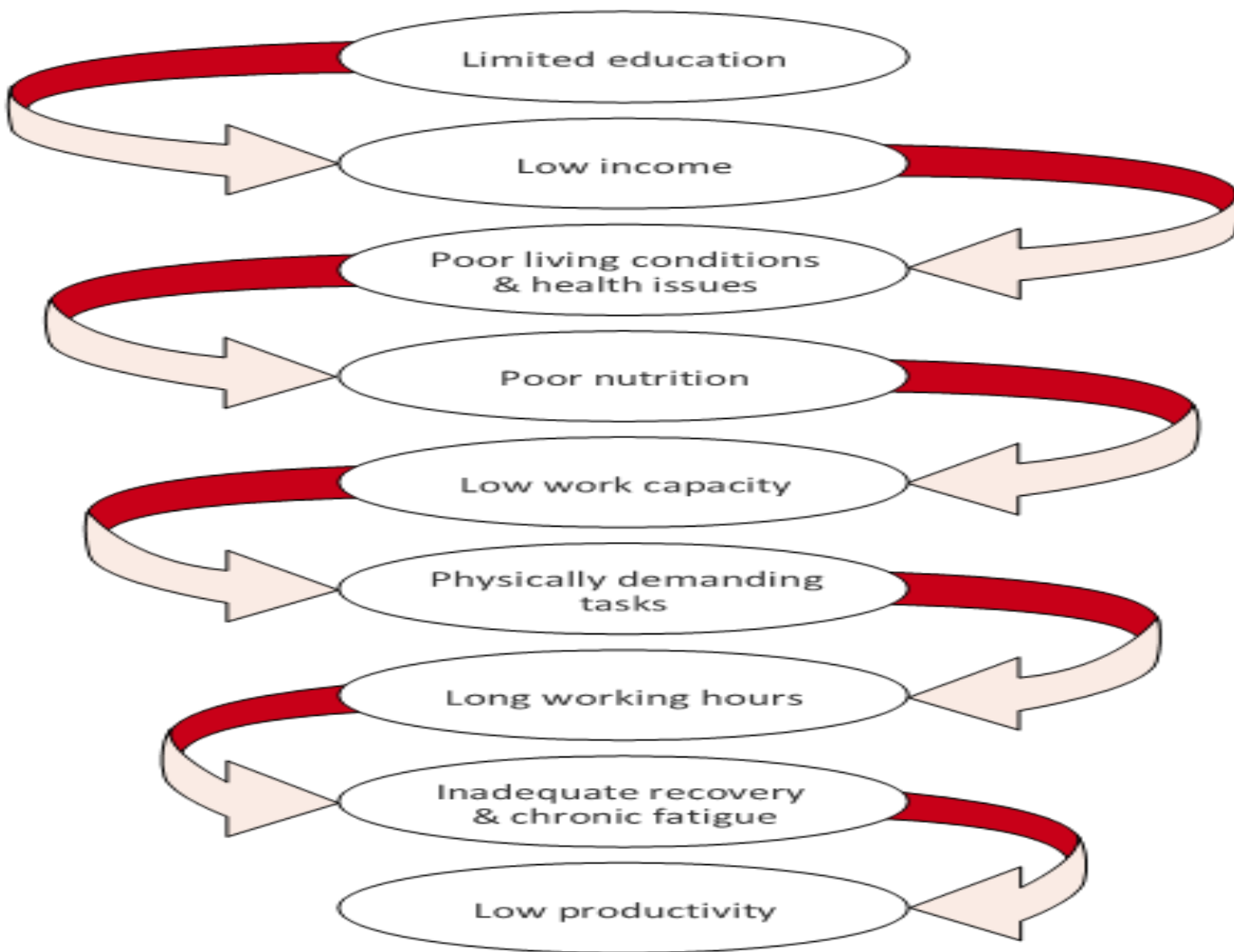
- 4. Workplace design:

Overall work environment

- 5. Work organization: The broader context of the organization and the work and how this affects individuals



PHYSICALLY DEMANDING TASKS COMPOUNDED BY:



NEGATIVE SPIRAL



Figure 8
Heavy, awkward loads can be much more effectively picked up, carried and lowered using team lifts or mechanical aids.



