

# Alternative Systems of Medicine

## CHAPTER 2

### 2.1. INTRODUCTION

Pharmacognosy has been basically evolved as an applied science pertaining to the study of all types of drugs of natural origin. However, its subject matter is directed towards the modern allopathic medicine. During the course of developments, many civilizations have raised and perished but the systems of medicines developed by them in various parts of the world are still practised, and are also popular as the alternative systems of medicine. These are the alternative systems in the sense that modern allopathic system has been globally acclaimed as the principal system of medicine, and so all the other systems prevalent and practised in various parts of the world are supposed to be alternative systems. The philosophy and the basic principles of these so called alternative systems might differ significantly from each other, but the fact cannot be denied that these systems have served the humanity for the treatment and management of diseases and also for maintenance of good health. About 80 percent of the world population still rely and use the medicines of these traditional systems.

Traditional Chinese medicine in China, *Unani* system in Greece, *Ayurvedic* system in India, *Amachi* in Tibet or more recently *Homoeopathy* in Germany are these systems of medicine which were once practised only in the respective areas or subcontinents of the world, are now popularly practised all over the world. The World Health Organization (WHO) is already taking much interest in indigenous systems of medicine and coming forward to exploit the scientific validity of the medicines used since traditions. The revival of great interest in these age-old systems of health care carries much meaning in the present scenarios. The study of these alternative systems is necessary so as to grasp and receive the best out of it to rescue humanity from the clutches of disease. Modern allopathy has developed many sophisticated and costlier diagnostic methodologies which have made it quite exorbitant and beyond the abilities of common man. Many modern synthetic drugs may harm

more than they help in curing the disease by its serious toxic effects. On the contrary, traditional medicines are much more preferred for being safe and without harmful effects and comparatively much cheaper than that of allopathic medicines. However, one fact must be accepted here that the yelling humanity lastly run towards the modern allopathic treatment, which has developed wonderful techniques of diagnosis and highly effective drugs to provide the best and effective treatment than any other system of medicine till date.

### 2.2. TRADITIONAL CHINESE MEDICINE SYSTEM

The use of herbs as medicine is mentioned in China and Japan. The burial that dates back to 168 B.C. consists of corpus of 11 medical works. The development in the field of medicine had took a drastic change by A.D. 25–220 but people were more confident than the earlier period to understand the nature and they believed that the health and the disease depended on the principles of natural order. The first herbal classic written in China was published in the Qin Dynasty (221–206 B.C.) called the Agriculture Emperors *Materia Medica*. The first plants discovered and used were usually for digestive system disorders (i.e. *Da Huang*), and slowly as more herbs were discovered the herbs became more useful for an increasing number of ailments, and eventually the herbal tonics were created.

Traditional Chinese medicine is based on the principle of *Yin* and *Yang* theory. *Yang* represents the force of light and *Yin* represents the forces of darkness. According to the yellow emperor, *Yin* and *Yang* is the foundation of the entire universe. It underlies everything in creation. It brings about the development of parenthood; it is the root and source of life and death; and it is found with the temples of the gods. In order to treat and cure diseases, one must search for their origins. Heaven was created by the concentration of *Yang* and the Earth by the concentration of *Yin*. *Yang*

stands for peace and serenity; *Yin* stands for confusion and turmoil. *Yang* stands for destruction; *Yin* stands for conservation. *Yang* brings about disintegration; *Yin* gives shape to things. Water is an embodiment of *Yin* and fire is an embodiment of *Yang*. *Yang* creates the air, while *Yin* creates the senses, which belong to the physical body when the physical body dies; the spirit is restored to the air, its natural environment. The spirit receives its nourishment through the air, and the body receives its nourishment through the senses.

Nature has four seasons and five elements. To grant long life, these seasons and elements must store up the power of creation in cold, heat, dryness, moisture and wind. Man has five viscera in which these five climates are transformed into joy, anger, sympathy, grief and fear. The emotions of joy and anger are injurious to the spirit just as cold and heat are injurious to the body. Violent anger depletes *Yin*; violent joy depletes *Yang*. When rebellious emotions rise to Heaven, the pulse expires and leaves the body and when joy and anger are without moderation, then cold and heat exceed all measure, and life is no longer secure. *Yin* and *Yang* should be respected to an equal extent.

When *Yang* is the stronger, the body is hot, the pores are closed, and people begin to pant; they become boisterous and coarse and do not perspire. They become feverish, their mouths are dry and sore, their stomachs feel tight, and they die of constipation. When *Yang* is the stronger, people can endure winter but not summer. When *Yin* is stronger, the body is cold and covered with perspiration. People realize they are ill; they tremble and feel chilly. When they feel chilled, their spirits become rebellious. Their stomachs can no longer digest food and they die. When *Yin* is stronger, people can endure summer but not winter. Thus, *Yin* and *Yang* are alternate. Their ebbs and surges vary, and so does the character of the diseases. The treatment is to harmonize both. When one is filled with vigour and strength, *Yin* and *Yang* are in proper harmony.

