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Enhancing Vyadhikshamatva: An Integrative Perspective from Ayurveda and Yoga

Varade S.¹, Choudhari V.², Golhar P.³

1. Associate Professor, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur
2. Professor & HOD, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur
3. PG Scholar, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur

ABSTRACT: Background: Amidst rising global health challenges and lifestyle disorders, there is renewed interest in traditional systems of medicine that offer preventive and holistic care. Ayurveda conceptualizes immunity as Vyadhikshamatva, a dynamic equilibrium involving Ojas, Agni, and Dhatus, while Yoga contributes through modulation of the neuroendocrine and immune systems. **Objective:** This paper aims to explore the integrative role of Ayurveda and Yoga in enhancing Vyadhikshamatva, drawing from classical Ayurvedic texts and contemporary scientific research. **Methods:** A narrative review approach was adopted, analyzing Ayurvedic principles such as Rasayana therapy, Dinacharya (daily regimen), and Ritucharya (seasonal regimen), alongside Yogic practices including Asana, Pranayama, and Dhyana. Recent clinical studies on Yoga's impact on cytokines, immunoglobulin levels, and stress biomarkers were also examined. **Results:** Ayurvedic Rasayana herbs like *Guduchi*, *Ashwagandha*, and *Amalaki* demonstrate immunomodulatory properties. Daily and seasonal routines support biological rhythms and strengthen host defense. Yoga practices have been shown to enhance parasympathetic activity, reduce cortisol levels, and modulate immune markers. The synergy between Ayurveda and Yoga offers a sustainable, non-pharmacological approach to boosting immune resilience. **Conclusion:** Integrating Ayurveda and Yoga presents a comprehensive model for preventive healthcare, promoting physical, mental, and immune well-being. This integrative approach is particularly relevant in addressing modern immune challenges, lifestyle disorders, and enhancing public health outcomes.

KEYWORDS: Vyadhikshamatva, Ayurveda, Yoga, Rasayana, Immunity, Integrative Medicine, Preventive Health.

CORRESPONDING AUTHOR:

Dr. Shilpa A. Varade

Associate Professor Department
of Rachana Sharir, Shri Ayurved
Mahavidyalaya, Nagpur.

Email: drshilpavarade@gmail.com

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INTRODUCTION:

Immunity is the cornerstone of health, acting as the body's natural defense mechanism against pathogens and internal imbalances. In recent years, the burden of lifestyle-related disorders, stress-induced conditions, and global pandemics such as COVID-19 has underscored the urgent need for effective, sustainable, and preventive healthcare strategies [1,2]. Traditional systems of medicine, particularly Ayurveda and Yoga, offer time-tested, holistic approaches that extend beyond symptomatic treatment to promote overall well-being [3]. In Ayurveda, immunity is conceptualized as Vyadhikshamatva—a dynamic interplay of the body's ability to resist disease (*Vyadhi-utpada-pratibandhakatva*) and to mitigate its impact when it does occur (*Vyadhi-bala-virodhi-tva*) [4]. This concept is deeply rooted in the balance of Ojas (vital essence), Agni (digestive/metabolic fire), and Dhatus (body tissues), and is influenced by factors such as diet, lifestyle, seasonal rhythms, and mental state [5]. Parallely, Yoga, the science of self-discipline and mind-body integration, offers evidence-based techniques such as Asana (physical postures), Pranayama (breath regulation), and Dhyana (meditation) that enhance physiological functions, reduce stress, and modulate immune responses [6,7]. Yoga not only complements Ayurvedic practices but also supports neuroendocrine-immune harmony [8]. In the current health paradigm, there is growing recognition of the value of integrative medicine, which combines ancient wisdom with modern scientific understanding [9]. This paper aims to explore the synergistic role of Ayurveda and Yoga in enhancing Vyadhikshamatva and proposes a unified, preventive model of healthcare relevant to modern health challenges.

Concept of Vyadhikshamatva in Ayurveda

In Ayurveda, immunity is conceptualized as Vyadhikshamatva, the body's inherent ability to resist and combat disease. According to *Charaka Samhita*, Vyadhikshamatva is of two types:

- **Vyadhi-utpada-pratibandhakatva:** The capacity to prevent the onset of disease.
- **Vyadhi-bala-virodhi-tva:** The ability to oppose the severity and progression of disease once it occurs [10].

This dual understanding highlights both the preventive and curative dimensions of immunity.

