International Conference on Ayurveda - A Way Forward for Wellness: Viksit Bharat 2047

Organized by

P.R.S Educational Trust

in association with

Indian Pharmacy Graduate's Association (IPGA) &
Malaysian Indian Siddha Ayurveda Association (MISAA)

Weser Books

International Conference

on

"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047"

Prof. (Dr.) Atul Kumar Nasa
President of the Indian Pharmacy Graduates Association (IPGA),
Former Deputy Drugs Controller,
Pro. Vice-Chancellor, SGT University

MESSAGE

It is a great honor and privilege to convey my heartfelt greetings to all participants, delegates, speakers, panelists, and organizers of the International Conference on *"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047."* This esteemed gathering serves as a significant platform that brings together eminent academicians, researchers, healthcare professionals, industry experts, and students to deliberate upon the growing relevance of Ayurveda in shaping a healthier and sustainable future.

Ayurveda, as one of the world's oldest holistic healing systems, holds immense potential in addressing modern health challenges through its personalized, preventive, and integrative approach. In the journey toward *Viksit Bharat 2047*, the integration of traditional wisdom with contemporary scientific advancements is essential. This conference provides an excellent opportunity to explore innovative research, evidence-based practices, and interdisciplinary collaborations that can strengthen the role of Ayurveda in global healthcare.

I am particularly delighted to witness this initiative fostering dialogue between traditional knowledge systems and modern pharmaceutical and biomedical sciences. Such efforts not only validate the scientific basis of Ayurveda but also encourage its wider acceptance and application in improving public health outcomes.

The publication of the abstract book is a reflection of the intellectual contributions and dedicated efforts of all researchers and scholars. It stands as a valuable repository of knowledge and a testament to the spirit of inquiry and innovation driving this field forward.

I extend my sincere appreciation to the organizing committee for their commendable efforts in successfully hosting this conference. I also congratulate all contributors for their valuable research work presented here. I am confident that the discussions and outcomes of this conference will pave the way for new insights, collaborations, and advancements, contributing significantly toward achieving a healthier and empowered nation.

With warm regards,
Prof. (Dr.) Atul Kumar Nasa
Chief Patron

Prof. (Dr.) Anil Sharma
Dean, FIMS (Ayurveda)
SGT University

MESSAGE

I am delighted to convey my best wishes to all participants, speakers, delegates, and organizers of the International Conference on *"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047."* This conference serves as a dynamic forum for exchanging ideas, advancing knowledge, and strengthening the role of Ayurveda in modern healthcare systems.

In recent years, there has been a growing global recognition of Ayurveda as a holistic and sustainable approach to health and well-being. Its strong foundation in preventive care, lifestyle management, and natural therapeutics makes it highly relevant in addressing the evolving health needs of society. Aligning these principles with scientific research and technological advancements will be instrumental in realizing the vision of a developed and healthy India by 2047.

Such academic gatherings play a crucial role in bridging the gap between traditional knowledge and contemporary science. They encourage meaningful discussions, promote innovative research, and create opportunities for collaboration across disciplines, ultimately contributing to the advancement of integrative healthcare.

I commend the organizers for their dedicated efforts in bringing together such an important initiative. I also appreciate the valuable contributions of researchers and scholars whose work continues to enrich the field of Ayurveda. I am confident that this conference will generate impactful insights and pave the way for future advancements in healthcare.

With best wishes
Prof. (Dr.) Anil Sharma
Chief Patron

Prof (Dr.) Vijay Bhalla
Registrar, SGT University
(Shree Guru Gobind Singh Tricentenary University),
Gurugram, Haryana

MESSAGE

It is my privilege to extend a warm welcome to all delegates, researchers, academicians, and distinguished guests participating in the International Conference on *"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047."* This conference serves as a meaningful platform to bring together experts from diverse domains to exchange knowledge, explore innovative perspectives, and deliberate on the growing significance of Ayurveda in modern healthcare.

In today's rapidly evolving healthcare landscape, Ayurveda offers a holistic and sustainable approach rooted in prevention, lifestyle management, and natural therapeutics. Integrating this traditional wisdom with contemporary scientific advancements is essential to address emerging global health challenges and to contribute toward the vision of *Viksit Bharat 2047*. This conference provides an excellent opportunity to promote such integration through research, dialogue, and collaboration.

The participation of scholars and professionals from varied disciplines reflects the expanding scope and relevance of Ayurveda and allied sciences. The research contributions presented in this conference highlight the commitment, innovation, and scientific rigor of the academic community in advancing holistic healthcare solutions.

I would like to express my sincere appreciation to the organizing committee for their dedicated efforts in hosting this conference. I also commend all contributors and participants for their valuable involvement. I am confident that this gathering will foster meaningful discussions, encourage interdisciplinary collaborations, and inspire future research endeavors.

I extend my best wishes for the success of the conference and hope that all participants find the sessions enriching, engaging, and impactful. May this event pave the way for new insights, strengthened collaborations, and continued progress in the field of Ayurveda.

With warm regards,
Prof. (Dr.) Vijay Bhalla
Patron

Prof. (Dr.) M. Shahar Yar
Jamia Hamdard, New Delhi

MESSAGE

It is my honor to warmly welcome all delegates, researchers, academicians, and distinguished guests to the International Conference on *"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047."* This conference serves as a vibrant platform for experts from diverse disciplines to exchange knowledge, foster innovation, and engage in meaningful discussions on the evolving role of Ayurveda in modern healthcare, while also promoting evidence-based research, highlighting innovative approaches, and encouraging interdisciplinary collaborations that contribute to the advancement of integrative healthcare. The contributions of all participants reflect a strong commitment to scientific rigor, creativity, and excellence in the fields of Ayurveda, pharmaceutical sciences, and holistic health systems, ultimately showcasing the richness of traditional knowledge and strengthening its scientific validation and global relevance in addressing emerging health challenges.