## Treatment

Every herb has its own properties which include its energy, its flavour, its movement and its related meridians to which it is connected to. The four types of energies are cold, cool, warm and hot. Usually cold or cool herbs will treat fever, thirst, sore throat and general heat diseases. Hot or warm herbs will treat cold sensation in the limbs, cold pain and general cold diseases. The five flavours of herbs are pungent, sour, sweet, salty and bitter. Pungent herbs are generally used to induce perspiration and promote circulation of both blood and *Qi*. Sour herbs exert three functions: constrict, obstruct and solidify. These herbs are good to stop perspiration, diarrhoea, seminal emission and leucorrhoea. Sweet herbs also exert three main functions: nourishing deficiency, harmonizing other herbs or reduce toxicity, relieve pain and slow the progression of acute

diseases. Salty herbs soften hardness, lubricate intestines and drain downward. These herbs are used to treat hard stool with constipation or hard swellings as in diseases like goitre. Bitter herbs induce bowel movements; reduce fevers and hot sensations, dry dampness and clear heat. They can also nourish the kidneys and are used to treat damp diseases. After absorption, herbs can move in four different directions: upward towards the head, downward towards the lower extremities, inward towards the digestive organs or outward towards the superficial regions of the body. Upward-moving herbs are used for falling symptoms like prolapsed organs. Downward-moving herbs are used to push down up surging symptoms like coughing and vomiting. Outward-moving herbs are used to induce perspiration and treat superficial symptoms that are moving towards the interior of the body. Inward movements of herbs induce bowel movements and promote digestion. Each herb will have a corresponding meridian or meridians to which it will correspond to. For example, herbs that are active against respiratory tract disorders move to the lungs and can be used for asthma or cough.

## 2.3. INDIAN SYSTEMS OF MEDICINE

The WHO estimates that about 80% of the populations living in the developing countries rely exclusively on traditional medicine for their primary health care needs. India has an ancient heritage of traditional medicine. Indian traditional medicine is based on different systems including *Ayurveda*, *Siddha* and *Unani*. With the emerging interest in the world to adopt and study the traditional system and to exploit their potentials based on different health care systems, the evaluation of the rich heritage of the traditional medicine is essential.

Almost in all the traditional medicines, the medicinal plants play a crucial role in the traditional medicine. India has a rich heritage of traditional medicine and the traditional health care system have been flourishing for many centuries.

In India, the Ayurvedic system of medicine developed an extensive use of medicines from plants dating from at least 1000 B.C. Western medicine continues to show the influence of ancient practices. For example, cardiac glycosides from *Digitalis purpurea*, morphine from *Papaver somniferum*, reserpine from *Rauwolfia* species, and quinine from *Cinchona* species and artemisinin, an active antimalarial compound from *Artemisia annua*, etc., show the influence of traditional medicine in Western medicine.

### Ayurveda—The Indian System of Medicine

Ayurvedic system of medicine is accepted as the oldest written medical system that is also supposed to be more effective in certain cases than modern therapies. The origin of Ayurveda has been lost in prehistoric antiquity, but

their concepts were nurtured between 2500 and 500 B.C. in India.

Ayurveda is accepted to be the oldest medical system, which came into existence in about 900 B.C. The word Ayurveda means *Ayur* meaning life and *Veda* meaning science. Thus, Ayurveda literally means science of life. The Indian Hindu mythology states four Veda written by the Aryans: *Rig Veda*, *Sam Veda*, *Yajur Veda* and *Atharva Veda*. The Ayurveda is said to be an *Upaveda* (part) of *Atharva Veda*. *Charaka Samhita* (1900 B.C.) is the first recorded book with the concept of practice of Ayurveda. This describes 341 plants and plant products used in medicine. *Sushruta Samhita* (600 B.C.) was the next ayurvedic literature that has special emphasis on surgery. It described 395 medicinal plants, 57 drugs of animal origin, 4 minerals and metals as therapeutic agents.

### Basic principles of ayurveda

According to ancient Indian philosophy, the universe is composed of five basic elements or *pancha bhutas*: *prithvi* (earth), *jal* (water), *teja* (fire), *vayu* (air) and *akash* (space). Everything in the universe, including food and the bodies were derived from these *bhutas*. A fundamental harmony therefore exists between the macrocosm (the universe) and the microcosm (the individual). The *Pancha Bhuta* theory and the human body: The human body is in a state of continuous flux or dynamic equilibrium. The *pancha bhutas* are represented in the human body as the *doshas*, *dhatus* and *malas*.

