

The Glory of Indian Medical System During Vedic Period and Subsequently and the Procedures Developed Thereon by the Exponents

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Abstract:- Physical and mental ingredients of Positive Health were genuine concern of people in Vedic Period – It means the World should be free from diseases and should have healthy mind (Yajurveda). The main source of knowledge with respect to Indian Medical Systems that are being developed by the great luminaries like Maharshi Agnivesya, Acharya Sushruta, Acharya Charaka, Bhagavan Dhanvantari are from, Rig, Sama, Yajusa, Atharva Vedas. The Ancient Indian Medical System developed & invented procedures and instruments to root out diseases/ailments from the suffering. They also believed that in addition to procedure and medicines, “hymns and prayers” are necessary to ward of the diseases and to protect people from diseases and natural disasters. In achieving this, heavenly task, the Maharshis and Acharyas in their respective lifetime, devoted their life and energy to the development of Indian Medical System and Surgery (Chikitsa) that was acclaimed as the most reverent innovations to save the mankind from diseases and disasters. These Maharshis and Acharyas derived the knowledge not only from, “Atharvanaveda but also from Brahmana literature” in identifying the basic elements of the body (Dhatus), the visible or the external parts of the body i.e. Head, ear, nose, mouth etc., and also the unseen internal parts like heart, lung, spleen, kidney or artery, liver, foetus. It is not surprising to mention that in that Golden Era, the Maharshis and Acharyas are able to identify the foetus and also the inner membrane of the embryo. In Vedic Period, the Maharshis and Acharyas who themselves are acclimatized with health and healthcare procedures are able to identify the medicinal plants like Aswangandha, Khadira, Apamarga, Udumbura, Vibhitika, Bhilva etc. Sushruta Samhita the treatise written by Acharya Sushruta and Upanishada are also source of information about the different parts of the body that are visible and invisible, the ailments/diseases, the causes thereon procedures to treat them and food habits that are to be followed in accordance with the treatment. In this article, an attempt is made to trace out the “Glimpses of Indian Medical System” that flourished in Ancient India specifically in Vedic Period and subsequently and also to bring out those procedures and applications and the Rasayana Sastra that are became the foundation for the present Medical System.

Keywords:- *Upaveda of Atharvaveda, Mantra Chikitsa in Modern Period, Skin Related Health Diseases as Mentioned in Rig Veda Samhita, Yakshma (Infectious Disease), Stem Cell Therapy, Genetic Engineering.*

I. INTRODUCTION

“Pranayamaat Pustihi Gotrasya Stejo Yashobalam”

The meaning of the above caption is “with Pranayama body gets strength, vigor and concentration”. If these things are developed by Pranayama the diseases or ailments are afraid of coming nearer to you.

*Drussena Saradaam Satam
Sunyama Saradaam Satam
Prabravama Saradaam Satam
Adhinaa Syama Saradaah Satam
Bhuyama Saradaah Satam*

*Means,
“one has to live for Hundred years”
How?*

With good habits like See Good, Hear Good, Speak Good and Live with Integrity

“A healthy body is the dweller of sound mind”

According to World Health Organization (WHO), it is a

“State of complete physical, mental and social well-being and not merely the absence of disease or infirmity”

The Ancient Indian Culture, has given more importance to the Health of the People because they firmly believed that “Health is wealth and a Healthy Nation is wealthy Nation”. The traditional Indian Medicine roots can be traced to Vedic Period and are supposed to be more than 5000 years. A glimpse at the Vedas, will identify information both practical and scientific, covering majority of the subjects that are useful to the humanity/mankind. Some of the notable subjects that found prominence in Vedas and are useful to the mankind in their day to day life are, health, philosophy, engineering, astrology and so on.

The real meaning of history of Medicine is,

“The study and documentation of the evolution of medical procedures, healthcare procedures, practices and acquiring knowledge over a period of time”.

In Ancient India, during Vedic Period, when there is lack of written sources of medicine, this information of health and health procedures are drawn from archaeological sources. This source of information includes the evolution of the human society's approach to health and health procedures, illness and injuries etc. It is during the period of Vedas written by the great Maharshi's, the first Indian text dealing in Chikitsa (medicine) is written in Public Interest wherein the description of various herbs that are used to cure various ailments/diseases are recorded in Atharvaveda. This is the concept, later became the foundation stone for Ayurveda, one branch of medicine. Ayurveda means **“complete knowledge for long life”**,

As everybody knows there are four Vedas namely **Yajurveda, Atharvaveda, Samaveda and Rigveda**. Of these four Vedas **Atharvaveda** mainly deals with the health and health related topics. The Vedas have a detailed comprehensive information regarding the diseases that are prevalent in those days and their treatment by using medicinal herbs and also the characteristics of herbal medicines their usage, procurement and nourishing; in addition Vedas also mentions about the efficiency of the medicinal herbs and their application to treat the diseases by removing the ailments make the human beings healthier and to conquer the diseases.

In addition to the above, the Vedas also mentioned in the form of Mantras to appease some of the Gods for curing purpose like,

“Rudra, Agni, Varuna, Indra and Maruthi” and are designated as Celestial Physicians.

Like other branches of Science, Ancient Indian System of Medical Science (**Vaidyamu Chikitsa**) is a well defined conceptual framework and is embedded in the Vedas and benefiting the mankind. The important aspect of Ancient Medical System is the **Vaidyars** in those days never use to treat any disease on the basis of visible symptoms on the body, but they used to treat the patient by identifying the root cause of the symptoms and that root cause of symptoms are addressed to eradicate the disease.

Of all the four Vedas mentioned above, **Atharvaveda** is mainly deals with Medical Science, diseases, application of herbal medicines and the procedure to cure any ailment/disease. **Atharvaveda** consists of 114 hymns related to Medical Science. Ayurveda which is predominant in Ancient India as a Medical Science is supposed to be the **Upaveda of Atharvaveda**.

Atharvaveda also contains 731 hymns, charms and incantations. The Atharvaveda VIII, 7 appears as a charm bestowing longevity, the divine-ties to whom it is addressed are the herbs mentioned in hymns. It also explains the use of hymns a remedial measure against diseases.

In Ancient India especially during Vedic Period there are two systems of medicines prevailing to cure the diseases that are identified by those Acharyas/Physicians who are well versed with them.

- *The system of charms prescribed by the Atharwan (priest physician)*
- *The system of drugs prescribed by ordinary medical practitioners.*

The locally available Panchagavyas means Five Products derived from the Cow Milk, Honey and certain types of fats as used as **“Anupanas”** as remedial measures for certain diseases.

The Panchagavyas (Five products of the Cow), Honey and fats as a suitable vehicle (Anupana) for the remedies.

In X:2:1-33, a hymn entitled **“the wonderful structures of man”**, in which the several parts of the Skeleton are carefully enumerated. In 11.33 almost all the important organs of the body are enumerated.

In X:8:43, a reference is made to Bull. Ind. Inst. Hist. Med. Vol. XXV lotus with nine gates. The comparison of the heart to a lotus, In I: 17:3 described

**“Thou sira of the lower part, remains,
thou of the upper part remains;
so thou of the middle part,
so thou small, so thou big Dhamani,”**

With regard to this verse. Sri Dasgupta, says,

“A knowledge of the distinction between Veins and arteries, in the modern sense of the terms, was known at that time”.

The division of Dhamanis, Siras and Snayus seems to have been based on their relative fineness, the thicker canals were called Dhamanis, the finer ones were called Siras, and the still finer ones Snayus.

The flow of certain fluids in the body, described in X:2:11,

“Who stored in him floods moving in all diverse directions and formed to flow in rivers pink, rosy red, and coppery dark running in all ways in a man, upward and downward”.

The intimate relation between the heart and the brain seems to have been dimly apprehended.

- Atharva Veda 1:12:3 mentions five classes of diseases.
- ✓ Atharvanic people recognised a threefold classification of all diseases those produced by wind, by water and fire later developments in Ayurveda, considered the threefold classification of all diseases as to the three Doshas Viz: Vata, Pitta and Kapha.
- ✓ Diseases produced by possession by demons and evil spirits.
- ✓ Diseases due to Worms.
- ✓ Diseases due to Sorcery (the use of magic powers derived from evil spirits).
- ✓ Kshetraja (hereditary) diseases.

Krimi (organisms) were explained in detail in the Vedas. In Atharva Veda 11:31:2, the organisms were classified into Dris-hya (Macro) and Adrishya (Micro), which were in water, earth, sky, houses. Mainly Atharva Veda 1:28:4 to XIX:66:1, about 98 varieties of Krimis and Krimi janya Vyadhis (diseases produced by bacteria, worms, insects) and treatment for different bacteria manifested diseases were explained.

XIII:1 :32 hymn reveals that "the rising Sun is prayed to destroy the infective organisms".

This connotes the ultra violet rays present in the Sunlight was known to Atharvanic people. Here, it is stated that pathogenic bacteria live mostly during darkness and die during sunrise.

Atharva Veda stated herbal remedies like Ajashringi (IV: 32:2) Prishni pami (11:25:2), Apamarga (IV:18:8) etc. as anti-bacterial and Shankha (IV:10:3), prathisar(VIII:5:8) etc. Manidharana as preventive (protection from bacteria).

II. AIM AND OBJECTIVE

The aim of this article is to trace out the glory of Indian Medical System during Vedic Period and subsequently and the procedures developed thereon by the exponents.

➤ The Chronology of Indian Medical System and the Proponents of Indian Medical System Since Vedic Period:

The notable personalities in traditional Indian Medicine who propagated the cream of Indian Medicine and its importance derived from the Vedas are

- Charaka, 2. Sushruta and 3. Bhela.

All the three treatise written on Indian System of Medicine derived from the Vedas and are known as “Charaka Samhita”, “Sushruta Samhita” and “Bhela Samhita”.

➤ The Earliest Literature on Indian Medicine Evolved During Vedic Period:

The Rigveda and Atharvaveda mention with all details regarding Traditional Indian Medicine. The principle laid down in Rigveda regarding diseases,

“Mainly occur due to the imbalance of the three factors of the body called the, ‘Tri-Dhatif’ or ‘Tri-dosha’. On the other hand, Atharvaveda mentions the same Tri-dosha Theory in a different manner such as, diseases are caused by three elements viz, Abhraja occurring due to moisture-laden cloud which indicates excess of Kapha element, Vataja happening due to wind and Susmaja indicating Pitta or Fiery element in the body”.

➤ The System of Medical Sciences during Vedic Period

As already mentioned above the ancient Medical System is derived from the Vedas mainly Atharvaveda and Yajurveda.