Several foundational principles in Ayurveda collectively contribute to Vyadhikshamatva:

- **Ojas:** Considered the vital essence of all Dhatus (body tissues), Ojas is responsible for maintaining physical vitality, mental clarity, and immune strength. It is regarded as the essence of immunity [11].
- **Bala (Strength/Resistance):** Bala refers to the body's resilience and resistance to disease. It is classified into three types:
 - Sahaja Bala: Natural or congenital strength.
 - Kalaja Bala: Strength influenced by time or season.
 - Yuktikrita Bala: Acquired strength developed through appropriate diet, lifestyle, and use of Rasayana therapies [12].
- **Agni (Digestive and Metabolic Fire):** Agni plays a central role in health and immunity. Proper Agni ensures effective digestion, assimilation, and metabolism, preventing the formation

of Ama (toxins), which are seen as precursors to disease [13].

- **Rasayana (Rejuvenation Therapy):** Rasayana is a specialized branch of Ayurveda aimed at promoting longevity, enhancing immunity, and rejuvenating tissues. It includes herbal preparations, lifestyle practices, and dietary regimens that nourish Ojas and optimize Agni [14].

Factors Influencing Vyadhikshamatva

Vyadhikshamatva is not static; it is influenced by several internal and external factors:

- Bala (strength and vitality)
- Ojas (immune essence)
- Agni (digestive/metabolic fire)
- Prakriti (individual constitution)
- Desha (geographical location)
- Kala (season and time)
- Vihara (lifestyle and daily habits) [15,16]

These factors determine an individual's immune capacity, adaptability, and susceptibility to disease.

Ayurvedic Approach to Enhancing Vyadhikshamatva

❖ Rasayana Therapy

Rasayanas are rejuvenative therapies aimed at promoting longevity, tissue nourishment, mental clarity, and enhanced immunity. These formulations are rich in antioxidants, adaptogens, and immunomodulatory compounds that help strengthen Ojas and Bala.

Common Rasayana herbs include:

- Amalaki (*Emblica officinalis*)
- Guduchi (*Tinospora cordifolia*)
- Ashwagandha (*Withania somnifera*)

These herbs have shown proven effects in modern studies, acting as anti-inflammatory, antioxidant, and immunostimulant agents [17–19].

❖ Dinacharya and Ritucharya (Daily and Seasonal Regimens)

Following daily (Dinacharya) and seasonal (Ritucharya) routines as per Ayurvedic guidelines helps in maintaining doshic balance and supporting immune homeostasis.

- Practices like Abhyanga (oil massage), Nasya (nasal administration), and Udvartana (herbal dry massage) stimulate the lymphatic system and support detoxification.
- Seasonal purification or Panchakarma before Rasayana therapy enhances efficacy [20].

❖ Ahara (Dietary Guidelines)

Ayurveda emphasizes:

- Satmya (suitability), Hita (beneficial), and Pathya (wholesome) foods.
- Inclusion of immune-supportive spices such as turmeric, ginger, cumin, black pepper, and garlic.

Ancient texts like *Bhaishajya Ratnavali* recommend specific diets and recipes for boosting immunity, now supported by modern research in nutritional immunology [21,22].

❖ Yogic Perspective on Immunity Enhancement

Yoga complements Ayurveda by working on the mind-body axis to relieve stress, regulate physiological functions, and modulate immune responses.

➤ Asana (Postures)

Specific yoga asanas promote internal organ massage, circulation, and lymphatic drainage, all contributing to immune competence.

Examples include:

1) Bhujangasana (Cobra pose)

Benefits:

- Strengthens the spine and stimulates abdominal organs.

- Opens the chest and boosts lung function.
- Reduces fatigue and stress, calming the sympathetic nervous system.
- Improves posture and counteracts sedentary lifestyle effects.

Immunity Mechanism: By improving respiratory efficiency and reducing cortisol levels, Bhujangasana supports both physical and mental aspects of immunity.

2) Matsyasana (Fish pose)

Benefits:

- Opens the chest, improves lung capacity, and supports respiratory health.
- Stimulates the thymus gland, which is vital for T-cell production.
- Balances the thyroid and parathyroid glands.
- Relieves upper back and neck tension, calming the nervous system.

Immunity Mechanism: This posture improves oxygenation, stimulates endocrine secretions, and activates vital energy centers (chakras), all of which enhance immune resilience.

