UNDERSTANDING AYURVEDA – AGE OLD SCIENCE FOR MODERN TIMES

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I. INTRODUCTION

Many academics concur that the oldest form of medicine is Ayurveda. The Sanskrit name for Ayurveda is "The Science of Life." Ayurvedic knowledge, also known as the "Mother of All Healing," has its origins in India and has been practised for more than 5,000 years. It derives from the ancient Vedic culture and has been transmitted orally for a very long time from great teachers to their disciples. While the majority of this knowledge is unavailable, a little fraction has been kept in writing. Ayurveda is the source of many of the natural therapeutic concepts currently practised in the West, including homoeopathy and polarity therapy. (Vasant, 1984).

II. AYURVEDA

An extensive system of healthcare has its roots in the ancient science of life. According to Indian philosophy, human social and spiritual advancement depends greatly on one's physical well-being. Lord Brahma, the architect of the universe, was the first Ayurvedic patient and instructor. The Four Vedas, the earliest Indian literatures, are thought to have been authored between 5000 and 1000 B.C. and contain sufficient information. on how to heal illnesses using herbs and natural methods. The majority of the ancient Indian literatures had references to medical care, medications, and surgery (Honwad et al,. 20170.Ayurveda was regarded as a fully developed and categorised science from the time of the Samhitas, or roughly 1000 years ago, up until the 17th century A.D. Despite the difficulties and obstacles posed by Mogal dynasties, Ayurveda developed in a remarkable manner. The modern medical system came to our nation under British administration, and it quickly gained popularity thanks to government support and swift action (Nishteshwar et al., 2009). Many ancient Vaidyas and families also preserved the richness of Avurvedic literature during these times and used it as their primary method of healthcare. Ayurveda has been an essential component of India's national health delivery system since the latter half of the 20th century (Agnivesha et al., 2011). With the aid of research and development, ayurvedic medical science has advanced significantly in the twenty-first century. Ayurveda was revealed to Dakshaprajapati by the universe's creator Brahma, who also taught it to the Ashwini Kumaras, the Vedic gods of medicine, who then passed it on to Indra (Mookerjee et al., 2004). All Ayurvedic schools concur on the divine lineage up to Indra, but they each hold a unique interpretation of how the art would be passed down in subsequent generations. There are two primary schools of thinking in Ayurveda: Punarvasu Atreya, the school of physicians, and Divodas Dhanwantari, the school of surgeons (Ayurveda, 2012).

III. HISTORY OF AYURVEDA

Ayurveda has a history that goes back to the second century BC. Ayurveda's foundations were laid by the Vaisheshika and Nyaya schools of ancient Hindu philosophy and logic, respectively. It is related to the Samkhya manifestation framework and was established at the same time as the Nyaya and Vaisheshika schools of thought. The Vaisheshika School promoted making judgements about a patient's pathological condition and formulating opinions in order to direct treatment. Contrarily, Nyaya School taught that one should have a complete understanding of the patient's condition as well as the stage of the disease before beginning treatment. According to the Vaisheshika school, there are six different types of attributes that can be applied to any object: substance, particularity, activity, generality, inherence, and quality. These attributes are referred to in Sanskrit as Dravya, Vishesha, Karma, Samanya, Samavaya, and Guna, respectively. Later, the Vaisheshika and Nyaya schools collaborated to create the Nyayaevai-seika school. Later on, the nyayaevaiseika school promoted traditional knowledge and assisted in the dissemination of Avurveda knowledge.Ayurveda is thought to have originated from the Hindu God Brahma, who is revered as the universe's creator, and continues to do so today. It is believed that the universe's creator gave the sages this comprehensive knowledge of healing for the benefit of humanity. The sages passed on their knowledge of conventional treatments to their disciples, who then shared it orally and in writing with the general public. The information was communicated through poems known as "Shlokas" that detail the therapeutic benefits of herbs. These were used by sages to describe how to use medicinal plants (Pal, 1991).

Four renowned knowledge collections (Vedas)—the Yajur Veda, Rig Veda, Sam Veda, and Atharva Veda—are considered to be the cornerstone of the Hindu medical system. The Rig Veda, the most well-known of the four Vedas, lists 67 plants, while the Atharva Veda and Yajur Veda list 293 and 81 medicinally useful plants, respectively. The basis for the practise of Ayurveda is the knowledge gained from these Vedas. The Rig Veda and Atharva Veda were written by a person known as "Atreya," who is said to have learned this knowledge from Lord Indra, who had previously learned it from Lord Brahma. Agnivesha compiled the Vedic knowledge, which Charaka and a small group of scholars edited and gave the name "Charaka Samhita" to in modern times. The Charaka Samhita covers every aspect of ayurvedic medicine, and the Sushruta Samhita covers the Science of Surgery.