There are three *doshas* in the body. They are *vata*, *pitta* and *kapha*. There are direct equivalents for these three *doshas*, known as *tridoshas*. However, the factors responsible for movement and sensation in a single cell/whole body are the representatives of *vata*; it explains the entire biological phenomena that are controlled by the functions of central

and autonomous nervous system. The factors responsible for digestion, metabolism, tissue building, heat production, blood pigmentation, activities of the endocrine glands and energy are the representatives of *pitta*. The factors responsible for strengthening the stomach and the joints, providing firmness to the limbs, and refreshing the sense organs are the representatives of *kapha*. There are some special areas in the body in which each *dosha* predominates, namely, the chest for *kapha*, digestive organs for *pitta* and the large intestine for *vata*.

The *dhatus* are the body constituents and form the basic structure of the body; each one having its own functions. The *dhatus* are seven in number: *rasa* (food juices), *rakta* (haemoglobin portion of the blood), *mamsa* (muscle tissue), *medas* (fat tissue), *asthi* (bone tissue), *majja* (bone marrow) and *shukra* (semen).

*Malas* are the by-products of the *dhatus*, partly used by the body and partly excreted as waste matter after the process of digestion is over. These play a supporting role while they are in the body, and when they are eliminated, their supporting role is finished. The useful elements absorbed by the body are retained as *prasad* (useful matter), while those excreted are known as *malas* (waste matter). The chief *malas* are *mutra* (urine), *shakrit* (faeces) and *sveda* (perspiration). The *doshas*, *dhatus* and *malas* should be in a state of perfect equilibrium for the body to remain healthy. Any imbalance among these constituents results in ill health and disease.

### Diagnosis

Diagnosis in Ayurveda implies a moment-to-moment monitoring of the interaction between order (health) and disorder (disease). The disease process is a reaction between the bodily *humours* (*doshas*) and tissues (*dhatus*) and is influenced by the environment.

The classical clinical examination in Ayurveda is called *ashta sthana pariksha* (eight-point diagnosis) and includes an assessment of the state of the *doshas* as well as various physical signs. The eight-point diagnoses are *nadi pariksha* (pulse diagnosis), *mutra pariksha* (urine examination), *vata/sparsha* (Nervous system assessment), *Pitta/drik* (assessment of digestive fire and metabolic secretions), *kapha/akriti* (mucous and mucoid secretions assessment), *mala pariksha* (stool examination), *jihva pariksha* (tongue examination) and *shabda pariksha* (examination of body sounds).

### Treatment

In Ayurveda, before starting the treatment, a person's constitutional type should be determined. Drugs are prescribed based on the patient's body type as well as on what disease or disturbance of the *doshas* they are suffering from. Everything that might affect the patient's health, including their activities, the time of the day, and the season should be taken into consideration. In other words, patients are looked at as individuals as well as in relation to their

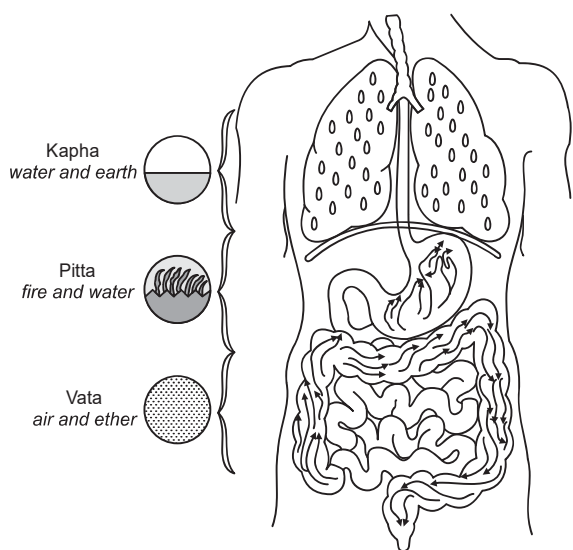


Fig. 2.1 The seats of three doshas: Vata, Pitta and Kapha

environment. Ayurvedic treatment attempts to establish a balance among the bodily humours of *vata*, *pitta* and *kapha*, as well as to improve digestion and elimination of *ama* (undigested food).

Ayurvedic therapy often begins with *shodhana* (cleansing) in which toxins, emotional or physical, are eliminated or neutralized. Once *shodhana* is completed, *shamana* (palliative treatment) is used to reduce the intensity of a disease and balance the disordered *doshas*. Finally, *rasayana* (rejuvenation therapy) is used to maintain health and reduce the negative effects of disease.

