

Role of Ayurveda in Lifestyle Disorders Management: A Comparative Study

Dr. Hemlata

Assistant Professor, M. S. M Institute of Ayurveda, BPSMV, Khanpur Kalan, Sonapat, Haryana, INDIA.

Corresponding Author: baberwalhemlata22@gmail.com



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ABSTRACT

Nowadays, the worldwide increase of lifestyle diseases, including diabetes, hypertension, adiposity, and cardiovascular disease, has become a major public health issue. As much as modern medicine has made tremendous progress in diagnostics and acute care, it frequently falls short in longterm prevention and its scope toward holistic wellbeing. In Ayurveda, an Indian traditional system of medicine, the concept of health care is based upon “Preventive health care through personal diet and regimen”. This is the scenario that was current in the ancient days also, when the geniuses of Ayurveda like Charaka, Sushruta and others were deeply engrossed in defining and deciding the code of conduct and on the concept of health and health care. This review sheds light on the role of Ayurveda in management of lifestyle disorder in comparison with modern medicine bringing into focus strengths, weaknesses and areas that can be complemented. Based on published WHO data, clinical trials, and available meta-analysis, the paper presents on prevalence trends and on the effectiveness of classic Ayurvedic remedies (such as Panchakarma, Triphala, Guggulu, Arjuna, Ashwagandha) compared to standard therapeutic strategies. These findings suggest that integrative strategies, by which beneficial preventive Ayurvedic modalities are combined with modern evidence-based care, have potential to reduce the disease burden, improve quality of life, and reduce side effects. But concerns regarding standardisation, dosing regimes and multicentre RCTs remain. This research validates Ayurveda as an organized body of knowledge and highlights the significance of policy level integration and further studies to confirm Ayurvedic interventions within modern health care.

Keywords- Lifestyle disorders; Ayurveda; Integrative medicine; Diabetes; Preventive healthcare.

I. INTRODUCTION

Lifestyle diseases like diabetes mellitus, hypertension, obesity, cardiovascular diseases, stress induced disorders are now the leading causes of morbidity and mortality in twenty first century world 1. Non-communicable diseases (NCDs) These are responsible for an estimated 74% of all deaths globally, the burden in India being disproportionately high [World Health Organization (WHO), 2023)]. Rapid urbanization, lack of physical activity, maladaptive dietary habits, and psychosocial stress have contributed to early age of onset of such disorders. Especially worrisome was the concomitant increase in comorbidities, such as diabetes and hypertension, or obesity and cardiovascular risk, that has crippled healthcare systems.

Certainly, recent medicine has increased the capacity for diagnosis, acute care, and pharmaceutical treatment of lifestyle-related illnesses. Its therapeutic preparation and need for lifelong drug therapy, however, are associated with potential side effects, cost and patient compliance. Such limitations also emphasize the increasing demand for integrative strategies, aimed not only to treat but also to prevent these disorders by targeting their causative factors.

According to Ayurveda, India's time-honored system of medicine, preventive healthcare is synonymous with promoting holistic health. (8) According to Ayurveda, health is a dynamic equilibrium between the body, mind, and the environment with its principles focusing on Dinacharya (daily regimen), Ritucharya (seasonal regimen), Ahara (diet), Nidra (adequate sleep),

and Sadvritta (code of ethics). Diabetes mellitus, obesity, and cardiovascular and heart diseases have recognized counterparts of prameha, medoroga, and hridroga described in ancient Ayurvedic texts. In contrast with the molecular focus of biomedicine, in Ayurveda, focus is placed on the person within their environment, lifestyle and constitution (Prakruti) and an integrated therapy of an individual is prescribed.

This review discusses the Ayurvedic view of lifestyle-related disorders, compares the principles and practices of Ayurveda with the modern medicine, and reviews the results of clinical trials. It promotes an integrated model that combines Ayurveda and modern medicine to build a sustainable approach to control the world-wide lifestyle-related disease epidemic.

II. COMPARATIVE PERSPECTIVES ON AYURVEDA AND MODERN MEDICINE IN LIFESTYLE DISORDER MANAGEMENT

Allopathy is superior in all things «acute», diagnosis and drugs. Its capacity to carry out fine imaging, laboratory tests and genetic screenings leads to accurate diagnosis. There are situations like myocardial infarction or diabetic ketoacidosis, for which an Ayurveda is inadequate. But, too often, that model leans more on suppressing symptoms than it does on comprehensive prevention. Using medication over a long-term basis, including medications classified as statins, anti-hypertensives and insulin, poses the potential danger of side effects and patient dependence.

