

Fundamental Aspect and Basic Concept of Siddha Medicines

Shukla SS, Saraf S, Saraf S

Department of Pharm Sciences, University Institute of Pharmacy, Pt. Ravishankar Shukla University, Raipur, India

ARTICLE INFO

Article history:

Received 20 July 2010

Accepted 26 September 2010

Available online 02 August 2011

Keywords:

Basics concept

Formulations

Siddha system

Siddhars

Tridosas

ABSTRACT

Siddha is one of the ancient medical systems in India considered as the mother medicine of ancient Tamils/Dravidians in South India. The word Siddha means established truth or "one who is accomplished" and refers to perfected masters who according to Hindu belief have transcended the ahankara (ego or I-maker), have subdued their minds to be subservient to their awareness, and have transformed their bodies composed mainly of dense Rajotama gunas into a different kind of bodies dominated by sattva. This is usually accomplished only by persistent meditation over many lifetimes. Siddha System of Medicine is as old as mankind and dominated the civilization of the southern peninsula of India. There are some people who claim that Ayurveda is the oldest medical system, but from the research done with the help of available historical data, it is evident that Siddha system of medicine is much older and has more history than even Ayurveda. Not only is this medical system the oldest, this is a medical system with lots of specialities; its specialities far outweigh the Ayurvedic medicine.

Introduction

Siddha is one of the ancient medical systems in India considered as the mother medicine of ancient Tamils/Dravidians in South India. The word Siddha means established truth.^[1,2] The Siddha system is a treasurehouse of secret science, embodying the results of the ardent pursuit thereof by the ancient Siddhars. This civilization dates back to 12,000 years B.C. The findings of historians and the Tamil literary works such as "Tholkapiam," "Thiruvashagam", etc., reveal that there were three Tamil Academies for the growth of 64 Arts of Tamilians. Before 2000 years the traditional medical system of the Tamils was known as Marunthu (Medicine).^[3] A Siddha has also been defined to refer to one who has attained a Siddhi. The Siddhis as paranormal abilities are considered emergent abilities of

an individual that is on the path to Siddhahood, and do not define a Siddha, who is established in the Pranav - the Aum, which is the spiritual substrate of creation. The persons who were associated with establishing such a Siddha school of thought were known as Siddhars. Siddhars were upright people and mystics who acquired supernatural powers.^[2] The Siddhi in its pure form means "the attainment of flawless identity with Reality (Brahman); perfection of spirit." The concept of Siddhis is a prime notion in Jainism.

The Siddhas were those who had renounced the world after experiencing its instability and uncertainty. They practiced the eight kinds of yogas and wrought great miracles, imbued with divine power. They kept their body unpolluted and unwrecked and lived subterranean lives in samathi for years.

For instance, Saint Francis of Assisi can be called a Siddhar. Saiva Siddhantam is fundamental for Siddha.^[4] Many of the Siddhars were devout Saivaites. Yet, Poonaikannar, a French priest, was a Siddhar;^[5] Yakobu, a Muslim, was a Siddhar; Joseph Constantine Beschi, an Italian priest who called himself Veeramamunivar in Tamil, was a Siddhar.

The relative unawareness and ignorance of Siddha in the West is due to various causes. First, most of the Siddha literature is still in Tamil. Second, when Western scholars like Max Muller were provided with translated versions of Sanskrit literature, including that of Ayurveda, no such effort seems to have been taken to introduce Tamil works to Western scholars. Thousands of Siddha literature still remains in the form of palm leaf manuscripts. Of late, Siddha is slowly gaining recognition in the world of complementary/alternative medicine. Modern medicine recognizes Siddha medicine as an alternative East Indian Medical System prevalent among Tamil-

Access this article online	
Website: www.sysrevpharm.org	Quick Response Code:
DOI: 10.4103/0975-8453.83439	

Correspondence:

Prof. Shailendra Saraf; E-mail: shailendrasaraf@rediffmail.com

speaking people.^[6]

Siddha medicine embodies the essence of Ayurveda (plant extracts), Unani, Acupressure (sensitive points), Reiki (energy field), etc. in the theories of Siddha medicine. Siddha medicine utilizes plant extracts and metal oxides with chanting of mantra are done during the preparation of medicines.

The Siddha medicines meant for the human body are prepared, based on the theory of Panchabhutas (metals of gold, lead, copper, iron and zinc). Gold and lead are used for the maintenance of the body. Iron, the only metal attracted by the electric power of the magnet, and zinc, used for generating electricity, are employed in the medicines which are administered for the extension of life and copper is used for the preservation of heat in the body. The learned modern scientists of today have yet to know the rejuvenation theories followed by Siddhars of Tamil Nadu in ancient times.

