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PANCHAMAHABHUTA-STRUCTURE: FUNCTIONAL BASIS OF PHARMACOLOGICAL ACTION IN AYURVEDA

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ABSTRACT

The ultimate aim of Ayurveda is to maintain the health of a healthy person and prevent from disease. The fundamental principles of Ayurveda are responsible for the creation of this universe to physiological functions of the body, etiopathogenisis of a disease and the dravyas used for the treatment, all are originated from the Ayurvedic Adharbhuta Siddhanta (Panchamahabhuta). Everything in this universe is made up of five basic elements which are Akasha, Vyau, Agni, Jala, Prithvi and together they are termed as Panchamahabhuta. On the basis of Guna (Property) and Karma (Action), the *Panchamahabhuta* accomplish their functions. The present study is aimed to elucidate the concept of Panchamahabhuta in a systemic manner and its interrelation with other components of the body like Tridosha, Dhatu, Triguna, Rasa etc. This study, also concludes that each and every fundamental principle of Ayurveda is

based on Panchamahabhuta theory.

KEYWORDS: Ayurveda, Aadharbhut Siddhanta, Panchamahabhuta, Chikitsa.

INTRODUCTION

The concept of *Panchamahabhuta* is precisely elaborated in *Ayurvedic* literature. The word 'Panchamahabhuta' is made up of three words- 'Pancha', 'Maha' and 'Bhuta'. 'Pancha' means five, 'Maha' means great and 'Bhuta' means that which exists. The term Bhuta is consist of two words i.e. Bhoo and Kta. The meaning of the word Bhuta is 'that which has its identity and existence. Bhutas are not formed by any other things or elements. Bhutas are five in number and they further give origin to *Panchamahabhuta* or five greater *Bhutas*. This gives an idea that the *Bhutas* are earlier forms of *Mahabhutas*. "*Mahanti bhutani mahabhutani*" means the larger forms of *bhutas* are called *Mahabhutas*. "*Ihahi dravyam panchamahabhootaatmakam*" (A.S.Su.17/3). These *Mahabhutas* has showed their presence in all the living and non-living objects of this universe. According to *Vedanta* philosophy, *Panchamahabhuta siddhanta* is *sarvatantra siddhanta* (Universal theory). *Panchamahabhuta siddhanta* has been well adapted by *Ayurveda Sastra*. Thus, the *Panchamahabhuta* does not anticipate the *sastra* but the *chikitsa*. It is stated that the digested *Ahara* consumed by the *Panchabhautika Shareera* assimilates into the respective *Panchabhautika* constituents of the body. In this manner symmetrical properties of *mahabhutas* (Elements) gives nutrition to corresponding symmetrical organs of body. The variation in these *Panchamahabhutas* will lead to numerous diseases.

"Sarvam Dravyam Panchabhautikam Asminartheya". Acharya Charka advocates that all dravyas (Substances) in this universe are composed of Panchamahabhauta. [2] In this context 'Sarva Dravya' refers to Karya dravyas only (Chkarpani). Thus, all the Karya dravyas (Perceivable matters) existing in the world are Panchabhautika.

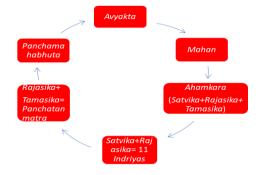
AIM AND OBJECTIVES

- 1. To interpret the basic concept of *Panchamahabhuta siddhanta* to its full perspective.
- 2. To understand the *Panchamahabhuta* structure: functional basis pharmacological action in *Ayurveda*.

MATERIALS AND METHODS

- 1. Collection of literature in the ancient classical texts, scientific journals, research papers, dissertation etc. concerned with the concept.
- 2. Critical review of the compiled literature and suggestions derived therefrom.