Figure 9
Fixed work postures and lack of task variety can be alleviated by regular breaks away from the task.

Patient seating and examination



A) Patient position

• 1. patients seating :

- ❖ The patient should have a direct access to the chair.
The Patient should be seated so that all his body are well supported
- ❖ The chair height should be low,
- ❖ The backrest upright,
- ❖ and the armrest adjusted to allow the patient to slide into the chair as though seated in a lounge chair.

After the patient is seated the armrest is returned to its normal position and the head rest is positioned to support the head and to elevate the chin slightly away from the chest.

Good and efficient lightening is essential

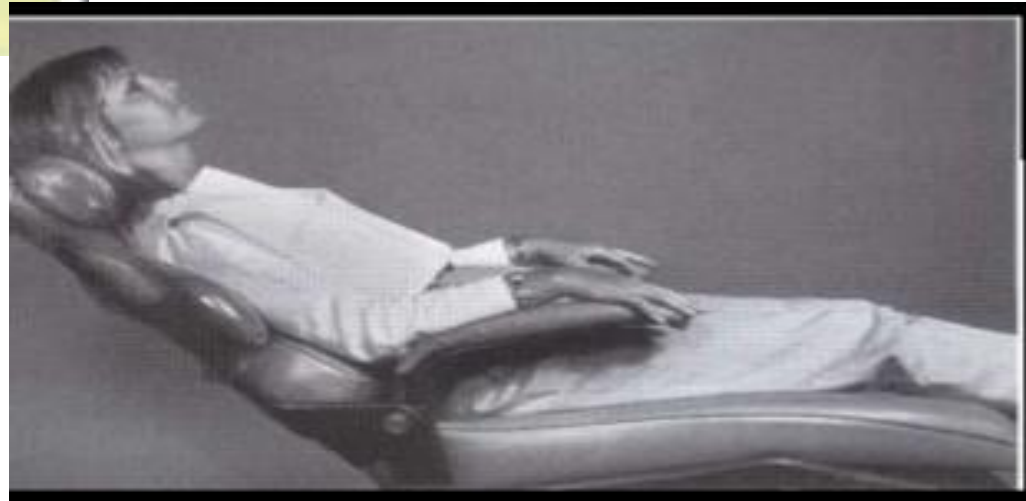


The most common patient positions are :

1.Upright position. This is the initial position from which chair adjustments are made



2.Reclined 45 degree position (semi –upright). A patient with certain types of cardiovascular or respiratory problems may need to be in a semi upright position during treatment



- **3. Almost supine position (horizontal) .** the patient is flat, with head and feet on the same level.



- **4.Trendelenburg position.** The patient is in supine position and tipped back and down 35 degree so that the heart is higher than the head.



This choice depend on :