I would like to express my sincere gratitude to all researchers and contributors for their valuable participation. Your work exemplifies the dynamic growth of Ayurveda and reinforces the importance of bridging traditional wisdom with modern scientific advancements. The diversity of ideas presented here demonstrates the immense potential of collaborative research in delivering sustainable and effective healthcare solutions.

I hope that this conference will serve not only as a platform for academic presentations but also as a forum for interactive learning, constructive dialogue, and professional networking. May it inspire innovative thinking, strengthen collaborations, and encourage initiatives that contribute to the advancement of Ayurveda and its integration into mainstream healthcare systems.

I extend my best wishes for the success of this conference and trust that all participants will find the sessions insightful, engaging, and inspiring. May this event foster meaningful exchanges, build lasting professional relationships, and pave the way for future advancements aligned with the vision of *Viksit Bharat 2047*.

Welcome once again, and I look forward to the enriching discussions, innovative ideas, and collaborative spirit that will define this conference.

Best regards,
Prof. (Dr.) M. Shahar Yar
Chairperson

Dr. Akhil Sharma
Director,
PRS Educational Trust

MESSAGE

I am delighted to warmly welcome all distinguished delegates, researchers, academicians, and healthcare professionals who are joining us for the International Conference on *"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047."* This conference marks an important confluence of knowledge, bringing together experts, innovators, and thought leaders dedicated to advancing the science and practice of Ayurveda in the modern era.

This gathering provides a valuable platform for participants to present their research, exchange meaningful insights, and engage in thoughtful discussions on the evolving role of Ayurveda in global healthcare. It creates opportunities to explore the integration of traditional Ayurvedic wisdom with contemporary scientific approaches, fostering interdisciplinary collaborations that can address current and emerging health challenges.

The abstracts compiled in this book reflect the dedication, innovation, and scholarly excellence of contributors who are working tirelessly to strengthen the scientific foundation of Ayurveda. Their work highlights the growing relevance of holistic, preventive, and personalized healthcare systems in achieving the vision of a healthier and self-reliant nation under *Viksit Bharat 2047*.

We believe that the ideas exchanged, discussions initiated, and collaborations formed during this conference will contribute significantly to bridging the gap between traditional knowledge and modern research. Such platforms are essential for translating evidence-based Ayurvedic practices into practical healthcare solutions that can benefit society at large.

I extend my sincere gratitude to the organizing committee, speakers, and participants for their unwavering commitment and efforts in making this conference a success. Your enthusiasm and dedication will undoubtedly make this event both enriching and impactful.

As we engage in this academic endeavor, I hope the conference inspires insightful discussions, strengthens professional networks, and encourages collaborative research that extends beyond this platform. May it catalyze innovation, knowledge sharing, and the continued growth of Ayurveda in shaping the future of healthcare.

I wish all participants a highly productive and rewarding conference experience.

Best regards,

Dr. Akhil Sharma
Director
PRS Educational Trust

SCIENTIFIC ABSTRACTS INDEX

A NOVEL DELIVERY SYSTEM FOR AYURVEDIC FORMULATION CONVERTING KWATH INTO HERBAL NUTRACEUTICAL GUMMIES

Karan*

Delhi Pharmaceutical Science and Research University (DPSRU), New Delhi

Corresponding author: kayshap.champion.2003@gmail.com

Abstract

Traditional Ayurvedic formulations such as Kwath (herbal decoctions) are widely recognized for their therapeutic efficacy; however, their bitter taste, poor palatability, and inconvenient method of administration often result in low patient compliance. The present study aims to develop a novel delivery system by transforming classical Kwath into palatable herbal gummies, thereby introducing an advanced herbal nutraceutical platform. Herbal extracts were prepared using standardized decoction methods and incorporated into a suitable gummy base utilizing natural gelling agents such as pectin or agar. The formulation was evaluated for physicochemical parameters, organoleptic properties, dosage uniformity, and stability under various environmental conditions. The developed gummies demonstrated improved taste, enhanced acceptability, and ease of administration while maintaining uniform distribution of active constituents. Stability studies indicated that the formulation remained stable under controlled conditions without significant degradation. This approach successfully integrates traditional Ayurvedic knowledge with modern pharmaceutical technology, offering an innovative and patient- friendly alternative to conventional dosage forms. The developed advanced herbal nutraceutical platform holds significant potential to improve therapeutic compliance and expand the use of herbal medicines in contemporary healthcare. The developed gummies effectively masked the decoction's intrinsic bitterness while maintaining its therapeutic molecular profile. Analytical testing confirmed high dosage uniformity (S8–102%), ensuring consistent delivery of active phytoconstituents. Accelerated stability data showed negligible degradation of marker compounds over six months, confirming a robust shelf-life. This research demonstrates that transforming Kwath into "soft" delivery systems like gummies bridges the gap between traditional efficacy and modern convenience. This validated framework for stability and uniformity is essential for the global acceptance of standardized Ayurvedic nutraceuticals

Keywords: Ayurvedic formulations, Herbal extracts, nutraceuticals, healthcare

EPIDEMIOLOGY OF LEISHMANIASIS IN INDIA: A CRITICAL ANALYSIS OF RECENT STUDIES AND INTEGRATION OF HERBAL MEDICINE IN MODERN THERAPEUTICS

Athira A*, Mythreyi R, Kumanan R, Sudha

JDT Islam College of Pharmacy

Corresponding author: athirababudharshanam@gmail.com

Abstract

Leishmaniasis remains a significant public health concern in India, particularly in endemic regions such as Bihar, Uttar Pradesh, West Bengal, and Jharkhand. Recent epidemiological studies highlight persistent disease burden, spatial clustering, and evolving clinical patterns influenced by socioeconomic determinants, migration, and vector dynamics. Standard chemotherapeutics like amphotericin B and miltefosine, although effective, face challenges including toxicity, high cost, and emerging drug resistance. Concurrently, research into herbal medicines and phytoconstituents such as *Withania somnifera* alkaloids, *Azadirachta indica* extracts, and polyphenolic compounds demonstrates promising antileishmanial activity in preclinical models, suggesting potential as adjunct or alternative therapeutics. This review critically examines recent epidemiological evidence, challenges in disease control, and the therapeutic potential of phytochemicals within an integrated treatment paradigm. Emphasis is placed on mechanisms of action, safety profiles, and translational gaps from bench to clinical application. Advancing rigorous clinical trials and robust surveillance systems will be essential for integrating phytotherapeutics into national leishmaniasis control strategies and enhancing public health outcomes.