Fundamental aspects

The name Siddha medicine owes its origin to medicinal ideas and practices of a class of Tamil sages called the Siddhas “perfected” or “holy immortals” who were, and are still, believed to have superhuman powers. They had firm faith in the “deathless” physical body being in tune with the spiritual immortal “soul”. Significantly, one of the definitions of Siddha medicine is conquest of death: “that which ensures preventive against mortality”. This statement is attributed to Tirumular; a revered Siddha whose treatise called Tirumantiram has 3000 stanzas and is regarded as a classic text on the basic philosophy of Siddha medicine.^[2] In India, Yoga sutras^[7] (aphorisms of yoga attributed to a sage called Patanjali, second century B.C.), advocate controlled breathing, concentration of mind, mastery over senses and intense meditation, besides certain postures or exercises for psychosomatic harmony. One of the yoga aphorisms^[8] speaks of extraordinary psychic powers which a tantrik yogi could acquire by five pathways, one of which is by means of herbs or drugs. According to Tamil tradition, Siddha medicine is associated with 18 Siddhas, with Agastyar, Tirumular and Bhogar being the most important. The dates of these Siddhas are uncertain; although, Tamil tradition accords remote antiquity to them, Agastyar, Tirumular, Bhogar might have lived in the fifth to sixth century and the other of a later date.^[9,10]

There is no doubt that Siddha medicine is derived from alchemy. The source of inspiration for Indian alchemy in general, and Siddha alchemy in particular, was Chinese alchemy, Taoism, and Taoist Patrology. Chinese alchemy, which had its esoteric beginnings even before the Christian era, had established itself by the third to fourth century in terms of aurifaction (transmutation of base metals into gold), elixirs of gold and cinnabar (mercuric sulfide) and certain “herbs of deathlessness” or immortality.^[11]

Pao Phu Tzu proclaimed that the least of the minor cinnabar elixirs was far more effective than the plant elixirs and that only the holy immortals were aware of this.^[11] The Taoist concept of attaining immortality encompassed not only the use of mercurial and other elixirs but also regulated breathing, dietary regimen, meditation, sexual techniques, heliotherapeutics and gymnastics by which a Taoist could elevate himself into a “perfected” celestial or earthly immortal.^[12] Around the fifth century A.D. in India, there was an upsurge of Tantrism^[13,14] a complex esoteric ensemble of practices with a male-female imagery and its divine union, worship of ritual diagrams, mystic incantations, sexual techniques, yogic rigour of meditation, and rejuvenating compositions all intended toward

leading a very long life with some supernatural powers. Buddhist monks who had contacts with China, and Chinese monks who visited India, possibly had a pivotal role in this exogenous influence. It is noteworthy that some tantrik/alchemical texts in Sanskrit are in the nature of a dialogue between these two divinities i.e., Shiva and Shakti or Devi. For example, in the Matrka bhedatantram^[15] the text is unfolded as a dialogue between Chandika Devi (a form of Shiva's consort) and Sankara (another name for Shiva). In the Rasarnavakalpa, the dialogue is between Bhairava (a form of Shiva) and Devi (his consort).^[16]

In such, the universe consists of two essential entities, matter and energy which is called by Siddhas Shiva (male) and Shakti (female, creation), respectively. Matter cannot exist without energy inherent in it and vice versa. The two coexist and are inseparable.^[17]

In this world and universe around it are made up by the five basic elements, namely Earth, Water, Fire, Air and Space, which are called the fundamental Bhutas (Elements). The origins of the five elements are clearly described in Siddha medicine and which is formed by different substances in the universe by various combinations of the elements. The living creatures and the non-living things are made up of these five elements. They are the primordial elements Bhutas (Five elements), not to be confused with modern chemistry. These are Munn (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 these five elements.^[18] The physical constituents which are identical to the various types of tissues are called as Udal Thathus (Body Constituents). They are also constituted by the five elements namely Saram (Primary Nourishing Fluid), Senneer (Blood), Oon (Muscle), Kozhuppu (Fat), Enbu (Bone) and Moolai (Bone Marrow).

Tridoshas concept

The three doshas may be compared to three pillars that support a structure. The physiological function in the body is mediated by three substances (dravayas), which are made up of the five elements and are involved in all functions of the body, physical, emotional and mental. 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 dhatus^[17] [Table 1].

Five types of Vayu

The primary dosha is the Vatham because it activates the other two doshas. *Vatham* is the outcome of the *Akasa* and *Vayu* of the Panchamaha Bhutas. The location and functions of the *Vayu* is not much different from that of Ayurveda [Table 2].