Both the Yajur Veda and the Atharva Veda list 81 and 293 different plants that have medicinal value. The basis of ayurvedic practise is knowledge derived from these Vedas. Texts in the Atharva Veda and the Rig Veda are attributed to "Atreya," who is thought to have learned this knowledge from Lord Indra, who had previously learned it from Lord Brahma. The Vedic knowledge was compiled by Agnivesha, which Charaka and a small group of scholars later edited and gave the name "Charaka Samhita" to. Every aspect of Ayurvedic medicine is covered in both the Sushruta Samhita and the Charaka Samhita.

Both of these illustrious collections are still used by conventional medical professionals. These ancient texts are available in many translations and languages, including Tibetan, Greek, Chinese, Arabic, and Persian. The most well-known of all the records is the Charaka Samhita, though there are a few other closely related, lesser-known compilations as well, such as the Nighantu Granthas, Madhava Nidana, and Bhava Prakasha from the contributions of many academics.

IV. CONCEPT OF TRIDOSHA

The traditional, prehistoric Indian system of medicine is called ayurveda. Literally, its name means "life knowledge." Balance of the body, mind, and spirit is emphasised in the Ayurvedic approach to holistic treatment to treat and prevent disease. This 5,000-year-old practice emphasises food, herbal medicines, yoga and meditation, exercise, a healthy lifestyle, and body cleaning as ways to bring the body into harmony with nature. The foundational idea known as the "tridosha tatwa" serves as the foundation for the Ayurvedic style of treatment. The terms "tri" and "dosh," which in Sanskrit mean three and pollutant or vitiated element, respectively, are the etymological roots of the word "tridosh," which means "three pollutants" or "tri-pollutant." The Sanskrit word "tatwa" is translated into English as "theory." In essence, the maintenance of health or well-being as well as disease or illness is significantly influenced by pollutants coexist peacefully with another (Joshi et al., 2021).

V. PANCHAMAHABHUTA AND AYURVEDIC TRIDOSHAS ARE RELATED.

The Panchamahabhuta, or the five great elements, are regarded as the foundation of the universe. They are Akash (space), Vayu (air), Agni (fire), Jala (water), and Prithvi (earth). When the Atma and soul are infused into these five fundamental components that make up the human body.

Sense organ	Mahabhuta	Properties
Ear	Akash	Empty area of cosmos, frictionless, sound
Skin	Vayu	Light, subtle, touch
Tongue	Jala	Fluidity, motion, taste
Eyes	Agni	Energy, transformation, ageing, warmth, vision
Nose	Prithvi	Solidity, grounding forces, smell

(Joshi et al., 2021)

VI. NATURE, KINDS AND FUNCTIONS OF TRIDOSH

From a close examination of the signs, symptoms, and actions that the tridosh performs in both normal and abnormal circumstances and environments, some broad conclusions about the nature and interrelation of vayu, pitta, and kapha can be drawn.

Vayu functions that are in a regular and undisturbed state allow for the proper function of breathing, the power and speech of the thought organs, as well as the excretion of faeces and urine..

Vision, body temperature, lustre, happiness, and intelligence all manifest in their usual, undisturbed states if the pitta is still present and still at work in assimilation. If the kapha is allowed to function normally and unaltered, smooth mobility of the joints, general stability of the body and build, potency and strength, courage, and greedlessness occur. Various signs and symptoms manifest if and when the normal nature of tridosh is disturbed for any reason, and they can be briefly listed as follows:

- 1. Vayu: Among the notable signs are a sense of looseness, dislocation, extension, and expansion of the organs, as well as a lack of joy, sadness, thirst, pain throughout the body, roughness of the skin, stiffness of the organs, inability to act, reddened skin, an alkaloid taste, perspiration, paralysis, and contraction of the organs. If an Ayurvedic physician were to observe these symptoms, he or she would not take long to conclude that the patient is suffering from a disease brought on by vayu's erratic and disturbed state of functioning.
- 2. Pitta: Some of the obvious symptoms include a burning sensation, warmth, running secretions from deep body wounds, the assumption of a crimson hue, etc. It has been observed that these senses predominate in any bodily parts where the pitta is present. The professional Ayurvedic doctor is likely to conclude that the sickness is a result of pitta's abnormal and disturbed state of functioning based on the presence of such symptoms.
- **3. Kapha:** Some of the noticeable indicators include the body's assumption of a pale coloration, a feeling of coldness, heaviness, thinness, and insignificance, a feeling of oiliness, a sweet-tasting sensation, and a tendency to put off taking action. These symptoms lead the Ayurvedic doctor to conclude that the kapha, in its aberrant and disturbed condition of functioning, has generally caused the sickness (Pal, 1991).