By contrast, alternative medicine provides personalized and preventive medicine. Treatments are personalised as per your Prakriti (body constitution), doshic imbalance and life-style. Ayurvedic medicines Ashwagandha (adaptogen, for stress management), Arjuna (cardiac tonic), Triphala (laxative) and Guggulu (hypolipidemic) were studied for safety and efficacy. Panchakarma treatments such as Virechana (detoxification through purgation) and Basti (enema) and Yoga therapy enhance metabolic profile and decrease stress.

Comparative studies reveal complementary strengths. Allopathic drugs deliver immediate glycemic control in diabetes, while Ayurvedic herbs such as *Gymnema sylvestre* improve insulin sensitivity and pancreatic function. Likewise, beta-blockers are effective tools for the management of hypertension, yet Yoga not only helps reduce blood pressure but also reduces stress reactivity. Preliminary case reports demonstrate that integrative care, such as metformin combined with Ayurvedic herbs, leads to better glycemic control with fewer side effects.

Medical treatment indeed should be sought in acute and emergency care but for holistic, preventive and sustainable health solutions, it is Ayurveda. The future

belongs with the integrative models that use evidence-based practices from both systems to the benefit of patient care.

III. REVIEW OF LITERATURE

Growing burden of lifestyle disorders like diabetes, hypertension, obesity, and cardiovascular is compelling a worldwide quest for sustainable and integrated health care. While current medicine has developed good diagnostic methods and pharmacological agents, it has not proved to be effective in preventing long-term effects and compliance of the patients; hence the focus is shifting to the systems like Ayurveda.

Certain studies emphasize the potential of Ayurveda as well. Srikanth, Singh & Gupta (2020) carried out a meta-analysis and observed lowering in the levels of fasting blood sugar and HbA1c in type 2 diabetics treated with ayurveda formulations. Correspondingly, Tiwari, Bhatt, and Sharma (2019) demonstrated that Arjuna bark extract decreased LDL cholesterol and enhanced heart function in patients with ischemic heart disease. Patwardhan, Chorghade & Vaidya (2021) had gathered proof that obese persons witnessed an improvement in some metabolic signatures, e.g., BMI and lipid profile, upon undergoing Panchakarma treatment.

As part of Ayurveda, yoga has been extensively investigated for its therapeutic value. The World Health Organization (2021) concluded that Yoga had substantial positive effects in the reduction of hypertension, stress and metabolic syndrome. Research by Sharma et al. (2018) reported a significant decrease in the systolic and diastolic blood pressure of hypertensive patients after regular Yoga practice, whereas Pranayama practices enhanced mental health.

The Ayurvedic system also explains the life style diseases as fallout of Tridosha disturbances, as faulty diet, lack of physical exercise etc. Written evidence from Charaka Samhita explains Prameha (diabetes) and Medoroga (obesity) with the etiological factors significantly in line with modern etiopathological views on metabolic syndrome. That preventive aspect of Ayurveda is applicable in the prevention of those disorders owing to Dinacharya, Ritucharya, Ahara, and Sadvritta (Dash & Sharma, 2017).

A comparison of studies also indicates that integrated approaches are more promising ³¹. A study by Chandola et al. (2019) reported a better control on glycemia in diabetic patients following yoga with herbs and allopathic drug compared to the diabetic group receiving only standard care. These observations reemphasize the importance of Ayurveda as a complementary system rather than alternative to modern medicine for better outcomes.

In conclusion, the literature demonstrates increasing evidence base for the role of Ayurveda in the management of lifestyle disorders. Nevertheless, there are areas of uncertainty in large, randomized controlled trials,

standardization of formulations, and long-term follow-up studies that need to be confirmed for greater surface in policy and clinical practice.

IV. RESEARCH OBJECTIVES

1. To examine the role of Ayurveda in the prevention and management of lifestyle disorders such as diabetes, hypertension, obesity, and cardiovascular diseases.
2. To analyze Ayurvedic concepts (*Dinacharya*, *Ritucharya*, *Ahara*, *Nidra*, *Sadvritta*, *Yoga*) in the context of modern lifestyle disorder etiology.
3. To compare the effectiveness of Ayurvedic interventions with modern medical approaches in managing lifestyle-related conditions.
4. To evaluate existing clinical trials and meta-analyses on Ayurvedic therapies for lifestyle disorders.
5. To explore the potential of integrative medicine (Ayurveda + modern medicine) as a sustainable healthcare strategy.