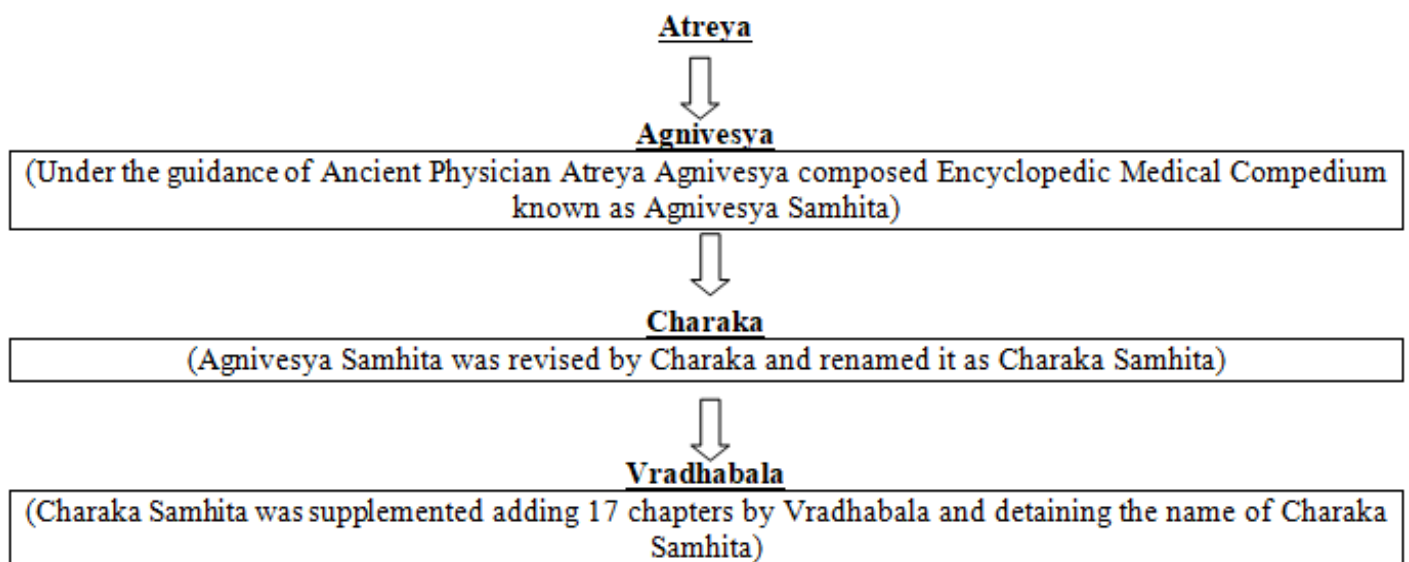


Fig 1 The System of Medical Sciences during Vedic Period

Over a period of time Indian Medical Science in Vedic Period and subsequently has emerged into two major schools of thought; namely

- Athreya Parampara
- Dhanvantari Parampara

• Athreya Parampara:

This School of thought namely Athreya Parampara was mainly "Sampradaya of Surgeons" related to "Shalya Chikitsa".

Agnivesha under the guidance of the Ancient Physician "Maharshi Atreya", "composed an Encyclopedic Medical Compendium". In the 18th Century, B.C.E., called, "The Agnivesha Samhita". However, this Agnivesha Samhita of Acharya Agnivesha has not received that much attention that it deserves. However, in the latter period, this Agnivesha Samhita was revised by Charaka and renamed it as "Charaka Samhita". Subsequently at a later stage this Charaka Samhita was supplemented with additional seventeen chapters that are being added by Acharya Vrdhabala, without changing the name of Charaka Samhita which is predominantly acclaimed by one and all in Ancient Indian Medical Form.

• Dhanvantari Parampara:

"Dhanvantari School of Thought" is concerned, it is more related to medicines/body treatment and mainly the work of a physician. Over a period of time two Eminent Scholars, "Charaka" & "Sushruta" emerged as "Notable persons" in "Indian System of Medical Science" and developed a systematic way of treating ailments/diseases of the patients in two different ways.

Of these notable persons, "Charak" wrote a treatise on Medicine called "Charaka Samhita" which mainly deals with the treatment of ailments/diseases with medicinal plants, herbs in a methodical way as per the symptoms of disease.

This two books mainly "Charaka Samhita" & "Sushruta Samhita" are the first and the most ancient works in the field of Indian Medical System and regarded as the greatest treatise in the field of Indian Medical System.

➤ Charaka Samhita:

This treatise contains more than 600 drugs, all derived from Plants, herbs, animals and minerals.

These things are evident from the Yajurveda wherein, we can observe that,

"Physical and Mental ingredients of Positive Health were a genuine concern of people in the Vedic period – it means the World should be free from diseases and should have healthy mind".

• Koushika Sutra:

In addition to Charaka Samhita and Sushruta Samhita there is another important treatise which provides a detailed

information about body parts (Sareera Bhaga), Different types of ailments/diseases, the root cause of ailments/diseases, different procedures for different ailments are all explained in detail. In addition, Koushika Sutra deals with not only Medical Therapy but also Faith Therapy.

• *There are four types of methods of treatment for diseases were discussed in Atharvaveda:*

✓ Atharvana Chikitsa: This type of Chikitsa as mentioned in Vedas mainly deals with, by Chanting Mantras the diseases can be cured; and it is also known as "faith healing" by way of Psychiatry or Psychotherapy or Psychological method of Treatment.

✓ Aangirasa Chikitsa: This type of Chikitsa mainly deals with Medical Procedure based on the Medicinal Herbs and Animal Products and Birds.

✓ Daivy Chikitsa: This type of curing diseases is with the help of natural elements that are available in the environment such as Sunrays, Water, Earth etc. It is nothing but the subsequent form of naturopathy treatment wherein the five elements of nature i.e. Agni, Vayu, Prudhvi, Jala, Ether are involved.

✓ Aushadhi Chikitsa: This type of Chikitsa is something a modified version of treatment by application of finished products of medicines.

• *Contents of Charaka Samhita,*

The extent text has eight *sthāna* (books), totalling 120 chapters. The text includes a table of contents embedded in its verses, stating the names and describing the nature of the eight books, followed by a listing of the 120 chapters.^[29] These eight books are^[6]

✓ Sutra Sthana (General principles) - 30 chapters deal with general principles, philosophy, definitions, prevention through healthy living, and the goals of the text.^[30] It is divided into quadruplets of 7, making it 28 with 2 concluding chapters.

✓ Nidana Sthana (Pathology) - 8 chapters on causes of diseases.^[31]

✓ Vimana Sthana (Specific determination) 8 chapters contain training of a physician, ethics of medical practice, pathology, diet and nourishment, taste of medicines.^[32]

✓ Śarira Sthana (Anatomy) - 8 chapters describe embryology & anatomy of a human body (with a section on other living beings).^[33]

✓ Indriya Sthana (Sensory organ based prognosis) - 12 chapters elaborate on diagnosis & prognosis, mostly based on sensory response of the patient.^[31]

✓ Cikitsa Sthana (Therapeutics) - 30 chapters deal with medicines and treatment of diseases.^[34]

✓ Kalpa Sthana (Pharmaceutics and toxicology) - 12 chapters describe pharmacy, the preparation and dosage of medicine, signs of their abuse, and dealing with poisons.^[31]

- ✓ *Siddhi Sthana* (Success in treatment) - 12 chapters describe signs of cure, hygiene and healthier living.^[31]

Seventeen chapters of *Cikitsā sthāna* and complete *Kalpa sthāna* and *Siddhi sthāna* were added later by Dr̥ḥabala.^[35] The text starts with *Sūtra sthāna* which deals with fundamentals and basic principles of Ayurveda practice. Unique scientific contributions credited to the *Charaka Samhitā* include:

- ✓ A rational approach to the causation and cure of disease
- ✓ Introduction of objective methods of clinical examination
- *Atharvana Veda mainly deals with human anatomy, classification of diseases, herbal medicines and their application to cure the diseases.*

In addition to *Charaka Samhita*, the *Upanishads* (Ancient Literature in Vedic period) also explains elaborately about different parts of the body, their ailments/diseases, reasons/causes of ailments/diseases and how to cure them while observing food habits in line with treatment.

Besides *Atharvana Veda*, the *Brahmana* literature has also provided a detailed information regarding Traditional Indian Medical System, the basic elements of the body (*Dhatus*). In addition the visible or the external body parts, head, ear, nose, mouth, etc and also the unseen internal parts, heart, lung, spleen, kidney, vein or artery, liver, foetus and also the inner membrane of the embryo. In Vedic Period, the Maharshis who are acclimatized with health and healthcare procedures have identified the medicinal plants like *Ashvagandha*, *Khadira*, *Apamarga*, *Udumbara*, *Bibhitaka*, *Bilva* etc.

After the above, few Maharshis developed Ayurveda further and later Ayurveda was developed into three schools of thought by *Sages Charaka, Sushruta and Kashyapa*.

In addition to the above, there is much more information and the knowledge of those physicians and surgeons in Ancient India about Veins and Arteries in *Atharvaveda* (I.17.1) and also the earliest surgery that is conducted can be traced in the *Rigveda* (I.116.15) in which the eternal twin surgeons *Ashvins* inserted an iron leg to *Vishpala* who lost her leg in a war. He can also find the places of surgery in *Atharvaveda* (4.12.3-5). A mantra to pray for joining the disjointed parts of a body. From all the above information one can draw a conclusion that in Ancient India especially from the Vedic Period and subsequently surgery and medicine is in a highly developed state and widely used to cure diseases and ailments in addition to replacing the missing parts of a body due to injury or otherwise especially for the war victims to rehabilitate them so that, they can have their normal routine without the existence of others when the rest of the world is not even having a thought of it.

This development in Medicine and Medicinal Plants has channelized in the development of chemistry and the production of medicines and alkaline substances, glass, colorfast dyes and paints from the plants and flowers, is a testimony of Paintings in *Ajanta Caves*.

When these Ancient treatise on Ayurveda are observed, one can find,

“to rejoin the head of a horse after it has been served in Yajna (Vedic Ritual), or the restoration site to the Sage Chyawan, or restoring his senility (neurocognitive disorder)”.

A further reading of the Ancient texts on Ayurveda reveals that,

“Sage Atreya for Internal Medicine, Dhanvantari for Surgery and Kashyapa for Gynecology and Pediatrics”

And these teachings are further extended for the spread of Ayurveda in Vedic period and subsequently are

“Sushruta of the Dhanvantari tradition who codified surgical practices, Charaka of the Atreya School who codified the precepts and practices in Internal Medicine and Vagabhatta – II of the Kashyapa School, dealing with Gynecology and Pediatrics. Acharya Bhela was another scholar of Atreya School of thought and whose compilation of the Bhela Samhita are the most survive treatise on Ayurveda years to come”.

- *Bhela Samhita:*

Bhela Samhita not only explains the existence of blood circulation but also it describes the need and purpose of blood supply to the whole body and nutrition. *Acharya Bhela* even has gone a step further in describing

“Blood circulation even in the foetus. Acharya describes that, blood is a transitory but a vital constituent of the body and the blood flow never ceases as long as life exists and why should it flow is an inexplicable mystery (Adrushta Hetuna)”.

Acharya Bhela also mentions in *Bhela Samhita*,

“The blood is nothing but the essence of the food that we take which is transmuted by the Rasa Kriya or the chemical action of the body to an assimilable form”.

Bhela Samhita (20.3) also mentions that,

“It is from the heart that Rasa issues forth and from this, the later goes on to all places (Dhaminis). The heart is reached by the veins and therefore the veins are said to be borne of the heart (this is a present concept of heart-artery-body-vein-heart cycle or circulation of blood with heart as the centre)”.

III. THE AIM OF LIFE SCIENCE

Life is of four kinds: *Sukha* (happy), *Duhkha* (unhappy), *Hita* (good) and *Ahita* (bad).

➤ *Sukham-Ayuh* is a life unaffected by bodily or psychic diseases, is endowed with vigor, capabilities, energy, vitality, activity, knowledge, successes and enjoyments. The opposite of this is the *Asukham-Ayuh*.

➤ *Hitam-Ayuh* is the life of a person who is always willing to do good to all living beings, truthful, non-stealing, calm, self-restrained, taking steps after examining the situation, virtuous, achieves Dharma-Artha-Kama, without conflict with others, worshipping whatever is worthy, devoted to knowledge-understanding-serenity of mind, and to charity and peace. The opposite of this is the *Ahitam-Ayuh*.

➤ *The aim of Ayurveda is to teach what is conducive to these four kinds of life.*
Caraka Samhita Chapters 1.1, 1.30 (Abridged)^{[27][28]}

➤ *Golden Words of Acharya Charaka to live happy and healthy life in 10 ways:*

Acharya Charaka who is fondly called "the father of medicine", in those days, profounded 10 ways to live happy and healthy life. Those golden words are still holds good even in the present circumstances and people's way of life, though there is a lot of variation in environment; that is why I mentioned them as golden words because they are true to their meaning Yesterday, today and tomorrow.