In Ayurveda, vegetable, animal, mineral substances or metals could be used for their healing effects. The metals mentioned as drugs were gold, silver, copper, lead, tin and iron. Along with these substances elements from the earth, like arsenic, antimony, sand and lime, were also used. Earlier, 600 medicinal plants were recorded in Ayurveda, and it has increased to more than 1200 medicinal plants.

### Properties of herbs

Ayurvedic herbs are described and classified according to five major properties: *rasa* (taste), *guna* (physicochemical properties), *veerya* (potency), *vipaka* (postdigestive effect) and *prabhava* (unique effect of the drug). As the digestive process begins, the food or drug is acted upon by the *agnis* (various digestive juices) and enzymes.

Rasa is divided into six major types: *madhura* (sweet), *amla* (sour), *lavana* (salty), *katu* (pungent), *tikta* (bitter), and *kashaya* (astringent). Each taste is made up of a combination of two of the five basic elements (earth, water, fire, air and ether). Each taste has their own effects on the three bodily *doshas* (*vata*, *pitta* and *kapha*).

Rasa	Elements	Action
<i>Madhura</i> (sweet)	Earth + water	Increases <i>kapha</i> , decreases <i>pitta</i>
<i>Amla</i> (sour)	Earth + fire	Increases <i>kapha/pitta</i> , decreases <i>vata</i>
<i>Lavana</i> (salty)	Water + fire	Increases <i>kapha/pitta</i> , decreases <i>vata</i>
<i>Katu</i> (pungent)	Fire + air	Increases <i>vata/pitta</i> , decreases <i>kapha</i>
<i>Tikta</i> (bitter)	Air + ether	Increases <i>vata</i> , decreases <i>kapha/pitta</i>
<i>Kashaya</i> (astringent)	Air + earth	Increases <i>vata</i> , decreases <i>kapha/pitta</i>

*Guna* represents the physical aspects of a medicinal substance. There are five major classes of *guna*, and each class corresponds to one of the major elements (*mahabhutas*): unctuousness corresponds with water; heaviness with earth; keenness and sharpness with fire; dryness with air; and light with ether. *Gunas* are generally considered in pairs: cold/hot, wet/dry, soft/hard and stable/unstable, etc.

*Veerya* represents the active principle or potency of a drug. The two divisions are *sita veerya* (indicates *kapha varag*) and *ushna veerya* (indicates *pitta varag*); *vata* remains buffer.

*Vipaka* is the quality a substance takes on after it has been acted on by the body (after digestion). The three types of *vipaka* are *madhura* (increases *kapha*), sour (increases *pitta*) and *katu* (increases *vata*). The type of food responsible for *madhura*, sour and *katu* are carbohydrates, proteins and fats, respectively.

*Prabhava* is the activity or influence of a drug in the body. The drugs may have the same *rasa*, *guna*, *veerya* and *vipaka* but the *prabhava* may be different due to the chemical composition.

### Branches of ayurveda

Ayurveda maintains that there is a definite relationship between illness and the metaphysical state of an individual. Its approach to medical treatment is to focus on the person rather than the disease.

Ayurveda has eight branches: *Kaya Chikitsa* (Medicine), *Salya Chikitsa* (Surgery), *Salakya Chikitsa* (ENT treatment), *Bala Chikitsa* (Paediatric treatment), *Jara Chikitsa* (treatment related to genetics), *Rasayana Chikitsa* (treatment with chemicals), *Vajikarana Chikitsa* (treatment with rejuvenation and aphrodisiacs), *Graham Chikitsa* (planetary effects) and *Visha Chikitsa* (toxicology).

Tibetan system of medicine which is the main stay of the majority of Tibetan people not only in India, but in neighbouring countries too was developed out of Ayurveda, or was influenced by it. Researches in traditional medicine have confirmed the efficacy of most of the natural substances used by the practitioners of Ayurveda. The principle, treatment and philosophy of Ayurveda are one of the best systems that fulfill the needs of human beings. It has so many good prescriptions without many side effects. Thus, Ayurveda formulates the holistic approach of treatment by subjecting the body as a whole giving least importance to *rogabalam*. This may be the reason for time-consuming treatment in Ayurveda, but the results last long.

## 2.4. SIDDHA SYSTEM OF MEDICINE

*Siddha* medicine is practised in Southern India. The origin of the Tamil language is attributed to the sage *Agasthya*, and the origin of *Siddha* medicine is also attributed to him. Before the Aryan occupation of the Sind region and the Gangetic plain, there existed in the southern India, on the banks of the river Cauvery and Tamirapani, a civilization which was highly organized.

