



# A CONCEPTUAL REVIEW ON PERSONALIZED HEALTH CARE BASED ON DAIHIKA PRAKRITI

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## Abstract

Ayurveda the Traditional Indian Medicine Science has a rich history and its significance is woven deeply into the Indian culture. The Indian traditional system of medicine describes a unique concept “*prakriti*”, which categorises the population into several subgroups. *Prakriti* refers to an individual’s behavioural trait, which is established at the moment of birth and cannot be altered during one’s existence. The concept of *prakriti* or constitutional type determined by the proportion of three doshas, namely- *vata*, *pitta* and *kapha* in Ayurveda is the root of today’s personalized health management. Geoclimatic regions can be correlated to *deshanupatini*, familial characteristics can be correlated to *kulanupatini*, and ethnicity can be understood as *jatiprasakta* in Ayurvedic terms have all been shown to affect phenotypic variability. *Prakriti* based treatments can help change the existing situation in health care, it provides new insights into *tridosha* that may pave the way for personalized health care. A foundation of *Prakriti* based preventative health care and improvement of quality of life index with longevity can be accomplished through *aahar & vihar* according to individual *prakriti* type. In this perspective, we try to understand *prakriti* use in personalized care, and how to integrate it with programs for the development of better health care.

**Keywords:** *prakriti*, *deshanupatini*, *kulanupatini*, *tridosha*, personalised health care, quality of life, *aahar & vihar*

## INTRODUCTION

As a discipline of “Upveda”, Ayurveda is an ancient knowledge with rich it’s significance woven deeply into the Indian culture<sup>1</sup>. It represents the Indian system of ‘personalized health care’ whose primary aim is the maintenance of health and eradication of disease<sup>2</sup>. These recent treatment practices in contemporary medicine that emphasize disease alleviation via lifestyle and dietary changes are analogous to the practices of the ancient system of Indian medicine<sup>3</sup>.

*“It’s far more important to know what person has the disease than what disease the person has”*

*–Hippocrates*

Western Medicine today targets therapy to broadest patient population i.e. “ONE DRUG FITS ALL” approach, but the importance of personalized health care has long been understood in the medical profession<sup>4</sup>. The Father of Western medicine, Hippocrates was also known to advocate personalized health care. He evaluated factors like a person’s constitution, age and physique in decision-making when prescribing drugs. It was seen that intrinsic heterogeneity among individuals in a population can drastically alter the treatment response and disease outcome. The *tridoshas* described in Ayurveda i.e. *vata, pitta & kapha* whose balanced and imbalanced states determine the health and disease respectively of an individual. This *prakriti* based maintenance of personalized health care essentially embodies the recent concept of personalized medicine<sup>5</sup>. “*Prakriti*” basically involves the classification of an individual based on several characteristics like body frame, food habits, disease resistance and healing capabilities, memory retention, metabolism, etc.<sup>6</sup> It has long been known that Ayurveda practices are based on systems-oriented framework analysis for the promotion of health and prevention of diseases. It is in this context that attempts have been made to decipher relationships between individual *Prakriti* and personalized health care to enable clinicians to offer better disease management strategies based on an individual’s *prakriti* type.

## AIM AND OBJECTIVES

*Acharya Charaka* quoted “Every individual has different traits from one another and should be considered as different in their own ways. As many variations are there in the universe, all are seen in human beings.”<sup>7</sup> Ayurveda emphasizes whole-body therapy by integrating physical, emotional, and mental health and believes that a person’s *dosha*, or physiological humor, affects their character and well-being<sup>8</sup> *Deha Prakriti* represents the psychological and physical make-up of an individual which is formed at the time of conception this makes the person unique and different from others. The main aim behind working in this article was to create an *Ayurvedic* understanding of the *Prakriti* aspect which helps maintain health and understand disease and its management through the Personalized Health Care approach.

## MATERIALS AND METHODS

*Samhitas* like *Charak Samhita, Susrut Samhita, Astanghridaya, Astangsangraha* etc. & various modern books related to health care were used as main source materials, various websites, articles, and other literary works were considered and searched thoroughly for this review article.