- *Be at One with Nature:*

According to him every person in this Universe is a microcosm. To fulfill the purpose of life, the liberation of your soul you must attain unity with your surroundings that means to say be a part of nature spending some time touching the trees in around you, look at them and grab the pressure in the wonder of their ability to stand tall even in the wind and rooted deep in the earth.

- *Keep your Balance:*

As is evident nature is nothing but a combination of six elements (Fire, Earth, water, Air and Ether) and the six and most important one is the soul which is spiritual. Acharya Charaka emphasized that

"A healthy world and a healthy human must contain a perfect balance of them"

- *Do not Provoke your Humors:*

According to Ayurvedic Principle, every body contains three humours namely Vata (Wind), Kapha (Mucus), Pitta (Biliousness). Acharya also mentioned that all diseases of the body and mind are caused by eating food and that food provokes any one of the mentioned above. Acharya said,

"all people lean towards one type of Dosha – Vata types are active and hesitated, Kaphas slow but composed, Pittas are sociable but short temper. A mix of personality types make for the best relationships"

- *Go with Flow:*

A common and simple formula enunciated by Acharya is

"if you do end up filling up with the wrong matter then just need to let it go, for inner peace, just release."

- *Do not be Evil:*

Acharya enunciated that,

"bad behaviour will come back to bite you and he advised everybody to live a moral life which is nothing but good Karma".

- *Keep it Clean:*

As the present healthcare professionals irrespective of their branch of specialization and healthcare providers advocate the principle of "personal hygiene".

There is nothing new but the same was professed and practiced in Ancient India by luminaries like Acharya Charaka who said,

"brush your teeth twice, use eye drops and massage your scalp daily, apply medicated oils to your nostrils, bath your hair and body, drain your ear passages with oils to prevent deafness."

- *The Drugs do Work:*

"Acharya Charaka the selfless noble personality identified and invented medicines such as suppositories, tampons (one method of absorbing menstrual flow during your period) and douches (a shower of water) for relieving congestion. In addition Acharya also advised the use of rectal and vaginal areas for the treatment of wasting diseases, debility and fractures."

- *Sweet the Technique:*

Acharya Charaka firmly believed that due to his observation and experience

"impurities absorbed from the surroundings should be cleansed through sweating, making everybody perspire with sun bathing or steaming for purification".

- *If in Doubt, cut it out:*

Surgery was pioneered in Ancient India to hack out the pain. Acharya Sushruta the contemporary of Acharya Charaka invented and introduced many surgical procedures and procedures to eliminate the pain and suffering. It is noteworthy to mention,

“For a burst abdomen, which states that large black ants should be applied to the perforated intestines, that their body should be separated from their heads after they have firmly bitten the perforated parts with their claws. The intestines should be rinsed with grass, blood and dusk, washed with milk and lubricated with clarified butter and gently pushed back into the cavity”.

- *Sleep at Night, Lying Down on a Full Stomach:*
According to Acharya Charaka, this type of behaviour and habit will make a man active and cheerful.

✓ *The Ideal Medical Student:*

He should be of a mild disposition, noble by nature, never mean in his acts, free from pride, strong memory, liberal mind, devoted to truth, likes solitude, of thoughtful disposition, free from anger, of excellent character, compassionate, one fond of study, devoted to both theory and practice, who seeks the good of all creatures.

—Charak Samhita 3.VIII.6 (Abridged)^{[12][13]}

✓ *Diet and Health*

Innumerable diseases, bodily and mental, have for their root *Tamas* (stupefaction, darkness). Through fault of the understanding, one indulges in the five injurious objects, suppresses the urgings of nature and accomplishes acts that are highly rash. The man of Ignorance then becomes united with conditions for disease. The man of Knowledge, however, purified by knowledge avoids those conditions. One should never take any food, acting only from a desire for it or guided by ignorance. Only food that is beneficial should be eaten, after proper examination. Truly, the body is the result of food.

—Charaka Samhita, 1.XXVIII.41-48^{[53][54][55]}

✓ *Nutrition and Diet[edit]*

Charaka Samhita dedicates Chapters 5, 6, 25, 26 and 27 to "Aharatattva" (dietetics), stating that wholesome diet is essential for good health and to prevent diseases, while unwholesome food is an important cause of diseases.^[56]

The tastes are six. They are sweet, sour, saline, pungent, bitter and astringent. Properly used, they nourish the body. Improperly used (excess or deficient), they verily lead to the provocation of the *Dosha*.

The Dosha are three: Vata, Pitta and Kapha.

When they are in their normal state, they are beneficial to the body.

When, however, they become disorganized, verily they afflict the body with diseases of diverse kinds.

—Charaka Samhita, 3.I.3-4^{[57][58]}

The text suggests that foods are source of heat, nutritive value as well as physiological substances that act like drugs inside human body. Furthermore, along with

medicine, Charaka Samhita in Chapters 26 and 27, states that proper nutrition is essential for expedient recovery from sickness or surgery.^[56]

Charaka, the eminent Scholar in Medicine in Ancient India is the first person to ascertain that,

“Prevention is better than cure”

Charaka also brought to the notice of everybody that,

“A body functions because it contains Three Dosha or Principles namely Movement (Vata), Transformation (Pitta) and Lubrication and stability (Kapha).”

These Doshas can be compared with the present allopathic system and classification of,

“Humors, Wind, Bile and Phlegm”

These Doshas are produced in the body when **Dhatus (blood, flesh and marrow)** act upon the food eaten. This kind of functionality differs from person to person or body to body, that is seen in the different ways of single ailment is brought to the notice when the patients are observed individually. **Charaka** also emphasized that the illness/ailment is caused when there is an imbalance in these three Doshas mentioned above in a human body and thus disturbing it. According to **Charaka**, the curing of such imbalance (Disease or Ailment) is to restore the balance for which the prescribed medicinal herbs and the products there on as drugs. However, it is quite interesting to see that **Charaka** gave importance more to the imbalance in the body than the germs that are in the body.

IV. UNDERSTANDING OF HUMAN ORGANS BY ACHARYA CHARAKA:

Charaka mastered the art of studying the functions of human organs of the body and identified the bones, teeth etc. It is not surprising to mention that **Charaka** is the first person who identified the controlling function of the heart of the body and that this heart is connected to the entire body through thirteen main channels; and **Acharya Charaka** also found that in addition to these there are countless channels or veins with different sizes that supplied nutrients to various tissues and also provided passage to waste products, and also **Acharya** claimed that any obstruction in the main channels lead to a disease or deformity in the body.

With due respect and acknowledging the Research Work carried out by the eminent Scholars “*Puja Upadhyay*” and “*Muralidhar Paliwal*”, Post Graduate Scholar, Department of Samhita and Sanskrit, Faculty of Ayurveda, IMS, BHU, Varanasi and Professor Department of Samhita and Sanskrit, Faculty of Ayurveda, IMS, BHU, Varanasi have in their Research Article titled, “*Review of Mantra Chikitsa in Ayurveda*” published in Journal of Ayurveda and Integrated Medical Sciences (Vol. 6 Issue 5, Sep, Oct’2021) regarding the procedure of Chikitsa

advocated by Acharya Charaka who derived them from Vedas are noteworthy and a cream of Mantra Chikitsa.

With due respects to the authors I am taking out some of the quotes in this article for the benefit of readers in the research scholars.

Mantra is used and chanted even before the manufacture of any medicine and it was mentioned that,

“To reside the Sri Sukta Mantra of the Atharvaveda in the manufacture of Ayubardhak Rasayan. Similarly in the manufacture of Nagabala Rasayan Acharya Charak mentioned the Rasayana Pada and also instructed to chant the Swasti Vachan Mantra before uprooting the Nagabala Aushadhi. Similarly in Rasayan Pada the Acharya directed to take the fruit of Amla from the tree after chanting the Omkara Mantra in Kevalamlak Rasayan. Mantra should be used at the time of making Vishanashak Agad”.

यर्ाऽहो नात्रभजानात्रम रणेकृ ष्णपराजयम् ।
एतेन्ित्यवाक्येन अगदो मेप्रात्रिधयतु ।
नमो वैड्यतमातेहुलुहुलुर मां िवतत्रवषर्भ्यः ॥ (As.hri.u-35/28-30)

Before taking the Drug In the context of Madhumeha treatment, It is stated to chant the Mantra at the time of Tuvarak Tail Pana. [36] As quoted,

मज्जार महावीयतिवातन धातून्वशोधय ।
शांख चक्र गदा पात्रण स्वामाज्ञापयतेऽच्युतः ॥ (Su.chi-13/26)

In **Graha-Chikitsa In Mukhamandika Chikitsa** there is a description of bathing in **Goshala** with **Gayatri Mantra Sanskarita Jala**. [37] Use of Mantra is advised in sacrificial work to protect from **Graha Roga** [38] As,

नमः स्कन्दाय देवाय ग्रहात्रधपतयेनमः ।
त्रशशि त्वाऽत्रभवन्देऽहंप्रत्रतगृह्णीष्व मेबत्रलम् ।
नीरुजो त्रनर्वतकारच्ि त्रशशुमेजायतारुतम् ॥ (Su.u-27/21)

In **Shalya-Karma Acharya Sushruta** has stated to protect Vrana from Graha etc. by the application of Dhupana and Rakshoghna Mantra after cleaning of the Sadyovrana. The description of Raksha Karma has come to overcome fear of Kritya and Devils, in this Karma, Brahma Deva and many other deities have been prayed by the Mantras.[39] In Visha-Chikitsa Acharya Charak has described the use of specific Siddha Mantra for Visha Chikitsa.[40] Acharya Charak has described the use of specific Siddha Mantra for Visha Chikitsa. [40]

मम माता जया नाम जयो नामेत्रत मेत्रपता ।
ोऽहंजयजयापुरो त्रवजयोऽर् जयात्रम च ।
नमःपुरुषतिहाय त्रवणवेत्रविकमतणे ॥
िनातनाय कृ ष्णाय भवाय त्रवभवाय च ।
तेजो वृषाकपेः िंिर्तिजो ब्रह्मेन्द्रयोयतमे ॥

यर्ाऽहंनात्रभजानात्रम वािुदेवपराजयम् ।
मातुश्च पात्रणग्रहणांिमुस्य च शोषणम् ॥
अनेन ित्यवाक्येन त्रिधयतामगदो ही अयम् ।
त्रहत्रलत्रमत्रलिांस्पृष्टेरि िवतभेषजोर्मेस्वाहा ॥ (Ch.chi-23/90- 94)

Alarka Visha Chikitsa Mantra has been described by Sushruta. [41]

अलकात्रधपतेयि िारमेयगणात्रधप । ॥
अलकत जुष्टमेतन्मेत्रनर्वतषांकुरु मात्रचरात् ॥ (Su.k.7/61-62)

Arishta Bandhan Mantra is used in Sarpadansha Chikitsa.[42] In Panchakarma Acharya Charak has advised to recite the Mantra before the Vaman Karma. For the Vaman Karma, prepared, Vaman Aushadh should be used after chanting of Mantra such as,[43]

ॐ ब्रह्मदित्रिरुरेन्त्रभूचन्त्नाकातत्रनलानलाः ।
ऋषयः िौषत्रधग्रामा भूतिङ्गाश्च पान्तुते ।
रियनत्रमवषीणां देवानाममृतांयर्ा ।
िुधेवोर्त्तनागानांभेषज्यत्रमदमस्तुते ॥ (Ch.K-1/14)

➤ **Mantra Chikitsa in Modern Period:**

Contemporary Researches in Modern Era, some of the researches have been carried out to find out the effects of Mantras in various diseases. It is well known that sound and music are forms of vibration energy which can have a significant impact on living organisms.