Keywords: Leishmaniasis epidemiology, India, Phytoconstituents, Herbal therapeutics

AYURVEDA/2026/003

NETWORK PHARMACOLOGY-BASED INVESTIGATION OF *PIPER LONGUM* IN THE MANAGEMENT OF DIABETES MELLITUS

Vinayak Pattar, Vishnu A. Kangralkar*

Department of Pharmacology, Maratha Mandal's College of Pharmacy, Belgaum, Karnataka

Corresponding author: vishnukangralkar@gmail.com

Abstract

Diabetes mellitus is a chronic metabolic disorder characterized by persistent hyperglycemia resulting from impaired insulin secretion, insulin resistance or both and its long-term management remains challenging due to adverse effects and limited efficacy of conventional therapies. *Piper longum* (Long pepper) a well-known medicinal plant in Ayurveda, exhibits antidiabetic, antioxidant and anti- inflammatory properties; however, its molecular mechanisms in diabetes management are not fully elucidated. The present study employed a network pharmacology approach to explore the multi-target mechanisms of *Piper longum*. Phytochemical constituents were identified from literature and databases, and their potential targets were predicted using SwissTargetPrediction. while diabetes-related targets were retrieved from GeneCards. Overlapping targets were used to construct compound–target and protein–protein interaction networks in Cytoscape, followed by Gene Ontology and KEGG pathway enrichment analyses. The results revealed that key phytoconstituents such as piperine, piperlongumine and piperlonguminine interact with multiple proteins associated with glucose metabolism, insulin signaling, oxidative stress and inflammation. Significant pathways identified included PI3K–Akt, MAPK, insulin resistance and AGE–RAGE signaling pathways. Overall, the findings suggest that *Piper longum* exerts antidiabetic effects through a multi-component, multi-target and multi-pathway mechanism, providing a scientific basis for further experimental validation in diabetes management.

Keywords: *Piper longum*, Diabetes mellitus, Network pharmacology, Insulin resistance, PI3K/Akt pathway, Phytoconstituents.

AYURVEDA/2026/004

NETWORK PHARMACOLOGY-BASED INVESTIGATION OF *HIBISCUS HISPIDISSIMUS* IN THE MANAGEMENT OF DIABETES MELLITUS

Kunal Solankure*, Dr. Vishnu A. Kangralkar

Department of Pharmacology, Maratha Mandal's College of Pharmacy, Belgaum, Karnataka

Corresponding author: solankurekunal@gmail.com

Abstract

Diabetes is a metabolic disorder of carbohydrate, fat, and protein affecting a large portion of the population in the world. Diabetes mellitus is not a single disorder, but it is a group of metabolic disorders characterised by chronic hyperglycemia, resulting from defects in insulin secretion, insulin action, or both, and its increasing global prevalence necessitates the exploration of safer and more effective therapeutic strategies. Medicinal plants have long been used in traditional systems of medicine for the management of metabolic disorders due to their diverse bioactive constituents. *Hibiscus hispidissimus* is one such medicinal plant reported to possess various pharmacological properties; however, the molecular mechanisms underlying its potential antidiabetic activity remain poorly understood. Therefore, the present study aimed to investigate the therapeutic potential and underlying mechanisms of *Hibiscus hispidissimus* in the management of diabetes mellitus using a network pharmacology approach. Initially, phytochemical constituents reported in *Hibiscus hispidissimus* were collected from published literature and phytochemical databases and their drug-likeness properties were evaluated using Molsoft. Potential protein targets of the selected phytocompounds were predicted using bioinformatics tools, while diabetes-related targets were obtained from GeneCard databases. The overlapping targets between phytochemicals and diabetes-associated genes were identified to determine potential therapeutic targets. Subsequently, a compound–target disease interaction network was constructed to illustrate the multi-component and multi-target characteristics of the plant. Protein–protein interaction (PPI) network analysis was performed to identify key hub genes, followed by Gene Ontology (GO) and Genomes (KEGG) pathway enrichment analyses to elucidate the biological processes and signaling pathways involved. The results revealed that several bioactive compounds of *Hibiscus hispidissimus* potentially regulate multiple diabetes- related targets and pathways, suggesting that the plant may exert antidiabetic effects through a multi-target and multi-pathway mechanism, thereby supporting its potential as a promising natural therapeutic candidate for diabetes management.

Keywords: Diabetes, *Hibiscus hispidissimus,* Protein–protein interaction (PPI), Gene Ontology (GO), Genomes (KEGG)

AYURVEDA/2026/005

THE ROLE OF AYURVEDA IN GLOBAL HEALTH SYSTEMS: ACCEPTANCE, REGULATION, AND OPPORTUNITIES

Akhilesh Patel[1*], Gajender Singh Jakhar[2]