Evolution of *Panchamahabhuta* theory^[3]



The evolution of *Panchmahabhauta* follows the doctrine of *Saankhya* Philosphy. *Avyakta* (The unmanifest principle) produced *Mahan* and from this *Mahan Ahmkara* is produced which contains three charactersitics viz. *Satva* (Essence), *Raja* ((Energy) and *Tamas* (Mass). The *Satva* and *Raja* manifested from *Ahamkara* forms *ekadashaindriyas* (5 *karmaendriyas* + 5 *Gyanendriya* + 1 *Ubhayendriya*). In the same way, *Raja* and *Tamas* of *Ahamkara* forms *Panchtanmatra* i.e 5 subtle elements *Shabda* (Sound), *Sparsha* (Touch), *Roopa* (Form, vision), *Rasa* (Taste), and *Gandha* (Smell) that finally leads to the formation of *Panchmahabhuta*.

Acharya Sushruta described 3 types of conjugations taking place among *mahabhutas* to form *Panchabhautika dravya*.^[4] These are:

Paraspara-samsarga: In this process two or more *mahabhutas* come in contact with each other to form *Panchabhautika dravya*.

Paraspar-anugraha: Anugraha means Upakara, give and take relationship, to enhance properties of each other. In this type of conjugation reaction, mahabhutas act in such a way that they will favour each other.

Paraspara-anupravesha: In this type of conjugation, *mahabhutas* get submerged into each other at *mahabhuta* level.

Properties of *Panchamahabhuta*^[5]

Table no. 1: Showing properties of *mahabhuta*.

Panchamahabhuta	Tanmatra	Indriya	Gunas
Akasha	Shabda	Karna	Aprtighaat
Vayu	Sparsha	Twak	Chaltva
Agni	Roopa	Chakshu	Usantva
Jala	Rasa	Jihwa	Dravta
Prithvi	Gandha	Nasa	Kharatva

Properties of *Panchmahabhuta* shows their importance in *Chikitsa*. By following this concept, the predominant components of *panchmahabhuta* can be seen in people possessing different characteristics of three *doshas* (*Vata*, *Pitta*, *Kapha*). *Jala* and *Prithvi mahabhuta* is a predominant component of people having *kapha dosha* characteristics likewise *Agni mahabhuta* in those with *Pitta dosha* characteristics and *Vayu* and *Akasha as* their dominant component in those having *vata dosha* characteristics.

Table no. 2: Showing Panchamahabhuta and Tridosha relation.

Dosha	Mahabhuta
Vata	Vayu+Akasha
Pitta	Agni
Kapha	Jala+Prithvi

Panchamahabhuta and Grabha (Embryonic) development

The factor which is implanted for the formation of Garbha (Embryo) is known as Sukra or sperm. Its composed of vayu, agni, jala and prthvi in the state of their excellence-all these factors individually share one factor of the attributes of each of the mahabhutas. [6]

Chakarpan icomments, all the above described Panchabhautika elements possess equivalent contribution in sukra formation. Akasha is also no doubt present in sukra in view of its all, pervasive nature but as it does not move together with the other four *mahabhutas* present in sperm in the course of ejaculation, it is not considered to be a distinct factor responsible for the composition of sperms. Akasha does not figure even in the process of transmigration of a soul from one body to the other.

"Panchamahabhuta vikara samudayatmaka" Acharya Charka mentioned that the embryo is formed by the five *Mahabhutas* and it serves as the receptacle of *chetana* (Consciousness). In fact, the soul (Conscious element) constitutes the sixth dhatu responsible for the formation of Garbha (Embryo)^[7]. Acharya Vagbhata and Bhayamisra have also corroborated that the body is composed of the Mahabhutas and combined also with Chetana, give life to the Garbha (foetus).[8,9]

"Khadayschetanasasthadhatva purushsamrata" According to Ayurveda Chikitsya purush/ Karma purush comprises six dhatus, Panchamahabhuta and Chetana. [10]

Panchamahabhutas and Trigunas^[11]

Satvaparikshan (Mental strength examination) is the diagnostic tool to assess the manobal (Mental strength) of the patient. By knowing the level of satva one can decide what to intervene in the patient.

