

## Short Review



### INTEGRATING ANCIENT MENTAL HYGIENE AND BEHAVIORISM WITH MIND-BODY MEDICINE: A PREVENTIVE HEALTH PERSPECTIVE FROM AYURVEDA AND YOGA

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#### ABSTRACT :

Preventive health strategies have gained global prominence, particularly in addressing non-communicable diseases. Ayurveda and Yoga emphasize holistic well-being by integrating mental hygiene and behaviorism through *Achara Rasayana*, *Sadvritta*, and *Yama-Niyama*. These principles encompass ethical conduct, emotional stability, social interactions, and lifestyle practices that contribute to physical and mental health. The current narrative review aimed to find scientific evidence supporting these principles through the lenses of psychology, neuroscience, and psychoneuroimmunology. This may help validate their role in stress regulation, cognitive enhancement, and immune modulation. To this end, the narrative review was conducted by sourcing classical Ayurvedic texts and modern scientific literature from databases such as PubMed, Embase, and Cochrane. The review emphasizes evidence for the role of *Achara Rasayana* and Yogic behaviorism in stress regulation, immune modulation, and cognitive well-being." Integrating these ancient frameworks with contemporary preventive health strategies can offer a comprehensive, evidence-based approach to fostering resilience, longevity, and overall well-being. However, effective application requires consideration of individual beliefs, clinical relevance, and integration into modern healthcare models.

**KEYWORDS** Achara Rasayana, Mental hygiene, Behaviorism, Psychoneuroimmunology, Mind-Body Medicine

RECEIVED ON:

27-03-2025

REVISED ON:

16-04-2025

ACCEPTED ON:

16-05-2025

Access This Article Online:

Quick Response Code:



Website Link:

<https://jahm.co.in>

DOI Link:

<https://doi.org/10.70066/jahm.v13i4.1680>

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CITE THIS ARTICLE AS

Kavyashree Kulamarva. Integrating ancient mental hygiene and behaviorism with mind-body medicine: A preventive health perspective from Ayurveda and Yoga. *J of Ayurveda and Hol Med (JAHM)*. 2025;13(4):111-118.

## 1. INTRODUCTION

Following a catastrophic surge of COVID-19, global attention has shifted towards preventive medicine as a primary strategy. While vaccines remain pivotal in preventing communicable diseases, emphasis on prevention takes precedence in addressing non-communicable diseases. Over the years there is a transition from burden of infectious diseases to non-communicable diseases.[1] The predominant cause of which is attributed to faulty diet and lifestyle. The four major risk factors are physical inactivity, poor nutrition, tobacco use, and excessive alcohol which can be modified to prevent most of the chronic diseases. Lifestyle, behavior change and nonmedical factors that influence health (social determinants of health) are critical to addressing rising rates of chronic disease.[2]

Alternative or complementary medical systems have gained significant position in the field of preventive health. Alternative medicine refers to therapeutic approaches taken in place of traditional medicine and used to treat or pacify the disease. Integrative medicine refers to combining complementary treatments with conventional care. Unlike the modern reductionist approach, the basic philosophy of complementary and alternative medicine (CAM) includes holistic care, which focuses on treating a human being as a whole person, promoting positive health.[3] Ayurveda and Yoga being life sciences, have a three-pillar approach considering mind, body and spirit while dealing with any physical and mental diseases. Ayurveda highlights the utmost importance of maintenance of health in healthy

individuals along with therapeutic interventions for various diseases.[4]

In an era marked by the convergence of ancient wisdom and modern scientific understanding, the concept of *Achara Rasayana* and *Sadvritta* from Ayurveda emerged as a profound approach to preventive health next to *Dinacharya* and *Ritucharya* (daily and seasonal regimen). While *Sadvritta* emphasizes on conduct, ethical and moral principles[5], *Achara Rasayana* focusing on mental hygiene and behaviorism, offers a holistic framework for maintaining harmony between mind and body. The word '*Achara*' refers to the customary laws or community norms of a particular social group.[6] *Rasayana Chikitsa* (rejuvenation) is a unique branch of Ayurveda. The term *Rasayana* encompasses strategies aimed at optimizing the functionality of all bodily tissues. *Rasayana* primarily signifies a combination of medicinal nutrition, rejuvenation techniques, longevity-promoting practices, immune system enhancement, and geriatric healthcare. *Rasayana* interventions are not limited to pharmaceutical drugs; they may also include *Rasayana*-rich foods, adoption of a health-promoting lifestyle with *Rasayana* effects, or the utilization of *Rasayana* medications, either individually or in combination. [7] *Yama* and *Niyama* are the first two limbs of *Ashtanga yoga*. The *Yamas* are the ethical restraints of *Ahimsa* (nonviolence), *Satya* (truth), *Asteya* (non-stealing), *Brahmacharya* (sensual abstinence or restraint), and *Aparigraha* (non-possessiveness). The *Niyamas* are practices conducive to spiritual development: *Shaucha* (purity), *Santosh* (contentment), *Tapas* (persistence),

*Svadhya* (study of sacred scriptures), and *Isvara pranidhana* (contemplation of the divine).