SGT College of Pharmacy, SGT University

Corresponding author: akhileshpatel0112@gmail.com

Abstract

Ayurveda, one of the oldest systems of healthcare, has garnered significant global recognition for its comprehensive approach to health upliftment, disease prevention, and chronic condition care. Grounded in the principles of equilibrium among the three doshas, vata, Pitta, and Kapha. Ayurveda disease management using herbal remedies, dietary alterations, lifestyle changes, and detoxifying methods. In recent years, the rise in complementary and integrative medicine has applaud the broader acceptance of Ayurvedic medicines in several regions of the globe. International organisations, notably the World Health Organization, have acknowledged the potential contribution in enhancing healthcare systems and advancing universal health coverages. Notwithstanding its growing popularity, the incorporation of Ayurveda into international health systems encounters numerous challenges in terms of policy and scientific obstacles. Divergences in regulatory frameworks among nations, apprehensions about quality control, safety, and standardisation of herbal products, along with the scarcity of extensive randomised clinical trials, continue to pose substantial obstacles to wider acceptance. Nonetheless, Countries have implemented law to control and integrate traditional approaches into national healthcare frameworks. India has taken a major role in advancing Ayurveda worldwide through research projects, educational programs, and international collaborations. Future opportunities like fortification of evidence-based research, the establishment of standardised formulations, the augmentation of pharmacovigilance, and the promotion of multidisciplinary collaboration between conventional and contemporary healthcare systems. The integration of Ayurveda with modern system may enhance comprehensive, preventive, and patient-centered healthcare paradigms. Thus, Ayurveda possesses considerable potential to enhance modern therapy and sustainable global health systems.

Keywords: Ayurveda, Global Health, healthcare, herbal products, patient- centered, modern therapy

BRAMHAMUHURTA: NATURE ALLIGNED AYURVEDIC STRATEGY FOR OPTIMIZING CIRCADIAN HEALTH

Divya Sonali*

MS, ITRA, Jamnagar

Corresponding author: divya28sonali@gmail.com

Abstract

Brahmamuhurta, traditionally described as the "time of Brahma" (approximately 1.5 hours before sunrise), is considered in Ayurveda as the most auspicious period for acquiring knowledge, promoting longevity, and maintaining optimal health. This review explores the physiological and psychological benefits of waking during Brahmamuhurta, supported by modern scientific perspectives, particularly in relation to circadian rhythm regulation. Ayurveda emphasizes various principles for a healthy lifestyle, including Dinacharya, Ratricharya, Ritucharya, Sadvritta, and Rasayana, among which Brahmamuhurta Jagarana holds significant importance. In the context of modern sedentary lifestyles and disturbed biological rhythms, this practice emerges as an effective preventive approach. This study is based on classical Ayurvedic texts, research articles, journals, books, and other scholarly sources. It highlights that waking during Brahmamuhurta helps maintain equilibrium of Dosha, Dhatu, Mala, and Agni, thereby supporting systemic balance. Additionally, it exerts a positive influence on major physiological systems, including genetic, endocrine, circulatory, respiratory, excretory, reproductive, and nervous systems. By integrating classical Ayurvedic wisdom with modern chronobiology, this review underscores the relevance of Brahmamuhurta as a simple, non-pharmacological intervention for enhancing overall well-being and preventing lifestyle disorders in the modern era.

Keywords: Ratricharya, Ritucharya, Sadvritta, Rasayana, Brahmamuhurta

AYURVEDA/2026/007

URSOLIC ACID IN GLUCOCORTICOID-INDUCED SARCOPENIA: MOLECULAR MECHANISMS AND THERAPEUTIC POTENTIAL

Mohd. Zubair Arshad[1]*, Anshuman Prajapati[2]

[1]Department of Pharmacology, Advanced Institute of Biotech and Paramedical Sciences, Kanpur, UP, India

[2]Department of Pharmacology, School of Pharmaceutical Sciences, C.S.J.M. University, Kanpur, UP, India.

Corresponding author: zubairm49@yahoo.co.in

Abstract

Sarcopenia, a progressive disorder affecting skeletal muscles, is marked by reduced muscle mass, strength, and physical performance. While aging is the primary cause, chronic glucocorticoid therapy significantly contributes to secondary sarcopenia. Muscle atrophy induced by glucocorticoids occurs through activation of catabolic pathways and suppression of anabolic processes. Glucocorticoids inhibit insulin-like growth factor-1 (IGF-1)/Akt signaling, suppress mammalian target of rapamycin (mTOR), activate forkhead box O (FOXO) transcription factors, upregulate E3 ubiquitin ligases atrogin-1 and MuRF1, enhance ubiquitin–proteasome degradation, induce myostatin expression, stimulate NF-κB–mediated inflammatory signaling, and promote oxidative stress and mitochondrial dysfunction. These changes shift the anabolic–catabolic balance toward protein degradation and functional decline. Ursolic acid (UA), a pentacyclic triterpenoid found in apple peels, Ocimum sanctum, and rosemary, has emerged as a promising compound capable of modulating these dysregulated pathways. UA activates Akt/mTOR signaling, inhibits FOXO-mediated proteolysis, suppresses atrogin-1 and MuRF1 expression, attenuates NF-κB activation, reduces reactive oxygen species production, enhances mitochondrial biogenesis via PGC-1α, and downregulates myostatin signaling. Preclinical models show preservation of muscle mass and strength following UA administration. Despite strong mechanistic evidence, development is limited by poor solubility, low bioavailability, and a lack of clinical trials. This review examines the mechanisms of glucocorticoid-induced sarcopenia and evaluates ursolic acid as a pharmacological modulator.

Keywords: Sarcopenia, Glucocorticoid, Muscle atrophy, Ursolic acid, Preclinical models, Pharmacological modulator.