VII. BRANCHES OF AYURVEDA

1. Kaya Chikitsa: "Treatment of diseases of the entire body" is what "Kaya Chikitsa" signifies. Considering this, this branch offers details on ailments that impact the body, such as fever, blood disorders, consumption, memory problems, skin-related concerns, urinary disorders, etc. "Kaya" also denotes "antaragni," or the internal fire of the body. As a result, Kaya Chikitsa advises that since the fire within the physical body is what causes the body's cells and tissues to change and convert, it should be kept in good condition. If the intrinsic fire isn't under control, it can cause several illnesses like fever, skin difficulties, bleeding troubles, etc.

- **2. Bala Chikitsa:** This Ayurvedic branch also goes by the name Koumara Bhritya. The nutrition of children is the focus of this particular discipline. This area covers topics like children's diet, milk purification, and how to manage illnesses that affect kids.
- **3. Graha Chikitsa:** This section, sometimes referred to as "Bhuta Vidya," focuses on illnesses and issues brought on by numerous grahas, such as Deva, the deity, Daitya, the monster, Gandharva, the singers from heaven, Yaksha, the demigods, Rakshasa, the demon, Pitru, the ancestors, and Pisachi, the devils.
- **4. Urdhwanga Chikitsa:** This area of Ayurveda focuses on illnesses and remedies for bodily areas above the collar bone. The eyes, ears, nose, mouth, nose, and neck are among these physical components. Additionally known as Shalakya Tantra. The words "urdhwa" and "anga," which together stand for upper and organs, respectively, make up the term "urdhwanga.".
- **5. Shalya Tantra:** The Ayurvedic school of "shalya tantra" offers several techniques for expelling "shalya," or foreign items, from the body. These foreign things, which can be the underlying cause of a number of ailments, include gravel, wood, dust, pus, infected wounds, etc. It also covers the investigation and treatment of Ama Vrana, or young wounds, Pakva Vrana, or old wounds, etc. Additionally, this subdivision goes into detail about Yantras, instruments, Shastra, instruments, Agni Karma, etc.
- 6. Damshtra Chikitsa: This specific Ayurvedic discipline is also known as Visha Chikitsa, which translates to "treatment of poison." Therefore, it focuses on ways to cure insect, rodent, and snake bites and stings that can cause humans to become poisoned. It goes into detail on the numerous poisons, their effects, and how to treat them. To mention a few, they include Samyoga Visha, which is a poisonous mixture, Swabhavika Visha, which is a natural poison, and Kritrima Visha, which is a manufactured poison.
- **7. Jara Chikitsa:** This branch, also known as Rasayana Tantra, teaches you how to stay young for a longer period, how to stop aging, and how to increase your life expectancy, intelligence, and immunity. This area also covers how to stop disease in later life, or old age, as well as how to stop premature aging.
- 8. Vrsha Chikitsa: The eighth branch of Ayurveda discusses techniques for treating conditions like Alpa Shukra, or scanty semen, Ksheena Shukra, or decreasing semen, Dushta Shukra, or contaminated semen, among others, as well as for nourishing, cleansing, and improving semen amount and production. This division covers the topic of sex interest stimulation as well (Sushruta, et al., 2002).

VIII.DHATU SIDDHANTA DOCTRINE (THEORY OF TISSUE DEVELOPMENT AND DIFFERENTIATION)