- **Effect of Mantra Chikitsa on Weight, BP, SPO2, BMI.**
Chanting of **Beeja Mantra** will have effect especially on students, to be more attentive, comfortable, relaxed and increased memory power, significant reduction in mean pulse rate, weight. In addition people suffering from BP expressed a feeling of relaxation after chanting **Beeja Mantra** for number of times.
- **Effect on Growth of Cancer Cells:**
It is an established fact in ancient India, during Vedic period and subsequently, by the Acharyas,

“Sound effects the body due to its physiology. When vibration given to the cell then dynamic changes are seen in it, which occur through harmonic wave motion and the effect of sound was seen on the growth of tumor cells, Samaveda Mantra Sound is used for this experiment”.

The effect of these Mantras, can be observed in tumor cells in culture medium, and the tumor cells were that of lungs, colon, brain, breast and skin. This sound of Samaveda Mantra,

“it is observed that the growth of the tumor cells were decreased significantly”.

- **Effect in Pain Management:**
The Acharyas and Vaidyas who have profound knowledge of Chikitsa have identified that,

“Pain is a condition or symptom of many diseases, it stems from activation of the nervous system. In some cases Pain is clearly caused by specific injury or medical condition. Pain is seen and felt in many illnesses or disorders, such as the Fire Grow Myalgia (muscle pain and tenderness), Trigeminal Neuralgia (trigeminal nerve in the face), Arthritis and many others. Pain Management of Osteo-Arthritis which is very common in the present environment, mantra meditation significantly reduce the knee pain and other symptoms of Osteo-Arthritis. Chanting or Meditating of Mantra increase the beneficial function and promote structural changes in brain, which is associated with pain processing, emotional control mechanism, attentiveness and awareness.”

• *Effect in Hyper Tension:*

“Hyper Tension in which Saura-Sukta Mantra was used which is described in the first mandal of the Rigveda Samhita; this Saura-Sukta Mantra is devoted to the Sun God to cure all Cardiac Problems. The chanting of Saura-Sukta Mantra will have effect in lowering the symptoms of excessive Sweda and Krodha, Kampa and Shirashula which is one of symptoms in all mild, moderate and severe graid primary hyper tension”.

• *Effect on Brain:*

Three structure of Brain Insula, Anterior Singulate Cotex and Orbiofrontal Cortices which perform several functions of the brain and function of the Insula is Pain, Temperature, Vagal and Gustatory. Anterior Singulate has the function of behavior and cognitive process, and another one Orbiofortnal cortices has function of visual, taste and touch.

As already mentioned in Ancient India especially in Vedic period and subsequently, Acharyas, Vaidyas like

Charaka, Susruta etc have identified the functions of a brain and any disorder can be cured according to them by, **“Mantra Chikitsa”**. Especially while chanting the Mantra **“OM”**. The three areas of the brain reduced their output and deactivate them and intensified sensitivity to sensory transmission. In some cases of mental disorder such as emotional processing chanting of **“OM”** Mantra will have positive results.

• *Effect of Post Stroke Patients:*

In the present environment of stress and strain people are getting affected with stroke irrespective of age and sex throughout the world. A person who is affected by stroke suffers from different physical, psychological and emotional problems and that effects their daily chores, as the normal routine gets disturbed. It also effects one’s own movement, emotional disturbances, including sensory systems disturbances, pain, temporary memory loss, communication, thought process, fatigue. This kind of abnormality is identified by the healthcare professionals in Ancient India during the Vedic period and subsequently and identified that, **“Mantra Chikitsa”** is one of the solutions to overcome this type of disturbance. In those days the Maharshis and Acharyas advised chanting of **“Gayantri Mantra”** as one of the Mantra Chikitsa to overcome this type of disturbance and thus increase the quality of life and longevity.

• *Effect on thought Process:*

Since man is a social animal is always subjected to stresses, strains and negative influences and emotions. It was identified in Ancient India by the Acharyas who brought in, the **Mantra Chikitsa** to overcome these disturbances they advised praying the God by chanting Mantras, that will induce

“strong brain activity and stimulate the brain by overcoming the negative thoughts and emotions”.

Table 1 Effect on thought Process

Sl. No.	Chikitsa	Origin/purpose
1	Atharvana Chikitsa	Chanting of Mantras to cure diseases. Also Faith healing by way of Psychiatry or psycho therapy or psychological type of treatment
2	Aangirasa Chikitsa	Medical treatment based on application of medicinal herbs and products of animals and birds.
3	Daivi Chikitsa	Curing the diseases with the help of natural elements (Sunrays, Water, Earth etc) It is like naturopathy treatment in which the elements of nature play important role in healing diseases
4	Aushadhi Chikitsa	Curative Treatment of application of finished products of medicine to cure the diseases.
5	Brahmana Literature	Gives detailed information on Indian Traditional Medicines, basic elements of the body (Dhatu) and visible or external body parts like Head, Ear, Nose, Mouth etc and in addition the invisible (unseen) internal body parts like heart, lung, spleen, kidney, vein/artery, liver, foetus and the inner membrane of the embryo.

This kind of **Mantra Chikitsa** namely Chanting Mantras continuously and praying the God will activate that particular part of the brain that is not capable of functioning normally as before. Finally it is proved beyond doubt that if this **“Mantra Chikitsa”** is practiced and applied in accordance with the procedures that were introduced by Acharya Charaka and others, will have a positive effect by,

“eliminating negative emotions and thoughts in one’s own brain”.

The above are some of the examples regarding the effect of **Mantra Chikitsa** on human body to ward of the evil effects, disorders, negative thoughts and emotions that are causing imbalance in the normal functioning of a body

thereby subjecting the body to diseases and ailments, can be cured and the body is brought to the normalcy with the practice of Mantra Chikitsa or regularly chanting of mantras,

“to wipe out fear, anger and depression and to relieve disorders of the respiratory system, digestive system, circulatory system, speech, intellectual and cognitive systems.”

It is not surprising to note that, in the present environment, the world is moving towards Meditation And Yoga to overcome certain kind's of diseases that are related with emotions and feelings wherein the role of mantra makes an important place. Thus the development of Naturopathy, Yoga, Meditation are all the subcomponents of the Mantra Chikitsa that are being followed since time immemorial, can be compared to the present “Rehabilitation Centres”.

In addition to Medicines, Ancient Indians use to do prayers to appease the Gods for speedy recovery and for good health by worshipping Sheethala Mata/Mata Durga/Mariyamman.

➤ HRIDAYA-CARDIOLOGY - The Present Known Theory of Cardiology in Ancient India.

It is not surprising to mention here, that the European Term describing the heart can be traced its roots, in Sanskrit

Word – Hridaya. In fact the word “Heart” is originated from “Heorte” meaning Breast, Soul, Spirit, Will, Desire, Courage, Mind and Intellect.

On the other hand, the Sanskrit word was derived from three verbs as per Satpath Brahmin and Brihadaranyak.

If we elaborate Hridaya,

“HRU for Heart i.e. to receive from or to abduct – DA for Dadati i.e. to give or to donate – YA for either Yagati i.e. to control through self generated Rhythmicity or Yama i.e. maintaining balance for contraction and relaxation, or to circulate”.

In all the word “Hridaya” itself is a “Comprehensive Physiologic Expression”. The Concept Of Hridaya Was Illustrated By Acharya Charak In His Samhita In The Chapters

“Arthe Dash Mahamully Adhyaya and Trimarmiya Adhyaya. Hrudaya was described as the organ engaged in contraction and relaxation ceaselessly during waking and sleep”.

This was described in Atharvaveda in Organ System including Sirasthahridaya i.e. brain and Ursthahridaya i.e. heart. Yogvashishtha also clearly mentioned a thoracic and a cranial hridaya and expressed the emotional component of the heart.

In the chapter, Kayachikitsa Tantra (physical medicine doctrine) Acharya Sushruta clearly described and mentioned the treatment and procedures of Hridroga (Heart Diseases). Acharya also mentions Hridroga was due to dysfunction of Vayu (wind or circulation), especially Prana (air exchange) and Vyama (omni present air or circulation), Vayu. Acharya also mentions that the Hridaya was also associated with

“Sadhak Pitta (Heart-mind-balance/consciousness)”

“Avalambak Kapha (Structural Integrity of heart and lungs)” and

“Oja (Metabolism or energy distribution)”

➤ Skin Related Health Diseases as Mentioned in Rig Veda Samhita:

As already mentioned above among all the four Vedas Rigveda that contains medical information of various diseases and the procedures to eradicate such diseases related to skin. As mentioned in Rigveda, Skin that covers the entire body and controls the functioning of the body and guards the body in its entirety was broadly mentioned in Rig Veda. Rig Veda mentions about many of the skin diseases such as Leprocy, Guniaworm, Jaundice and so on. Rig Veda also mentions the disorders that can be observed on the nails, hair etc. and the procedure that has to be followed to eradicate these skin and other diseases and also the management strategies of such diseases. It also mentions the medicinal herbs that can cure these diseases in addition to emulating and chanting Mantras and by touching the body, using Mantrajala and Sunrays.

• Skin Care in Everyday Life

Along with the mention of skin ailments in the Rigveda, the care of the skin in health was also given an important place. The daily care of the skin and use of perfumes was very much prevalent:

“imā nārividhavāḥ supatnīrānjanena sarpiṣā saṃ viṣantu.”

“Let these unwidowed dames with noble husbands adorn themselves with fragrant balm and unguent (Ointment).”

Rgveda.X.18.7.

Hair styling and hair care: Is also very popular among both sexes

“śwityanco yatra namasā kapadirno dhiyā dhīvanto asapanta trtsabāh.”

“There where the white robed Trtsus with their braided hair, skilled in song worshiped you with homage and hymn.”

Rgveda. VII.83.8.

- *Skin, Hair and Nail and their Diseases*

Among all the Four Vedas Atharva Veda primarily deals with Chikitsa (Medical Topics). On the other hand Rigveda also contains Chikitsa (Medical Topics) to a lesser extent than Atharva Veda. When you peep into the Vedic Literature, one can get an idea of diseases and the philosophy and management of diseases that prevailed in Ancient India. This study discloses the various diseases and their forms and the procedures to treat them to eradicate such diseases and the healing process are all mentioned but we have to trace it out carefully.

- *Health Science in Vedas:*

All the four Vedas that we have been discussing are religious in nature but there are 'Hidden Germs' with respect to the diseases and the remedies, the drugs which are the basic principles of the present Allopathy.

While tracing out the same from the Vedas we can notice the following,

“Satam te rajan bhisajah sahasram urvi gabhira sumatiste astu”

Rgveda I.24.9

“O King, hundreds, nay, thousands are your healers (then why are you suffering so?)”

In Ancient India, it is largely believed that the diseases were due to the wrath of various Gods and super natural powers or a noxious act of the Evil Gods (demons). In spite of all these beliefs and feelings Pharmacology was developed in those days when the rest of the world is sleeping. In this respect, we can mention,

“Ośadhi-śukta is the living example of documentation of study of plants botanically and pharmacologically”

The great personalities and Maharshis like,

“Āngirasa, Sāmbu, Jamadagni, Kaṇva and Kaśyapa”

who expertise in discovering and identifying new herbs for remedial measures of the diseases. A reference has been given in Rigveda that mentioned “Pradhātu” that indicates a rudimentary beginning of

“Theory of trdosā-the theory of three humors, Vayu (Air), Pitta (Bile), Kapha (Phelgum)”

Rigveda also mentions regarding the care that is to be taken for skin to improve one's own health and some procedures are indicated regarding the daily care of the skin and the use of perfumes are also indicated. A reference can be drawn from the Rigveda,

“imā nārividhavāḥ supatnīrānjanena sarpiṣā sam viśamtu.”