1. This civilization has a system of medicine to deal with problems of sanitation and treatment of diseases. This is the *Siddha* system of medicine. The therapeutics of *Siddha* medicines consists mainly of the use of metals and minerals whereas in the earlier Ayurveda.
2. There is mention of mercury, sulphur, copper, arsenic and gold used as therapeutic agents.

### Principle of Siddha system of medicine

The universe consists of two essential entities: matter and energy. The *Siddhas* call them *Siva* (male) and *Shakti* (female, creation). Matter cannot exist without energy inherent in it and vice versa. The two coexist and are inseparable. They are the primordial elements (*bhutas*), and are not to be confused with modern chemistry. Their names are *munnn* (solid), *neer* (fluid), *thee* (radiance), *vayu* (gas) and *aakasam* (ether). These five elements (*bhutas*) are present in every substance, but in different proportions. Earth, water, fire, air and ether are manifestations of five elements.

The human being is made up of these five elements, in different combinations. The physiological function in the body is mediated by three substances (*dravyas*), which are made up of the five elements. They are *vatham*, *pitham* and *karpam*. In each and every cell of the body these three *doshas* coexist and function harmoniously. The tissues are called *dhatu*s. *Vatham* is formed by *aakasam* and *vayu*. *Vatham* controls the nervous actions such as movement, sensation, etc. *Pitham* is formed by *thee* and controls the metabolic activity of the body, digestion, assimilation and warmth, etc. *Karpam* is formed by *munnn* and *neer* and controls stability. When their equilibrium is upset, disease sets in.

### Tridoshas according to Siddha medicine

The *tridoshas* are involved in all functions of the body, physical, mental and emotional.

#### 1. *Vatham*:

- Characteristic is dryness, lightness, coldness and motility.
- Formed by *aakasam* and *vayu*, controls the nervous action that constitute movement, activity, sensation, etc. *Vatham* predominates in the bone.
- *Vatham* predominates in first one-third of life when activities, growth, sharpness of function of sense are greater.

#### 2. *Pitham*:

- Heat—mover of the nervous force of the body.
- Formed by *thee*, controls the metabolic activity of the body, digestion, warmth, lustre, intellect, assimilation, etc. *Pitham* predominates in the tissue blood.
- *Pitham* predominates in the second one third of life.

#### 3. *Karpam*:

- Smoothness, firmness, viscosity, heaviness.
- Formed by *munnn* and *neer*, controls the stability of the body such as strength, potency, smooth working of joints. *Karpam* predominates in other tissues.
- *Karpam* predominates in the last one-third of life. Diminishing activity of various organs and limbs.

The seven *dhatu*s are as follows:

1. *Rasa* (lymph).
2. *Kurudhi* (blood).
3. *Tasai* (muscle).
4. *Kozhuppu* (adipose tissue).
5. *Elumbu* (bone).
6. *Majjai* (marrow).
7. *Sukkilam* and *artavam* (male and female hormones).

### Method of treatment

The treatments for the imbalance of the *Tridoshas* are made up of the five elements. The drugs are made up of the five elements. By substituting a drug of the same constituents (*guna*), the equilibrium is restored. The correction of the imbalance is made by substituting the drug, which is predominately of the opposite nature. An example of *vatham* imbalance is cold, dry; thus the treatment will be oily and warmth. For inactivity of limbs, massage and activity are prescribed. If *pitham dosha* is increased, warmth is produced; to decrease *pitham*, sandalwood is administered, internally or externally because of its cold characteristics.

Five type of *vayu* are as follows:

1. *Prana*: located in mouth and nostrils (inhaled); aids ingestion.
2. *Apana*: located at anal extremity (expelled); elimination, expulsion.
3. *Samana*: equalizer, aids digestion.
4. *Vyana*: circulation of blood and nutrients.
5. *Udana*: functions in upper respiratory passages.

### Siddha pharmacy

**Mercury:** Mercury occupies a very high place in *Siddha* medicine. It is used as a catalytic agent in many of its medicines. When mercury is used, it is used in combination with sulphur. The addition of sulphur is to control the fluidity of mercury—this converts to mercuric sulphite which is insoluble in mineral acids.

*Siddhas* used five forms of mercury:

1. Mercury metal—*rasam*.
2. Red sulphide of mercury—*lingam*.
3. Mercury chloride—*veeram*.
4. Mercury subchloride (mercury chloride)—*pooram*.
5. Red oxide of mercury—*rasa chenduram*. Ordinary *rasa chenduram* (red oxide of mercury) is a poison, but when processed as *poorna chandrodhayam* according to *Siddha* practice, it becomes ambrosia.