This literature review explores the integration of *Achara Rasayana* and Yogic principles of *Yama-Niyama* with evidence from modern science, shedding light on its potential implications for preventive health strategies in contemporary society.

## 2. METHODOLOGY

Classical ayurveda and yoga texts were referred for understanding of basic principles. Further literature search was conducted using electronic databases for a comprehensive data collection from recent and relevant studies. The timeframe for the search spanned from 2010 to 2024, ensuring inclusion of the most relevant and recent studies. Databases such as PubMed, Scopus and Web of Science were chosen for their comprehensive coverage of peer-reviewed literature in the field. Keywords employed in the search included terms such as *Achara Rasayana* OR *Sadvritta*, Behaviorism AND Psychology, Mental hygiene AND Behaviorism AND Yoga, HPA Axis OR Psychoneuroimmunology, Mind AND Body Medicine, which were iteratively refined to enhance the relevance of retrieved articles. The current review was designed as a narrative review focusing on conceptual integration of Ayurveda-Yoga and modern science considering the limited number of previous literatures in this area.

### **Understanding *Achara Rasayana*, *Yama* and *Niyama***

In Ayurveda, *Achara Rasayana* is a form of *Rasayana* therapy which refers to the regimen or lifestyle practices that promote longevity, vitality, and overall well-being. It comprehends holistic approach to health maintenance,

emphasizing on behavioral guidelines, mental practices, and social interactions along with few dietary recommendations. The principles include: truthfulness, emotional stability, and abstinence from habit forming substances like alcohol and excessive sensual indulgence; engagement in meditation and cleanliness practices; charity, reverence for tradition; including milk and ghee in diet; cultivating humility, simplicity, and spiritual focus; the value attributed to wisdom from elders and spiritual teachings. By adopting these qualities one can get the maximum benefit of all other physical forms of *Rasayana* therapy. [9] *Yama* and *Niyama* are the initial practices of Ashtanga yoga, which prepare an individual for further practice of *Asana* (physical yogic postures). Both include various codes of behavior and principles of self-awareness at personal and interpersonal levels which are analogous to *Achara Rasayana*. All the components can be integrated and classified under 'mental hygiene and behaviorism'.

### **Ancient Wisdom Meets Modern Science**

The symbiotic relationship between body and mind has been well established in traditional systems. Various paradigms of connection between the duos are substantiated through scientific evidence. Psychological factors involved in the etiopathogenesis of physical disorders have gained attention in recent times. Psychological determinants have the potential to precipitate, aggravate and perpetuate the existing clinical condition. Ancient practices of social and spiritual wellbeing correlating with the physical health outcomes can be evidenced through several studies of

psychology, neuroscience, and psychoneuroimmunology.

### **Psychology**

Ayurveda mentions various psychological factors such as greed, grief, fear, anger, egoism, shamelessness (impudence), jealousy, excessive affliction and desire, to be restrained.[10] When these are not balanced, they may further disturb the mental equilibrium. Emotional factors disturb the *Agni* (factor responsible digestion and metabolism) invariably interrupt with further absorption and assimilation of nutrients. Ayurveda also emphasizes on disturbed mental factors hampering the normal body physiology and exacerbating the existing illness. While traditionally spiritual and philosophical, the practices of *Yama* and *Niyama* have demonstrated significant potential in fostering positive mental health and emotional resilience. They act as tools to overcome the consequences of various diseases by playing a pivotal role in maintaining an equilibrium.[11] Psychological state of an individual plays an important role from the onset of an illness to its prognosis. Modern psychology highlights different psychological traits having the tendencies to develop certain diseases. There is now substantial evidence that individual differences (in humans) in stress reactivity, cognitive styles, emotionality, chronic stress, coping, are associated with a host of physiological responses and homeostasis, including a variety of immunity-related states. There is evidence for an upfront model of psychological dysfunction, consequent immune disruption, and subsequent disease.[12] The concept of resilience, optimism, and self-esteem through practices

such as gratitude journaling, positive affirmations, and cultivating supportive relationships are parts of emotional wellbeing. These factors in turn reflect the physical health remarkably in conditions such as lifestyle, chronic and terminal illness.