## PRAKRITI

### ➤ Definition:

*Prakriti* is a conductive state of the doshas, formed at the time of formation & and development of *Garbha* due to self-excitatory causes and which runs from birth to death<sup>9</sup>.

*dōṣānuśayitā hyēṣām dēhaprakṛtirucyatē||40||*

*Prakriti* is named according to the continual predominance of a particular *Doshas* in the body<sup>10</sup>.

### ➤ Factors responsible for the origin of particular *Prakriti*:

*dhruvaṃ caturṇām sānnidhyāḍgarbhaḥ syādvidhipūrvakam /*

*ṛtukṣētrāmbubijānām sāmagryādāṅkurō yathā ||33||*

According to *Acharya Charaka*, for the growth of the plant, 4 factors are very important similarly for the fertilization and development of *Garbha*, these 4 factors are essential. They are *Bija*, *Kshetra*, *Ambu* and *Ritu*<sup>11</sup>. i.e. *Sudhdha Shukra & Sonita*, *Garbhashaya*, *Ahara rasa & Ritukala* respectively.

*rasātmamātāpitr̥sambhavāni bhūtāni vidyāddaśa ṣaṭ ca dēhē|*

*catvāri tatrātmani samśritāni sthitastathā"tmā ca caturṣu tēṣu||33||*

*bhūtāni mātāpitr̥sambhavāni rajaśca śukraṃ ca vadanti garbhē|*

*āpyāyyatē śukramasṛk ca bhūtairyaistāni bhūtāni <sup>[2]</sup> rasōdbhavāni||34||*

Our body is composed of 16 *Bhutas*. They are derived from *Rasa*, *Atma* (soul), *Mata* (mother) and *Pita* (father) each of these four is comprised of 4 *Bhutas* i.e. *Prithvi*, *Aap*, *Teja* and *Vayu*. Four of these *Bhutas* accompany the soul and the soul himself depends upon four of them for his existence. *Bhutas* from the mother and father are derived through their ovum and sperm. It is the *Rasa* which provides nourishment in the form of *Bhutas* to the sperm & ovum<sup>12</sup>. So based on the above 4 factors which are responsible for making *Prakriti*.

*tatra prakṛtyādīn bhāvānanuvyākhyāsyāmaḥ /*

*tadyathā- śukrasōṇitaprakṛtiṃ, kālagarbhāśayaprakṛtiṃ, āturāhāravihāraprakṛtiṃ, mahābhūtavikāraprakṛtiṃ*

*ca garbhaśarīramapēkṣatē|*

They are<sup>13</sup>:

1. *Shukrashonita Prakriti*:

2. *Kala garbhashaya Prakriti*:

3. *Maturaharvihara Prakriti*:

4. *Mahabhutavikara Prakriti*:

### ➤ Influencing factors of *Prakriti*:

*Acharya Charaka* has mentioned the 6 factors, by which the *Prakriti* is influenced.

*tatra prakṛtirjātiprasaktā ca, kulaprasaktā ca, dēśānupātinī ca,*

*kālānupātinī ca vayo'nupātinī ca, pratyātmaniyatā cēti|*

*jātikuladēśakālavayaḥpratyātmaniyatā hi tēśām tēśām puruṣāṇām tē tē bhāvaviśēṣā bhavanti*

They are<sup>14</sup>:

1. *Jati Prasakta*
2. *Kula Prasakta:*
3. *Deshanupatini:*
4. *Vayonupatini:*
5. *Kalanupatini:*
6. *Pratyatmaniyata:*

➤ **Types of Prakriti:**

*Prakriti* is mainly divided into two types:

1. *Sharira Prakriti*
2. *Manasa Prakriti*

➤ **Sharira Prakriti:**

*ētānihi yēna yēna dōṣēṇādhikēnaikēnānēkēna<sup>1</sup> vā samanubadhyantē, tēna tēna dōṣēṇa garbhō'nubadhyatē; tata*

*ḥ sā sā dōṣaprakṛtirucyatē manuṣyāṇām garbhādipravṛttā*

*tasmācchlēṣmalāḥ prakṛtyā kēcit, pittalāḥ kēcit, vātalāḥ kēcit, saṁsṛṣṭāḥ kēcit,*