Basic principles

There are 96 basic principles (Thathuas) are:

- Bootham - 5 (Elements): Mannu-Earth, Neer-Water, Thee-Fire, Vaayu-Air, Aakaayam-Space
- Pori - 5 (Sense organs): Eye, Ear, Nose, Tongue, Skin
- Pulan - 5 (Functions of sense organs): Vision, Hearing, Smell, Taste, Touch
- Kanmenthiriyam - 5 (Motor organs): Hands, Lega, Mouth, Rectum, Sex Organs

Table 1: Types of Tridoshas

Tridoshas	Vatham	Pitham	Kabam
Activities	Voluntary and involuntary	Bodily changes involving destruction/ metabolism.	All constructive processes are performed
Characteristic	Dryness, lightness, coldness and motility	Heat, mover of the nervous force of the body	Smoothness, firmness, viscosity, heaviness
Components	Formed by Akasa and Vayu. Controls the nervous actions i.e. movement, sensation, activity etc	Formed by thee and controls the metabolic activity of the body, digestion, warmth, luster, intellect, assimilation, etc.	Formed by munn and Neer and controls the stability of the body such as strength, potency, smooth working of joints.
Predominance	In the bone.	In the tissue blood.	In other tissues
Location	Pervades the body (refer to Vayu chart)	In alimentary canal from cardiac end of stomach to end of small intestine	In chest, throat, head and joints acts as thermostat to the body

Table 2: Five types of Vayu

Prana	Apana	Samana	Vyana	Udana
Located in mouth and nostrils (inhaled) - aids ingestion	Located at anal extremity (expelled) elimination, expulsion	Equalizer, aids digestion	Circulation of blood and nutrients	Functions in upper respiratory passages

Gnanenthriyam - 5 (Perception of senses with the help of five sense organs)

Karanam - 4 (Intellectual faculties): Manam, Bhuddhi, Siddham, Ahankaram

Arivu - 1 (Wisdom of self realization)

Naadi - 10 (Channels of life force responsible for the dynamics of prana): Idakalai, Pinkalai, Sulumunai, Siguvai, Purudan, Kanthari, Athi, Allampudai, Sanguni, Gugu

Vayu - 10 (Vital nerve force which is responsible for all kinds of movements): Pranan, Abanan, Uthanan, Samanan, Vyanan, Nagan, Koorman, Kirukaran, Devadhathan, Dhanenjeyan

Asayam - 5 (Visceral Cavities): Amarvasayam-Stomach, Pakirvasayam-Small Intestine, Malavasa-Large Intestine Especially Rectum, Chalavasayam-Urinary Bladder, Suckilavasayam-Seminal Vesicle

Kosam - 5 (Five states of the human body or sheath): Annamaya Kosam-digestive Sheath, Manomaya Kosam-Mental Sheath, Pranamaya Kosam-Respiratory Sheath, Vignanamaya Kosam-Intellectual Sheath, Ananthamaya Kosam-Blissful Sheath

Aatharam - 6 (Stations of soul): Moolatharam, Swathistanam, Manipooragam, Anakatham, Visuthi, Aakinai

Mandalam - 3 (Regions): Thee Mandalam (Agni Mandalam)-Fire Region, Gnayiru Mandalam (Soorya Mandalam)-Solar Region, Thingal Mandalam (Chandra Mandalam)-Lunar Region

Malam - 3 (Three impurities of the soul): Aanavam, Kanmam, Mayai,

Thodam - 3 (Three humours): Vatham, Pitham, Kapham

Eadanai - 3 (Physical Bindings): Porul Patru-Material Bindings, Puthalvar Patru-Offspring Bindings, Ulaga Patru-Worldly Bindings

Gunam - 3 (Three cosmic qualities): Sathuvam (Characters of Renunciation or Ascetic Virtues), Rajas (Characters of Ruler), Thamas (Immoral Characters)

Vinai - 2 (Acts): Nalvinai (Good Acts), Theevinai (Bad Acts)

Ragam - 8 (The eight passions): Kamam-Desire, Kurotham-Hatred, Ulobam-Stingy, Moham-Lust (Intense or Strong Desire), Matham-Pride (The Feeling of Respect towards Yourself), Marcharyam-Internal Conflict, Idumbai-Mockery, Ahankaram-Ego

Avasthai - 5 (Five states of consciousness): Ninaivu-Wakefulness, Kanavu-Dreams, Urakkam-Sleep, Perurakkam-Repouse (Tranquil or Peaceful State), Uyirpadakkam-Insensibility to surroundings.

Basics of siddha medicine

The basic concepts of the Siddha medicine are almost similar to Ayurveda. The only difference appears to be that the Siddha medicine recognizes predominance of *vatham*, *pitham* and *kapam* in childhood, adulthood and old age, respectively, whereas in Ayurveda it is totally reversed: *kapam* is dominant in childhood, *vatham* in old age and *pitham* in adults.