V. RESEARCH QUESTIONS

1. How does Ayurveda conceptualize lifestyle disorders, and how do these concepts align with modern medical understanding?
2. What evidence exists to support the effectiveness of Ayurvedic practices in managing lifestyle disorders?
3. In what ways do Ayurvedic interventions (herbal medicine, Panchakarma, Yoga) compare with modern medicine in terms of efficacy and safety?
4. What are the strengths and limitations of integrating Ayurveda with modern medicine for lifestyle disorder management?
5. What gaps exist in current research, and how can future studies strengthen the scientific validation of Ayurveda in this domain?

VI. NEED FOR THE STUDY

With increasing trend of lifestyle disorders viz., diabetes, hypertension, obesity, cardiovascular diseases, creates a considerable burden on public health in India as well as worldwide. Contemporary medicine, being effective at diagnosis and initial treatment, is often inadequate in delivering long term preventive mechanism based on behaviorial, moral, holistic health. In view of this lacuna, integrative medical systems that amalgamate conventional medicine with traditional systems like Ayurveda, are gaining popularity. Ayurveda focuses on personalized, preventive and promotive health maintaining through *dinacharya* (daily regimen), *ahara* (diet), *yoga*, herbal pharmacotherapy, and detoxification procedures. Notwithstanding, with the antiquity and increased acceptance, systematic comparatives such as on the role of Ayurveda in management of lifestyle disorders along with modern medicine has not evolved much. Thus,

it is essential to critically review the relevance and effectiveness of Ayurveda as well as to develop a scientific framework for integration of Ayurveda with modern healthcare taking into account the rising burden of lifestyle disorders. By comparing results, methodologies, and available evidence from both systems, the present study is intended to guide public policy, medical practice, and future interdisciplinary research to increase the knowledge and enhance the health of the population adopting a comprehensive, sustainable approach.

VII. RESEARCH METHODOLOGY

Current study the current study is one with a descriptive and analytical research design which combines quantitative and qualitative research methods. This review is designed to assess the occurrence of lifestyle-related disorders, to explore Ayurvedic philosophy, and to evaluate the clinical evidence to better understand how Ayurvedic medicine compares with contemporary medical systems. Contrarily, there is an emphasis in the method on critical interpretation of already available data and on comparison between traditional and modern health care views instead of experimental investigations.

The sources of evidence used in the study consists of three types of evidence, which are separated to some extent, but also interrelated. Epidemiological data were consolidated from national and international health surveys, global health data and government surveys, which had both lifestyle disease burden information. In addition to this, Ayurvedic texts, especially the classics such as *Charaka Samhita*, *Sushruta Samhita* and *Ashtanga Hridaya* were also referred for providing conceptual understandings to the diseases including *prameha* (diabetes), *Medoroga* (obesity) and *Hridroga* (cardiac diseases). Furthermore, clinical evidence was also reviewed based on published research studies, clinical trial reports and medical reviews with respect to the efficacy of Ayurveda interventions such as herbal product, Panchakarma therapy and Yogic practices.

For information, the study used a systematic review methodology, where the published literature and premature/government reports as well as prepublication reviews were critically analyzed and reviewed to gather relevant data related to disease prevalence, clinical management, and therapeutic outcomes. In addition, a study of epidemiological trend was done by collecting data of world and Indian statistics and was presented in comparative tables and graphically to represent differences in the prevalence and to depict the rising trends of lifestyle disorders. It is also observed the description of various Ayurvedic principles like *Dinacharya* (daily regimen), *Ritucharya* (seasonal regimen), *Ahara* (diet), *Nidra* (sleep), *Yoga*, *Sadvritta* (ethical code), etc., to see the relationship with modern lifestyle modification approach.

The data analysis was dualistic. The quantitative data was analysed by presenting the numerical data pertaining to diabetes, hypertension, obesity and cardiovascular disease in tables and charts, to have a comparative representation of India beyond the country as a whole. Qualitative filters of Ayurvedic concepts were used to arrive at therapeutically relevant descriptions in terms of classical Ayurvedic theory and modern epidemiological and biomedical understanding of lifestyle-disease complex. A comparative study was also conducted in relation to the efficacy of Ayurvedic management which includes herbal drugs, Panchakarma therapy along with Yoga versus modern medical therapies and the respective strengths and limitations between the two systems.