“Let these unwidowed dames with noble husbands adorn themselves with fragrant balm and unguent.”

Rgveda.X.18.7.

Among the diseases, *leprosy*, hair diseases, etc., were mentioned repeatedly in the *Rigveda*:

“...ghoṣāyai cit pitrsade durone patim jūryantyā aśvinau adattam.”

Rgveda.I.117.7, 19.

Ghoṣā was healed from her *leprosy* and could get married by the grace of the divine physicians Aśvins. Similar incidence has been mentioned in the hymn I.117.8 where the physician duo, Aśvins cured Śyāva of *leprosy*.

Mr. Kearns and Nash observed that,

“The First mention of the cure for Leprosy is in Sushruta's famous Surgery Book, Oxford claims that ritualistic cures for Leprosy were described in the Arth-veda (way before 2000 BC) which was before Sushruta's time”. However, either way one thing is certain that,

“The cure for Leprosy did infact originate in India.”

In Ancient India, during that period Leprosy was looked upon as a demonic curse that people were given for the longest time even in India before the treatment was found.

The hymn 50 of Book VII gives a picture of a condition that is very much indicative of the guinea worm disease affecting the skin and other body parts:

“yadvijāmanparuṣi bandanam bhubadasībantou pari kulphou ca deham

agnistacchocannapa bādhatāmito mā mām padyena rapasya bidattasaruh.”

“Eruption that appears upon the twofold joints, and that which overspreads the ankles and the knees, May the refulgent Agni banish far away: let not the winding worm touch me and wound my foot.”

Rgveda. VII.50.2.

The word rapas used in these verses was imagined to be an activity of the demon, probably a worm-like creature (? guinea worm) that used to affect the feet and joints causing wound.

- *Skin and its Appendages: Its Importance in Social Life*

The *Rgveda* provides us with some interesting information about the implication of skin color on the social life of that period. The non-Aryan inhabitants with darker complexion were placed in the lowest and outcast group of the social system. As is evident from verse 100.18 of Book I

of the Rgveda, the fair-skinned Aryans had camaraderie among themselves in everyday life.[14]

Sometimes, a particular hair style had remained the identity of a particular class of people:

“śwityanco mā daksinataskapardā dhīyamjinnāso abhi hi pramanduah”

“Those who wear hair-knots on the right, the movers of the holy thought, White-robed, have won me over.”

Rgveda.VII.33.1.

The Vaśiṣṭhas used to sport kapardā or cūdā on the right site (single lock of hair kept at the head at tonsure) as their class identity.[15]

• *Management of Skin Diseases: A Brief Overview*

In Vedic medicine, the management strategy of diseases was composed of a complicated method of chanting *mantras*, offering oblations and performing some intricate rituals. Along with these, there were use of medicines in the forms of herbs, organic and inorganic materials and some procedures like an ointment, hydrotherapy, cauterization, etc. [16] The physicians required to have knowledge about medicinal properties of plants:

“yatrousadhih samanmataha rājānah samitāmiba bipraha sa ucyate bhishakbaksohamība cātanah.”

“He who hath store of Herbs at hand like Kings amid a crowd of men –, Physician is that sage's name, fiend-slayer, chaser of disease.”

Rgveda.X.97.6.

Anointment was a common method of therapeutic measure practiced by the Vedic physician. It is evident from hymn X.161 that the physician used to recite the *mantra* and touch the various parts of the body of the diseased with his hands anointed with ritually prepared clarified butter (*ghee*).

In verse VII.50.2, mentioned earlier, the description is very much suggestive of the use of fire for cauterization.

Some of the hymns like that in verses 50.11–13 of Book I are suggestive of knowledge of heliotherapy, particularly in the treatment of yellowness of the body.

• *The Vedic seers also used water for the management of various diseases (?Hydrotherapy):*

“apsu antar amrtam apsu bhesajam apām uta praśastaye devā bhabata vājīnah.”

“Amrita is in the Waters; in the Waters. there is healing balm: Be swift ye Gods, to give them praise.”

Rgveda.I.23.19.

“apsu me somo abravīd antar viśvāni bhesajā agniś ca viśvaśambhuvam āpaś ca viśvabhesājī.”

“Within the Water – Soma thus hath told me – dwell all balms that heal, And Agni, he who blesseth all. The water holds all medicines.”

Rgveda.I.23.20.

A physician used to use his tender touch for the remedial purposes. It was of course not very clear if it was a type of massage therapy or part of the hypnotherapy or simply touch therapy (as is used these days in the alternative system of medicine):[16]

“ayam ye hasto bhagavānāyam me bhagabattarah ayam me viśvabhesajohayam śivābhimarśanah.”

“Felicitous is this mine hand, yet more felicitous is this. This hand contains all healing balms, and this makes whole with gentle touch.”

Rgveda. X.60.12.

The rejuvenation of the aged as in the case of sage Cyavāna (Rgveda I.116.10, 117.13, Rgveda.V.74.5, Rgveda.VII.71.5, R.V.X.39.4 etc.) and that of sage Kālī (Rgveda.I.112.15;X.39.8) was a fascinating description of an esthetic approach toward the aging skin and its ailments during the Vedic era.

➤ *Yellowness of the Body or Jaundice has been Mentioned in Book I:*

“śukeṣu me harimānam ropanākāsu dadhmasi atho hāridraveṣu me harimaṇam ni dadhmasi.”

“Rising this day, O rich in friends, ascending to the loftier heaven, Surya, remove my heart disease, take from me this my yellow hue”

Rgveda.I.50.12.

Hair disorders have also found place in this *Veda*: Verse 126.7 of Book I perhaps was an example of Hypertrichosis – a condition considered an annoying feature in female during this period. On the contrary, scanty hair was also considered as a setback for a lady. Apālā, the Rsikā of the hymns, had some hair disease and in the verse could be seen praying for the growth of hair in her body as well as on her father's scalp:

“imāni trīni viṣṭapā tānīndra bi rohaya śīrastatasyorbarāmādidam mā upodare.”

“O Indra, cause to sprout again three places, these which I declare,– My father's head, his cultured field, and this the part below my waist.”

Rgveda. VIII.80.5

**“asau ca yā na urbarādīmām tanwam mama atho tatasya
yacchīrah sarva tā romasā krdhī.”**

**“Make all of these grow crops of hair, you cultivated field
of ours, my body, and my father's head.”**

Rgveda. VIII.80.6.

- Whether it was any genetic hair disease was not conceivable from the above text.

The **yaksmā** or consumption had been mentioned in almost all Vedic Literatures. Therefore, it may be assumed that it was a common disease during the ancient days. A hymn of Book X mentioned about it describing the affection of the hair and nails:

**“mehanādbanāmkaranallaombhyaste nakhebhyah yakṣam
sarbasāmādātamanastamidam bi brhāmi te.”**

**“From what is voided from within, and from thy hair, and
from thy nails, From all thyself from top to toe, I drive thy
malady away.”**

Rgveda.X.163.5.

**“angadāngallomno lomno jātam parvaṇi parvaṇi
yakṣam sarbasāmādātamanastamidam bi brhāmi te.”**
**“From every member, every hair disease that comes in
every joint, From all thyself, from top to toe, I drive thy
malady away.”**

Rgveda. X.163.6.

- **Yakshma (Infectious Disease) – Consumption/ Tuberculosis**

As already discussed above Atharvaveda which contains medical and medicinal information and also different diseases/ailments and the therapies evolved to cure them, some are in a nacent stage and some are in highly developed stage are all embodied in it. This Atharvaveda not only made with major diseases but also minor diseases and this Veda is also known as **“Bhaisajyaveda”** because hymns represents Ayurveda of Ancient Vedic period.

Atharvanaveda also mentions regarding hereditary diseases (sin committed by the parents is the origin of the disease to the hereditary to the subsequent generation) not only this but also Atharvanaveda mentions the spread of diseases through Infection in addition to the hereditary theory and also at one point of time this Veda explains that **“Germ of Yakshma arising from excessive cohabitation, flies like bird from one place to other and enters the body of any person who is weak and the body cannot resist.”**

- ✓ **Yakshma (Tuberculosis):**

Atharvanaveda mentions that Yakshma is a general internal disease found in humans and cattle and is identified as a disease that enters every part of the body and it causes disintegration of the limbs, fever, pain and heart and also all parts of the body (Bodyache).

In the words of Mullar,

**“In eyes of the vedic people Yakshma was simply a Demon
or external force who, when entering the body caused
Malady.”**

Though majority of the people subscribe to Mullar but one cannot ignore the similarities between,

**“the description of Yakshma and those of consumption, or
more generally, those of any disease which brings about a
general condition of bodily decay”.**

Atharvaveda also mentions about Yakshma

“Which are classified as speaking like a child and like an adult, suggesting that their victims are both children and adults (IX.8.10-12; XIX.36.3). Specifically, there is the “Ajnatayakshma” (unknown Yakshma) and the “Rajayakshma” (Royal Yakshma or Yakshma of kings or king among the diseases) (VI.127.3; III.11.1; XI.3.39; XII.5.22). In one important verse it is mentioned that, the Yakshmas have their origin in the relatives of the bride and to follow the wedding procession (XIV.2.10) and more particularly Yakshma is said to be divinely sent and caused by sin (VIII.7.3). There is reference in AV that, the Yakshma can attack the stomach, lungs, navel and heart (IX.8.12).

The word “Jayanya” mentioned in AV also resembles consumption and it breaks ribs, settles in the lungs, harbours in the back and springs from excessive sexual intercourse (VII.76.3). According to AV the germ of consumption arising from excessive cohabitation, flies like a bird and enters the body of a man. It is of two kinds, chronic and the transient (VII.76.4).

The main cure for persons afflicted by Yakshma is

**“the recitation of spells, of which the most efficacious was
the hymn II.33., along with use of herbs like Kustha
(Saussurea lappa C.B. Clarke)/Cipudru (Pinus longifolia
Roxb.?) and Arundhati (Sida cordifolia Linn.)”** (V.4.9;
VI.127.1,3; VI.59.2)

V. DISCUSSION

The Rgvedic literature is the reminiscent of the remote past of the Aryans and is the oldest book of the Aryan family of nations.[17] The mention of various diseases, their remedies and even the use of iron prosthesis for the severed leg in war (Rgveda. I.112.10, Rgveda. I.117.15) is a fascinating example of developed medical thinking of the Vedic era. Although the skin and its ailments occupy very little space, its mention in such an ancient literature during the early part of the history is noteworthy. As the early medicine and its methodology described in the RgVeda was the cornerstone on which the edifice of the exceedingly well-organized medical system of Ayurveda – the science of life – was built, further researches may throw more light about skin and its diseases.

➤ *What is New?*

- Vedas give some idea about the prevailing medical conditions of the ancient Aryan societies. Though *Atharva* Veda deals more with the diseases and their remedies, *Rg* Veda also throws some light on it.
- Vedas formed the base work for the highly developed *Ayurveda* of the later period.
- Skin and its diseases were not only important from the health point of view, but also they had social significance.

- *Contributing factors and the origin of diseases/ailments – According to Atharvaveda*

Krimi/Krmi (worms, germs and insects) are one of the source of spread of diseases. The above two words “**Krimi and Krmi**” that are used in Atharvanaveda are related to Insect (Krmi) and Worm/Germ(Krimi). These “**Krimi and Krmi**” are multiply themselves and enters week human bodies, sometimes they are visible and sometimes they are invisible,

- ✓ *Trisersanam – Round worms or thread worms – V.23.9*
- ✓ *Aglandun – Ascaris (?) – (II.32.2-3)*
- ✓ *Salunan – A type of oxyuris –*
- ✓ *Kururu – Thigh borer (Thread worm) – II.31.2*

According to AV some germs are everywhere i.e. in trees, mountains, waters and in living beings (II.31.4). Some of them are parasites of man. For example, 1. Sirsanyam – Which causes mania and lunacy 2. Parsteyam – The germ which can cause disease in ribs. In one stanza AV describes the parasite with a floating head (having three projections round the mouth), which is colourless (V.23.9). The description resembles the description of the roundworm or the threadworm. AV also mentions germs found in eyes, nose and teeth (V.23.3).