3) Trikonasana (Triangle pose)

Benefits:

- Improves digestion and assimilation, supporting Agni (digestive fire).
- Stimulates the lymphatic system and promotes detoxification.
- Enhances lateral spinal flexibility and strengthens the lower back and legs.
- Relieves stress and anxiety, supporting neuroendocrine balance.

Immunity Mechanism: By stretching the sides of the torso and improving blood circulation, Trikonasana enhances organ function and reduces stagnation, which indirectly supports immune function.

Yoga Asanas and Vyadhikshamatva

These asanas have been shown to improve gastrointestinal function, detoxification, and

vitality [23]. Regular practice of specific yoga asanas like *Trikonasana*, *Matsyasana*, and *Bhujangasana* offers targeted benefits to immune-related systems. These asanas improve digestion, respiratory function, glandular activity, and mental relaxation. Their effects on lymphatic circulation and hormonal balance make them powerful allies in enhancing Ojas and maintaining optimal Vyadhikshamatva. When integrated with Ayurvedic Rasayana therapy and lifestyle regimens, these practices form a holistic, synergistic approach to preventive and promotive health.

➤ Pranayama (Breathing Techniques)

Pranayama techniques regulate breath and autonomic nervous system balance. They are particularly effective in reducing oxidative stress and inflammation.

Effective practices:

- Anuloma Viloma (alternate nostril breathing)
- Bhramari (humming bee breath)
- Kapalabhati (frontal brain cleansing)

Studies have shown that regular practice can improve respiratory capacity, reduce anxiety, and lower pro-inflammatory cytokines [24,25].

➤ Dhyana (Meditation)

Meditation brings mental clarity and emotional stability. It positively influences neuroendocrine-immune mechanisms, which regulate immune cell activity.

- Regular Dhyana practice is associated with:
 - ✓ Decreased cortisol
 - ✓ Increased natural killer (NK) cell activity
 - ✓ Elevated levels of salivary immunoglobulin A (IgA) [26,27]

➤ Integrative Ayurvedic-Yogic Protocols

Combining Ayurvedic wisdom with Yogic discipline offers a synergistic approach to enhancing immunity:

- Rasayana therapy post Panchakarma
- Asana-Pranayama-Dhyana for stress modulation and organ health
- Dinacharya practices like oil pulling, meditation, and sunlight exposure
- Ritucharya adaptations to seasonal transitions

Such integration supports preventive, promotive, and curative health strategies rooted in traditional Indian wisdom.

Scientific Evidence and Recent Advances Supporting Integration

There is growing scientific validation for the integrative application of Ayurvedic and Yogic practices in immune modulation, particularly in the context of lifestyle diseases, infections, and psychoneuroimmunological disorders.

❖ Evidence from Ayurveda

- Guduchi (*Tinospora cordifolia*) has been shown to significantly enhance phagocytic activity and macrophage function in animal models, supporting its use as an immunostimulant [28].
- A clinical trial published in the *Journal of Ayurveda and Integrative Medicine* highlighted the immunomodulatory and rejuvenative effects of Rasayana formulations in elderly individuals, with improvements observed in immunity markers and vitality scores [29].
- Ashwagandha (*Withania somnifera*) demonstrated improved immune function, including increases in white blood cell count and natural killer cell activity, in randomized controlled trials [30].

❖ Evidence from Yoga

- Yoga-based lifestyle interventions have shown to modulate gene

expression associated with immunity, reduce oxidative stress, and improve psychological well-being in individuals experiencing chronic stress [31].

- Studies have shown significant increases in CD4 counts and improved immune profiles in HIV-positive patients practicing integrated yoga protocols [32].
- Regular practice of yoga has been linked to reduced levels of inflammatory cytokines, including Interleukin-6 (IL-6) and Tumor Necrosis Factor-alpha (TNF- α), indicating its anti-inflammatory and immune-regulating potential [33].

❖ Government-Endorsed Integrative Approaches

- During the COVID-19 pandemic, the Ministry of AYUSH, Government of India, recommended a national immunity protocol that integrated:
 - ✓ Rasayana herbs such as Ashwagandha, Guduchi, and Chyawanprash,
 - ✓ Daily yoga practices including asanas, pranayama, and meditation,
 - ✓ Lifestyle guidelines such as Dinacharya and home remedies to boost respiratory and systemic immunity [34].