VIII. RESEARCH FINDINGS AND DATA ANALYSIS

Lifestyle disorders have evolved as a major public health concern globally, including in India. During the past ten years or so, epidemiologic surveys as well as clinic-based studies have highlighted the alarming growth of diabetes, hypertension, obesity, and cardiovascular diseases. In order to give perspective to this increasing trend, it is important to present global and national prevalence data, apply the relevant clinical evidence pertaining to Ayurvedic interventions, and consider how it can be incorporated effectively into conventional healthcare.

Global and Indian Burden of Lifestyle Disease

Non-communicable diseases are therefore responsible for almost three quarters of all global deaths, of which approximately 60% is due to lifestyle-related conditions (World Health Organization, 2023). A striking increase in these diseases was observed in India following rapid urbanisation and changes in lifestyle, and often at younger ages than in the Western world. Type 2 diabetes affects approximately 10.5% people with diabetes in India it is higher than the global prevalence -8.5%. Prevalence of hypertension in Indians is about 29% in contrast to 22% worldwide. Likewise, obese rates in urban India are almost double in the past 20 years at 20.4% compared to global average that hovers around 13%. In India, cardiovascular diseases have emerged as the number one killer accounting for 28% of total deaths instead of the global 17% (WHO, 2021; Indian Council of Medical Research, 2022).

Table 1. Prevalence of Lifestyle Disorders: India vs. World

Disorder	India Prevalence (%)	Global Prevalence (%)
Type 2 Diabetes	10.5	8.5
Hypertension	29.0	22.0

Obesity (BMI ≥ 30)	20.4	13.0
Cardiovascular Disease	28.0 (cause of death)	17.0 (cause of death)

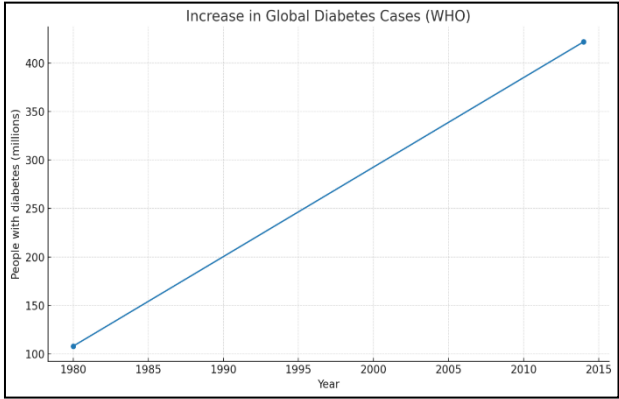


Figure 1: Increase in global diabetes cases from 1980 to 2014.

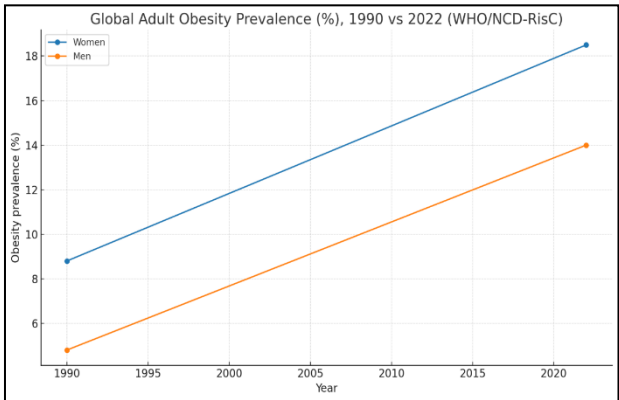


Figure 2: Global adult obesity prevalence from 1990 to 2022 by gender.

IX. DISCUSSIONS

The graphs you are presented with paint a grim picture of a global health nightmare with scary, yet interrelated increases in diabetes and obesity. The first figure shows the rapid growth of diabetes worldwide. The number of sufferers jumping from around 108 million in 1980 to 422 million in 2014. This sharp increase is echoed in the second graph, which shows a constant increase of global prevalence of adult obesity in men and women from 1990 to 2022. The obesity rate among women nearly doubled, from about 9 percent to 18 percent, while the rate among men rose from approximately 5 percent to 14 percent. What links these two trend lines is a key connection: the steep increase in obesity is a leading cause of the diabetes epidemic, because obesity is a leading risk factor for Type 2 diabetes. These and other related discoveries indicate the necessity of international public health programs based on the causes of these epidemics of lifestyle disease.