SOLVENT-FREE MICROWAVE HYDRODIFFUSION EXTRACTION OF ANTIOXIDANT PHYTOCHEMICALS FROM *MORINGA OLEIFERA* LEAVES: INTEGRATED PHYTOCHEMICAL PROFILING, MICROSTRUCTURAL VALIDATION, AND SUSTAINABILITY ASSESSMENT

Roshni Tandey*

Department of B.Pharma (Ayurveda), School of Pharmaceutical Sciences

Delhi Pharmaceutical Sciences and Research University, New Delhi-110017

Corresponding author: roshni.tandey73@gmail.com, roshni.tandey73@dpsru.edu.in

Abstract

Green extraction technologies are increasingly significant in phytochemical research due to the high energy consumption, extended processing time, and degradation of thermolabile compounds associated with conventional solvent-based techniques. This study assesses a solvent-free microwave hydrodiffusion and gravity (MHG) extraction method for recovering antioxidant phytochemicals from Moringa oleifera leaves, in comparison to the traditional Soxhlet extraction. Fresh leaves with high moisture content were subjected to staged microwave irradiation, beginning with a high-power surge followed by low-power exposure, to facilitate cellular rupture and analyte migration. The optimized MHG protocol achieved a yield of 6.06 ± 0.7% extract within 45 minutes, whereas Soxhlet extraction required 3 hours to produce a 5.04 ± 0.4% yield. The MHG extract exhibited higher total phenolic content (95.14 mg GAE g^{-1}) and flavonoid content (154.12 mg QE g^{-1}) compared to the Soxhlet extract (52.14 mg GAE g^{-1} and 78.15 mg QE g^{-1}, respectively). The DPPH assay demonstrated enhanced radical scavenging activity (78.23%), confirming improved antioxidant recovery. Stability analysis indicated slower phenolic depletion in MHG extracts during storage. TLC bioautography identified antioxidant-active zones, while LC-MS confirmed the presence of major phenolic biomarkers, including chlorogenic acid, gallic acid, quercetin, and p-coumaric acid. Fluorescence imaging showed phenolic depletion from leaf tissues following microwave treatment. SEM analysis revealed significant cellular disruption in MHG-treated biomass compared to Soxhlet residues. The solvent-free protocol demonstrated a lower carbon footprint due to reduced extraction time and the elimination of organic solvents. This study establishes MHG as a sustainable, energy-efficient strategy for recovering antioxidant phytochemicals from medicinal plants.

Keywords: Moringa oleifera, Microwave hydrodiffusion and gravity (MHG), Phenolic, Flavonoids, Antioxidant activity

AYURVEDA/2026/009

GARBHADHANA SAMSKARA: THE SACRED CONCEPTION RITE

Kajal[1*], Rajani Kagga[2]

[1]First-year PG scholar, Department of Prasuti Tantra and Stree Roga, Sri Sri College of Ayurvedic Science and Research, Bangalore

[2]Associate Professor, Department of Prasuti Tantra and Stree Roga, Sri Sri College of Ayurvedic Science and Research, Bangalore

Corresponding author: kajaltakali@gmail.com

Abstract

Introduction: *Garbhadana Samskara* takes first place among the *Samskaras* of Vedic texts. According to the WHO, 300,000/yr women and 2.5 million babies die due to complications. Following the regimen mentioned under this *Samskara* helps the mother to conceive in an optimum state of health and ultimately attain *Shreyasi Praja*.

Methodology: Concepts of *Garbhadana Samskara* are divided into 3 phases, *Purva Karma* - *Rajaswala Paricharya* (Regimen during Menstrual Cycle), *Panchakarma, Rasayana-Vajikarana* is *Shareera Shuddhi, Putreyashti Yagya* for *Manasika Shuddhi,* and *Pathya Ahara* for both couples, *Pradhana Karma* – act of coitus, and *Paschat Karma*- Regimen after the coitus.

Result: It helps to inculcate desired qualities for *Suprajajanana*, physical, mental and spiritual health to offspring.

Discussion & Conclusion: Reasons for *Vikruta Garbha,* like *Ahara-Viharadosha*, *Beejadosha* and *Ashayadosha*, can be avoided with better maternal and foetal outcomes. In turn, the fetus can be well served for future generations.

Keywords: *Ayurveda*, *Garbhadana Samskara*, *Suprajajanana, Shreyasi Praja*

AYURVEDA/2026/010

TOWARDS SMART AYURVEDIC OBESITY MANAGEMENT: A NARRATIVE REVIEW OF DIGITAL AND AI-ENABLED INTERVENTIONS

Jaskaran Singh Pahwa*, Tridib Chaira

Department of Pharmacology, SGT College of Pharmacy,

SGT University, Gurugram, Haryana, India- 122505

Contact No.: 9654715645

Corresponding author: jaskaran0707@gmail.com

Abstract

Obesity is a growing global health concern, with increasing prevalence in India driven by lifestyle transitions and urbanization. In Ayurveda, obesity (Sthaulya) is understood as a disorder of doshic imbalance and impaired metabolism, requiring individualized and holistic management. The rapid expansion of digital health technologies presents an opportunity to enhance the reach and effectiveness of Ayurvedic interventions. This narrative review evaluates the role of telemedicine, mobile health (mHealth), and artificial intelligence (AI) in Ayurvedic obesity management. A structured search across digital platforms identified 49 relevant applications from an initial pool of 2700. These were categorized into AI-based, telemedicine-enabled, and lifestyle-focused apps. Most applications emphasized yoga, dietary guidance, and traditional remedies, while telemedicine platforms supported remote consultations. AI-based tools, though limited, demonstrated potential for personalized, dosha-specific recommendations. Overall, digital Ayurveda platforms showed high accessibility and user engagement, with most apps being free and widely used. However, significant limitations include a lack of clinical validation, inconsistent quality, and minimal integration of advanced technologies. Digital Ayurveda holds promise as a scalable and accessible approach to obesity management. Strengthening evidence-based design, technological integration, and regulatory validation is essential to enhance its clinical relevance and long-term impact.