### **Neuroscience**

Cognitive exercises, visualization, meditation and various mental training are involved in improving neuroplasticity thereby influencing the overall health outcome. Several studies have shown that resource-poor environments, which are associated with stress, violence and abuse within families and communities, have detrimental effects on cognition and neural function.[13] A study reviewing the neural correlates of well-being suggested that gray matter volume in the insula and the precuneus(part of the brain) may be positively associated with subjective and psychological well-being, respectively.[14] Stress is an adaptive response which is determined by several genetic, environmental, and developmental factors. There are constant changes occurring at the level of neurotransmitters, hormones, and other biochemical depending on emotions, mood and stress responses.[15] Previous researches have demonstrated the positive effect of *Yama*, *Niyama* and other behavioral conducts enhancing stress response by improving emotional regulation, mediated through alterations in neurotransmitters.

### **Psychoneuroimmunology**

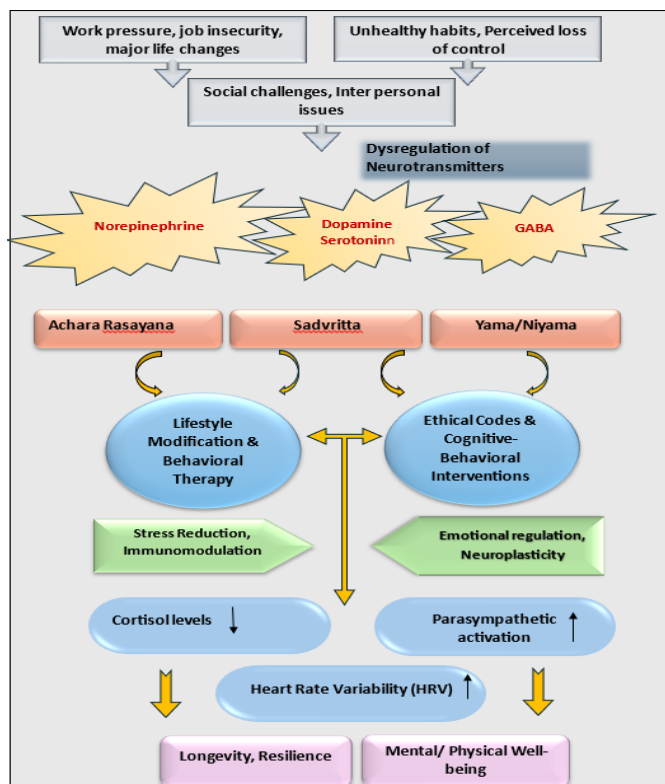
Psychoneuroimmunology (PNI) investigates the bidirectional interactions between the central nervous system, behavior, and the immune system, and examines how these interactions influence both mental

and physical health.[16] The cytokines released during stress activate the immune system, which in turn signals the nervous system to release stress hormones in the brain. This process also influences behavior and cognitive function. Cardiovascular dysfunctions, diabetes, cancer, autoimmune syndromes, chronic pain and mental illnesses such as depression and anxiety disorders have been linked to both stress and inflammation.[17] The practices of mental hygiene and behaviorism may reduce the conflicts within and bring about clarity in priorities and purpose of life, these disciplines gradually influence the frequency of stressful interactions. A person's spiritual quotient can be enhanced by committing to thoughtful and pure actions, harmonizing their existence within society, and maintaining the stability of their biological homeostasis through a balanced neuro-endocrine flow.[18]

**Figure 1:** Illustrating how stress and lifestyle impact neurotransmitters, with Integrative mental hygiene and behavioral models enhancing resilience and health.

### 3. DISCUSSION

The ethical principles, codes of mental and behavioral hygiene and longevity-enhancing practices outlined in ancient texts enable the holistic well-being. *Achara rasayana*, *Sadvritta*, *Yama* and *Niyama* together encompass a range of lifestyle factors and behaviors. Adhering to these principles might help an individual to cope up with various stressors and develop an emotional stability. Scientifically, these behaviors correlate with reduced stress levels by enhancing the production of neurotransmitters like dopamine and serotonin which are known to improve the neuroplasticity.[18] Furthermore, engagement in meditation and cleanliness practices has been extensively studied in modern research, showing benefits in stress reduction, cognitive enhancement, and immune system modulation.[19] Positive mental health regulates the physical health by reducing the pro-inflammatory cytokines such as IL-6, TNF-  $\alpha$  , lowering the C-Reactive Protein concentration and boosting anti-inflammatory cytokine IL-10.[20] A previous study demonstrated, patients with higher baseline levels of emotional well-being have better recovery and survival rates than patients with low levels of emotional well-being in chronic illnesses.[21]