- *Witchcraft as the cause of disease:*

AV believes human sorcery causes diseases (I.28, IV.28.V.30.2) and evil eye produces diseases where as witchcraft cures them (II.7, VI.96.2,3 refer to Sapatha as the cause). There is one more reference to evil eye, which causes disease (XIX .35.3).

- *Bhutas (demons) as causes of disease:*

According to AV and its hymns, magic and witchcraft form the most important subject. Like wise a disease is caused by demon (a disease itself is a demon). AV believes that particular demon causes a particular disease. The same idea has been taken by Ayurveda. Now Bhutavaidya is one of the branches of Ayurveda and it establishes direct connection with AV. There are number of demons listed in AV. Viz.

- *General Medicine – Atharvanaveda*

The Atharvana Veda in addition to Infectious diseases also describes to identify diseases by symptoms. Atharvanaveda explains to recognize any disease by internal and external symptoms through observation and also the information gathered from the patient regarding his discomfort, based on these symptoms both internal and external the vaidya used to decide the type of disease/ailment and appropriate medicines were applied to ward of the disease. The general principle in Atharvanaveda is every disease/ailment is caused by Enemy, Witch Craft or Gods. As an example the disease “**Jalodara**” was connected to Varuna (Rain God) and not only the application of herbals medicines and herbal procedures to eliminate diseases/ailments from the human bodies and it is also advised by the Vaidyas to pray those Gods through hymns that are mentioned in Atharvaveda to please that particular god as a remedy to ward of the disease/ailment. Some of the examples are given below.

- *Hymns Addressed To Gods*

Table 2 Hymns Addressed to Gods

Sl. No.	God/Goddess	Disease/Condition	Reference
a.	Rudra	Against Aksata	VI.57
b.	Rudra	Against Internal Pain	VI.90
c.	Garutman	Against Visa	IV.6
d.	Saraswathi	Against Krimi in children	V.23
e.	Agni, Soma & Varuna	Against Takman	V.22
f.	Indra, Parjanya	Against Asrava	I.2

- *Hymns Addressed to Diseases*

Table 3 Hymns Addressed to Diseases

Sl. No.	Diseases	Reference
a.	Apachit	VI. 83; VII. 76. 1,2
b.	Jayanya	VII. 76. 3, 4, 5
c.	Takman	V. 22. 2, 6, 7
d.	Balasa	VI. 14
e.	Kasa	VI. 105

- *Hymns Addressed to Remedies (Medicines)*

Table 4 Hymns Addressed to Remedies (Medicines)

Sl. No.	Drug	Disease	Reference
a.	Rohini	For the healing of fracture	IV.12
b.	Silaci	For the healing of wounds	V.5
c.	Pippali	For the cure of Ksipta	VI.109
d.	Kustha	For the cure of Takman	V.4
e.	Visanaka	For the cure of Asrava	VI.44

➤ *Following is the Division/Classification of Diseases in Atharvanaveda.*

According to the history and the information available **Atharvanaveda** does not mention the classification of diseases into various categories according to the symptoms both internal and external. However subsequently during the period of **Charaka** and **Sushruta** in their books called **Charaka Samhita** and **Sushruta Samhita** the diseases

were classified according to their symptoms internal and external because Pathology and Diagnosis, Therapeutics and Toxicology are developed during this period but not found in **Atharvanaveda**.

- *Following are Some of the Examples to Show how the Diseases were Classified by Charaka and Sushruta.*

Table 5 the Diseases were Classified by Charaka and Sushruta

Sl. No.	Disease	Equivalent	Reference
1.	Aksiroga	Eye diseases	VI. 16
2.	Amiva	Feminine demon causing malnutrition	VIII.8.2,28; XIX.44.7
3.	Apachit	Scrofula	VI.25;57,83;VII.74,76, 12
4.	Asrava	Polyurea	I.2; II.3; VI.44
5.	Asthibhagna	Fracture of bone	IV. 12
6.	Balasa	Skin disease	VI. 14; VI.127
7.	Grahi	Epilepsy	VI.112; 113
8.	Harima	Chlorosis	I.22
9.	Hrdhyota	Heart disease	I.22
10.	Jalodara	Ascites	I.10; VII.83; VI.22, 24,96
11.	Jayanya	Tuberculosis	VII.76.3,4,5
12.	Kasa	Cough	VI. 105
13.	Kilasa (Kustha)	Skin disorder	I.23, 24 (Leucoderma)
14.	Krimi	Worm infestation	II.31.1
15.	Ksetriya (?)	Demon causing internal disease	II.8, 10, III.7
16.	Ksipta	---	VI 109
17.	Mutravarodha	Urinary obstruction	I.3
18.	Rudhirasrava	Bleeding	I.17; VI.127, IX.8.1, XII.4.4
19.	Sirsakti	Headache	IV.12
20.	Slesma	Phlegm	I.12,12,VI.105
21.	Sula	Pain	VI.90
22.	Takman	Fever	I.25, V.22, VI.20, VII.116
23.	Trsna	Thirst	II.29
24.	Unmada	Insanity	VI. 111
25.	Viskandha	Tetanus (?)	I.16. II.4. 4; III.9; V.30.8,9; IX.8.5, 13-19, 21,22; XIX.44.1-2
26.	Yaksma	Consumption (Tuberculosis)	VIII.7.15; XII.2.1

- *In addition to above the following diseases are also mentioned in Atharvanaveda but are treated as minor diseases due to their severity.*

1. Ajnatayaksma 2. Aksata 3. Alaji 4. Angabheda 5. Angajwara 6. Apva 7. Jambha 8. Karnasula 9. Lohita 10. Palita 11. Paman 12. Papayaksma 13. Pratyamaya 14. Udyuga 15. Vidradha 16. Visalpaka 17. Visarika 18. Visucika

In Ancient Vedic Period the Atharvana Priests/Vaidyas or Medical Practitioners with par excellence are very thorough with the names of the medicinal plants, their properties, usages and application to cure many diseases. According to Atharvanaveda, a Vaidya is considered to be best physician who cured the disease by preparing and applying the medicines identified by him from thousands of varieties of herbs.

Atharvaveda describes a patient,

“He hath attained attainments, he hath attained the strong hold of the living for, a hundred physicians are his, also a thousand plants (II.9.3).”

“Satham Hyasya Bhisajah, Sahasramuta Virudhah” –
II.9.3.

➤ *Identification of Healthcare Diseases/Ailments, the Root cause and Procedures to Eradicate through Medicines and Mantras:*

- *Varieties of Jwara (Fever) Classified by the Acharyas (Physicians) in Ancient India.*

Table 6 Classified by the Acharyas (Physicians) in Ancient India

Sl. No.	Type of Jwara mentioned in Vedas	Symptoms to identify
1	Abhrajā (1:12:3)	Kaphaja Jwara (Due to clouds)
2	Vataja (1:12:3)	Due to Vitiation of Vata (Wind)
3	Shushma (1:12:3)	Due to emaciation
4	Parusha (V:8:5)	Due to rukshatwa in the skin (dryness).
5	Anga. (IX:8:5)	In Limbs.
6	Angabhed (IX:8:5)	Due to body pains.
7	Sheeta (V:22:10)	Due to cold
8	Roor (V:22:10)	Due to Paittik (Bile).
9	Trithiyak (V:22:13)	Fever manifested on 3rd day
10	Vitrithiyak (V:22:13)	Fever manifested on 4th day
11	Sadandi (V:22:13)	Continuous.
12	Sharad(V:22:13)	Due to specific effects of autumn season.
13	Varshik (V:22:13)	Due to specific effects of rainy season
14	Grishma (V:22:13)	Due to specific effects of summer season
15	Vishwa Sharad (IX:8:6)	Spreading type diseases (Malaria due to specific effects of Autumn season.
16	Aruna (VI:20:3)	Feverwith red coloured pustules i.e. Masurika (small pox).
17	Babhru (VI:20:3)	Yellow fever.
18	Vanya (VI:20:3)	Due to forestry.
19	Chyavan (VII:116:1)	Feverwith over sweating.
20	Nodan (VII:116:1)	Intermittant
21	Avritha (VII:116:2)	Vishamajwar (Typhoid)
22	Ghrishnu (VII:116:1)	Due to injuries or hurt.
23	Hayan (XIX:39:10)	Due to indigestion of Vrechi (a kind of rice)

- *Complications that Arise in Jwara (Fever), causes - Management. - Bull. Ind. Inst. Hist. Med. Vol. XXV (Reference)*

Table 7 Classified by the Acharyas (Physicians) in Ancient India

Sl. No.	Complications of Jwara (Fever)	Reference	Causes	Managment	Varieties
1	Shirovedana	1:12:2	Roga Jeevanu (Tuberculosis) - Communicable disease from diseased to others	Jangidi herb (XIX:34:10) - Presently the species is extinct. 2. Kushtha (V:4:1) Saussurea lappa. 3. Anjana (IV:9:8)	1. Akshath - Without any ulceration in phupphusa (Lungs). 2. Sukshath - Ulceration in phupphusa (Lungs).
2	Shleshma	V:22:2			
3	Kasa	V:22:3			
4	Hikka	V:22:10			
5	Kshaya	V:22:11			
6	Kamala	V:22:12			
7	Twak Kathinyata	VI:30:3			

- *This clearly shows that Adharvana Veda which is the main source of Indian Medicine/Medical Treatment deals with human anatomy, classification of diseases, herbal medicines and their application.*

From the above discussion and the important narrations that were mentioned we can conclude that the Vedic Samhita is a channel through which the tradition of Indian Medical Science is flowing continuously and it is being systematized from time to time like the great vaidyas “Agnivesh, Sushruta and Charaka and Vagabatta and soon”.

However much efforts are not put on in Ancient Indian Medical Science to bring out everything that is internally woven and has not seen the light of the day so far.

In this regard, Sage Charaka says,

धर्मार्थकाममोक्षणाम् आरोग्यं मूलमुत्तमम्।
रोगास्तस्तापहर्तारः श्रेयसो जीवितस्य च॥

As mentioned in Vedas Prevention is better than cure, the same principle is applied in Ayurvedic Treatment. According to Ayurvedic Procedures of prevention of the diseases/ailments is

“Dinacary, Rjtricary, Itucary, Sadvrta, Ecrarasjyana and some Yoga practices. This entire health module is called ‘Svsthavrta’”

This Svsthavrta is one of the finest medical concept developed and given to the mankind by the Maharshi’s who pioneered Health and Healthcare profession in Vedic Period and subsequently. This concept of Svsthavrta is having the relevance in the present concept of Public Health. Not only this the present healthcare system and the methods and the procedures that are applied, followed are drawn from the principles of Ayurveda developed during Vedic period and subsequently. Accordingly it has been stated in Yajnavalkyasmrti

निस्सृतं सर्वशास्त्रं तु वेदशास्त्रात्सनातनात्।

न वेदशास्त्रादन्यत्तु किञ्चिच्छास्त्रं हि विद्यते।।

The other concept of Health and Healthcare promulgated by the Ancient Maharshis in their Smrithis and Samhitas, they made emphasis on two Kriyas namely “Ahara and Vihara” to keep a person’s good health. A similarity can be drawn from Bhagawadgita which says,

“Yoga becomes a destroyer of sorrow of one whose eating and movements are regulated, whose efforts in works is moderate, and whose sleep and wakefulness are temperate”

That is why the Maharshis identify the cause of good health and said, health and food are closely linked; Meaning a person who takes healthy food / nutritious food will always keep good health; because a healthy food will have greater influence on mental and physical health of a person. This was justified and pronounced by Sage Charaka and Maharshi Kashyapa

आहारसम्भवं वस्तु रोगश्चाहारसम्भवः।³

न चाहारसमं किञ्चित् भेषज्यमुपलभ्यते।

शक्यतेऽप्यन्नमात्रेण नरः कर्तुं निरामयः।।

भेषजे नोपपन्नोऽपि निराहारो न शक्यते।

भिषग्भिराहारो महाभेषज्यमुच्यते।।⁴

This concept of public health can also be traced Brhadaryakopanisat mentions about the health as “havisya diet” that gives hale and healthy generations to come. As already mentioned these above principles are the pillars of Ayurveda and in this regard Ayurveda mentions,

पथ्ये सति गदार्तस्य किमौषध निषेवणम् ?