As per the Siddha medicine various psychological and physiological functions of the body are attributed to the combination of seven elements:^[18]

1. Saram (Digestive juice). Saram means Prana vayu (Oxygen) responsible for growth, development and nourishment;
2. *Cheneer* (blood) responsible for nourishing muscles, imparting color and improving intellect;
3. *Ooun* (muscle) responsible for shape of the body;
4. *Kollzuppu* (fatty tissue) responsible for oil balance and lubricating joints;
5. *Enbu* (bone) responsible for body structure and posture and movement;
6. *Moolai* (Bone marrow- responsible for the production of RBC, etc).
7. *Sukila* (semen) responsible for reproduction.

Concept of disease and their cause

When the normal equilibrium of three humors (vatha, pitha and kapha) is disturbed, disease is caused. The factors which affect this equilibrium are environment, climatic conditions, diet, physical activities and stress. Under normal conditions, the ratio between these three humors (vatha, pitha and kapha) is 1:1/2:1/4, respectively. According to the Siddha medicine system diet and life style play a major role not only in health but also in curing diseases. This concept of the Siddha medicine is termed as pathya and apathya, which is essentially a list of do's and don't's.^[17-20]

Concept of drugs

In Siddha medicine the use of metals and minerals are more

predominant in comparison to other Indian traditional medicine systems. In the usage of metals, minerals and other chemicals, this system was far more advanced than Ayurveda. The drugs used by the Siddhars could be classified into three groups:

Mooligai/Thavaram (herbal product),

Thathu (inorganic substances) and

Jeevam or Sangamam (animal products).

In herbal drugs, the Siddhars not only used herbs, but also herbs that grow in high altitudes of Himalayas along with tropical herbs. It is noteworthy that Siddhar Korakkar was the first to introduce Cannabis as a medicine; he used it as a powerful painkiller. They also used animal products as medicine, for example in mental diseases, *peranda bhasma* is used which is made of human skull bones and the skulls of dogs. In addition to drugs, *pranayama* and other disciplines of yoga are necessary for good health and longevity.

The *Thathu* drugs are further classified as:

1. *Uppu* (Salts) (water-soluble inorganic substances or drugs that give out vapor when put into fire),
2. *Pashanam* (Arsenicals) (drugs not dissolved in water but emit vapor when fired),
3. *Loham* (Heavy metals) (not dissolved in water but melt when fired),
4. *Rasam* (Mercury and its salts) (drugs which are soft) and
5. *Ghandhagam* (Sulfur alone) (drugs which are insoluble in water, like sulfur).

Siddhar Nagarjuna introduced the use of mercury and its compounds to the Ayurvedic system in later periods. The use of more metals and chemicals was justified by the fact that to preserve the body from decomposing materials that do not decompose easily should be used. The other reason perhaps was that the south Indian rivers were not perennial and herbs were not available all through the year.

Concept of physician

In Siddha system of medicine a physician should be spiritual and have an in-depth knowledge. According to Theraiyar (a siddha) in his *Theriyar Thyla varga churrukama*, the physician should have pure thought and action, love for all human beings, a detailed knowledge about geographical seasonal variations, correct physical and mental state and dietary habits. Agasthiyar Sillaraikkovai further adds generosity, patience, untiring hard work, capability of overcoming greed, anger, knowledge about astrology and numerology as the qualities of a physician. He says that a physician should protect his patient like an eyelid, which protects the eyes and care as a mother who cares for her sick child. A physician should not wear colorful dress, nor use silk, leather rope, cosmetics and should always move around in white dress, using only sandal paste as cosmetics. Theraiyar in his *Thylavarka churukkam* insists that a physician should clean his hands many times and have bath after examining a patient.

Siddha medicine

'Siddha medicine' means medicine that is perfect. Nobody knows when it originated. It evolved when the world started from spiritual life. Vishwa Brahma Dutt meditated for 41,000 years. He could then connect and communicate with the elements air, water, ether, earth and fire and also the plants. Subsequent men and women who dedicated their lives into developing the system were called 'Siddhars'. They compiled the knowledge and left it for the future

generations, without even mentioning their names.

The drugs used in Siddha medicine were classified on the basis of five properties: *svavai* (taste), *guna* (character), *veerya* (potency), *pirivu* (class) and *mahimai* (action).

According to their mode of application the Siddha medicine could be categorized into two classes:

1. Internal medicine and
 2. External medicine.
- Internal medicine was used through the oral route and further classified in to 32 categories based on their form, methods of preparation, shelf life, etc.
 - External medicine includes certain forms of drugs and also certain applications like nasal, eye and ear drops and also certain procedures like leech application.

The internal medicines are 32 in number. They include medicines with short life period to medicines which could be used even for hundreds of years. The metallic preparations that could be preserved and used for longer duration are considered as higher medicines. They act even in very small quantity and are capable of curing chronic illness.

