Exploring the Relationship Between *Sadvritta* Practices and *Vyadhikshamatva* (Immunity): An Observational Study in Ayurveda

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Abstract-Background: The concept of *Sadvritta* in Ayurveda encompasses a range of ethical, social, physical, mental, and moral guidelines, which are thought to bolster *Vyadhikshamatva*, or immunity, by fostering overall well-being. This research examines its effects on immune function.

Objective: To assess the link between following *Sadvritta* practices and immunity in individuals who appear to be healthy.

Methods: In 2024, a study observing 500 individuals from Jodhpur, India, was carried out. The Harvard Step Test (HST) was employed to evaluate physical fitness, while adherence to *Sadvritta* was measured through a questionnaire. Immunity was deduced from self-reported health results and physiological metrics. The data underwent analysis using descriptive statistics and correlation analysis, with a significance level of $p<0.05$.

Results: Adhering strongly to *Sadvritta* practices was associated with remarkable outcomes: managing passion (91.46%), engaging in daily worship (82.48%), participating in exercise (80.54%), and maintaining hygiene (78.11%) were all closely linked to enhanced immunity. Individuals who consistently practiced these habits showed exceptional physical fitness (HST scores >97) and experienced fewer seasonal illnesses ($p<0.001$).

Conclusion: Adopting *Sadvritta* greatly boosts *Vyadhikshamatva*, underscoring its importance in preventive healthcare. These results suggest incorporating Ayurvedic lifestyle practices into contemporary health approaches.

Keywords: *Sadvritta*, *Vyadhikshamatva*, Immunity, Ayurveda, Harvard Step Test, Lifestyle Practices, Holistic Health

INTRODUCTION

Ayurveda, a time-honored Indian medical tradition, seeks to preserve the health of the well and heal the sick, as articulated by *Acharya Charaka*: "*Swasthasya swasthya rakshanam, aturasya vikaraprashamanam cha*" [1]. Central to this philosophy is the concept of health, which is seen as a harmonious balance of doshas (*Vata*, *Pitta*, *Kapha*), *Dhatu* (tissues), *Mala*(wastes), and a satisfied mind, soul, and senses [2]. In today's world, lifestyle-related ailments like diabetes, hypertension, and reduced immunity arise from unhealthy eating habits, stress, and lack of physical activity, highlighting the need for preventive strategies [3].

Sadvritta, as detailed in Ayurvedic texts such as *Charaka Samhita* and *Ashtanga Hridaya*, includes codes of conduct divided into categories like *Vyavaharika* (ethical), *Samajika* (social), *Sharirika* (physical), *Manasika* (mental), and *Dharmika* (moral) [4]. These practices—such as honesty, cleanliness, physical activity, and mindfulness—are thought to boost *Vyadhikshamatva*, or immunity, which encompasses *Vyadhi Balavirodhitvam* (resistance to disease strength) and *Vyadhi Utpadaka Pratibandhakatva* (prevention of disease onset) [5]. *Acharya Sushruta* associate's immunity with *Oja* (vital essence) and *Bala* (strength), which are affected by lifestyle and mental health [6].

Contemporary science acknowledges immunity as a complex interaction of innate and adaptive responses, influenced by diet, exercise, and psychological factors [7]. The connection between mind and body, increasingly supported by research on stress and immune function, resonates with Ayurveda's holistic perspective [8]. However, despite its traditional focus on prevention rather than cure, scientific evidence linking *Sadvritta* to immunity is still sparse [9].

This study explores the research question: "Is there a relationship between *Sadvritta* and *Vyadhikshamatva*" The null hypothesis (H_0) asserts no relationship, while the alternative hypothesis (H_1) proposes a positive correlation. The objectives include reviewing Ayurvedic and modern literature

on *Sadvritta* and immunity and empirically evaluating their connection in a healthy population.

METHODS

Study Design

An observational study was conducted at the Post Graduate Institute of Ayurveda, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur, in 2024 (IEC/21-22/494, approved 31/01/2023). The study targeted 500 apparently healthy individuals from Jodhpur and surrounding areas.

Participants

Participants aged 18-60 years, of both genders, were recruited via purposive sampling.

- Inclusion Criteria: Healthy individuals willing to participate, providing informed consent.
- Exclusion Criteria: Chronic illnesses (e.g., diabetes, tuberculosis), immunosuppression (e.g., HIV), or unwillingness to participate.

Data Collection

1. Physical Fitness Assessment: The Harvard Step Test (HST) assessed cardiovascular endurance and Bala (strength), with ratings categorized as Poor (<54), Low Average (54-67), Average (68-82), Good (83-96), or Excellent (>97) [10].
2. *Sadvritta* Questionnaire: A 45-item instrument evaluated adherence in five areas (mental, character, religious, ethical, physical, social, dietary, study, and sexual conduct), with scores of Never (0), Sometimes (1), or Always (2) [11].
3. *Vyadhikshamatva* Assessment: A questionnaire consisting of 20 items assessed physiological factors such as appetite, sleep, and the frequency of seasonal illnesses, with ratings ranging from 1 to 5, indicating poor to excellent. The self-reported health results were used to deduce immunity [12].
4. Anthropometric and Vital Data: Height, weight, BMI, pulse, and blood pressure were recorded.