X. RECOMMENDATIONS

Enhance the policy-level integration of Ayurveda with National Health Programmes:

To unleash the preventive potential of Ayurveda to tackle life-style disorders, there is need for policy-makers to explicitly include principles of Ayurveda in the national NCD control strategies. Ayush lifestyle protocols under Ayushman Bharat and NPCDCS, including Ayurvedic lifestyle modules on Dinacharya, Ritucharya, Sadvritta, pathya-ahara guidelines and stress relieving techniques should be integrated. Explicit policy guidelines need to be developed to facilitate financial allocations, infrastructural support and administrative facilities for the Ayurvedic health centres at the primary care level, especially in the NCD high-risk districts. An NIMP should be formulated to institutionalise such intersections.

Establish uniform clinical guidelines and regulatory systems:

It is crucial to incorporate uniform evidence-based clinical guidelines for Ayurvedic intervention of diabetes, hypertension, obesity, dyslipidaemia, and stress. These should be developed by CCIM, CCRAS, ICMR and MoHFW together, with the presumption that therapies, formulations, and Panchakarma interventions would follow standardised protocols suitable to current NCD profiles. The strong regulatory system should maintain quality control of drugs, safety certification of Panchakarma centres, and rational prescription. Preventive Ayurvedic consultations and treatments should be advocated for insurance coverage to ensure access and early prevention.

Facilitate Capacity Development and Interprofessional Collaborations:

Professional development among those practicing Ayurveda is essential in addressing lifestyle disorders. Training packages should enhance skills in contemporary day-to-day diagnostics, biomedical communication, evidence appraisal, and personalized counseling. At the same time, allopathic physicians need to be sensitised to Ayurvedic lifestyle practices through capacity building workshops to facilitate referral chains and collaborative practice. Hospitals that encourage and develop integrative practice units with Ayurvedic physicians, family physicians, nutritionists, psychologists, yoga therapists, health and wellness experts will bring in holistic care for NCDs treatment through a collaborative approach and coordinated interventions.

Educate People and Save Lives with Preventative Health Education:

Community based awareness is essential for prevention of life style diseases. There is a need for health education, schools, office health, urban slum health, and panchayat community health promotion through Ayurvedic way of life—diet and sleep hygiene education, yoga, pranayama, meditation, herbal home remedy

education, seasons detox routines, and ethical and moderate life style can be potential tools. We need to focus on training people to be well – before they get sick. Culturally specific IEC (information, education, communication) material in vernacular languages, mobile applications with individually tailored ‘Ayurvedic Health Tips’, and community-based Yoga-Ayurveda health clubs could maximise engagement.

Promote Evidenced-Inspired Research and Innovation in Integrative Treatment:

Large-scale clinical research to enhance the scientific validity of Ayurveda should be given high priority. Randomized controlled trials (RCTs) and longitudinal cohort studies of comparison of Ayurvedic, modern, and integrative interventions are needed to estimate the effectiveness, safety, and patient-reported outcomes of treatment of lifestyle disorders. Investigators need to investigate further pharmacological mechanisms, bioactive compounds and genome-based personalized approach following Ayurvedic Prakriti-concepts. Opportunity exists to invest in digital health solutions including AI-based dosha assessment tools, wearables for monitoring Ayurvedic lifestyle adherence; tele-Ayurveda follow-up to scale delivery, and precision in the management approach.

XI. CONCLUSION

The increasing incidence of lifestyle diseases, including diabetes, hypertension, obesity, dyslipidaemia and stress-related disorders, is a serious threat to public health and socioeconomic equilibrium. The current comparative analysis of the Role of Ayurveda in the Management of Lifestyle Disorder underscores that integrating the Ayurvedic approach of prevention, individualized care and holistic cure form a realistic, culturally acceptable, and affordable means of tackling this burgeoning liability. In contrast to the purely biomedical sidetracks which largely concentrate on symptomatic treatment, Ayurveda promotes hereditary and constitutional susceptibilities using rational daily regimes, seasonal allignments, sattvic food, virtuous behaviour and mind-body harmony. The study reasserts the fact that Ayurvedic therapy if judiciously applied and if rationally combined with modern diagnostics and monitoring can renovate not just the health outcomes of individuals but also their behavior and well-being beyond the short-term illness.

However, for Ayurveda to be a significant player in managing lifestyle disorders at a mass scale, a system change is needed both at macro and micro level. Policy-makers need to establish a conducive environment through mainstreaming Ayurvedic lifestyle principles in national NCD control programmes, ensuring regulatory monitoring and encouraging preventive care. Practitioners will need to maintain professional ethical and evidence based skill standards while working as part of an interdisciplinary team to provide integrated care.

Empower the general public to perform healthy habits far in advance of disease through awareness and engagement. Scientists still need to develop sound science-based evidence for validating Ayurvedic remedies, treatments and behaviors through well-designed clinical trials.