Additionally, the emphasis on charity, reverence for tradition, and positive interpersonal relationships in ancient systems align with contemporary understanding of social support networks and their influence on

mental and physical health outcomes. Consumption of healthy, balanced diet conducive to ones *Prakruti* (Basic body constitution) provides essential nutrients beneficial for overall physical health and cognitive functioning. Moreover, the importance placed on maintaining a balanced lifestyle, including adequate sleep and adherence to circadian rhythms, reflects emerging research on the critical role of sleep hygiene in overall health and longevity. Cultivating humility, simplicity, and spiritual focus may contribute to psychological well-being and resilience, as evidenced by findings in positive psychology and mindfulness research. Lastly, the value attributed to wisdom from elders and spiritual teachings aligns with studies highlighting the protective effects of social connectedness and a sense of purpose on health outcomes.

One of the studies have highlighted that “the acute medical model” a dominant model of healthcare, restricts the opportunities to develop evidence-based holistic approaches for supporting people living with chronic conditions. Hence there is a persistent need for approaches that consider all domains of functioning (biological, cognitive, emotional, social) and their interactions as well as considering the influence of wider systemic factors such as our relationships, community, environment and socio-contextual factors.[22] Hence, Ayurveda and Yogic principles of mental hygiene and behaviorism can be integrated with mind-body interventions such as relaxation techniques, psychotherapy, and social support. These approaches help modulate immune function and improve health

outcomes in clinical populations. Thus, traditionally framed principles offer a comprehensive framework for promoting physical, mental, and social well-being, which resonates with contemporary scientific understanding.

#### **4. CHALLENGES AND FUTURE DIRECTIONS**

The principles of mental hygiene and behaviorism however are traditional; their application in various clinical conditions is individualistic. This should be applied considering ones philosophical, spiritual beliefs and level of acceptance. The global implementation of these techniques requires modifications to ensure their suitability and adaptability across diverse socio-cultural contexts. The integration of these principles in current psychotherapy or mindfulness-based techniques needs adequate understanding of the concept by the administering person. The principles also can be incorporated in preventive health counseling and lifestyle advice in general population.

#### **5. CONCLUSION**

The literature suggests wide-ranging significance of *Acharya Rasayana* and Yogic principles as a preventive health strategy that bridges ancient wisdom with modern science. By promoting mental hygiene and behaviorism, it offers a holistic approach to fostering harmony between mind and body, with potential implications for enhancing overall well-being in the current society.

This review underlines the translational potential of Ayurvedic mental hygiene practices in preventive health care models globally. Future research should focus on developing evidence-based behavioral intervention frameworks integrating these ancient principles.

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**Conflict of Interest:** None