DISCUSSION:

The modern immune system is intricately influenced by factors such as stress, lifestyle, diet, and sleep—domains that are centrally addressed in both Ayurvedic and Yogic standards. In Ayurveda, Vyadhi-kshamatva is not merely defined as resistance to disease but as a dynamic state of equilibrium between the body, mind, and environment.

This balance is achieved through modulation of Agni (digestive fire), maintenance of Ojas, and alignment with natural cycles through Dinacharya (daily regimen) and Ritucharya (seasonal regimen). Yoga, on the other hand, enhances psycho-neuro-immunological regulation by reducing sympathetic overactivity and improving vagal tone. Practices such as Pranayama and Dhyana (meditation) have been shown to decrease stress biomarkers, improve sleep quality, and strengthen immune response. The integration of Ayurvedic and Yogic systems offers a synergistic approach to immune enhancement by combining personalized preventive strategies with mind-body practices:

- Ayurveda emphasizes dosha-based customization, dietary guidance, Rasayana therapy, and detoxification protocols like Panchakarma, contributing to both innate and acquired immunity [16].
- Yoga complements this by improving psychological stability, emotional regulation, and neuroendocrine function, which are critical in immune modulation [13].

Together, these disciplines foster a state of adaptive strength, empowering individuals to maintain homeostasis in the face of physical, mental, and environmental stressors. This comprehensive approach is especially relevant in managing lifestyle disorders, chronic inflammation, and susceptibility to infections.

Furthermore, contemporary research supports these traditional practices:

- Rasayana herbs like Guduchi, Ashwagandha, and Amalaki have demonstrated immunomodulatory, antioxidant, and adaptogenic effects [5,6].
- Yoga-based lifestyle interventions have shown positive outcomes in gene

expression related to immune function and stress reduction [12].

- Integrated models of care during the COVID-19 pandemic further validated the public health benefits of Ayurveda-Yoga protocols promoted by the Ministry of AYUSH.

In light of growing global health burdens, adopting such integrative frameworks aligns with the principles of preventive, promotive, and participatory healthcare, offering a sustainable path toward long-term well-being and physiological strength.

CONCLUSION:

Ayurveda and Yoga together offer a holistic and time-tested approach to enhancing *Vyadhikshamatva*, or immunity. While Ayurveda strengthens the body through *Rasayana*, *Dinacharya*, and herbal interventions, Yoga complements this by reducing stress and balancing the mind-body connection. Scientific studies increasingly support their immunomodulatory benefits, making this integrative model highly relevant in today's context of lifestyle disorders and infectious diseases. Embracing these practices can lead to sustainable, preventive healthcare that promotes overall well-being.

REFERENCES:

1. World Health Organization. Noncommunicable diseases. Geneva: World Health Organization; 2023 [cited 2025 Jul 29]. Available from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
2. Dhabhar FS. The short-term stress response—Mother nature's mechanism for enhancing protection and performance under conditions of threat, challenge, and opportunity. *Front Neuroendocrinol*. 2018;49:175–92.
3. Singh RH. Exploring larger evidence base for contemporary Ayurveda. *Int J Ayurveda Res*. 2010;1(2):65–6.