The equilibrium of Tridosha, Saptadhatu, and Trimala forms the foundation of Ayurveda's fundamental theory. All of these are initially well-nourished under the influence of each person's own Jatharagni's (digestive energy) potency after ingesting food. Then, each level of Dhatu (body tissues) receives the productive nutrients (Ahara Rasa) for nutrition. Ultimately, a single stream of water provides all the nutrients required for the production and growth of all tissues. To the location where the Dhatus are, they bring their assistance. The operation of each Dhatvagni, or metabolic energy of each tissue, affects how well each Dhatus is nourished. One of each Dhatvagni's main purposes is to encourage the production of self-clones of the associated tissues and dependent tissues (Upadhatus). The succeeding tissues are also given the necessary components by each Dhatu's Dhatvagni to hasten their cloning. Following each other, Rasa, Rakta, Mamsa, Meda, Asthi, Majja, and Shukra Dhatus develop and feed additional Dhatus. For example, Rasadhatvagni plays a significant role in the development of Rakta Dhatu from Rasa Dhatu, which then influences and feeds the Mamsa Dhatu. If the strength of any level of Dhatvagni increases or decreases, it might have an effect on the process of creating the following Dhatu. Dhatumala (tissue excreta), a class of metabolic wastes, are produced as a result of this process. Throughout their lifetime, everyone encounters the same phenomenon of Dhatu's differentiation and development. Any restriction or vitiation in the different Srotas (tissue microcirculation) may result in the deformation of the surrounding tissue. Several concepts of tissue formation and development from Ayurveda (Dhatu Pushti Nyaya) explain this. The Ek Kala Dhatu Pushti Nyaya, Kedara Kulya Nyaya, Khale Kapota Nyaya, and Ksheera Dadhi Nyaya are some examples of these theories. During the nutrition process from Rasa to Shukra Dhatu, the Dhatvagni of each Dhatu substantially divides the three fundamental elements-Sukshma, Sthula, and Mala Bhaga—into three parts. Tissue-specific stem cells maintain organs for life by self-renewing and producing differentiated progeny (Sharma et al., 2014).

The components or various organs and systems that make up the human body are referred to in Ayurveda as Dhatus. According to Dalhanacharya (2002), they are primarily divided into seven Sapta Dhatus:

- Semen and Reproductive Tissue (Shukra),
- Bones (Asthi),
- Semen and Bone Marrow (Majja),
- Plasma (Rasa),
- Blood (Rakta),
- Muscles (Mamsa),
- Fatty Tissue (Meda),
- Bones (Asthi).

IX. DIAGNOSIS IN AYURVEDA

The doctor should first understand the Dosha, Ashraya (the place of manifestation), and Nidanas (etiological variables) of the ailment before beginning treatment. As a result, it is crucial to be fully knowledgeable about these three elements when diagnosing a new condition. One would never fail in his attempt to treat the sickness after comprehending these three factors. A diagnosis is made by a doctor in response to data gathered from the patient and other sources, from a physical examination of the patient, and from any medical tests the patient has had. Understanding Dosha and Dooshya thoroughly is crucial for ayurvedic diagnosis. The diagnosing process begins when a patient makes contact with a doctor and provides a list of complaints (the symptoms). If the patient is unconscious, this condition is the default complaint. The patient is then asked for additional information regarding his symptoms, past health, current living situation, and other details (if anyone is present who knows him).

Instead of taking into account all of the potential diseases that could affect the patient, the doctor only lists those disorders that could explain the patient's symptoms. As a result, there are fewer illnesses that could be the most likely culprits behind the patient's outward symptoms. The likelihood of each is typically listed in decreasing order. Further diagnostic procedures (such as medical imaging) may be ordered or conducted if the doctor feels confident in the patient's current health. These procedures serve both to confirm and refute the diagnosis and to update the patient's medical history by documenting the patient's state (Joshi et al., 2021).

You might look to speak with additional medical professionals and experts in the area. The initial hypothesis could be ruled out if unexpected findings are made during this procedure, forcing the doctor to investigate alternative possibilities. Typically, these are listed in decreasing order of probability. Typically, these are listed in decreasing order of probability. Despite all these complications, most patient visits are only a few minutes long because many disorders are visible or the doctor may be able to recognize the ailment right away due to experience. The decision trees that are typically employed for diagnostic hypothesis testing are rather brief, which is another consideration. Prior to making a definitive diagnosis, a doctor must be aware of other conditions with comparable symptoms and clinical presentations, a process called differential diagnosis (Sharma et al., 2014).

Differential diagnosis is the process of carefully comparing and contrasting the clinical evidence of two or more diseases or ailments to identify which one a patient has. Because of modern medical advancements, diseases can now be diagnosed early on and their progression can be halted. However, there are situations when a patient cannot afford pricey imaging methods like CT scanning or MRIs. We must therefore be aware of the Ayurvedic diagnosis in order to lessen the financial load on the suffering people. Once the diagnosis has been made, the doctor discusses the prognosis with the patient and suggests a treatment plan that includes therapy and follow-up (additional consultations and tests as needed to assess the patient's condition and the efficacy of the treatment), usually in accordance with the recommendations made by the medical community for the treatment of the particular illness).