- Surasam - These are extracts of leaves, roots, barks, flowers, rhizomes and fruits, etc, which are boiled so that their water content is greatly reduced. Their duration of life is 3 hours. Example: ginger juice surasa.
- Charu - They are extracts of leaves, roots, barks, flowers, etc, obtained by grinding them, or obtained by adding some astringent substances or by direct heat application.
- Kudineer - These are decoctions prepared by adding water to dry herbs, or fresh ones and the boiling them so that the water content is greatly reduced to 1/16th or 1/8 of the water added. Some times, some substances are not directly added to the water but instead they are kept in a clean white cloth, tied and immersed in the water. They also could be used for 3 hours.
- Karkam - These are pastes obtained by grinding wet drugs or by adding water decoctions to dry powders. The kalvam or the pestle and mortar should be cleaned when the drugs are ground in it. It should be ensured that all drugs added to it are properly mixed. Its life period is 3 hours.
- Utkalee - The drugs are added to rice either raw or boiled or to Bengal gram flour, ground properly, sugar or jaggery added to it and then boiled so that it is made in to a paste form, where the outer layer is dry and the inner moist.
- Adai - Some leaves are added to rice flour and ground properly and baked in hot oven after applying ghee to it. The life period is 3 hours.
- Chooram - The dried drugs are taken separately, purified, either by frying or otherwise and made in to fine powders and sieved in fine cloth and mixed with other powder of the drug. The purification of the chooram is made by baking it either in water or in milk. The life period is 3 months.
- Pittu - The drugs are made in to fine powder separately; mixed, baked either in water or in milk and then sugar or jaggery is added to it. The life period is 3 months.
- Vadagam - The raw drugs are made in to fine powder separately, and then jaggery or palm sugar is added to it and baked in milk-water combination until the milk is completely dried up. Then it is ground when it is hot and made in to small pills. The life period is 3 months.
- Vennai - The powder of the raw drugs are heated by adding ghee to it, so that the powder completely melts and mixes with the ghee. This is poured in to a bigger vessel containing water

and churned properly, to get butter like substance, life period is 3 months.

- Manappagu - Some herbal drugs are made in to decoctions separately, or fruits juices are taken and boiled adding sugar or sugar crystals, till an aromatic smell appears, some drugs could also be added at this stage. This is the syrup form of a drug that has a life period of 6 months.
- Nei - Some juices or pastes or decoctions of herbs or tubers are added to cow's ghee and boiled till the drugs completely mix with the ghee and is in the form of the ghee. This process is used to get fat-soluble components of the drugs.
- Rasayanam - The raw drugs are made in to fine powder, sugar and ghee are added to it and taken in a semi-solid form.
- Ilagham - Some decoctions or juices are mixed together, sugar is added to it and boiled in mild fire. When an aromatic smell appears, fine powders are sprinkled in to it. Ghee is added to it and then, honey is added until it is mixed well.
- Ennai - although it indicates gingely oil generally, it includes all oily substances of seeds, climbers, barks, tubers, etc. It is classified in to 12 by its origin and five by its mode of application. Life period is 1 year.
- Mathirai - The raw drugs are ground by adding juices, decoctions, ginger juice or breast milk and made in to small pills according to its dose and dried. Life period is 1 year.
- Kadughu - The raw drugs are added to oily substances and boiled till mustard like granules appear. The granules are taken in, while the oil is used for external application. The life period is 1 year.
- Pakkuvam - Drugs like *Terminalia chebula* are soaked in rice water or water, after it shrinks it is added wither to butter milk or to juices like that of ginger and lemon, and raw drugs are added to it. Life period is 1 year.
- Thenural - Drugs like ginger, Indian gooseberry, *T. chebula* are soaked in water, pores are made in it and then soaked either in sugar syrup or honey. The life period is 1 year.
- Theeneer - This is the process in which raw drugs are distilled in water or some salts are distilled in specialized distillery pot. Life period is 1 year.
- Mezhugu - They are of two types:
 - a. Obtained by grinding drugs.
 - b. Obtained by heating them by adding oily substances:
 - a. Obtained by grinding drugs: Mercurial compounds are ground separately or with other raw drugs adding juices or honey, in to a semi-solid form.
 - b. Obtained by heating them by adding oily substances: Mercurial drugs or pashana drugs are heated by slowly adding oily substances or juices and made in to a semi-solid form and then ground well. Life period is 5 years.
- Kuzhambu - Some juices or single juice kept in a vessel and raw drugs are added to it in fine powder form, then heated and taken in a semi-liquid form. Life period is 5 years.
- Pathangam - This is the process of sublimation. Mercurial compounds are made to sublime in specialized pots by keeping them in small container called "Moosai", over salt and red soil. Life period is 10 years.
- Chenduram - Metallic substances or toxic salts are made into red colored powders, by the process of either burning them or frying them or exposing to the sunlight or keeping them in specialized pudas by adding decoctions, cheyaners, dravagams, etc. Life period is 75 years.
- Neer or Parpam - Loghas, Uparasas or Pashanas are made in to

white powders by the puda process, burning them, frying them, blowing them by adding juices, cheyaners, dravagams, etc. It is to be remembered, the calcination process or the parpa of the gold alone is yellow in color unlike other parpas. Life period is 100 years.