Classifications of *Siddha* medicine:

1. *Uppu (Lavanam)*: Drugs that dissolve in water and decrepitated when put into fire giving off vapours (water soluble inorganic compounds). There are 25 varieties and are called *kara-charam*, salts and alkalis.
2. *Pashanam*: Drugs that do not dissolve in water but give off vapour when put into fire (water insoluble inorganic compounds).

3. *Upasam*: Drugs that do not dissolve in water (chemicals similar to *Pashanam* but differing in their actions) such as mica, magnetic iron, antimony, zinc sulphate, iron pyrites, ferrous sulphate.
4. *Loham*: Metals and minerals alloys (water insoluble, melt in fire, solidify on cooling) such as gold, silver copper, iron, tin and lead.
5. *Rasam*: Drugs that are soluble (sublime when put in fire, and changes into small crystals), such as mercury amalgams and compounds of mercury, arsenic.
6. *Gandhakam*: Sulphur insoluble in water, burns off when put into fire.
7. *Ratnas* and *uparatnas*: Thirteen varieties are described, such as coral, *lapis-lazuli*, pearls, diamonds, jade, emerald, ruby, sapphire, opal, *vaikrantham*, *rajavantham*, *spatikam harin mani*.

The common preparations of *Siddha* medicines are:

1. *Bhasma* (Calcined metals and minerals).
2. *Churna* (powders).
3. *Kashaya* (decoctions).
4. *Lehya* (confections).
5. *Ghrita* (ghee preparations) and *taila* (oil preparations).
6. *Chunna* (metallic preparations which become alkaline).
7. *Mezhugu* (waxy preparations).
8. *Kattu* (preparation that are impervious to water and flames).

**Sulphur:** Calcined sulphur or red oxide of sulphur can be obtained by solidifying it first by the *Siddha* method of purification. In small doses, it conserves the body, and it is diaphoretic and alterative. Therapeutic ally is used as both external and internal remedy against skin diseases, rheumatic arthritis, asthma, jaundice and blood poisoning.

**Arsenic:** As per *Siddha kalpa*, purified and consolidated arsenic is effective against all fevers, asthma and anaemia.

**Gold:** It is alterative, nervine tonic, antidote to poison and a powerful sexual stimulant. Very little is absorbed in the system. Care is taken to see that calcinations of gold is freed from metallic state and lustre to ensure safe absorption in the system.

Thus, these drugs and metallic minerals can be screened for its antiviral, immune stimulant and immuno-modulator activity. As HIV negative people have taken *Kalpa* drugs for rejuvenation and long life, it is believed that if *Kayakapla* therapy is thoroughly investigated using modern parameters, it might lead one to find whether these drugs could be used in preventative or curative benefits in AIDS or other diseases.

## 2.5. UNANI SYSTEM OF MEDICINE

*Unani* system of medicine is originated in Greece by the Greek philosopher, physician Hippocrates (460–377 B.C.),

who freed medicine from the realm of superstition and magic, and gave it the status of science. The theoretical framework of *Unani* medicine is based on the teachings of Hippocrates. After him, a number of other Greek scholars followed the system considerably. Among them Galen (131–212 A.D.) was the one to stabilize its foundation, on which Arab physicians like Raazes (850–925 A.D.) and Avicenna (980–1037 A.D.) constructed an imposing edifice. *Unani* medicine got its importance among the other systems of traditional medicine in Egypt, Syria, Iraq, Persia, India, China and other Middle East and Far East countries. In India, Arabs introduced *Unani* system of medicine, and soon it enriched in India. When Mongols ravaged Persian and central Asian cities, scholars and physicians of *Unani* medicine fled to India. The Delhi Sultans, the Khiljis, the Tughlaqs and the Mughal Emperors provided state patronage to the scholars and even enrolled some as state employees and court physicians. During the 13th and 17th century, *Unani* medicine was firmly rooted in India by Abu Bakr Bin Ali Usman Kasahani, Sadruddin Damashqui, Bahwabin Khwas Khan, Ali Geelani, Akabl Arzani and Mohammad Hoshim Alvi Khan.

*Unani* considers the human body to be made up of seven components. *Arkan* (elements), *mizaj* (temperaments), *aklath* (humours), *anza* (organs), *arawh* (spirits), *Quo* (faculties) and *afal* (functions), each of which has close relation to the state of health of an individual. A physician takes into account all these factors before diagnosing and prescribing treatment.

