

**THE PHYSIOLOGICAL AND PATHO-PHYSIOLOGICAL ROLE OF VATA DOSHA IN  
AYURVEDA WITH SPECIAL EMPHASIS TO VAYU****Dr. Shirish Ramrao Patki\*<sup>1</sup>, Dr. Vandana M. Chatore<sup>2</sup>**<sup>1</sup>Professor, Kriya Sharir Department, Sau. Shantadevi Vedprakash Patil Ayurved College and Research Institute, Hatta, Tal. Basmat, Dist. Hingoli, India.<sup>2</sup>Professor, Rachna Sharir Department, Shantadevi Vedprakash Patil Ayurved College and Research Institute, Hatta, Tal. Basmat, Dist. Hingoli, India.**\*Corresponding Author: Dr. Shirish Ramrao Patki**Professor, Kriya Sharir Department, Sau. Shantadevi Vedprakash Patil Ayurved College and Research Institute, Hatta, Tal. Basmat, Dist. Hingoli, India. DOI: <https://doi.org/10.5281/zenodo.19416172>**How to cite this Article:** Dr. Shirish Ramrao Patki\*<sup>1</sup>, Dr. Vandana M. Chatore<sup>2</sup> (2026). The Physiological And Patho-Physiological Role Of Vata Dosha In Ayurveda With Special Emphasis To Vayu. World Journal of Pharmaceutical and Medical Research, 12(4), 290–292.

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**ABSTRACT**

In Ayurveda, *Vata*, along with *Pitta* and *Kapha*, is one of the three main *Doshas*. It is said to be the primary drive behind movement, communication and coordination for both mind and body. It has the most kinetic or dynamic qualities of all interdependently, as all interdependent physiological functions are initiated and regulated by this *Dosha*, which is essential for establishment of homeostasis as it defines the initiation and regulation of virtually all physiological activities. The functions governed by *Vata* include respiration, circulation, digestion, excretion, and the activity of the nervous system. Collectively, they provide the basis for adapting to all internal and external events that create the opportunity for the body to make appropriate physical adjustments. *Vata* functions similarly to current scientific concepts regarding neural regulation, bioelectrical signaling, and kinetic energy functions within the body, in that it produces changes in levels of bioenergetics or energy flow throughout the body by facilitating the movement of impulses, facilitation of transporting of nutrients, and facilitating the elimination of wastes *via* the kinetic properties of *Vata*.

**KEYWORDS:** *Vata*, *Physiology*, *Vayu*, *Kriya Sharir*.**INTRODUCTION**

The word *Vata* is related to the *Gati* and it represents the broad array of functions that occurs in the body. *Vata dosha* is an essential *Shariraka dosha* that plays a major role in governing both physiological phenomena as well as the mechanisms causing the development of disease. Because *Vata* is the principle *Dosha* regulating all forms of movement, all methods of communication and the flow of energy, it oversees many of the major bodily functions. Whereas *Kapha* provides the structural foundation for tissues and organs and *Pitta* transforms those tissues, *Vata* creates, sustains and mobilizes both the movement and coordination necessary for *Pitta* and *Kapha* to function appropriately. *Vata* is the principal force behind any and all dynamic actions of the body. It is thus extremely important to maintain a proper balance of *Vata* by accommodating it within our diet, lifestyle, and through other therapeutic means in order to promote

optimum health and prevent disease according to Ayurvedic medicine.<sup>[1-4]</sup>

Just as *Vata* carries by *Vayu* everything from one place to another like the wind carries clouds in the sky, so too is *Vata* the dynamic and mobilizing force within the body. This classical analogy illustrates the dynamic and mobilizing properties of *Vata* in Ayurvedic medicine. There are also a number of characteristic *Gunas* that constitute the nature of *Vata*. Each of inherent *Gunas* of *Vata* defines the functional characteristics of *Vata* and affects both the physiological and pathological manifestations.<sup>[3-5]</sup>

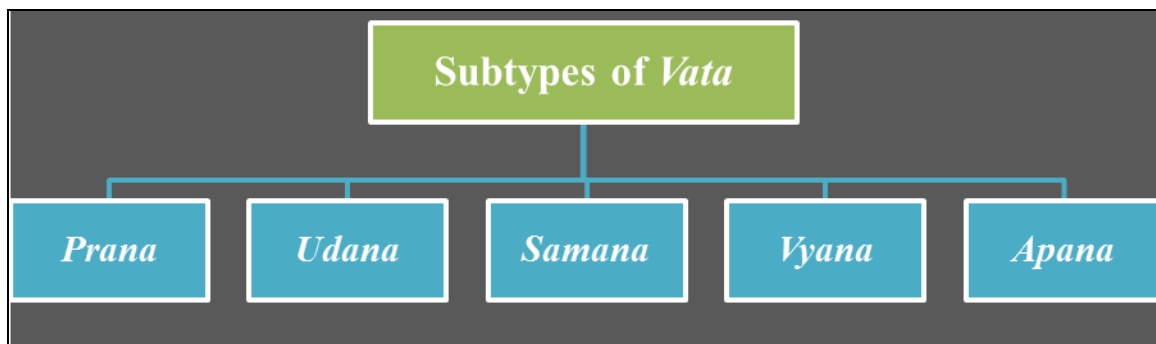
***Vata* Types and Physiological Functions**

*Vata* governs numerous vital functions including *Utsaha*, *Uchvasa*, *Nishvasa*, *Cheshta*, *Vega-Pravartana*, movement of *Dhatu*s and *Patava* of *Indriyas*. As the main controller of both mechanical and dynamic

movements in the body, *Vata* manages both upward & downward retrograde motion in the body as well as control of the mind and coordination of body functions. Functionally, *Vata* is subdivided into five subtypes as mentioned in **Figure 1**. Each subtype is responsible for specific physiological functions in different anatomical regions of the body as mentioned below:

- ❖ *Prana Vayu* is responsible for respiration and higher mental functions.