- 1. Elements of Diagnosis: Dosha: Sthana (location),
 - Atma rupa (cardinal symptom),
 - Prakopa Lakshana (symptoms of aggravated humor),
 - Gati (movement),
 - Dooshya: khavaigunya (genetic defect or defect in tissues)
 - Srotas: Srotodushti Lakshana (symptoms of vitiation of channels)
 - Agni: Ama (indigested matter)
 - Srotodushti: Atipravriti (over activity),
 - Sangha (obstruction),
 - Siragranthi (tumor),
 - Vimarga gamana (displacement)
 - Roga marga: Shakha (periphery),
 - Marma Asthi-Sandhi and Koshtha (vital tissues, bone, joint & GIT) (Vasant et al., 2013).

2. Diagnosis of an Unidentified or Novel Disease: Charaka Samhita's description of the process for figuring out an unidentified disease is based on Aptopadesha Pareeksha. They are Prakopa (causative factors), Yoni (site of origin), Uthana (site of expression), Atmanam (cardinal symptoms), Adhisthana (location), Vedana (pain), Samsthana (clinical features), Sabda (sound), Sparsa (touch), Rupa (inspection)), Rasa (taste), Gandha (smell), Upadrava (complication), Vridhi (increased Dosha),

X. CONFIRMATION OF THE DIAGNOSIS

Confirmation tests must be used if a doctor is unable to make a final diagnosis despite thoroughly examining the patient. A few confirmatory tests aid in the final diagnosis mentioned in the classics section. The Purisha Nimajjana Pareeksha is a stool sink test. Examination of tainted blood, or Dushita Rakta Pareeksha: A) by dog, etc. B) Stain testing. Peepalika Abhidhavanam, or the examination of urine, Shukra Pareeksha (examination of semen), Nimajjana- Avasadi, Phenila, Taila Bindu Pareeksha (Yog Ratnakar), Stanya Pareeksha (examination of breast milk), and Artava Pareeksha (examination of menstrual fluid) fourteen are among the tests that are performed (Vasant et al.)

REFERENCES

- [1] Lad V. Ayurveda: The science of self-healing: A practical guide. Lotus press; 1984.
- [2] Vidyanath R, Nistēśvar K. Hand book of history of Ayurveda. Chowkhamba Sanskrit Series Office; 2004: 486.
- [3] Agnivesha CS. Ayurveda deepika of Chakrpani; Edited by Acharya Yadavaji Trikamji, 2011: 738.
- [4] Mookerjee Bhude, Rasajala Nidhi Ocean of Indian Chemistry, Vol. 2. Medicine and Alchemy. 4th edition. Delhi: Chaukhambha Orientalia; 2004.pp.288.
- [5] Moin S, Siddiqui JI, Khan S, Alam A, Khatoon F, Alam A. Therapeutic Potential and Traditional Values of Frequently used medicinal plant Berberis aristata DC.(Rasaut): A Comprehensive Review. Research Journal of Pharmacy and Technology. 2023 Apr 1;16(4):2035-43.
- [6] Sudheendra Honwad1, Reena. Origin & development of ayurveda. International Ayurvedic Medical Journal, 2017, 5(7): 2619-2627.
- [7] Joshi K, Thapliyal A, Singh V. The Tridosha theory according to Ayurveda. International Journal for Modern Trends in Science and Technology. 2021;7(8):120-4.
- [8] Pal M. The tridosha theory. Ancient science of life. 1991 Jan;10(3):144.
- [9] Sharma V, Chaudhary AK. Concepts of Dhatu Siddhanta (theory of tissues formation and differentiation) and Rasayana; probable predecessor of stem cell therapy. Ayu. 2014 Jul;35(3):231.
- [10] Dalhanacharya, Commentator. Sushruta Samhita, Sharira Sthana, Shukrashoditashuddhi Shareeropkrama Adhyaya, 2/33, 7th ed. Chaukhambha Orientalia, Varanasi, 2002; 348.
- [11] Sharma V, Chaudhary AK. Concepts of Dhatu Siddhanta (theory of tissues formation and differentiation) and Rasayana; probable predecessor of stem cell therapy. Ayu. 2014 Jul;35(3):231.
- [12] Tortora GJ, Derrickson BH. Principles of anatomy and physiology. John Wiley & Sons; 2018 May 15.
- [13] Patil V, Sapra UK. Clinical Diagnosis In Ayurveda: Concepts, Current Practice And Prospects. Journal of Ayurveda and Holistic Medicine (JAHM). 2013 May 18;1(2):1-7.