*Unani* medicine is based on the Greece philosophy. According to Basic Principles of *Unani*, the body is made up of the four basic elements, i.e. Earth, Air, Water and Fire, which have different Temperaments, i.e. Cold, Hot, Wet and Dry. After mixing and interaction of four elements, a new compound having new temperament comes into existence, i.e. Hot Wet, Hot Dry, Cold Wet and Cold Dry. The body has the simple and compound organs, which got their nourishment through four humours, i.e. blood, phlegm, yellow bile and black bile. The humour also assigned temperament as blood is, i.e. hot and wet; Phlegm is cold and hot, yellow bile is hot and dry and black bile is cold and dry. Health is a state of body in which there is equilibrium in the humours and functions of the body are normal in accordance to its own temperament and the environment.

When the equilibrium of the humours is disturbed and functions of the body are abnormal, in accordance to its own temperament and environment, that state is called disease. *Unani* medicine believes in promotion of health, prevention of diseases and cure. Health of human is based on the six essentials (*Asbabe Sitta Zarooriya*), if these are followed health is maintained; otherwise, there will be diseases.

Six essentials are atmospheric air, drinks and food, sleep and wakefulness, excretion and retention, physical activity and rest and mental activity and rest.

### Diagnosis

Diseases are mainly diagnosed with the help of pulse (*nabz*), physical examination of the urine and stool. Also, patients are examined systematically to make the diagnosis easy as spot diagnosis with the help of simple, modern gadgets.

### Treatment

Diseases are treated in the following ways:

1. *Ilajbil Tadbeer* (Regimental Therapy): Some drugless regimens are advised for the treatment of certain ailments, i.e. exercise, massage, hamam (Turkish bath), Douches (Cold and Hot) and the Regimen for Geriatrics.
2. *Ilajbil Ghiza* (Dietotherapy): Different diets are recommended for the patients of different diseases.
3. *Ilajbil Dava* (Pharmaco therapy): The basic concept of treatment is to correct the cause of the disease that may be abnormal temperament due to:
  - Environmental factors
  - Abnormal humours either due to internal causes or external causes which may be pathogenic microorganism, through (a) drugs of opposite temperament to the temperament of the disease that is called *Ilaj-bil-zid* or (b) drugs of similar temperament as of the temperament of the disease that is called as *Ilaj-bil-misl*
4. *Ilajbil Yad* (Surgery).

The drugs used are mostly of the plant origin. Some drugs of animal and mineral origin are also used. Patients are treated either by single drug (crude drugs) or by compound drugs (formulations of single drugs).

There are two types of compound drugs used in the treatment of the diseases, i.e. classical compound drugs which are in use for the hundreds and thousands years and patent/proprietary compound drugs which have been formulated by the individuals or institutions as per their research and experiences. *Unani* system of medicine is one of the oldest systems of medicine in the world; it is still popular and practised in Indian subcontinent and other parts of the world.

## 2.6. HOMEOPATHIC SYSTEM OF MEDICINE

Homoeopathy is a specialized system of therapeutics, developed by Dr Samuel Christian Friedrich Hahnemann (1755–1843), a German physician, chemist and a pharmacist, based on natural law of healing: *Similia Similibus Curantur*, which means ‘Likes are cured by likes’.

*Homois* means like (similar) and *pathos* means treatment. Thus, Homoeopathy is a system of treating diseases or suffering by the administration of drugs that possess power of producing similar suffering (diseases) in healthy human beings. Dr Hahnemann believed that symptoms are no

more than an outward reflection of the body's inner fight to overcome illness: it is not a manifestation of the illness itself. This law of similar for curing diseases has being in use since the time of Hippocrates, father of medicine. But it was Dr Hahnemann who developed it in to a complete system of therapeutics enunciating the law and its application in 1810.

### Fundamental Principles of Homoeopathy

Every science has certain basic principles that guide the whole system. Homoeopathy as a science of medical treatment has a philosophy of its own, and its therapeutics is based on certain fundamental principles that are quite distinct and different from those of other school of medical science. These fundamental principles were discussed by Hahnemann in different sections of his medicine and philosophy.

They are as follows:

1. Law of *Similia*.
2. Law of Simplex.
3. Law of minimum.
4. Drug proving.
5. Drug dynamization or potentization.
6. Vital force.
7. Acute and Chronic Diseases.
8. Individualization.
9. Direction of cure.

#### Law of similia

The therapeutic law on which homoeopathy is based is *Simillia Similibus Curentur*, which means ‘Let likes be cured by likes’. In this art of healing, the medicine administered to a diseased individual is such that if given to a healthy person it produces same sufferings (diseases) as found in the diseases individual. Thus, the symptoms of the diseased individual are to be matched with the pathogenesis of the medicine, and the medicines which are most similar, viz. *Simillimum* is selected and administered with certainty to cure.

#### Law of simplex

Simple and single drugs should be prescribed at a time. Thus, medicines are proved on healthy human beings singly and in simple form without admixture of any other substance.