Puda is the process in which the drugs is kept in a shallow earthen plate, and covered by an identical plate. The mouth is closed by clay paste clothes, in seven layers and kept in a pit and cooked using a given number of cow dung cakes.

- Kattu - Some pashanas are made in to solid substances which never vaporize or melt or dissolve in water by adding cheyaner, dravagam, leaf juice, breast milk, honey and binding them. The other process by which it is made solid is by grinding then adding juices or breast milk after they are made in to parpas or chenduras. Its life period is 100 years.
- Urukku - Some Loghas or Pashanas after adding synergetic drugs or antagonistic drugs are kept in "Moosai" and blown using natural charcoal fire. Life period is 100 years.
- Kalanghu - Mercurial compounds are kept in pudas after burning them with cheyaner dravagam or juice and blown till they become beads, then gold and zinc are added to it. Life period is 100 years.
- Chunnam - Mercury or Pashana or Logha either individually or combined are ground in Kalvas by adding juices, dravagam or cheyaner dried, kept in moosai, blown and made in to white powders. They become red when turmeric powder is added to it because of the presence of Lime in it (calcium). Life period is 500 years.
- Karpam - Some herbal medicines are taken in prescribed doses with specific instructions over a period of time, similarly logha, uparasa preparations are also taken.
- Chatthu - Drugs like iron powder, magnetic iron, uparasa are ground well with white yolk of eggs and kept in moosai and blown. Later mercury, gold and sulfur are added to it, and made in to chenduras by burning them.
- Gurukuligai - The sublime mercury is made in to beads in its amalgam forms.
Mercury is used in five forms such as *rasam* (mercury), *lingam* (red sulfide of mercury), *veram* (mercury perchloride), *pooram* (mercury subchloride) and *rasa-chinduram* (red oxide of mercury). They are known as *panchasutha*.

Diagnosis and treatments

In diagnosis, examination of eight items is required which is commonly known as astasthan-pariksa.^[20,21] These are:-

- Na (tongue): black in vatha, yellow or red in pitha, white in kapha, ulcerated in anaemia.
- Varna (color): dark in vatha, yellow or red in pitha, pale in kapha;
- Svara (voice): normal in vatha, high pitched in pitha, low pitched in kapha, slurred in alcoholism.
- Kan (eyes): muddy conjunctiva, yellowish or red in pitha, pale in kapha.
- Sparisam (touch): dry in vatha, warm in pitha, chill in kapha, sweating in different parts of the body.
- Mala (stool): black stools indicate vatha, yellow pitha, pale in kapha, dark red in ulcer and shiny in terminal illness.
- Neer (urine): early morning urine is examined; straw color indicates indigestion, reddish yellow excessive heat, rose in blood pressure, saffron color in jaundice and looks like meat

washed water in renal disease.

- Nadi (pulse): the confirmatory method recorded on the radial artery.

The treatment 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 is 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.^[5]

The way of treatment in Siddha medicine is aimed at keeping the three humors in equilibrium and maintenance of seven 7 Udal Kattugal (7 Body components), 7th one – Sukkilam or Suronitham (Semen and ovum). Saint Thiruvalluvar explains four requisites of successful treatment, namely patient, attendant, physician and medicine. Treatment is classified in to three categories:

- Devamaruthuvam (Divine method),
- Manuda maruthuvam (rational method), and
- Asura maruthuvam (surgical method).

In Divine method medicines like parpam, chendooram, gurukuligai made of mercury, sulfur and pashanams are used. In rational method, medicines made of herbs like churanam, kudineer, vadagam are used. In surgical method, incision, excision, heat application, blood letting, leech applications are used. As per therapies the treatment of Siddha medicines could be categorized in to Purgative therapy, Emetic therapy, Fasting therapy, Steam therapy, Oilation therapy, Physical therapy, Solar therapy and Blood letting therapy, Yoga therapy, etc.

The treatment in Siddha is aimed at restoring the original balance of the three forces so that the patient becomes healthy. Restoring the lost balance is logically simple. When any one of the three forces is aggravated causing a disease, one should use a substance, which has properties opposite to its own, so that the Force will be reduced or brought to its normal state. When a Force is deficient, some substance having properties similar to that particular Force may augment it. This is possible because the Three Forces are also made up of five elements as already stated.