**Source of Support:** None

**References**

1. Mathur P, Mascarenhas L. Lifestyle diseases: Keeping fit for a better tomorrow. *Indian J Med Res.* 2019 Jan; 149(Suppl 1):S129–35. Available from: <https://europepmc.org/article/med/31070189>
2. Hacker K. The burden of chronic disease. *Mayo Clin Proc Innov Qual Outcomes.* 2024 Feb 1; 8(1):112–9. Available from: <https://pubmed.ncbi.nlm.nih.gov/38304166/>
3. Tabish SA. Complementary and alternative healthcare: Is it evidence-based? *Int J Health Sci (Qassim).* 2008 Jan;2(1):V–IX. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3068720/>
4. Yadavaji Trikamaji (editor). *Charaka Samhita of Charaka, Sutrasthana, chapter 30, verse no.26.* reprint edition, Varanasi; Chowkhambha orientalia;2023;187
5. Yadavaji Trikamaji (editor). *Charaka Samhita of Charaka, Sutrasthana, chapter 8, verse no.19-29.* reprint edition, Varanasi; Chowkhambha orientalia;2023;59-61
6. Brick D. *The spirit of Hindu law.* By Donald R. Davis, Jr. *J Hindu Stud.* 2010 Oct 1;3(3):373–5. Available from: [https://www.researchgate.net/publication/293103914\\_The\\_spirit\\_of\\_hindu\\_law](https://www.researchgate.net/publication/293103914_The_spirit_of_hindu_law)
7. Yadavaji Trikamaji (editor). *Charaka Samhita of Charaka, Chikitsasthana, chapter 1/1, verse no.5-14.* reprint edition, Varanasi; Chowkhambha orientalia;2023;376-377
8. Dylan A, Muncaster K. The yamas and niyamas of ashtanga yoga: relevance to social work practice. *J Relig Spiritual Soc Work.* 2021 Oct 2;40(4):420–42. Available from: [https://www.researchgate.net/publication/363442431\\_The\\_yamas\\_and\\_niyamas\\_of\\_ashtanga\\_yoga\\_relevance\\_to\\_social\\_work\\_practice](https://www.researchgate.net/publication/363442431_The_yamas_and_niyamas_of_ashtanga_yoga_relevance_to_social_work_practice)
9. Yadavaji Trikamaji (editor). *Charaka Samhita of Charaka, Chikitsasthana, chapter 1/4, verse no.30-35.* reprint edition, Varanasi; Chowkhambha orientalia;2023; 388-389
10. Yadavaji Trikamaji (editor). *Charaka Samhita of Charaka, Sutrasthana, chapter 9, verse no.27.* reprint edition, Varanasi; Chowkhambha orientalia;2023;50
11. Dalal PK, Agarwal M. Postmenopausal syndrome. *Indian J Psychiatry.* 2015 Jul;57(Suppl 2):S222–32. Available from: <https://pubmed.ncbi.nlm.nih.gov/26330639/>
12. Friedman HS. The multiple linkages of personality and disease. *Brain Behav Immun.* 2008 Jul 1;22(5):668–75. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC2464619/>
13. McEwen BS, Morrison JH. The brain on stress: vulnerability and plasticity of the prefrontal cortex over the life course. *Neuron.* 2013 Jul 10;79(1):16–29. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3753223/>
14. Machado L, Cantilino A. A systematic review of the neural correlates of positive emotions. *Rev Bras Psiquiatr.* 2017;39(2):172–9. Available from: <https://pubmed.ncbi.nlm.nih.gov/27901215/>
15. Tsigos C, Kyrou I, Kassi E, Chrousos GP. Stress: endocrine physiology and pathophysiology. In: Feingold KR, Anawalt B, Blackman MR, Boyce A, Chrousos G, Corpas E, et al., editors. *Endotext* [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000 [cited 2024 Jul 5]. Available from: <https://pubmed.ncbi.nlm.nih.gov/25905226/>
16. Bower JE, Kuhlman KR. Psychoneuroimmunology: an introduction to immune-to-brain communication and its implications for clinical psychology. *Annu Rev Clin Psychol.* 2023 May 9;19:331–59. Available from: <https://pubmed.ncbi.nlm.nih.gov/36791765/>
17. Mariotti A. The effects of chronic stress on health: new insights into the molecular mechanisms of brain–body communication. *Future Sci OA.* 2015 Nov 1;1(3):FSO23. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC5137920/>
18. Kang JWM, Keay KA, Kendig MD, Corbit LH, Mor D. Serotonin and dopamine show different response profiles to acute stress in the nucleus accumbens and medial prefrontal cortex of rats with neuropathic pain. *Neurochem Res.* 2023

- Jul;48(7):2265-2280. Available from:  
<https://doi.org/10.1007/s11064-023-03906-y>
19. Vallath N. Perspectives on yoga inputs in the management of chronic pain. Indian J Palliat Care. 2010;16(1):1–7. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC2936076/>
20. Jamil A, Gutlapalli SD, Ali M, Oble MJP, Sonia SN, George S, et al. Meditation and its mental and physical health benefits in 2023. Cureus. 2023;15(6):e40650. Available from: <https://pubmed.ncbi.nlm.nih.gov/37476142/>
21. Felger JC, Lotrich FE. Inflammatory cytokines in depression: neurobiological mechanisms and therapeutic implications. Neuroscience. 2013 Aug 29;246:199-229. Available from: <https://doi.org/10.1016/j.neuroscience.2013.04.060>
22. Lamers SMA, Bolier L, Westerhof GJ, Smit F, Bohlmeijer ET. The impact of emotional well-being on long-term recovery and survival in physical illness: a meta-analysis. J Behav Med. 2012 Oct 1;35(5):538–47. Available from: <https://pubmed.ncbi.nlm.nih.gov/21918889/>
23. Kemp AH, Tree J, Gracey F, Fisher Z. Editorial: Improving wellbeing in patients with chronic conditions: theory, evidence, and opportunities. Front Psychol. 2022 Mar 14;13:868810. Available from: <https://pubmed.ncbi.nlm.nih.gov/35360566/>