#### Law of minimum

Drugs are administered in a minimum quantity because of hypersensitivity in disease and the action of drug is always directed towards normal by virtue of altered receptivity of tissue to stimuli in disease. The medicines are just required to arouse a reaction in the body. If they are given in large doses, they cause physiological action producing unwanted side effects and organic damage. The minutest quantity



of medicine helps it to reach the disease, which is of very subtle in nature. The curative action of drug can only be expected without any unwanted aggravation by using minimum quantity of medicine.

### **Drug proving**

To apply drugs for therapeutic purposes, their curative power should be known. The curative power of a drug is its ability to produce disease symptoms when employed on a healthy person. The curative power of a drug is known by its pathogenesis and is ascertained by proving the drug singly on healthy human being. This serves the only true record of the curative properties of drug.

### **Drug dynamization or potentization**

Disease is a disturbance or deviation in the normal harmonious flow of life force which is dynamic in nature. Now medicine used to encounter disease should also have dynamic action to act on the dynamic disturbance of life force. Therefore, the drugs are dynamized or potentized liberating their dynamic curative power which lies dormant in them. This dynamization is done by the process of Trituration (in case of insoluble substances) or Succession (in case of soluble substances).

### **Preparation of potencies**

The potency can be prepared by three different scales, like decimal scale, centesimal scale and millesimal scale.

#### **Decimal scale**

This scale was introduced by Dr Constantine Bering. In this scale, the first potency should contain 1/10 part of original drug. The second potency will contain 1/10 part of the first potency, and so on. The potency in this scale is denoted by suffixing the letter 'X' to the number indicating the potency, i.e. the first potency is 1X, the second potency is 2X, and so on.

#### **Centesimal scale**

In this scale the first potency should contain 1/100 of original drug and the second potency will contain 1/100 of the first potency, and so on. The potency in this scale is denoted by suffixing the letter 'C' to the number indicating the potency. In practice, it is generally denoted by a simple numerical 1C potency equivalent to 2X potency and 2C potency is equivalent to 4X, and so on.

#### **Millesimal scale**

In this scale, the first potency should contain 1/50,000 part of the original drug and second potency will contain 1/50,000 of the first potency, and so on. Potency in this scale is denoted by I, II, V, X, etc., or 0/1, 0/2, 0/5, 0/10, etc. In this scale potency 0/2 is equivalent to 4C = 8X, 0/4 = 8C = 16X and so on. Preparation of potency through trituration is made by either decimal or centesimal, and the preparation of potency through succession is made by decimal, centesimal and millesimal.

### **Vital force**

Disease is nothing but the disharmonious flow of the vital force giving rise to abnormal sensation and functions (symptoms and signs). In order to restore the health, the disordered vital force is to be brought back to normal. Disease and health are two different quantitative states of this vital force of living being, and cure is to be affected here. Vital force has the following characteristics: spiritual, autocratic, automatic, dynamic, unintelligent and instinctive.

### **Acute and chronic diseases**

The diseases are classified into these types depending upon their onset, nature of progress and termination of diseases.

### **Individualization**

No two individuals are alike in the world, so the diseases affecting individuals can never be the same assuming the unique individual picture in each diseased individual. Thus, medicines can never be prescribed on the basis of the name of the disease without individualizing each case of disease.

### **Direction of cure**

Dr. Hering states that 'cure takes place within outward from above to downward and the symptoms disappears in the reverse of their appearance'. If the direction is reverse of that stated then it is not cure but suppression which has occurred.

## **2.7. AROMATHERAPY**

The word aromatherapy means *treatment using scents*. It refers to the use of essential oils in *Holistic healing* to improve health and emotional well being, and in restoring balance to the body. Essential oils are aromatic essences extracted from plants, flowers, trees, fruit, bark, grasses and seeds.

There are more than 150 types of oils that can be extracted. These oils have distinctive therapeutic, psychological and physiological properties that improve health and prevent illness. All essential oils have unique healing and valuable antiseptic properties. Some oils are antiviral, antiinflammatory, pain relieving, antidepressant, stimulating, relaxing, expectorating, support digestion and have diuretic properties too.

Essential oils get absorbed into our body and exert an influence on it. The residue gets dispersed from the body naturally. They can also affect our mind and emotions. They enter the body in three ways: by inhalation, absorption and consumption.

Chemically, essential oils are a mixture of organic compounds like ketones, terpenes, esters, alcohol, aldehyde and hundreds of other molecules which are extremely difficult to classify, as they are small and complex. The essential oils molecules are small. They penetrate human skin easily and enter the bloodstream directly and finally get flushed out through our elementary system.