Table no. 3: Showing Panchamahabhutas and Trigunas relation.

S. No.	Mahabhuta	Mahaguna
1.	Akasha	Satva
2.	Vyau	Raja
3.	Agni	Satva+Raja
4.	Jala	Satva+Tama
5.	Prithvi	Tamas

From the above table, we can assume the importance of *Panchabhautika dravyas* in numerous *manovikaras*.

Panchamahabhtas and Rasa^[12]

Each of the *rasa* originate with predominance of two of the *Panchamahabhutas*.

Table no. 4: Showing predominant mahabhutas in rasa.

Rasa(Taste)	Mahabhuta dominance
Madhura (Sweet)	Prithvi+Jala
Amla (Sour)	Prithvi+Teja
Lavana (Salty)	Jala+Teja
Tikta (Bitter)	Vayu+Teja
Katu (Pungent)	Vayu+ Akasha
Kashaya (Astringent)	Vayu+Prithvi

Panchamahabhutas, Ritu Prabhava and Rasa^[13]

The year is divided into six *Ritus*, like wise because of variation in dominancy of *mahabhutas*, six *Rasas* will be formed.

Table No. 5: Showing Ritu and Corresponding Rasas.

S.No.	Ritu	Dominant Mahabhutas	Rasa formed
1.	Sisira	Vayu+Akasha	Tikta
2.	Vasanta	Vayu+Prthvi	Kasaya
3.	Grisma	Agni+Vayu	Katu
4.	Varsa	Agni+Prthvi	Amla
5.	Sarat	Agni+Jala	Lavana
6.	Hemanta	Prthvi+Jala	Madhura

Panchamahabhutas and Dhatus

All *sapta dhatus* are *Panchabhautika* and *dhatuvriddhi* and *dhatukshaya* conditions are predominantly responsible for disease manifestations. For the treatment of *Panchabhautika dhatus*, it is essential for the *bhishak* (Physician) to know the concept of *dhatvagni* and permutation combination of *mahabhutas* of *bheshaja* (medicine) *dravyas*.^[14]

Clinical application of *Panchamahabhutas*

From thorough review of *Panchamahabhutas* literature, it can be predicted vitiation of any of these *mahabhutas* in the body causes disease and vitiated *mahabhuta* can be normalized by giving the *dravya* and *ahara* having *mahabhuta* of opposite to vitiated one. As vitiated *prithvi mahabhuta* can be treated by *Vayu*, *Agni*, *Akasha mahabhuta Pradhan dravya Dhatusamyata* (Equilibrium state of *dhatus*) is the ultimate aim of our *Ayurveda* science. Acharya *Charaka Samanyam* (Similarity) principle helps in increasing degraded similar *dhatus* in body and when there is *dhatu vriddhi* condition *Vishesha dravyas* (Opposite substances) are preferred in the treatment. To fulfil this purpose, knowledge of *Panchamahabhutika* composition of therapeutic substances is essential.

Tridosha Prakopa and Prasham (Vitiation and Alleviation of humours)

According to *Acharya Sushruta Vata*, *Pitta* and *Kapha* are the main factors responsible for the induction of all pathogenesis inside the body, because of having their symptoms. *Dosha* which is *kshina* (Decreased) should be nourished (Increased to normal), those *kupita* (Slightly aggravated) should be mitigated, those *vriddh* (Highly aggravated) should be expelled out and those which are same (Normal) should be protected (Maintained normally), this is the principle of treatment of *dosha*.^[17]

Acharya Sushruta has describedthe relation of predominant mahabhuta in dravya with doshas. [18]

Table no. 7: Showing Mahabhuta and Dosha relation.