4. Charaka. Charaka Samhita: Sutrasthana 28/7–8. Translated by Sharma RK, Dash B. Varanasi: Chaukhambha Sanskrit Series; 2014.
5. Sushruta. Sushruta Samhita: Sutrasthana 15/41. Edited by Bishagratna KK. Varanasi: Chaukhambha Orientalia; 2012.
6. Telles S, Singh N, Balkrishna A. Managing mental health disorders resulting from trauma through yoga: A review. *Depress Res Treat*. 2012;2012:401513.
7. Streeter CC, Gerbarg PL, Saper RB, Ciraulo DA, Brown RP. Effects of yoga on the autonomic nervous system, gamma-aminobutyric acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder. *Med Hypotheses*. 2012;78(5):571–9.
8. Black DS, Slavich GM. Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. *Ann N Y Acad Sci*. 2016;1373(1):13–24.
9. Patwardhan B, Mutalik G, Tillu G. Integrative approaches for health: Biomedical research, Ayurveda and Yoga. San Diego: Academic Press; 2015.
10. Charaka. Charaka Samhita: Sutrasthana 28/7–8. Translated by Sharma RK, Dash B. Varanasi: Chaukhambha Sanskrit Series; 2014.
11. Sharma PV. Dravyaguna Vigyan. Varanasi: Chaukhambha Bharati Academy; 2014.
12. Tripathi B. Charaka Samhita with Charaka Chandrika commentary. Varanasi: Chaukhambha Surbharati Prakashan; 2013.
13. Lad V. Textbook of Ayurveda, Volume 1: Fundamental principles. Albuquerque: Ayurvedic Press; 2002.
14. Sharma H, Chandola HM. Rasayana concept: A holistic approach for health promotion and management of aging. *AYU*. 2011;32(2):183–8.
15. Bishagratna KK, editor. Sushruta Samhita. Varanasi: Chaukhambha Orientalia; 2012.
16. Patwardhan K, Mutalik G. Ayurveda education and research in India: Present status and future strategies. *J Ayurveda Integr Med*. 2011;2(4):197–204.
17. Sharma H, Chandola HM. Rasayana concept: A holistic approach for health promotion and management of aging. *AYU*. 2011;32(2):183–8.
18. Balasubramani SP, Venkatasubramanian P, Patwardhan B. Immunomodulatory effects of *Tinospora cordifolia*: A review. *J Ethnopharmacol*. 2020;246:112206.
19. Tiwari SK, Pandey M. Ashwagandha (*Withania somnifera*) as a rejuvenating Rasayana drug in Ayurveda: A review. *Int J Green Pharm*. 2017;11(3):S416–20.
20. Lad V. Textbook of Ayurveda: A complete guide to clinical assessment, Volume 2. Albuquerque: Ayurvedic Press; 2006.
21. Mishra LC, Singh BB, Dagenais S. Scientific basis for the therapeutic use of *Withania somnifera* (ashwagandha): A review. *Altern Med Rev*. 2000;5(4):334–46.
22. Patwardhan B, Gautam M. Botanicals and Ayurveda: Opportunities for synergy with modern medicine. *J Altern Complement Med*. 2005;11(3):379–90.
23. Sengupta P. Health impacts of yoga and pranayama: A state-of-the-art review. *Int J Prev Med*. 2012;3(7):444–58.
24. Bhargav H, Shenoy S, Valsaraj R, Tiwari S. Effect of pranayama and meditation on cytokine profile and oxidative stress in COVID-19 recovered subjects. *J Ayurveda Integr Med*. 2022;13(1):100523.
25. Sinha S, Singh SN, Monga YP, Ray US. Improvement of glutathione and total antioxidant status with yoga. *J Altern Complement Med*. 2007;13(10):1085–90.

26. Black DS, Slavich GM. Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. *Ann N Y Acad Sci.* 2016;1373(1):13–24.
 27. Goyal M, Singh S, Sibinga EM, Gould NF, Rowland-Seymour A, Sharma R, et al. Meditation programs for psychological stress and well-being: A systematic review and meta-analysis. *JAMA Intern Med.* 2014;174(3):357–68.
 28. Mathew S, Kuttan G. Immunomodulatory and antitumor activities of *Tinospora cordifolia*. *Fitoterapia.* 1999;70(1):35–43.
 29. Patwardhan B, Joshi K, Chopra A. Ayurvedic Rasayana therapy for promotion of health in elderly: A clinical trial. *J Ayurveda Integr Med.* 2010;1(2):123–9.
 30. Chandrasekhar K, Kapoor J, Anishetty S. A prospective, randomized double-blind, placebo-controlled study of safety and efficacy of *Ashwagandha* root extract in reducing stress and anxiety. *Indian J Psychol Med.* 2012;34(3):255–62.
 31. Bhasin MK, Dusek JA, Chang BH, Joseph MG, Denninger JW, Fricchione GL, et al. Relaxation response induces temporal transcriptome changes in energy metabolism, insulin secretion and inflammatory pathways. *PLoS One.* 2013;8(5):e62817.
 32. Naveen KV, Telles S. Yoga for HIV patients: A review of the published evidence. *J Int Assoc Provid AIDS Care.* 2008;7(3):125–30.
 33. Kiecolt-Glaser JK, Bennett JM, Andridge R, Peng J, Shapiro CL, Malarkey WB, et al. Yoga's impact on inflammation, mood, and fatigue in breast cancer survivors: A randomized controlled trial. *J Clin Oncol.* 2014;32(10):1040–9.
- Ministry of AYUSH. Advisory for Coronavirus: COVID-19. New Delhi: Government of India; 2020 [cited 2025 Jul 29]. Available from: <https://www.ayush.gov.in>

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