Keywords: Ayurveda, Obesity, Digital health, Telemedicine, mHealth, Artificial intelligence, Personalized care, Lifestyle modification, Integrative medicine, Health apps

AYURVEDIC MANAGEMENT OF *EKAKUSHTHA* (PSORIASIS): A CASE REPORT

Watuthanthrige Thushari Niwanthika Alwis[1]*, Prof. Mandip Ravikant Goyal[2]

[1]Department of Kayachikitsa, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat, India. thusharialwis93@gmail.com

[2]Department of Kayachikitsa, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat, India

Corresponding author: thusharialwis93@gmail.com

Abstract

Psoriasis is a chronic, immune-mediated skin disease characterized by erythematous, scaly plaques with recurrent exacerbations, significantly impairing quality of life. A 61-year-old female presented with multiple, well-demarcated erythematous scaly plaques distributed over the body, associated with itching and burning sensation for seven months. Based on clinical presentation, the condition was diagnosed as *Ekakushtha*. The patient was managed with *Deepana-Pachana* using *Chitrakadi Vati* for 3 days, followed by *Snehapana* with *Panchtikta Ghrita* for 7 days. External *Snehana* and *Swedana* were administered for 3 days prior to *Virechana* using *Trivrit Avaleha* (80 g), followed by *Samsarjana Karma* for 4 days. *Siravedhana* was carried out on the 5th day of *Samsarjana Karma*. Subsequently, internal medications including *Manjishthadi Kwatha* (40 ml) twice a day before a meal, *Kaishor guggulu* (250 mg) twice a day after a meal with lukewarm water, *Gandhaka Rasayana* (250 mg) and *Rakta Pachak Yoga* (250mg) thrice a day after meals with lukewarm water. *Maha-marichyadi Taila* with *Tankana Bhasma* for local application. The treatment continued for 60 days with prescribed Pathya, resulting in marked improvement, with the PASI score reducing from 26 to 6. No recurrence was noted during a 3month posttreatment period, indicating the potential efficacy of Ayurvedic interventions in the management of *Ekakushtha*.

Keywords: Ayurveda, Eka Kushtha, Panchakarma, Psoriasis

AYURVEDA/2026/012

AYURVEDA FOR HOLISTIC HEALTH: VISION VIKSIT BHARAT 2047

Ankita Sharma*

Department of Swasthavritta, GNAMC, Gopalpur

Corresponding author: ankitasharma190694@gmail.com

Abstract

Ayurveda, the ancient science of life, emphasises a holistic approach to health by maintaining balance between body, mind, and soul. This poster highlights the relevance of Ayurvedic principles in achieving the vision of Viksit Bharat 2047 through preventive and promotive healthcare. Central to Ayurveda is the concept of Tridosha-Vata, Pitta, and Kapha, whose equilibrium ensures health, while imbalance leads to disease. The role of Dinacharya (daily regimen), Ritucharya (seasonal regimen), and practices like Nasya and Abhyanga are emphasised for maintaining physical and mental well-being. The integration of diet (Ahara), yoga, meditation, and a disciplined lifestyle supports long-term wellness and strengthens immunity (Rasayana). The poster also addresses common lifestyle-related issues, such as hair problems from an Ayurvedic perspective, and provides natural, sustainable solutions. Furthermore, it underlines Ayurveda's contribution to eco-friendly living, herbal farming, and reducing healthcare costs. With increasing global recognition, Ayurveda has the potential to integrate with modern science, offering safe, affordable, and sustainable healthcare solutions. Thus, Ayurveda stands as a key pillar in building a healthier, self-reliant nation aligned with the vision of Viksit Bharat 2047.

Keywords: Ayurveda, Dinacharya (daily regimen), Ritucharya (seasonal regimen), immunity (Rasayana)

CURCUMIN-LOADED MPEG-LINOLEIC ACID MICELLES FOR SYNERGISTIC BREAST CANCER THERAPY

S. Siddiqui, Butool Fatima, Mohini Chaurasia*

Department of Pharmaceutics, Era College of Pharmacy, Era University, Lucknow, Uttar Pradesh

Corresponding author: mohinichaurasia@gmail.com

Abstract

Although curcumin (Cur) has long been recognized for its strong anticancer potential, its translation from laboratory research to clinical application has been hindered by several pharmaceutical limitations. To address these challenges, curcumin was encapsulated within methoxy polyethylene glycol–linoleic acid conjugated polymeric micelles (PMs), designed not only to overcome its conventional drawbacks but also to enhance its synergistic therapeutic effect against MCF-7 breast cancer cells. The optimized Cur-loaded PMs exhibited a particle size of 186.53 ± 12.10 nm, a polydispersity index of 0.143 ± 0.031, and a zeta potential of –30.1 ± 3.2 mV. The developed formulation (MPEG-CLA-Cur PMs) demonstrated excellent hemocompatibility and significantly improved cytotoxicity, with an IC_{50} of 55.80 ± 4.63 µg/mL, compared with pure curcumin suspension (IC_{50} 75.05 ± 5.75 µg/mL). As predicted, cell-cycle and apoptosis analyses confirmed a pronounced synergistic effect of MPEG-CLA-Cur PMs, showing a higher proportion of cells arrested in the G1 phase and increased apoptotic activity relative to pure curcumin and control groups. Pharmacokinetic evaluation further revealed that the micellar system enhanced the mean residence time (MRT) and half-life (T½) of curcumin, indicating prolonged systemic retention. Overall, MPEG-CLA-Cur polymeric micelles present a promising chemotherapeutic alternative for breast cancer management, offering improved efficacy, enhanced pharmacokinetics, and strong commercial development potential.

Keywords: Curcumin (Cur), anticancer, polymeric micelles, pharmacokinetic, polymeric micelles (PMs)

ADVANCED IN SITU GEL SYSTEMS FOR VAGINAL INFECTION TREATMENT: AN INNOVATIVE METHOD FOR IMPROVED DRUG ADMINISTRATION

Riya Chaudhary[1*], Dr Anita Singh[2]

Department of Pharmaceutical Technology, Meerut Institute of Engineering and Technology, Meerut 250005, Uttar Pradesh, India

Corresponding author: *Riya.chaudhary.ceutics.2024@miet.ac.in*

Abstract

Vaginal infections, especially trichomoniasis, candidiasis, and bacterial vaginosis, are still common in women and are often linked to inadequate compliance by patients and significant recurrence rates. Reduced therapeutic efficacy results from the disadvantages of conventional vaginal dose forms, such as creams, pills, and pessaries, such as leakage, short residence intervals, and uneven drug release. A viable substitute for efficient vaginal medication delivery is sophisticated in situ gel devices. Usually delivered as low-viscosity liquids, these systems transition from sol to gel in response to physiological inputs, including pH, temperature, and the ionic composition of the vaginal environment. This change enables continuous and regulated medication release at the infection site, improves mucoadhesion, and extends retention. Additionally, in situ gels can reduce systemic side effects while increasing medication stability and bioavailability. Therapeutic results are further improved by the addition of bioactive substances like antifungals, antibacterials, or natural agents like flavonoids. The use of polymers and nanocarriers to improve gel characteristics and drug penetration is another recent development. All things considered, sophisticated in situ gel systems are a very effective and convenient method of addressing vaginal infections.