पथ्येऽसति गदार्तस्य किमौषध निषेवणम् ?

The present healthcare professionals who advise the patients what to eat and what not to eat with reference to any disease is not a new concept but it is age old concept pronounced by the Maharshis and also Charaka and Sushruta the exponents of health and healthcare in their books. Ayurveda mentions eighteen types of food called as Viruddhahara (incompatible foods), which are root cause for many diseases. It is astonishing that those ancient professionals of Vedic period and subsequently developed the concept of Viruddhahara as the avoidable diet that unable to identify them without any sophisticated equipment. When you go through the literature on Ayurveda one can find various types of that are summarized below (Mukund Sabnavis, 2015):

- Desha (place) Viruddha
- Kaala Viruddha
- Agni (metabolism) Viruddha
- Maatraa (quantity) Viruddha
- Saatmya (wholesome) Viruddha
- Dosha (humor) Viruddha
- Sanskara (mode of preparation) Viruddha
- Veerya (potency) Viruddha
- Koshtha Viruddha
- Avastha (state of health) Viruddha
- Krama (sequence) Viruddha
- Parihara Viruddha
- Upachara (treatment) Viruddha
- Paaka (cooking) Viruddha
- Samyoga (combination) Viruddha
- Hridaya Viruddha
- Sampad (richness of quality) Viruddha
- Vidhi (rules for eating) Viruddha

Among all the four Vedas Atharvana Veda has more references with regard to health, diseases/ailments which was reflected more in Charaka Samhita.

In the words of Gopatha Brahmana,

योऽथर्वणस्तद्भेषजं तदमृतं यदमृतं तद्ब्रह्म।

“The Atharvana hymns are curative,

what is curative makes for immortality; what is immortal is Brahman”

- Some Assorted Concepts (Tr. by M. Bloomfield 1897):-
- ✓ Charms to Cure Diseases and Possession by Demons of Disease
- ✓ Prayers for Long Life and Health
- ✓ Imprecations Against Demons, Sorcerers, and Enemies
- ✓ Charms Pertaining to Women
- ✓ Charms Pertaining to Royalty
- ✓ Charms to Secure Harmony, Influence in the Assembly, and the Like
- ✓ Charms to Secure Prosperity in House, Field, Cattle, Business, Gambling, and Kindred Matters * Charms In Expiation of Sin and Defilement

- ✓ Prayers and Imprecations in the Interest of the Brahmans
- ✓ Cosmogonic and Theosophic Hymns
- *Concepts of Public Health appear in the First Kanda:-*
 - ✓ Immunity from all diseases (9.8)
 - ✓ Jaundice and related diseases (1.22)
 - ✓ Kshetriya (hereditary disease) (2.8)
 - ✓ Mania (6.111)
 - ✓ Prayer to lightning, conceived as the cause of fever, headache, and cough (1.12)
 - ✓ Securing perfect health (2.32)
 - ✓ Takman (fever) (5.20)
 - ✓ Worms in children (2.31; 5.23)

VI. LITERATURE REVIEW

There is abundant literature available for the *Etiology, Diagnosis, Differential Diagnosis, Complications, Management Of Takma (Fever).*

The Vedas and subsequent treatise on health and healthcare procedures written by the Great Maharshis and Acharyas, one can notice their authority on understanding of physiology which is the foundation to understand pathology and diseases/ailments. This kind of psychological concept of understanding will give a thought provoking knowledge in Ancient India, and the depth in it that was existed in thousands of years ago. The seeds that were sown regarding medicinal knowledge which developed in Vedic period and blossomed into a full fledged knowledge in health science in the subsequent Samhita periods. As described above, the amazing accuracy in the concept of blood circulation in the body and the Maharshis rightly used to call *“the Hrudaya (Heart) the seat of Chetana”* as a pumping organ in the body. From the ancient literature one can find the circulation of blood with Hrudaya at the centre like, *“Rakta, Raktavaha, Srotas, Hrudaya, Dhamani and Shira”*. The present observation of blood clotting in various parts of the body that obstructs the circulation of the blood is not a new phenomena but it was discovered in Ancient India in Vedic Period itself in no uncertain terms; one can trace the information regarding *“Kapha Pitta Kara substance(liquid)”* that causes clogging of arteries and hamper blood circulation.

“Also in the ancient literature we can notice ‘the Hrudaya (Heart)’ was described as Inverted Lotus with Nine Gates”

*Pundarikam navadvaram tribhiringunairabhiravtram
Tasminyat yaksma matmatva tadavaibrahmavidoviduh*

It means the structure of Hrudaya is a like inverted lotus bud with nine openings, three in right atrium and four in the left atrium and one each in right and left ventricles. This was explained in Atharvanaveda as Dhaminis (Arteries) as ducts with thick valves Kshiras (Veins) as ducts with thin valves and some other final ducts that are mentioned could be capillaries. All the mantras and descriptions made in Vedas cannot be translated verbatim

but one should keep in mind the context in which they have been present and as an example the following quotation from Atharvaveda describe the vascular system, is a testimony.

“Who stored in him floods turned in all directions moving diverse and formed to flow in rivers, flashy red, copper hued and purple running all ways in Purusha upward and downward”

Circulation of the blood with oxygenated moving in all directions like a river flow, can be understood from the above reference and as P.N. Vinaya and J.S.R.A. Prasad, Ayurvedic Physician and Research Scholar, Department of Sanskrit Studies, University of Hyderabad aptly mentions,

“who filled these liquids (blood) in this body which are spread throughout the body (circulation), which flow from all sides (venous circulation) to Sindhu (heart) and flow out from there (arterial circulation) who’s movement is rapid and is of bright red colour (oxygenated) which contain iron hence red (haemoglobin) and which is also reddish blue(deoxygenated) in colour. This blood flows upward, downward and sideways”.

These two luminaries in Ayurveda, who have profound knowledge in their respective fields also mentions regarding Hrudaya,

*Tadetat trvksramhrdayamiti, hrityekamakṣaram, da-
ityekamakṣaram/*

*Yamityekam yivam haraterdadāterayatēhrdaya śabdaha
nruktaha|| 10*

The other reference given by them is

*Hrdayamiti pundarikākāro māmsapindaha pranāyātānō
anēka nādiśusira Ūrdhvanaladhōmukhō viśasyamānē
paśou parasidhōplambhyate | 11*

Above all Bhela Samhita describes blood circulation so aptly in Ancient India,

*Hrdōrasah nissaratī tatayūna ca sarvatah
Sirabhīrhrdayam caitī tasmāthrtprabavah sirāh||12*

*Tava prana vahānām srotasām hrdayam mūlam
mahāsrotasca| 13*

Though there are different views by the authors of the Samhitas in those ancient days the main function of the heart and blood circulation are common.

*“Chikitsa (Medicine) is mainly the Atreya tradition and
subsequently Sage Charaka propogated this system
through his treatise Charaka Samhita considered to be the
first book in Ayurveda.*

Charaka strongly believed that health and diseases are not predetermined but life can be prolonged with human efforts and giving attention to lifestyle.”

➤ *Relationship between Healthcare Professionals-Patients-Medicine:*

In ***Charaka Samhita***, Sage Charaka ascertained the relationship between Physician, Nurse, Patient and Medicines. Charaka Samhita elaborately explains the importance of these four parts in Chikitsa (Medical Practice) namely the patient, physician, nurse and the medicines. These four are essentials to recover and return to health of an ailing patient. A physician or the Vaidya provides a necessary knowledge to cure the disease/ailment and coordinates the procedure as, he is the only person who can

“Explore the dot interior of the body with the lamp of knowledge”

“The physician must express joy and cheer towards who can respond to treatment, masterfully avoid and save time in cases where the patient suffers from impurable diseases while compassionate towards all. The nurse must be knowledgeable, skilled at preparing formulations and dosage, sympathetic towards everyone and clean. The patient is responsible for being positive, have the ability to describe how he/she feels, remember and respectfully follow the physician instructions” (Wikipedia).

➤ *Procedures prescribed in Vedic Period and subsequently by the Acharyas when the Maharshis :*

Atharvanaveda describes methods of treatment/procedure in a simplest form; the Atharvanaveda priests who have excellent knowledge, used to decide the disease by gathering information from the patient and through observation and by identifying the herbs and medicinal plants that have potential to cure the disease. Atharvanaveda also mentioned some non pharmacological methods to treat particular type of diseases like Harima (Jaundice) and Hrthiot (Heart Disease) etc with the help of sunrays (morning sun rising rays) or some of the prominent treatments to cure particular diseases instead of using herbal medicines. The same is observed presently and the present Allopathy system advices to stay in the morning Sun (Vitamin D) as mentioned above. Atharvaveda contains Agada Tantra (Toxicology). Atharvanaveda also discusses about the cause and cure for Poison caused by Snakes, Scorpions, Insects, Plants and Arrows. It is not surprising that in those days the priests who are also called as Vaidyas are able to identify the poisonous plants and also the antidotes for such poisonous effects. For example, the plants that are used for Antidotes for Snake poison or Soma (“**master of plants,**” **the healer of disease**), Taudi (**chaff of wheat or barley, husk, cattle fodder**), Ghrtachi Durbha grass (**Kusha grass, Kusa grass, or Darbha Grass**), Asvaivara, Parusavara, Sweta (Guava Leaves), Paidva etc. (X.4. 1-24)

➤ *The other Therapy that was Mentioned in Atharvanaveda is*

• *Rasayana or Rejuvenation Therapy:*

This Rasa is nothing but the pure water that is frequently used, because of the virtues and qualities that water contains and also its ability to cure many diseases due its medicinal value. Atharvanaveda mentions that water contains Nectar which can control unaging.

• *Water as therapy in Ancient India:*

In the words of Ancient Acharya especially Charaka,

उदकं तु खल्वल्यर्थविकृतगन्धवर्णरसस्पर्श क्लेदबहुलम्।¹

That means,

Abnormal Water quality as we see in the Mineral Water and the water that is being supplied by the Corporations/Municipalities/Panchayats, due to the addition of chemicals and other abnormal treatment results in Smell, Color, Taste and excessive stickness. This has been proved by testing the mineral water or the water supplied by the Government Agencies shown,

“the presence of E-coil Bacteria and as per the Food Safety And Standard Act this E-coil Bacteria should not be present but the reverse is the result in the present drinking water.”

• *Milk as a Supplement Diet:*

The Ancient Healthcare Professional in Vedic Period and subsequently emphasized the pure milk taken from the animals in those days are having medicinal values and those Acharyas used to give milk as a supplemental diet to patient and also as a therapy to contain/eliminate some kind of ailments and also a pediatric therapy. However, in contrast the present packed milk that is consumed is brought/collected from the animal, who ate such food product (grass) as mentioned above, contaminated and thereby the milk consumed will cause harm. **“The Food Safety and Standards Authority of India (FSSAI)”** after testing the packed milk brought from different sources and manufacturing units, reported that such milk is adulterated and did not confirm to the **Food Safety and Standards Act, 2006**. This contamination is more in the Urban areas than in the Rural areas because of addition of preservatives. It is most unfortunate that some of the illegal manufacturers of milk are using detergent to make synthetic milk to increase the thickness and viscosity of the natural milk to increase the quantity.