- ❖ *Udana Vayu* allows us to speak and causes movement upwards.
- ❖ *Samana Vayu* regulates digestion and metabolic processes.
- ❖ *Vyana Vayu* governs circulation and movement.
- ❖ *Apana Vayu* eliminates waste and performs functioning of reproduction.



**Figure 1: Five subtypes of *Vata*.**

In addition to its function of regulation, *Vata* also serves as the activator of sensory and motor activity. It assists with the transmission of sensory information to our brain, allows us to produce sounds and provides for both auditory and tactile perception, since they are both closely related to *Shabda* and *Sparsha*. *Vata* plays an important role in maintaining *Agni*, removing excess *Doshas* and eliminating metabolic waste from the body. Its ability to pass through both gross and subtle channels (*Srotas*) illustrates the extent of its influence. Additionally, it also assists in developing the fetus, forming bodily structures and maintaining life when in a balanced state.<sup>[4-6]</sup>

*Vata* is analogous to the mechanisms that integrate movement, communication and coordination across these levels; specifically with the nervous, circulatory and respiratory systems. *Vata* represents a key connection between the Ayurvedic classical concepts and physiological knowledge, highlighting the importance of *Vata* in maintaining health and homeostasis of the body. The digestive system breaks down food into absorbable nutrients that we can use for energy, while the musculoskeletal system supports structure and movement. The urinary system maintains fluid balance and removes wastes from the body through the kidneys, ureters, bladder and urethra.<sup>[5-7]</sup>

#### **Patho-physiological Aspect**

*Vata Dosh* in Ayurveda is considered the primary biological force that produces bodily movement, communication and transport. It is made up of air and ether and regulates the essential biological systems: nervous, respiratory, circulatory, and excretory. All body actions start with *Vata*; *Pitta* and *Kapha* do not function unless they are regulated by *Vata*. When *Vata* is in balance, it regulates enthusiasm (*Utsaha*), breathing,

blood circulation, movement of tissues, and the brain's ability to use the five senses. *Vata's* actions included movement, nerve impulses, breathing through *Prana Vayu*, blood circulation through *Vyana Vayu*, digestion through *Samana Vata* and elimination of wastes through *Apana Vayu*. *Vata* is part of *Agni*, which regulates overall metabolism. However, when *Vata* becomes vitiated due to excessive dry and cold foods, an irregular lifestyle, overexertion, and aging, it will create different forms of pathology.

When *Vata* becomes unbalanced, it become very unstable, creating problems displace other *Doshas*; causes the *Pitta* & *Kapha* to be moved to different places and thus creates disease within the body. Aggravated *Vata* also creates *Srotodhusti* by creating an obstruction or an irregular flow from the aggravation of *Vata* due to its rough, dry qualities. Another area of the body that is very much associated with *Vata* is the skeletal system and when *Vata* is aggravated, it creates degeneration of bones and muscle loss, as well as creates many symptoms like osteoporosis.<sup>[6-8]</sup>

Clinically, there are a wide range of disorders that are caused by aggravation of *Vata*; many of them fall into the category of *Vata Vyadhi* which includes disorders of joint, musculoskeletal stiffness, *Pakshaghata*, *Ardita*, *Gridhrasi*, digestive disorders, bloating, gas, constipation, psychological disorders, anxiety, fear, restlessness and insomnia. Vitiating of *Prana Vata* affects mental processes and respiration, the imbalance of *Udana Vata* alter speech ability, vitiating of *Vyana Vata* affects circulation and movement, aggravation of *Samana Vata* alter normal process of digestion and assimilation of ingested foods, similarly aggravation of *Apana Vata* causes problem in waste elimination. Therefore normal functioning of different types of *Vata*

is important to maintain balanced state of human physiology.<sup>[7-10]</sup>

## CONCLUSION

*Vata* represents the principle of the force of movement, communication & regulation, which relates to various physiological processes, specifically through neural and biochemical mechanisms. *Vata* aligned with the transmission of nerve impulses that transmit sensory & motor activity *via* both electrical and chemical signaling, thereby allowing coordination of the multiple body systems to complete their essential functions. Furthermore, *Vata's* role in muscular contraction & relaxation supports the essential functions of locomotion, respiration, and peristalsis. Additionally, *Vata's* role during cellular communication relates to the processes of neurotransmission and hormonal signaling, which are fundamental to maintaining homeostasis. The relationship of *Vata* with circulation and delivery of nutrients to tissue aligns with the function of the autonomic nervous system for the maintenance of cardiovascular dynamics & metabolism. Based on the information above, it is clear that *Vata* is not simply a metaphysical concept but instead is a complete model of the dynamic physiological processes of the human body.

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