

Review:

## **An introduction and development of Unani System of Medicine and its Potential Herbal Drugs Used for Liver Diseases**

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### **Historical Background:**

*Unani* system of medicine owes its origin to Greece. It was the Greek philosopher physician Hippocrates (460-377 B.C.), who put forward the theoretical framework of *Unani* system of medicine. After Hippocrates a number of Greek scholars enriched this system considerably. Of them Galen (131-210 A.D.) is the one who established its foundation, and Arab physician like Rhazes (850-925 A.D.) and Avicenna (980-1037 A.D.) further developed this.

Hippocrates and Galen were Greek scholars. The humoral concept was suggested by Hippocrates in his book *Tabiatul Insan*. Galen based his philosophy and theories on experimental evidence. He defined the structure and functions of all body organs and established a concept of anatomy as well as physiology of the human body. "De Simplicibus" enjoyed great popularity in Latin.

During the time of Abbasid Caliphate (749-1258 A.D.) the Arab scholars of the time converted almost all Greek, Roman and Latin medical and scientific works into Arabic. Rhazes (850-925 A.D.) was a famous, legendary healer of the Arab world. His most celebrated work is *Al-Hawi* (Libre Continents). It is available in 25 volumes. It covers the subjects of therapeutics, materia medica and pharmacy. The most significant work of Zahravi (946 A.D.) is *Al-Tasreef*, a book on surgery.

Ibn Sina (Avicenna) was born in Bukhara. He travelled very widely. He reformulated the theories from a clinical point of view in his book *Al-Qanon Fit Tibb*, latinised as The Canon of Medicine. This book has also been translated into Uzbek, Turkish, Hebrew, English and Urdu. It was accepted in

Europe and Arab World for almost eight centuries. Ibn Zohar (1092-1198 A.D.), an Arab scholar wrote an important compendium of *Unani* medicaments in his book *Kitabul-Taiseer fi Madawat Wal-Tadbir*. Ibn Rushd (1126-1248 A.D.), an Arab author wrote an important book, *Kitabul Kulliyat* (Principles of Medicines). Ibn-e-Baiydar (1190-1286 A.D.), the great botanist of his times collected information about 1,000 drugs from the authentic sources but also added about 500 drugs to the materia medica, as a result of his personal research. His book *Al-Jami Li Mufradat al Adwiya Wal Aghzia* has been translated in Urdu by Central Council of Research in *Unani* Medicine, Govt. of India. Three volumes of this treatise have been published. The fourth is to be brought out shortly. Al-Masihi (1233-1286 A.D.), a renowned Arab author presented up to date knowledge on the subject in his book, *Kitab-al-Umda fil Jarahat*. He also mentioned the prescriptions based on single drugs.

*Unani* medicine got enriched by imbibing what was best in the contemporary systems of traditional medicine in Egypt, Syria, Iraq, Persia, India China and other Middle East countries.

### **Introduction in India:**

Greeko-Arab System:

Ayurveda: Native medicine (in India).

"*Unani Tibb*": Amalgamated form.

Hakim Gilani came to India from Iran during the reign of Akbar the Great (1556-1605), and became personal physician of the emperor. He was honoured with the title of "Galen of the age". He was very intelligent and fervent. He wrote the commentary on *Al-Qanon*.

In India, this system was introduced by Arabs in 13<sup>th</sup> - 14<sup>th</sup> century A.D. The *Unani* (*Greeko-Arab*) system of medicine came to India with the Muslims. Due to the native medicine *Ayurveda* and due to the temperament of the people of India the new system was not easily acceptable. The scholars and physicians of *Unani* medicine who settled in India were not content with the known drugs, but they subjected Indian drugs to clinical trials, and as a result of their experimentations added numerous native drugs to this system. Thus a hybrid amalgam of the Greeko Arabic and *Ayurvedic* medical practice was gradually produced, which later on was known as "*Unani Tibb*" or "*Tibbi medicine*". During the British rule in India, *Unani* medicine suffered. It declined. Sharief family in Delhi, and the Aziz family in Lucknow (India) during the late 18<sup>th</sup> and early 19<sup>th</sup> centuries and the Nizam of Hyderabad wanted to keep the tradition alive. Thus *Unani* medicine survived by their efforts. Hakeem Ajmal Khan (1864-1926) an outstanding physician and scholar of *Unani* medicine championed the cause of the system in India.