➤ *Public Health as professed by luminaries of healthcare in Ancient India during Vedic Period and subsequent:*

The concept of Public Health is not new phenomena as advocated by the present spokes persons of Health and Healthcare, but the origin of the same can be traced in the Ancient India i.e. in Vedic Period. When we go through the Atharvana Veda we notice the Public Health System adopted and practiced by the Maharshi’s and the Rulers. As

mentioned in Vedas, Health can be achieved with four human goals, namely,

“Dharma, Artha, Kama and Moksha”

Diseases/Ailments will rob a person’s health thereby it will have an impact on the welfare of human life,

As mentioned in Vedas.

“A healthy body is the dweller of sound mind”

VII. THE CONCEPT OF GENETIC ENGINEERING AND HUMAN HEALTH:

It is an appropriate thing to mention regarding Genetic Engineering that is prevailing in the Ancient India in Vedic period and subsequently.

In the words of Prime Minister Sri. Narendra Modi speaking at the inauguration of hospital in Mumbai in October’2014, equated birth of Mahabharata’s Karna to Genetic Engineering,

“We can feel proud of what our country achieved in Medical Science at one point of time. We all read about Karna in Mahabharata. If we think a little more, we realize that Mahabharata says Karna was not born from his mother’s womb. This means the genetic science was present at that time. That is why Karna could be born outside his mother’s womb”.

The so called Genetic Engineering advocated and professed by the Western Countries presently is a **“Centuries Old Theory”** developed by our Ancient Maharshis even in Vedic period and subsequently. When West is sleeping our Ancient Maharshis, pioneers and intellectuals who developed many a scientific knowledge with the help of the Vedas and became the path finder’s to the World.

In this regard you can trace out the ancient rice varieties such as **“Sali and Sukha”** are modified and remodified by the present Agricultural Scientists. However, the present scientists have gone too far by deliberately changing the characteristics of an organism, by changing/manipulating the genetic material, especially the DNA to create new varieties/new variations of life especially many food plants and other food grains to get more quantity.

In this regard, Stella G Ujogara argues that,

“Genetic Engineering is described as the science whereby the characteristics of an organism are deliberately modified by the manipulation of the genetic material, especially DNA, and transformation of certain genes to create new variations of life. Many food plants have been genetically modified (GM) for various purposes.”

However, this type of genetically modified foods has effect on human life when they are consumed and also they create environmental imbalance, as we are going against the nature and against natural growth as practiced by ancient people in Vedic period and subsequently; this modification of generic reduces/altercates quality of the food products, increases toxicity and consumption of such food material will cause health problems such as Allergy, Carcinogenicity. This type of transformation is unethical, giving opportunity for the creation of new virus, toxins and environmental pollution; also it leads to religious cultural and ethical concern.

➤ **Stem Cell Therapy:**

As many innovations in healthcare that took place in Vedic Period and subsequently more so by Acharya Susruta, who is the father of Surgery in Ancient India also invented **“Stem Cell Therapy”** in those days itself.

In this regard, it is relevant to mention about *Dinanath Batra*, convenor of *Shiksha Bachao Andolan Samiti* who claimed,

“Stem Cell Research was invented by an Indian, Dr. Ganapat Matapurkar, who was inspired by the Mahabharata”.

It is appropriate to mention Article 51A of the Constitution of India which says,

“Indian Citizens have the duty to develop the scientific temper, humanism and the spirit of Inquiry and reform”

VIII. CONCLUSION

In Ancient India, especially during Vedic Period and subsequently the great Maharshis and Acharyas worked selflessly for the welfare of mankind and developed healthcare and healthcare procedures taking queue from the four Vedas, and mainly from Atharvanaveda and to certain extent from Yajurveda. Originating from Maharshi Atreya, Agnivesya, Charaka, Vradhabala, brought this Ancient Indian Medical System that flourished and spread its wings in India and Asian Countries. In due course of time, the Indian Medical System that was developed during the Vedic Period and subsequently has got itself separated into two schools of thought namely **“Atreyaparampara and Dhanvantariparampara.”** Of these two Atreyaparampara was mainly acclimatized themselves with Sampradaya of Surgery or Shalya Chikitsa. Maharshi Agnivesh under the guidance of the Ancient Physician Maharshi Atreya **“Composed An Encyclopedic Medical Compendium”** and is known as the **“Agnivesya Samhita”**. Only during the period of Charaka, this Agnivesya Samhita was revised by Acharya Charaka and renamed it as **“Charaka Samhita”** and subsequently Acharya Vrdhabala added few more chapters that are relevant during that period to Charaka Samhita without changing its name or its authenticity because Charaka Samhita is predominantly acclaimed by one and all in Ancient Indian Medical Form. Subsequently another School of thought by name **Dhanvantari School of**

thought was developed and was related to medicines/body treatment and mainly the work of a physician. During this period, Acharya Sushruta and Charaka, the notable personalities who devoted their life in the development of healthcare and healthcare procedures for the benefit of mankind, redesigned, the then existing healthcare system and made it more accessible and accountable to the needy.

In this article, an attempt is made on the work carried out by Charaka, who wrote a treatise on medicine called Charaka Samhita that mainly deals with the treatment of ailment/diseases with medicinal plants, herbs in a methodical way as per the systems of the diseases. These two great Acharyas Charaka and Sushruta are the first and the foremost in the field of Indian Medical System and Charaka Samhita is regarded as the greatest treatise in the field of Indian Medical System in Ancient India.

In this article, an attempt is also made to trace out the glory of Indian Medical System that was drawn from the Vedas mainly from Atharvanaveda and partly from Yajurveda by those luminaries who worked relentlessly with service motive not only identified numerous diseases/ailments that are threatening the mankind and immobilizing them partly and fully and making them hapless human beings without any productivity.

The identification and development of diseases and procedures and medicines derived from the nature by identification of herbs, medicinal plants and made them of use in eradicating diseases and brought cheers in the lives of those deprived human beings. Subsequently few more personalities who practiced in Internal medicines like Maharshi Vagabhatta too, of the Maharshi Kashyapa school of thought who developed, "*Gynecology and Pediatrics*" and another scholar Acharya Bhela who developed, "*Rasakriya or the chemical action of the body*", to an assailable form and also the function of the heart "Hridaya" and the entire artery system in the body that are essential for the flow of blood and fluids which are essential for the entire body parts to make the human being alive.

Acharya Bhela mentioned in his Bhela Samhita,

"The blood is nothing but the essence of the food that we take which is transmuted by the Rasa Kriya or the chemical action of the body to an assimilable form".

Finally, the author earnestly made an attempt to trace out the development of health and healthcare in Ancient India in the Vedic Period and subsequently; the development of medicine, medicinal plants that have paved the path in the development of Rasayana Sastra (chemistry) and the production of medicines and alkaline substances.

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DECLARATION

The author declares that there is no competing interests nor any gains whatsoever, except to bring out the past glory of the Ancient Indian and Medical System and how they are relevant and appropriate even today for certain ailments/diseases where there is no answer to cure except containing the diseases and prolonging the life.

REFERENCES

- [1]. Traditional Indian Medicine during Vedic Period – www.indianetzone.com
- [2]. Vedic Health Care System (Clinical Practice of Sushrutokta Marm Chikitsa And Siravedhan) - <https://www.exoticindiaart.com/>
- [3]. The Vedic System of Medicine – Ancientindia wisdom.in Review of Mantra Chikitsa in Ayurveda – Journal of Ayurveda and integrated Medical Sciences- <https://jaims.in/jaims/article/view/1370>
- [4]. Continuation of Vedic India in medical Science - <https://indianethos.com/contribution-of-vedic-india-in-medical-sciences/>
- [5]. Anatomy in Ancient India: a focus on the Sushruta Samhita – PMC – www.ncbi.nlm.nih.gov
- [6]. Contribution of ancient Indian knowledge in Modern Medicine by Vedas – www.ncbi.nlm.nih.gov
- [7]. Medical Science in Ancient Indian Culture by Naryana – www.ccras.nic.in
- [8]. Charaka, Surgeon and Physician respectively - [https://www.massmed.org/About/MMS-Leadership/History/The-Sanctity-of-Medicine-\(pdf\)/](https://www.massmed.org/About/MMS-Leadership/History/The-Sanctity-of-Medicine-(pdf)/)
- [9]. Charaka – Wikipedia
- [10]. Charaka Samhita – Wikipedia
- [11]. Who discovered Surgery first – www.ncbi.nlm.nih.gov
- [12]. Sushruta: The father of Surgery PMC – NCBI – www.pubmed.ncbi.nlm.nih.gov
- [13]. Importance of Atharvaveda and medicine - <https://iie.chitkara.edu.in/index.php/iie/article/view/15>
- [14]. Which Vedas discusses diseases of Medicine – www.ncbi.nlm.nih.gov

- [15]. Skin in health and diseases in Rigveda - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3827509/>
- [16]. General Medicine In Atharvaveda With Special Reference To Yakma (Consumption/Tuberculosis) - http://www.ccras.nic.in/sites/default/files/viewpdf/jimh/BIIHM_2002/1%20to%2014.pdf
- [17]. Atharvaveda – Wikipedia
- [18]. The concept of Public Health in Atharvaveda – www.researchgate.com
- [19]. Atharvaveda Samhitas / Vedic Heritage – www.vedicheritage.com
- [20]. Medicine and Atharvaveda – exoticindia.art
- [21]. Traditional Medicine and Surgery in Asia – www.britannica.com
- [22]. Status of renal transplant in India – www.jpgmonline.com
- [23]. Know all about Sushruta, the first ever plastic surgery – www.indiatoday.com
- [24]. Opinion/The diety/the elephant and the plastic surgeon – www.livemint.com
- [25]. Vedic Plastic Surgery to test tube karna non science claims – www.theprint.com
- [26]. Science in ancient India – reality – www.goodreads.com
- [27]. History of Surgery in Ancient Middle and Modern Era – A review article – www.ijcrt.org
- [28]. Evolution of surgery from Ancient to modern times history – www.ukessays.com
- [29]. History of Surgery – www.wikipedia.com
- [30]. Some similarities between modern and primitive medicine – www.dalspace.library.dal.com
- [31]. History of Indian Medicine & Surgery – Asopa Hospital and Research centre – www.asupahospital.in
- [32]. Principles of Ancient Surgical Training vs-A-visyoga – www.ijhsr.org.
- [33]. A note on common healthcare: derived from the Vedas – 29th August, 2020 – www.vedicwellnessuniversity.com
- [34]. The vedic system of medicine – Ancient India Wisdom – www.ancientindianwisdom.com
- [35]. Traditional medicine and surgery in Asia – www.britannia.com
- [36]. Overview of Indian Healing tradition – history of science – national centre for biological science – www.ncbs.res.in
- [37]. Ayurveda/Johns Hopkin Medicine – www.hopkinsmedicine.org
- [38]. A glimpse of Ayurveda – the forgotten history and principles – www.ncbi.nlm.nih
- [39]. Medicine during ancient India – ancient India history notes – www.prepp.in
- [40]. Origin of Ayurveda – www.nhp.gov.in
- [41]. Development of medical surgery in India Current – concept of health, ethical – www.slideshare.net
- [42]. Evolution of medical surgical nursing – www.nursingenotes.com
- [43]. Historical development of healthcare in India – www.researchgate.com