**Pharmacognosy lecture: 1**

Is the part of pharmacology that studies the action of natural medicines, the term comes from two Greek words: "pharmakon" meaning drug or medicine, and "gnosis" meaning knowledge.

Pharmacognosy covering all information on medicine from natural sources (plants, animals and microorganisms).

**Crude drugs**

Is part of plants which after collection are subjected only to drying or making in to transverse or longitudinal slices or peeling them in some cases. Most crude drugs in medicine are obtained from plants and only a small number comes from animals and mineral.

**Phytochemistry** is a specialty derived from the Pharmacognosy and chemistry is the study of herbs.

**Importance and function of the phytochemical**

The **Phytochemistry** is very important

1. For the determination of the active ingredients of medicinal plants.
2. For quantification and analysis of the beneficial and harmful effects to human health.

**Medicinal plants** are all plants that contain, active ingredients, which, administered in sufficient doses, produces curative effects on diseases of human and animal in general.

**Roles compounds from natural sources:**

1- They provide a number of extremely useful drugs, these include, alkaloids of the opium poppy of ergot, the cardiotonic glycosides of digitalis; most of antibiotics; and all serums, vaccines.

2-natural sources also supply basic compounds that may be modified slightly to more effective or less toxic e.g. morphine molecule.

3-natural products is their utility as prototypes or models for synthetic drugs possessing physiologic activity similar to the original e.g. procaine

4-some natural products contain compounds that little or no activity but which can be modified by chemical or biological method to produce potent drugs. Stigmasterol which occurs in large quantity in soy bean oil permits the large scale production of hydrocortisone.

**Classification of crude drugs**

1- Alphabetical classification

2-taxonomical classification: families, species

3-morphological classification: (leaves, flower)

4-pharmacologic classification: drug like digitals

5- Chemical classification: alkaloid, volatile oil

6-chemotaxonomical classification

7-serotaxonomical classification