*samadhātavaḥ kēcidbhavanti*

*tēśām hi lakṣaṇāni vyākhyāsyāmaḥ||95||*

➤ *Sharira Prakriti* are of the following types<sup>15</sup> -

1. *Vataja*
2. *Pittaja*
3. *Kaphaj*
4. *Vatapittaja*
5. *Vata Kaphaj*
6. *Pitta Kaphaj*
7. *Samadoshaja*

At the time of conception, in certain individuals, there is the equilibrium of *Vata*, *Pitta* & *Kapha*; some are dominated by *Kapha*; some are dominated by two *Doshas* i.e. *Vatta-Pitta*, *Vatta-Kapha* & *Pitta-Kapha*. Out of these categories, individuals of the first category, by nature, possess normal health. Those belonging to other categories always suffer from one or the other bodily defects, although they might be healthy. For example, if a person though believed to be healthy, has dominancy of *Vata* in his temperament, he will be more susceptible to

cracking of the different parts of the body like skin etc. This happens because the very normal condition of health of such individuals is dominated by one or the other *Sharira Dosh*.

Such individuals are said to have normal health, not because their bodily conditions are normal, but because the condition of their body whatsoever, is since birth.

➤ **Characters of various prakriti are discussed below-**

❖ ***Vataja Prakriti***

Characters of *Vataja prakriti* persons are as follows<sup>16</sup>.

*Ruksha*: Unctuousness, emaciation and dwarfness of the body; obstructed and hoarse voice.

*Laghu*: Light and inconsistent movements.

*Chala*: Unstable joints, eyes, eyebrows, jaws, lips, tongue etc.

*Bahu*: Talkativeness, abundance of tendons and veins on the body.

*Shighra*: Quick in initiating others actions, getting irritated and the onset of morbid manifestations, quick in affliction with fear, quick in showing likes and dislikes, quick in understanding and forgetting.

*Shita*: Intolerance to cold.

*Parusha*: Roughness in body parts

*Vishada*: Cracking of the limbs and organs, production of cracking sound in joints when they move.

❖ ***Pittaja Prakriti***

Characters of *Pittaja prakriti* persons are as follows<sup>17</sup>.

*Ushana*: Intolerance to warm & hot weather, tender and clear body, freckles, black moles, excessive hunger and thirst, wrinkles on the skin, greying of hairs and baldness.

*Tikshna*: high physical strength and digestive power, high intake of food and drink, inability to face difficult situations in life.

*Drava*: Looseness and softness of joints and muscles, voiding of sweat, urine and faeces in large quantities.

*Visra*: Putrid smell of axilla, mouth and other body parts.

*Amla and katu*: Insufficiency of semen, sexual desire and procreation.

❖ ***Kaphaja Prakriti***

Characters of *Kaphaja prakriti* persons-<sup>18</sup>.

*Snigdha*: Unctuousness of body parts.

*Shlakshna*: Smoothness of body parts.

*Mridu*: Pleasing appearance and clarity of complexion.

*Madhur*: Increased desire for sexual intercourse.

*Sara*: Firmness, compactness and stability in body.

*Sandra*: Plumpness and roundedness in body parts.

*Manda*: Slow in various actions like intake of food and movement.

*Stimta*: Slow in initiating actions.



*Guru*: stable gait with the entire sole of the feet pressing against the ground.

*Shita*: Lack of intensity in various factors hunger, thirst, heat and perspiration.

*Vijjala*: Firmness and compactness in joints of the body.

*Achha*: Clarity in complexion, appearance and voice.

#### ❖ *Dwandvaja Prakriti*

Those individuals who have a constitution dominated by a combination of two doshas are characterized by the combination of manifestations of the respective doshas known as *Dwandvaja Prakriti*<sup>19</sup>.

#### ❖ *Samadoshaj Prakriti*

A *samadoshaj* type of individual who has all the doshas in a state of equilibrium and balance is endowed with good qualities of all three types of individuals described above are known as *Samadoshaj Prakriti*<sup>20</sup>.