Hakeem Abdul Hameed, a renowned *Unani* physician, established a *Unani* institution (Jamia Hamdard) in Delhi in 1989. His younger brother Hakeem Mohammed Said established Baitul Hikmat (*Unani* University) in Karachi, Pakistan. Presently the Govt. of India is patronising the *Unani* system of medicine in India. The literary and research works of Central Council for Research in *Unani* Medicine (Govt. of India) are commendable.

### **The concept of Unani medicine:**

The ancient Greek physicians used the term '*physiology*' to denote the origin and nature of things, which later was applied to the study of all the natural sciences, including medicine and biology. And since the teaching of the medical sciences came under the general heading of 'physicis' the practitioner of medicine was designated as 'physician'.

The *Unani* physicians forwarded a theory, which described that human body is composed of the seven natural principles (*Umoor e Tabia*).

According to *Unani* scholars "*Tabiat*" (*physis*) is a power which all living beings possess to maintain good health. It takes care of the smooth functioning of all bodily functions and fight against the diseases. The concept of *Tabiat* was laid down by the 'Hippocrates' who said "*the nature heals*" and the physician is only nature's assistant, and he advised physicians to abide by and follow the power of *Tabiat* (*physis*) and not antagonise it.

### **Seven natural principles (*Umoor e tabla*):**

- 1) Elements (*Arkan*)
- 2) Temperament (*Mizaj*)
- 3) Humours (*Akhlat*)
- 4) Members (*Aza*)
- 5) Pneuma or vital breaths (*Arwah*)
- 6) Faculties (*Quwa*)
- 7) Functions or operations (*Afaal*)

#### **1) Elements (*Arkan*)**

Among these seven natural principles the first is elements (*Arkan*). These are simple indivisible substances, which provide the primary components of the body. They can not be further resolved into simpler entities. Thus all types of matter found in the nature are formed by the combination of these substances. The element is the basic unit of the compound. According to the classical *Unani* theory there are four primary elements. *Air*, *Fire*, *Water* and *Earth*. These elements are the basic blocks of all substances in nature including the human body.

These four elements also determine the four states of the matter. Air stands for the gaseous state, water stands for the liquid state, earth stands for the solid state, and fire stands for matter, which has been transformed into heat.

Each element contains two properties in which one is active and one passive. For example in fire, heat is an active property, which has the productive capacity, while dryness is the passive property. Two active properties can never be found in an element i.e., an element can not be simultaneously hot and cold.

Every element has a certain temperament or 'Mizaj', which makes every compound differ in nature as far as chemical and physical states are concerned. Physically three types of matters are found. Solid, liquid, and gaseous, and chemically there are *Hot, Moist, Cold, and Dry*. The human body contains all types of matter.

## 2) Temperament (*Mizaj*)

According to the *Unani* physicians temperament or *mizaj* is the new state which results from the action and reaction among contrary qualities present in minute particles of different elements. The resultant uniform state emerging after the combination of more than one element is called *mizaj*.

The temperament is the result of intermixture of elements with mutual affinity. Therefore, two forms of intermixture. If two or more elements are simply mixed and their previous properties are maintained as before, it is called as simple intermixture (*imtizaj sadhi*), as for example the mixture of sugar and water in the form of a syrup. If the elements mix in such a way that their former properties are changed altogether and quite new properties are produced it is true admixture called factual combination (*imtizaj e haqiqi*).

The temperament is of two kinds:

- a) A balanced or equable temperament (*mizaj e muatadil*), when the contrary qualities of the elements in a compound are qualitatively equal and perfectly balanced according to the required properties and functions of that compound.
- b) An imbalanced or inequable temperament (*mizaj e ghair muatadil*) when the opposite qualities of the elements in a compound are qualitatively unequal and unbalanced.

According to the presence of different temperaments various types of personalities are described.

- a) **Hot personality:** These individuals have a hotter temperament than average.