Applications

Thirty-two types of external applications and manipulations are mentioned in Siddha text and most of them are in practice even today.^[22]

Kattu - This application of medicine made of herbs, pashanas, etc, to the affected areas and bandaging it.

Patru - Application of paste obtained from plant extracts or by grinding raw drugs with or without treating them.

Ottadam - It is the application of fomentation using pulses, cereals husk, lime, brick powder, leaves, etc.

Poochu - Application of medicated oils or herbal juices after warming them gently.

Vedhu - It is the inhalation of fumes or steam, by adding raw drug powders to boiling water or by burning raw drugs as wicks in small earthen lamps which contain neem oil.

Pottanam - Small cloth bags containing powdered raw drugs are soaked in warm neem oil or other oily substances and applied over affected areas of the body as fomentation.

Thokkanam - This is the physical manipulation of the body either by applying medicated oil or without. This is similar to the present day physiotherapy.

Pugai - This is application of fumes to the different parts of the body. The fume is generated by using peacock feather, cumin seeds, horns of animals, skin of snakes, etc. Apart from that, prepared medicines like Agasthiyar Kuzhambu, Koushikar Kuzhambu are also used.

Mai - Application of fine paste to the eye. Collyrium for the eye. The carbon or smoke formed by burning dried wick, soaked in *Eclipta alba* in confined air and mixed with cow's butter.

Podi thimirdhal - Rubbing the body with horse gram flour or turmeric powder with or without camphor.

Kallikam - Applying eye drops obtained by dissolving medicated pills in honey, breast milk, plant juices, etc.

Nasiya - The prepared medicines are used as nasal drops or fresh juice is used as nasal drop. When the prepared medicine is used it is made liquid by dissolving it in breast milk.

Oodhal - The physician chewing the medicated substance and blowing the aroma in to the ears or nose of the patient.

Nasiga paranam - Raw drugs are either powdered or soaked in milk or herbal juices dried, made in to powder and applied in to the nostril. This is the powdered form, while nasia is in liquid form.

Kazhimbu - Pashanas are powdered along with astringent drugs like Terminalia chebula, Quercus infectorious and ground well with butter and applied to wounds.

Seelai - Toxic drugs are ground in water or herbal juice and a piece of cloth is soaked in this and applied to the wounds.

Neer - Some raw drugs are soaked in water or made in to decoctions, or toxic substances are greatly diluted and used to wash wounds. They act as antiseptic.

Varthi - Toxic substances are ground well with herbal juices or decoctions and piece of cloth is soaked in this, made in to a wick and is applied to deep wounds.

Suttigai - This is heat application using needles, broken earthen pots or piece of wood in specific areas of the body. This also includes solar radiation and air radiation.

Sallagai - This is an exploratory therapy using a probe which has blunt end.

Pasai - Some drugs like kungiliya are added to molten wax or castor oil and applied to wounds.

Kazhi - Drugs like Lepidum sativum seeds are ground with rice flour by adding milk or water, heated and applied to affected area.

Podi - Raw drugs are powdered and applied to wounds, mostly astringent drugs are used for this purpose.

Murichal - This is the physical manipulation by which dislocated bone or joint are brought to their normal position. This is similar to bone-setting.

Keeral - Incision of boils and removal of accumulated pus, blood, etc.

Karam - Application of toxic drugs to areas to be excised or to chronic ulcers.

Attai-vidal - Leech application to locally affected areas, block or swelling.

Aruvai - This is excision of affected part of the body using specific surgical instruments.

Kombu kattal - Immobilizing fractured bone using splints and bandages - after proper reduction.

Urinjal - Drainage of accumulated pus, blood etc by sucking with proper drains.

Kuridhi Vangal - Blood-letting in condition where there is

accumulated blood by venesection.

Peechu - Enema using water or soap water to evacuate rectum.

Conclusions

Siddha system of medicine is the oldest documented medical system in the world. In the modern era, siddha system is not gaining proper popularity because of some hurdles and lack quantity of metals and other inorganic compounds. A major portion of the siddha medicines uses herbs and green leaved medicines. But sometimes situation arises when these diseases can not be cured with just green plants, then these medicines prepared from metals, minerals and salts which are in calcined forms. The use of more metal and chemicals was justified by the fact that to preserve the body from decomposing materials that do not decompose easily should be used. Recognizing the inherent toxicity of some metals, the siddha system insisted on purifying such ingredients before use in medications. The immediate need is to assure the regulating agencies and people regarding the purification, quality and essential use of these medicines. So that the object will be clarified and the important step must be taken for, its existence in the system must be come forward by the shell of Tamil to other part of the world.

Acknowledgement

The authors are highly grateful to UGC [F. No: 34-131/2008 (SR)] for financial assistance under major research project.