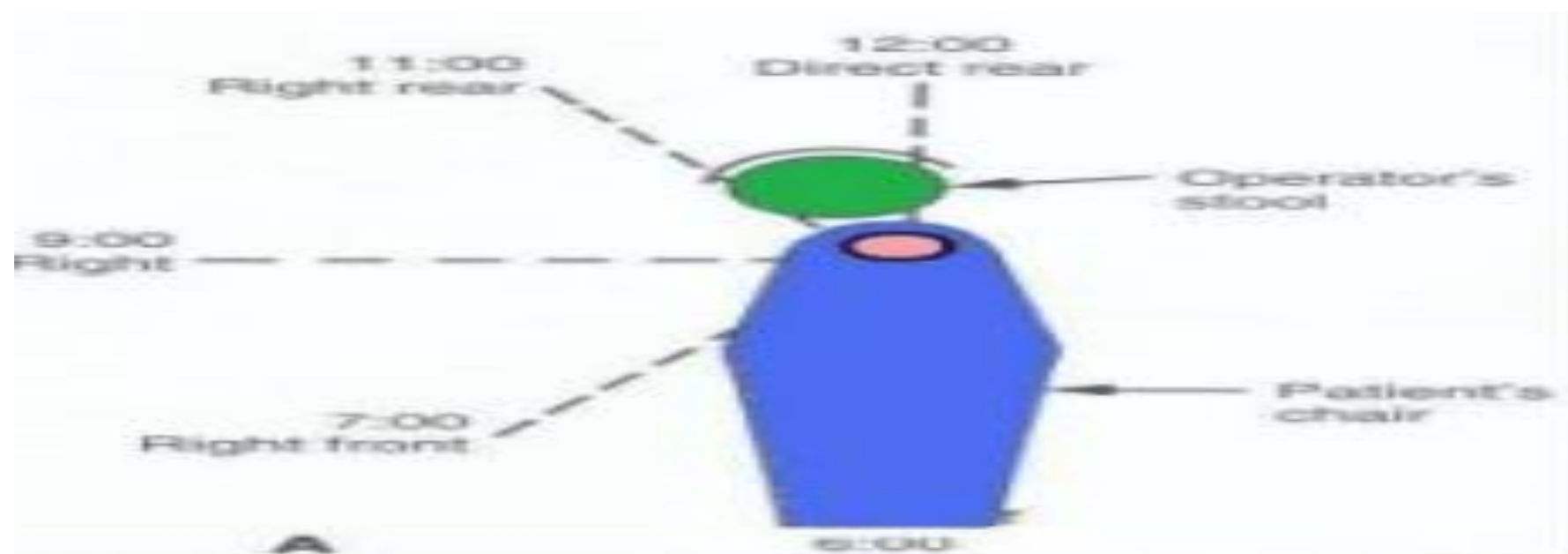
- 1.The operator.
- 2.Type of procedure.
- 3.Area of the mouth involved in the operation.



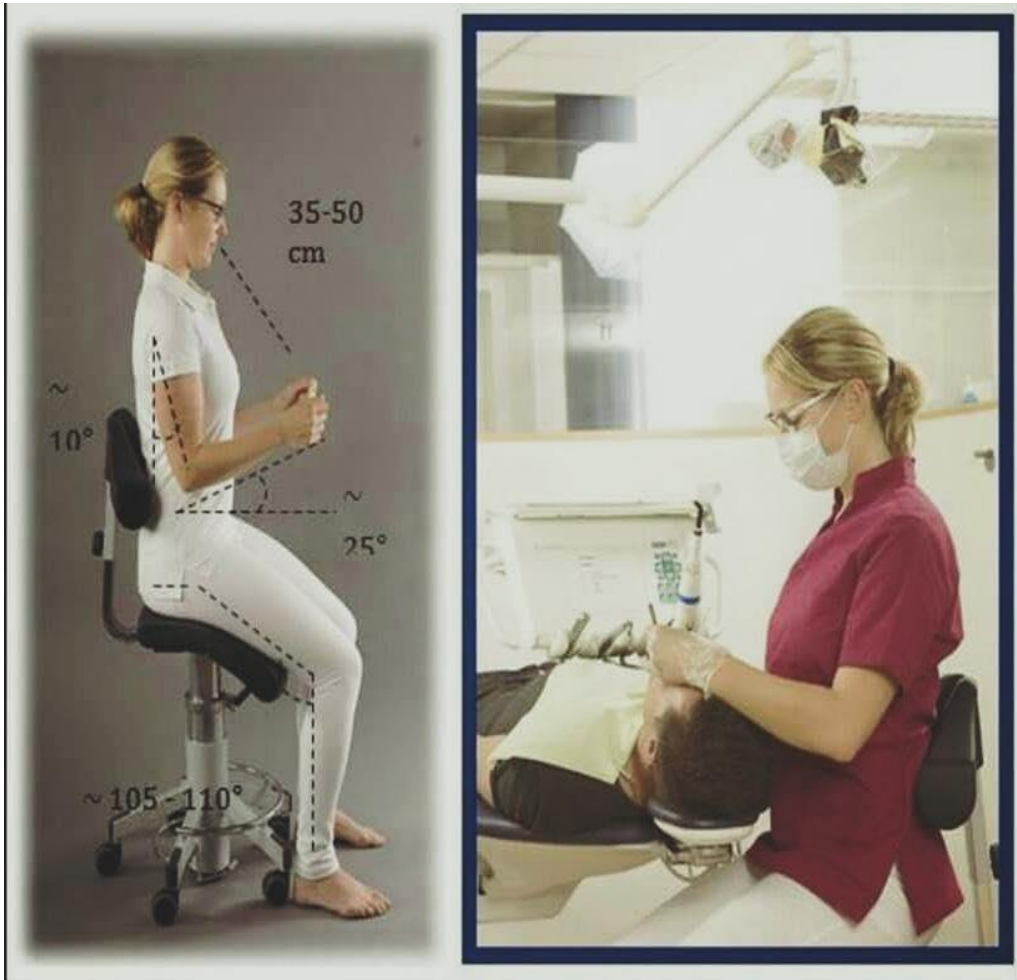
2.Occaussal surfaces direction:

- as a rule, when operating in the maxillary arch, the maxillary occlusal surfaces should be oriented approximately perpendicular to the floor.

- When operating in the lower arch, the mandibular occlusal surfaces should be oriented approximately 45 degrees to the floor.



B. Operating positions (location of the operator)



For right handed operator, there are four positions:

1.Right front (7 o'clock positions); for examination and work on mandibular anterior teeth, mandibular posterior teeth, especially the right side, and the maxillary anterior teeth. It is often better the patient head rotated slightly toward the operator.



Fig 15.2 Operator position - Right front



- **2.Right positions (9 o'clock position)**

for operating on the facial surfaces of the maxillary and mandibular right posterior teeth and the occlusal surfaces of the mandibular right posterior teeth.

3.Right rear positions

(11 o'clock positions)

the operator is behind and slightly to the right of the patient. The left arm is positioned around the patient head.

When one operating from this position, the lingual and incisal (occlusal) surfaces of the maxillary teeth is viewed in the mouth mirror.

Direct vision may be used in the mandibular teeth , especially on the left side, but the use of the mirror is advocated for light reflection, retracting and viewing



Fig 15.4 Operator position - Rear

- **4.Direct rear position**

Used for operating on the lingual surface of the mandibular anterior teeth,

The operator is located directly behind the patient ,and locks down over the patient head
This position has limited application.



Fig 15.5 Operator position - Direct rear.



Instruments and supplies

1.Plane mouth mirror.

for lower arch we do direct inspection and the mirror is used for retraction of tongue and check, while in the upper arch it used for indirect vision and reflection of light in addition to soft tissue retraction.



2.Sharp sickle-shaped - explorer;
used for dental caries diagnosis

3.Twizers.



- **4.Containers** when used for instruments and another for sterilizing instrument
- **5.Concentrated sterilizing solution.**
- **6.Towels**



7.Cotton

8.Mask and gloves.



- **Examination** ; the first step towards treating a patient is to achieve an accurate diagnosis for which comprehensive history taking and thorough clinical examination is essential.
- **Symptoms**: is the subjective evidence of a disease perceived by the patient.
- **Sign**: it is the objective evidence of the disease elicited by the clinician.
- **Diagnosis**. Is the process of identifying a disease by its sign and symptoms and result in various diagnostic procedures for conclusion reached through this process is called diagnosis.

DON'TS:



THANK YOU