- Have early eruption of teeth
- Have warmer skin and prominent veins
- Their built is lean
- Have black and thick hairs
- They feel comfort from the use of cold things

### b) **Cold personality:**

- They are fat and feel cold to the touch
- Have wheatish complexion
- Suffer greatly during winter season and have little desire for drinks

### c) **Dry personality:**

- Have dry and rough skin
- Humid things appeal to them
- Do not like autumn weather and some of them even suffer from sleeplessness

### d) **Moist personality:**

- These individuals have soft skin and are more fat
- They do not tolerate moist nature things easily
- They have excess sleep, excess salivation, and have puffiness of eyelids

Similarly each organ and tissue of the body has its own temperament. The main stress in this system is given to correct the temperament or *mizaj* of the body as a whole or the organ involved.

The hot organs (*Aza e Harra*) are supposed to be those in which blood supply and metabolic activities are comparatively more intense. Of all the organs heart is the hottest, then come liver and then flesh (muscle).

The cold organs (*Aza e Ratiba*) are those in which blood supply and metabolic activities are comparatively less intense. Of all the organs bone is coldest, then come cartilage, ligament and nerves, followed by spinal cord and the brain.

The moist organs (*Aza e Ratiba*) are more humid than the other category. Wettest is fat, and then loose flesh i.e. glands.

The dry organs (*Aza e Yabisa*) are drier than the other category. Of all the organs the body

hair is the driest, then fall bones, cartilage, tendons, and nerves in order.

### 3) Humours (*Akhlāt*)

Another important principle is humours (*Akhlāt*). *Unani* physicians developed the system, which combined physiology and pathology, and explained health and disease on humoral basis.

There are four humours in the body, *Blood*, *Phlegm*, *Yellow Bile*, and *Black Bile*. Corresponding to the four elements and their four primary qualities. It was observed that when the blood coagulates, it separates into humoral components. At the bottom black portion of the clot is black bile, the upper red part is the blood, the yellow portion is the yellow bile, and the fibrin is the category of the phlegm. The scholars and physicians of *Unani* system of medicine expressed the temperament of persons of as *Sanguine*, *Phlegmatic*, *Choleric*, and *Melancholic* according to the humours, blood, phlegm, yellow bile, and black bile, respectively.

The blood (*Dam*) is a fluid of red colour, hot and wet in nature. Its main function is to provide nutrition to the human body. It promotes growth of the body in adolescence and helps in the generation of innate heat by supplying fuel to the human body.

The blood is of two kinds, normal and abnormal. The normal blood is red in colour, has no unpleasant odour, and is sweet in taste.

The phlegm (*Balgham*), is a body fluid of whitish colour, which also includes many other white humours of different nature possessing different characteristics and functions. In nature, it is cold and wet. It is capable of transformation into blood at any time. It subserves nutrition to the organs.

The yellow bile (*safrā*) is hot and dry in nature and occurs in normal as well as abnormal forms. The normal bilious humour is bright red (like saffron) in colour. It is light and pungent. The yellow bile enables the blood to nourish those organs, which need the presence of bilious humour such as the lungs. It attenuates the blood

and thus enables blood to reach those minutest channels of the body. It cleanses the food residues and phlegmatic humour off the walls of bowels, and stimulates the muscles of the intestines and anus.

The black bile (*sauda*) in its normal form is the sediment of the blood, but this term also includes all other fluids having black or dark brown colour. It is cold and dry in nature. The portion of the black bile that enters into the blood subserves two purposes: takes part in the nourishment of some of the organs i.e. the bones, and bestows the density and consistency upon the blood. Its main use is that by travelling to the mouth of the stomach, it tickles the site and sets up a sense of hunger and so, arouses the appetite.

Every person is supposed to have a unique humoral constitution, which represents his healthy state, and to maintain the correct humoral balance there is a power of self-preservation or adjustment called as *Medicatrix Naturae* in the body. If this power weakens imbalance in the humoral composition to occur. And this causes disease. The medicines used in this system help the body to regain this power to an optimum level, thereby restoring humoral balance, and thus retaining health.

### 4) The members or organs (*Aza*):

The organs of the body are derived primarily from the coarser and solid particles of the humours as compared to the *pneuma*, which is formed out of the finer and lighter constituents of the humours. These members may be divided into two classes; simple (*mufrad*) and compound (*murakkab*).

The vital organs necessary for the maintenance for life of an individual are three, and for the preservation of the race one more vital organ is necessary. These vital organs are:

- a) The heart is the source of the vital power.
- b) The brain is the seat of all mental faculties, sensations and movements. It is subserved by nerves.