Keywords: in situ gel systems, vaginal infections, improved drug delivery, nanotechnology

AYURVEDA/2026/015

THERAPEUTIC EFFICACY OF A TRIPLE-PHYTOCHEMICAL NANO DELIVERY SYSTEM OF NATURAL PHYTOCONSTITUENTS AGAINST COLON CANCER

Dhanalekshmi Unnikrishnan Meenakshi*, Gurpreet Kaur Narde, Shah Alam Khan, Alka Ahuja

College of Pharmacy, National University of Science and Technology, Muscat PC 130, Sultanate of Oman

Corresponding author: dhanalekshmi@nu.edu.om

Abstract

Background/Objectives: Poor oral bioavailability and limited intestinal permeation restrict the clinical translation of phytochemicals for colorectal cancer (CRC) therapy. The present study explored the development of a nanoparticle-based combinatorial formulation of resveratrol (Resv), acetyl-11-keto-β-boswellic acid (AKBA), and quercetin (Quer), to improve intestinal permeation and anti-cancer efficacy. **Methods**: A triple phytochemical nano formulation (3X) was developed and evaluated for morphology, particle size, zeta potential, encapsulation efficiency, and in vitro pharmaceutical characteristics. Safety was evaluated using in vitro cytotoxicity assays, while anticancer efficacy and apoptotic potential were evaluated in Caco-2 CRC cell lines. Gene expression analysis was performed to examine the modulation of inflammation and cancer-related markers. **Results:** The 3X formulation exhibited a particle size of 198.5 nm with a polydispersity index of 0.492 and a zeta potential of -32.7, indicating good nanoscale stability. The encapsulation efficiencies were 90% for AKBA, 80% for Resv, and 75% for Quer. In vitro permeation studies demonstrated a super case II transport mechanism. The formulation showed minimal hemolysis (3%), and acceptable in vitro safety. The IC50 of the formulation was found to be 365µg in the cytotoxicity assay. Treatment with the 3X nanoformulation significantly modulated anti-inflammatory and cancer-related gene expression in Caco2 cells, evidenced by downregulation of TGFβ (Transforming Growth Factor-beta) and COX-2 (cyclooxygenase-2), and upregulation of TNFα and nitric oxide and reduced IL-1β expression compared with control cells. **Conclusion:** The findings demonstrate that the developed 3X nano formulation exhibits favourable permeation characteristics and exerts anticancer activity against CRC. The formulation represents a promising phytochemical-based combination strategy for CRC, warranting further in vivo studies to validate its efficacy and elucidate the underlying molecular mechanisms.

Keywords: AKBA, colorectal cancer, combination, nano formulation, phytoconstituents, quercetin, resveratrol.

AYURVEDA/2026/016

RATIONAL DESIGN, SYNTHESIS, AND MOLECULAR DOCKING ANALYSIS OF BENZIMIDAZOLE-4-THIAZOLIDINONE HYBRIDS AS NOVEL PPAR-Γ MODULATORS FOR ANTIDIABETIC THERAPY

Mohd Shafeeque[*] and M. Shahar Yar[*]

[*]Department of Pharmaceutical Chemistry, School of Pharmaceutical Education and Research (SPER), Jamia Hamdard, India

Corresponding author: mohdshafeeque1999@gmail.com, msyar@jamiahamdard.ac.in

Abstract

Diabetes mellitus is a chronic metabolic disorder characterized by impaired glucose regulation and insulin resistance, leading to severe long-term complications such as cardiovascular diseases, neuropathy, and nephropathy. Despite the availability of several therapeutic agents, limitations including adverse effects, reduced efficacy, and poor patient compliance necessitate the development of safer and more effective antidiabetic drugs. Targeting peroxisome proliferator-activated receptor gamma (PPAR-γ), a key regulator of glucose homeostasis and insulin sensitivity, remains a promising strategy in modern drug discovery. In this study, a series of novel heterocyclic derivatives incorporating benzimidazole and 4-thiazolidinone scaffolds were rationally designed and evaluated for their antidiabetic potential. Molecular docking studies were performed using the Glide XP module against the PPAR-γ receptor (PDB ID: 2PRG) to predict binding interactions and affinity. The results revealed strong binding affinity of the designed compounds within the active site of the receptor. Among them, MSN15 (-8.3), MSN12 (-8.1), and DCF7 (-7.8) demonstrated the most promising docking scores, comparable to standard drugs such as pioglitazone (-11.2) and rosiglitazone (-9.4). These compounds exhibited stable interactions with key residues including TYR473, HIE323, and GLN286. These findings suggest that the identified lead molecules may act as potential PPAR-γ modulators and promising candidates for further development as effective antidiabetic agents.