References

1. Piet JH. Logical Presentation of The Saiva Siddhanta Philosophy. Madras: Christian Literature Society for India; 1952.
2. Tamil Lexicon. 36th ed. Madras: Publications Office: Univ. of Madras; 1982.
3. Thiruvalluvar, Thirukural with English Version. In: Narayanasamy J, editor. Chennai: Sura Books [Pvt] Ltd; 2003.
4. Uthamaroyan CS. Thotra Kirama Araiachium Siddha Maruthuva Varalarum. Chennai: Tamilnadu Govt. Siddha Medical Board; 1992.
5. Sowrirajan M. Pathartha Gunapadam. Thanjavur: Saraswathi Mahal Library; 1992.
6. Stephen ES. Complementary and alternative medicine. In: Dennis LK, Eugene B, Anthony SF, Stephen LH, Llarry JL, editors. *Harrisons Principles of internal medicine*. 16th ed, McGraw-Hill Medical Publishing Division; 2005. p. 67.
7. Patanjali Yoga Sutras. Translated into English with notes by Swarmi Prabhavananda. Madras: Shri Ramakrishna Mission; 1953.
8. Patanjali Yoga Sutras. Translated into English with notes by Swarmi Prabhavananda. Madras: Shri Ramakrishna Mission, 1953: IV.
9. Balaramaiah V. Vadavaidyattukki Adi (in Tamil). Part I. Madras: Arul Jyoti Printers; 1980.
10. Viraraghava Iyer KC. The study of alchemy in Tamil Nadu. In: Datta HN, et al, editors. Acharya PC Ray Commemoration. Calcutta: NC Paul; 1932. p. 466-9.
11. Needham J. Science and civilization in China. Vol. 5. 2. Cambridge: Cambridge University Press; 1974. p. 13, 66-9, 90, 121-22.
12. Needham J. Science and civilization in China. Vol. 5. 2. Cambridge: Cambridge University Press; 1974. p. 109-10.
13. Chakravathy C. The Tantras: Studies on their religion and literature. Calcutta: Pundi Pustak; 1963.
14. Bagchi PC. On the foreign element in the Tantras. *Indian Hist Q* 1931;7:1-16.
15. Matrkbhedatantram. In: Bhattacharya C, editor. Calcutta: Metropolitan Printing and Publishing House; 1933.
16. Rasarn avakalpa. In: Roy M, Subbarayapa BV, editors. New Delhi: Indian National Science Academy; 1976.
17. Narayansami V. In: Pandit SS. Introduction to the Siddha System of Medicine. T. Nagar, Madras: Anandam Research Institute of Siddha Medicine; 1975. p. 1-51.
18. Kandaswamy, Pillai N. History of Siddha Medicine. Madras: 1979.
19. Sharma PV. Siddha medicine. In: Sharma PV, editor. History of Medicine in India. New Delhi: The Indian National Science Academy; 1992. p. 445-50.
20. Subbarayappa BV. Chemical practices and alchemy. In: Bose DM., Sen SN, Subbarayappa BV, editors. A Concise History of Science in India, New Delhi: Indian National Science Academy; 1971. p. 315-35.
21. Thottam Paul Joseph. Siddha Medicine: A Handbook of Traditional Remedies. New Delhi: Penguin Books; 2000.
22. Walter Thomas M, Rubia G, Sathiya E. Review of ethics in traditional Siddha Medicine as defined by Siddhar Theraiyar, *Siddha Papers*; 2009. 02 (03).

Cite this article as: Shukla SS, Saraf S, Saraf S. Fundamental aspect and basic concept of siddha medicines. *Syst Rev Pharm* 2011;2:48-54.

Source of Support: UGC [F. No: 34-131/2008 (SR)], **Conflict of Interest:** None declared.

Author Help: Reference checking facility

The manuscript system (www.journalonweb.com) allows the authors to check and verify the accuracy and style of references. The tool checks the references with PubMed as per a predefined style. Authors are encouraged to use this facility before submitting articles to the journal.

- The style as well as bibliographic elements should be 100% accurate to get the references verified from the system. A single spelling error or addition of issue number / month of publication will lead to error to verifying the reference.
- Example of a correct style
Sheahan P, O'leary G, Lee G, Fitzgibbon J. Cystic cervical metastases: Incidence and diagnosis using fine needle aspiration biopsy. *Otolaryngol Head Neck Surg* 2002;127:294-8.
- Only the references from journals indexed in PubMed would be checked.
- Enter each reference in new line, without a serial number.
- Add up to a maximum 15 reference at time.
- If the reference is correct for its bibliographic elements and punctuations, it will be shown as CORRECT and a link to the correct article in PubMed will be given.
- If any of the bibliographic elements are missing, incorrect or extra (such as issue number), it will be shown as INCORRECT and link to possible articles in PubMed will be given.