- c) The liver is centre of the nutritive faculties. It is subserved by veins.
- d) The testis (or ovary) is concerned with the propagation of the race. It is the seat of forming generative elements.
- 5) **Air** is considered to be composed of a number of substances, the most important and the one on which life depends is the *pneuma* or vital air. After this air enters the lungs and is purified it goes to heart and from there to all the parts of the body through the arteries, and then the waste which comes out with this air is exhaled out by the lungs.
- 6) **The faculties (*Quwa*)** is that property of the body with which the phenomenon of life is manifested. The faculties provide the basis for different bodily functions and are to be distinguished from the functions themselves. There are three kinds of faculties; natural (*tabia*), animal (*nafsania*), and vital (*haiwania*).
- 7) **The functions (*Af 'al*)** is the term in the *Unani* medicine used for the normal or special action or performance of a part of body. The *Unani* physicians consider that some of the functions are carried out by one single faculty like attraction etc., which are therefore called simple functions (*af 'al mufrida*). While, some other functions are carried out by the two or more faculties, like the act of swallowing which is called as the compound function (*af 'al e murkkaba*).

## Maintenance of health

*Unani* medicine believes in preventive measures rather than curative. There are six basic factors, which are considered essential for the maintenance of good health.

- A) *Air*
- B) *Food and drinks*
- C) *Physical movements and repose*
- D) *Psychic movements and repose*
- E) *Sleep and wakefulness*
- F) *Evaquation and retention*

If a person is in practice of these basic principles with a perfect balance, his/her health remains maintained.

## Methods of treatment

In *Unani* system of medicine there are four methods of treatment.

- a) *Pharmaco-therapy*: The medicines used for therapeutic purposes are derived from the herbal, mineral, and animal sources. These are mostly used in their natural forms within a purified way. These are used as single and compound forms. Single drugs are seldom used.
- b) *Surgery*: Which includes veinesection (*fasad*), cupping (*hijamat*), leaching (*taleeq*), and cauterization (*aml e kai*).
- c) *Diet o therapy*: By regulating the quality and quantity of the patient's diet.
- d) *Regimental therapy*: the modes of regimental therapy include exercises, massages, steam baths, fomentation, emesis, purging, and enema.

**Table 1. Plants Recommended to be Used for the Cure of Various Liver Diseases as Described by Ibn Sina<sup>1, 2</sup>**