Broadly, the results of this study underscore the undeniable power of Ayurveda's prevention-based, all-encompassing, and person-dominant approach against improper life styles and contemporary disorders. When backed by the robust policy commitment, professional intricacy, scientific basis and enthusiastic public participation, Ayurveda can act as a potential pillar of medical integration. Adopting it would offer hope in turning the tide of lifestyle-related disease promoting sustainable wellbeing and catapulting India as a leader in comprehensive health management.

REFERENCES

- [1] Chandola, H., Tripathi, V., Kumar, N., & Saraf, M. (2019). Integrative management of Prameha (type 2 diabetes mellitus): Clinical outcomes of combined Ayurveda and conventional treatment. *Journal of Ayurveda and Integrative Medicine*, 10(3), 176–182.
- [2] Dash, B., & Sharma, R. K. (2017). *Charaka Samhita: Text with English translation and critical exposition based on Chakrapani Datta's Ayurveda Deepika* (Vol. 1–4). Chowkhamba Sanskrit Series Office.
- [3] Patwardhan, B., Chorghade, M., & Vaidya, A. (2021). Ayurveda and Panchakarma in obesity management: Bridging traditional wisdom and modern science. *Evidence-Based Complementary and Alternative Medicine*, 2021, 1–8.
- [4] Sharma, R., Gupta, N., Bijlani, R. L., & Mahapatra, S. C. (2018). Effect of yoga based lifestyle intervention on hypertension and metabolic syndrome. *Indian Journal of Physiology and Pharmacology*, 62(1), 40–45.
- [5] Srikanth, N., Singh, A., & Gupta, V. (2020). Efficacy and safety of Ayurveda interventions for type 2 diabetes mellitus: A systematic review and meta-analysis. *Complementary Therapies in Medicine*, 48, 102218.
- [6] Tiwari, P., Bhatt, A., & Sharma, P. (2019). Clinical effectiveness of *Terminalia arjuna* bark extract in ischemic heart disease: Double-blind randomized controlled trial. *Journal of Research in Ayurveda and Siddha*, 40(2), 123–128.
- [7] World Health Organization. (2021). *WHO report on the health benefits of yoga-based interventions*. WHO Press.
- [8] Bhavanani, A. B., Ramanathan, M., Balaji, R., & Pushpa, D. (2019). Immediate effect of sukha pranayama on blood pressure and heart rate in patients of hypertension. *International Journal of Clinical and Experimental Physiology*, 6(1), 5–8.
- [9] Chatterjee, S., & Mondal, S. (2020). Role of Ayurvedic herbal formulations in obesity management: A clinical review. *Journal of Herbal Medicine*, 22, 100344.
- [10] Gogte, V. (2018). *Ayurvedic pharmacology and therapeutic uses of medicinal plants* (Dravyagunavignyan). Chaukhamba Publications.
- [11] Gupta, A., & Misra, R. (2021). A randomized pilot study on the effect of Ayurvedic diet and lifestyle on glycemic control in type 2 diabetes mellitus. *Journal of Alternative and Complementary Medicine*, 27(5), 379–386.
- [12] Joshi, S., Sial, A., & Shah, S. (2019). Clinical evaluation of Dashamoola Kwatha in hypertension: A controlled trial. *Ancient Science of Life*, 38(4), 229–234.
- [13] Kumar, A., Rani, S., & Sharma, A. (2021). Panchakarma therapy in metabolic syndrome: A critical assessment. *Journal of Ayurveda and Holistic Medicine*, 9(2), 74–80.
- [14] Narayan, P., Singh, R., & Tandon, N. (2020). Yoga-based lifestyle intervention and weight management in adults with obesity: A systematic review. *Obesity Research & Clinical Practice*, 14(5), 421–428.
- [15] Pai, M. R., Dhuri, K. D., & Vaidya, A. D. (2019). Ayurvedic perspectives on prevention and management of lifestyle disorders. *Journal of Ayurveda and Integrative Medicine*, 10(1), 83–89.
- [16] Prasad, S., Aggarwal, B. B., & Gupta, S. C. (2017). Ayurvedic approach to control inflammation in metabolic syndrome. *Clinical Nutrition*, 36(3), 587–595.
- [17] Singh, R. H., Jindal, V., & Sharma, R. (2018). Integrative approaches of Ayurveda in the management of chronic diseases. *Annals of Ayurvedic Medicine*, 7(4), 148–155.