S. No.	Dominancy of mahabhuta in Dravya	Alleviate or reduce Dosha
1.	Prithvi, Agni and Jala	Vatadosha
2.	Prithvi, Jala and Vayu	Pitta dosha
3.	Akasha, Teja and Vayu	Kaphadosha

DISCUSSION

Panchamahabhta Siddhanta has precisely showed its validation in the determination of causative factors responsible for the imbalance of doshas and thereby solution for the treatment. The concepts which cannot be explained by tridoshas, dhatus, can be very well interpreted by Panchamahabhuta siddhanta. Dravya is formed by an appropriate combination of Prithvi, Apaya, Teja, Vayu and Akasha mahabhuta. Even though dravya is composed of Panchamahabhutas, depending on the Pradhanyata of mahabhuta, the Dravyas are classified into Prithvi, Apya, Agneyaa, Vayavya and Akasiya (Su.Su.41/3). In this context,

Acharya Vagbhatta has described, out of the five Bhutas, Prithvi becomes the Adhistana or Asraya, Jala mahabhuta forms the yoni, i.e. it combines the particles in the Dravya and Akasa, Vayu and Agni mahabhutas together combine to give a structure to Dravya (A.H.Su.9/1-2). Likewise, Guduchi as aushada dravya, Godhuma as ahara dravya and all the remaining karya dravyas in this universe; adhara of a dravya furnishes by Prithvi mahabhuta, combination of particles in dravya by Jala mahabhuta, paka by Agni mahabhuta, growth and movements of dravya by Vayu mahabhuta and the space by Akasha mahabhuta (Acharya Yadavjitrikamji). Substances which are heavy, tough, hard, dull, stable, non-slimy, dense, gross and abounding in the quality of smell are dominated by Prithvi; they promote plumpness, compactness, heaviness and stability. Substances which are liquid, unctuous, cold, dull, soft, slimy and abounding in the qualities of taste are dominated by Jala; they promote stickiness, unctuousness, compactness, moistness, softness and happiness. Substances that are hot, sharp, subtle, light, non-unctuous, non-slimy and abounding in the qualities of vision are dominated by *Tejas*, they promote combustion, metabolism, lustre, radiance and colour. Substances that are light, cold, non-unctuous, rough, non-slimy, subtle, and abounding in the qualities of touch are dominated by Vayu; they promote roughness, aversion, movement, non-sliminess and lightness. Substances that are soft, light, subtle, smooth and dominated by the qualities of sound are dominated by Akasha; they promote softness, porosity and lightness (Ch.Su.26/11). It is evident in Srstikarma that all Dravyas are an outcome of *Panchamahabhuta* only. *Panchamahabhuta* becomes an inborn constituent of every Dravya on this universe. Shareera (Human body) as well as the lokabhava are also made up of Panchamahabhuta that indicates on intake of Prithvipradhana and Jalapradhana dravya will increase the same quality in the Shareera. In the same way Samanya Vishesha Siddhanta where Samanya is the main cause for the increase and Vishesha is the cause of decrease plays an important role accordingly. Panchamahabhuta Siddhanta plays an important role in *Chikitsa* which precisely signifies that a *Vaidya* with a sound knowledge of Panchabhautikatva of Dravyas need not worry to treat Vyadhis (Su.Sa.1/13). Thus, the Ayurvedic Acharyas Charaka, Sushruta, Vagbhatta opines that there is no need to think beyond Panchamahabhutas.

CONCLUSION

The thorough review of present study concludes, Panchamahabhuta siddhanta is well accepted and have general consideration that every dravya including dosha, dhatu, mala, rasa as well as Shareer (Human body) are made up of Panchamahabhuta. The equilibrium of dosha, dhatu, mala can be nurtured by taking particular Ahara & Dravyas on the background of Vriddhi and Kshaya Siddhanta, which can be managed by Samanya & Vishesh Siddhanta. This Siddhanta (Theory) is very much beneficial in understanding the theories of Ayurveda like Tridosha theory, Rasavirya (Theory of taste and potency) theory etc. It also opens a new research window in the field of *Ayurvedic* fundamental research.

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