### **PRAKRITI – A STEP TOWARDS PERSONALIZED HEALTHCARE**

“It takes 50 years to get a wrong idea out of Medicine, and 100 years a right one into Medicine.”

John Hughlings Jackson

“*Ayurveda*,” is an ancient system of medicine that follows a personalized strategy for prognostic and preventive factors of health care. Western medicine employs terminologies like gene expression, genome, epigenetics, etc. to explain the foundation of the physiology of our body and the health of a person in a profoundly reductionist framework. While *Ayurveda* consists of a unique holistic approach that encompasses concepts such as *Prakriti* and doshas. In *Ayurveda*, the inter-individual heterogeneity in vulnerability assessment, and judgment, is commonly based on the individual’s *Prakriti* types. A good physician must use treatment methods that result in more accurate treatment and decrease the chance of diagnostic errors. The physician should examine by all means, in all possible ways and then conclude the disease. One who does not make use of intellect, by examination of the patient when he is not able to understand the inner soul of the diseased or not able to gain the confidence of the patient, then treatment will be unsuccessful. When the physician by his knowledge and intellect tries to understand the patient individually to make the treatment to be successful.

The potential of *prakriti*-based Personalized Health care lies in:

- i. This revolution in the health care system intends to shift the focus from a disease-focused system to an individual-focused wellness system Promotion of health and quality of life and thereby longevity.
- ii. Provision of new approaches for diagnosis and drug development.
- iii. Prevention and management of disease.
- iv. Understanding patient needs and risk factors for various chronic conditions.
- v. Personalizing health care by monitoring *ahara*, *vihara*, and *aushadhi* on an individual basis.
- vi. Reduction in morbidity and mortality rates.
- vii. Reducing the trial-and-error approach of the health care system.
- viii. Minimizing adverse drug reactions.
- ix. Making healthcare affordable for people of various economic levels of society.

## DISCUSSION

The term "*Health care*" embraces a multitude of "services provided to individuals or communities by agents of the health services or professions, to promote, maintain, monitor, or restore health<sup>21</sup>". The term "*medical care*" is not synonymous with "health care". It refers chiefly to those personal services that are provided directly by physicians or rendered as the result of the physician's instructions. It ranges from domiciliary care to resident hospital care. Medical care is a subset of a widespread health care system. Health care is a public right, and it is the responsibility of governments to provide this care to all people in equal measure. *Ayurveda*'s holistic approach and its emphasis on prevention more than treatment modalities have the potential to improve the health status of the population. After the sequencing of the human genome, scientists are striving for the goal of personalized health care. An interdisciplinary approach forming the "Golden Triangle of *Ayurveda*", science and Western medicine can pave the path to Personalized Health Care and offer remedies to various health issues<sup>22</sup>. *Ayurveda* not only offers personalized treatment but also personalized dietary regimen & and lifestyle by way of both drug and non-drug modalities according to an individual's *prakriti*. This principle of *Ayurveda* can play a major role in disease prevention and the promotion of health towards a longer life span with a better quality of life which forms the basis of personalized health care.

## CONCLUSION

*Ayurveda* aims at not only curing the diseases but also preventing the illness<sup>23</sup> it is done by following diet and regimen according to the seasonal variation along with purificatory therapies<sup>24</sup> daily regimen according to one's capacity and also consumption of rejuvenating medicines. *Ayurveda* plays a major role in not only disease prevention but also the promotion of health towards longevity with a better quality of life. When it comes to the aspects of *Chikitsa* in many of the chapters, we have the *Chikitsa Sutra* mentioned. It can be taken as a guideline but before treating any disease every individual is considered as they differ from one another. The physician should observe the *Lakshanas* in the patient, then only *Upakrama* should be adopted according to *Dosha Bala Kala Vishesh*<sup>25</sup> These guidelines were followed in the analysis of the patient, and different modalities of treatment were planned. When a variety of treatment modalities are mentioned for a disease, not all can be adopted by the patient; the physician must observe keenly and then plan the treatment. However, some core concepts have been referred since the early<sup>26</sup> Personalized Health Care can help predict a patient's susceptibility to developing a particular illness. It makes us able to establish economical healthcare solutions through early screening in community health programmes for early treatments.

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