S.No.	Botanical names	Part (s) used	Unani names
1	<i>Achillea millefolium</i>	Whole plant	'Biranjasif'
2	<i>Adiantum capillus-veneris</i>	Whole plant	'Parsiaoshan'
3	<i>Aloe vera</i>	Leaf	'Ghee kanvar'
4	<i>Alhagi pseudalhagi</i>	Manna	'Turangabeen'
5	<i>Althaea officinalis</i>	Root	'Bekh-e-khatmi'
6	<i>Amoora rohituka</i>	Bark	'Harinhara' (H)
7	<i>Andrographis paniculata</i>	Whole plant	'Kalmegh'
8	<i>Areca catechu</i>	Nut	'Fofal'
10	<i>Artemisia absinthium</i>	Flower	'Afasanteen'
11	<i>Bambusa arundinacea</i>	Siliceous concretions of the stalk of female plant	'Tabasheer'
12	<i>Berberis aristata</i>	Stem/Root bark	'Rasaut'
13	<i>Capparis spinosa</i>	Root bark	'Kabar'
14	<i>Carissa spinarum</i>	Root	'Jangli karnoda'
15	<i>Cassia fistula</i>	Fruit	'Amaltas'
16	<i>Cassia occidentalis</i>	Seed/Leaf	'Kasaundi'
17	<i>Cichorium intybus</i>	Root/seed	'Kasni'
18	<i>Cinnamomum camphora</i>	Camphor	'Kabfoor'
19	<i>Cinnamomum zeylanicum</i>	Bark	'Darchini'
20	<i>Citrus medica</i> (syrup with sugar)	Fruit juice	'Sikanjabeen'
21	<i>Commiphora myrrha</i>	Gum resin	'Murmaki'
22	<i>Crocus sativus</i>	Dried stigma	'Zafran'
23	<i>Cuscuta reflexa</i>	Whole plant	'Akashbel'
24	<i>Cymbopogon jwarancusa</i>	Grass	'Izkhir'
25	<i>Eclipta alba</i> or <i>E. prostrata</i>	Whole plant	'Bhangra'
26	<i>Emblica officinalis</i>	Fruit	'Amla'
27	<i>Ferula galbaniflua</i>	Gum-resin	'Jaosheer'
28	<i>Fumaria indica</i>	Whole plant	'Shahtaraj'
29	<i>Gentiana dahurica</i>	Plant	'Ghafith'
30	<i>Glycyrrhiza glabra</i>	Root	'Mulethi'
31	<i>Iris germanica</i>	Root	'Bekh saosan'
32	<i>Indigofera tinctoria</i>	Plant	'Neel'
33	<i>Lagenaria siceraria</i>	Seeds	'Kaddu'
34	<i>Luffa echinata</i>	Fruit	'Bandal'
35	<i>Marrubium vulgare</i>	Plant	'Farasiyun'
36	<i>Matricaria chamomilla</i>	Flower	'Babuna'
37	<i>Melilotus officinalis</i>	Plant	'Aklilul-malik'
38	<i>Myrtus communis</i>	Leaf/Fruit	'Habulas'
39	<i>Nardostachys jatamansi</i>	Root	'Sumbul teeb'
40	<i>Nympaea stellata</i>	Root stock	'Chota kamal'
41	<i>Ocimum basilicum</i>	Leaf/seed	'Tulsi/Rehan'
42	<i>Pennisetum glaucum</i>	Plant, seed	'Bajra'
43	<i>Phyllanthus fraternus</i>	Whole plant	'Bhui-amla'
44	<i>Physalis alkekengi</i>	Plant	'Kaknaj'
45	<i>Picrorhiza kurroa</i>	Root	'Kutki'
46	<i>Piper longum</i>	Unripe fruit	'Pipla'
47	<i>Piper nigrum</i>	Fruit	'Mirch siyah'
48	<i>Pistacia lentiscus</i>	Resin	'Mastagi'

49	<i>Plantago ovata</i>	Seed	'Ispghol'
50	<i>Plumbago zeylanica</i>	Root	'Chita lakri'
51	<i>Portulaca oleracea</i>	Leaf	'Berg-e-khurfa'
52	<i>Pterocarpus santalinus</i>	Wood	'Sandal surkh'
53	<i>Punica granatum</i>	Seed	'Tukhm-e-anar'
54	<i>Rheum emodi</i>	Rhizome	'Revandchini'
55	<i>Ricinus communis</i>	Seed	'Arand'
56	<i>Rosa damascena</i>	Flower	'Gul-e-surkh'
57	<i>Rubia cordifolia</i>	Root	'Majeeth'
58	<i>Salix caprea</i>	Leaf	'Bed Mushk'
59	<i>Saussurea lappa</i>	Root	'Qust'
60	<i>Solanum nigrum</i>	Fruit / Leaf	'Makoh'
61	<i>Tamarindus indica</i>	Fruit	'Tamar-e-hindi'
62	<i>Tamarix dioica</i>	Leaf	'Berg-e-jhau'
63	<i>Terminalia chebula</i>	Fruit	'Halela-e-zard'
64	<i>Tinospora cordifolia</i>	Stem	'Gilo'
65	<i>Valeriana wallichii</i>	Root	'Asaroon'
66	<i>Viola odorata</i>	Flower	'Gul-banafsha'
67	<i>Vitex negundo</i>	Seed / Leaf	'Sambhalu'
68	<i>Wedelia calendulacea</i>	Plant	'Bhangra' (H)
69	<i>Withania somnifera</i>	Fruit	'Asgand'
70	<i>Zizyphus sativa</i> syn. <i>Z. vulgaris</i>	Fruit	'Unnab'

H=Hindi

### References:

1. Al-Qanun Fil-Tibb. Avicenna. (English translation of the critical Arabic text), Book 2, 1998. Hameed, H. A. (editor), Dept. of Islamic Studies, Jamia Hamdard (Hamdard University), New-Delhi, India.
2. A Comprehensive Glossary of Avicenna's Canon of Medicine, 1967. Institute of History of Medicine and Medical Research, New Delhi. Da iratul Ma arif Press, Osmania University, Hyderabad-7, A. P. India.