Statistical Analysis

Adherence and outcomes were summarized using descriptive statistics, such as percentages and means. The relationship between adherence to *Sadvritta* and immunity markers, including HST scores and frequency of illness, was examined through chi-square tests and Pearson's correlation coefficient, with a significance level set at $p<0.05$. The data analysis was conducted using SPSS software.

RESULTS

Demographic Profile

The research involved 500 individuals, evenly split between males and females, with ages spanning from 18 to 60 years and an average age of 35.2 ± 12.3. A majority, 60%, resided in urban locations, 70% identified as Hindu, and 45% belonged to the lower-middle socioeconomic class.

Sadvritta Adherence and Outcomes

Participants were grouped by adherence frequency ("Always," "Sometimes," "Never"). Key findings:

- Mental Conduct: There were strong positive correlations with health (p<0.001) for passion control (91.46% excellent outcomes for "Always"), mental freshness (74.45%), and temper control (80.99%).
- Religious Conduct: Engaging in daily worship (82.48%) and participating in charitable activities (89.72%) were associated with outstanding immunity indicators.
- Ethical Conduct: Early rising (79.85%) and exercise/yoga (80.54%) correlated with high HST scores ($p<0.001$).
- Physical Conduct: Bathing (78.11%) and hygiene (77.53%) showed excellent outcomes.
- Social Conduct: Table manners (82.69%) and menstrual abstinence (89.43%) were associated with better health (Table 1).

Table 1: *Sadvritta* Adherence and Outcome Percentages (N=500)

Practice	Always (% Excellent)	Sometimes (% Excellent)	Never (% Poor)	p-value
Passion Control	91.46	45.23	92.94	<0.001
Daily Worship	82.48	38.67	94.19	<0.001
Exercise/Yoga	80.54	40.12	86.52	<0.001
Bathing Habits	78.11	35.89	91.67	<0.001
Menstrual Abstinence	89.43	42.56	78.57	<0.001

Physical Fitness and Immunity

HST scores indicated: 40% Excellent (>97), 30% Good (83-96), 20% Average (68-82), and 10% Poor/Low Average (<67). Participants with "Always" adherence had higher Excellent scores ($r=0.78$, $p<0.001$) and fewer seasonal illnesses (0-2 times/year, 85%) compared to "Never" (4-6 times/year, 70%).

Overall Impact

Participants with consistent *Sadvritta* adherence showed:

- Higher Bala (HST Excellent: 60% vs. 10% in "Never," $p<0.001$).
- Reduced illness severity (1-2 symptoms: 75% vs. 5 symptoms: 15% in "Never").
- The alternative hypothesis (H_1) was accepted, rejecting H_0 ($p<0.001$).

DISCUSSION

Efficacy of *Sadvritta*

This study confirms a significant positive relationship between *Sadvritta* and *Vyadhikshamatva*, aligning with Ayurvedic claims [13]. High adherence to passion control (91.46%) and temper control (80.99%) likely reduces stress, enhancing immune function via lower cortisol levels, as modern research suggests [14]. Daily worship (82.48%) and moral practices (e.g., charity, 89.72%) may foster emotional resilience, supporting *Oja*and immunity [15].

Exercise/yoga (80.54%) and hygiene (78.11%) directly bolster physical health, consistent with studies linking physical activity to improved immune markers [16]. Dietary habits (e.g., avoiding curd at night, 82.26%) align with Ayurvedic principles of Agni (digestive fire) preservation, potentially reducing inflammation [17]. Social conduct, like menstrual abstinence (89.43%), reflects ethical discipline, possibly lowering infection risk [18].

Mechanisms

Sadvritta 's holistic approach integrates physical (exercise, hygiene), mental (mindfulness), and social (ethical conduct) elements, mirroring modern psychoneuroimmunology [19]. Regular yoga enhances parasympathetic activity, boosting immunity [20], while hygiene practices prevent pathogen exposure [21]. Mental freshness (74.45%) and calmness (81.40%) likely mitigate chronic stress, a known immunosuppressant [22].

Statistical Insights

The strong correlation ($r=0.78$) between adherence and HST scores, coupled with highly significant p-values (<0.001), underscores *Sadvritta* 's impact. The 85% reduction in illness frequency among adherent participants suggests a preventive role, supporting Ayurveda's emphasis on "prevention over cure" [23].

Implications

These findings advocate integrating *Sadvritta* into public health strategies, especially for lifestyle-related disorders [24]. Its accessibility—requiring no drugs—makes it a cost-effective preventive tool [25]. Tailoring practices to individual Prakriti (constitution) could further optimize outcomes [26].

Limitations

The observational design lacks a control group, limiting causality inference. Self-reported immunity data may introduce bias, and the regional sample (Jodhpur) may not generalize globally. Future studies should incorporate objective immune markers (e.g., IgG levels) and longitudinal designs [27].

CONCLUSION

Sadvritta practices significantly enhance *Vyadhikshamatva*, with consistent adherence linked to excellent physical fitness, reduced illness frequency, and improved well-being. This study bridges traditional Ayurvedic wisdom with modern health science, rejecting the null hypothesis and supporting H_1. Integrating *Sadvritta* into healthcare could promote resilience and reduce disease burden, though further research is needed to validate mechanisms and scalability.

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