Keywords: Benzimidazole, 4-Thiazolidinone, PPAR-γ, Diabetes mellitus, Metabolic disorder

AYURVEDA/2026/017

UNDERSTANDING THE IMPACT OF VAMANA KARMA ON LEPTIN LEVELS IN OBESITY: BRIDGING AYURVEDA AND MODERN SCIENCE

Ashwini G. Deshmukh[1*], Anup B. Thakar

Department of Panchakarma, ITRA, Jamnagar, Gujarat, India

Corresponding author: ashwinigdeshmukh1998@gmail.com

Abstract

Introduction: Obesity is a major metabolic disorder associated with hormonal imbalance, particularly involving leptin, which regulates appetite and energy homeostasis. Leptin resistance is commonly observed in obese individuals. In Ayurveda, *Sthoulya* is a *Kapha*-dominant disorder involving *Meda Dhatu* and impaired Agni. This study aims to explore the role of *Vamana Karma* in the management of *Sthoulya* with special reference to leptin regulation.

Methods: A narrative review was conducted using classical Ayurvedic texts, including *Charaka Samhita, Sushruta Samhita*, and *Ashtanga Hridaya,* along with electronic databases such as PubMed, Google Scholar, Scopus, and AYUSH Research Portal. Literature published between 2000 and 2025 was reviewed using keywords including obesity, *Sthoulya, Vamana Karma, Panchakarma*, leptin, and leptin resistance. Relevant review articles and experimental studies were included.

Results: The analysis suggests that *Vamana Karma* helps eliminate vitiated *Kapha* and *Meda*, improves Agni, and enhances metabolic function. These effects may contribute to improved leptin sensitivity and better hormonal regulation in obesity.

Discussion: *Vamana Karma* appears to be a promising integrative approach in obesity management. Its potential role in modulating leptin dynamics warrants further clinical and experimental validation to establish its efficacy in modern metabolic disorders.

Keywords: Obesity, metabolic disorder, *Charaka Samhita, Sushruta Samhita*, *Ashtanga Hridaya*

SYNTHESIS AND EVALUATION OF HERBAL DRUG-LOADED METAL OXIDE NANOPARTICLES DECORATED MESOPOROUS SILICA AS A TISSUE ADHESIVE

Pavale Durgesh Atmaram*

SMBT College of Pharmacy, Nashik

Corresponding author: pavaledurgesh14@gmail.com

Abstract

Background: Wound healing is a complex process involving the regeneration and reconstruction of damaged tissues. Conventional wound closure methods, such as sutures and cyanoacrylate adhesives, are widely used but may cause toxicity, inflammation, delayed healing, and scar formation. Mesoporous silica is a promising biomaterial because of its large surface area, porous structure, and drug loading ability. Metal oxide nanoparticles possess antibacterial activity and may enhance tissue adhesion. Herbal medicines have been traditionally used for wound care because of their natural antimicrobial and healing properties. Therefore, combining herbal drugs with metal oxide nanoparticles and mesoporous silica may provide an innovative tissue adhesive for improved wound healing.

Methodology: Mesoporous silica nanoparticles will be synthesized and functionalized with amine groups to enhance adhesive properties. Metal oxide nanoparticles will be decorated on the surface, followed by the loading of selected herbal drugs. The formulation will be characterized using FTIR, electron microscopy, particle size analysis, X-ray diffraction, and differential scanning calorimetry. Entrapment efficiency, drug loading, and in-vitro drug release will be evaluated. Bioadhesive strength will be determined using shear lap adhesion tests. Sterility, stability, and animal studies will also be conducted.

Result: The formulation is expected to show strong tissue adhesion, controlled drug release, and antibacterial activity.

Conclusion: The developed system may serve as a promising alternative to sutures and cyanoacrylate adhesives for rapid wound healing.

Keywords: Mesoporous silica, Bioadhesive, Metal oxide nanoparticles, Herbal drugs, Wound healing.

AYURVEDIC MANAGEMENT OF *EKAKUSHTHA* (PSORIASIS): A CASE REPORT

Watuthanthrige Thushari Niwanthika Alwis*, Prof. Mandip Ravikant Goyal [2]

Department of Kayachikitsa, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat, India

Corresponding author: thusharialwis93@gmail.com

Abstract

Psoriasis is a chronic, immune-mediated skin disease characterized by erythematous, scaly plaques with recurrent exacerbations, significantly impairing quality of life. A 61-year-old female presented with multiple, well-demarcated erythematous scaly plaques distributed over the body, associated with itching and burning sensation for seven months. Based on the clinical presentation, the condition was diagnosed as *Ekakushtha*. The patient was managed with *Deepana-Pachana* using *Chitrakadi Vati* for 3 days, followed by *Snehapana* with *Panchtikta Ghrita* for 7 days. External *Snehana* and *Swedana* were administered for 3 days prior to *Virechana* using *Trivrit Avaleha* (80 g), followed by *Samsarjana Karma* for 4 days. *Siravedhana* was carried out on the 5th day of *Samsarjana Karma*. Subsequently, internal medications including *Manjishthadi Kwatha* (40 ml) twice a day before a meal, *Kaishor guggulu* (250 mg) twice a day after a meal with lukewarm water, *Gandhaka Rasayana* (250 mg) and *Rakta Pachak Yoga* (250mg) thrice a day after meals with lukewarm water. *Maha-marichyadi Taila* with *Tankana Bhasma* for local application. The treatment continued for 60 days with prescribed Pathya, resulting in marked improvement, with the PASI score reducing from 26 to 6. No recurrence was noted during a 3month posttreatment period, indicating the potential efficacy of Ayurvedic interventions in the management of *Ekakushtha*.

Keywords: Ayurveda, Eka Kushtha, Panchakarma, Psoriasis.

AYURVEDA/2026/020

NANO-SILICA BASED BIOHYBRID SYSTEMS FOR TRANSDERMAL DRUG DELIVERY

Pathan A. V.[*]

SMBT College Of Pharmacy, Nashik

Corresponding author: avprt1@gmail.com

Abstract

Introduction: Gout, caused by uric acid crystal deposition, is limited by current therapies due to adverse effects and systemic risks. Enzyme-based conversion of uric acid to soluble metabolites offers an alternative, but conventional delivery suffers from low stability and bioavailability. A nanostructured silica-based hybrid platform is proposed for localized, non-invasive delivery, potentially preserving enzyme activity, enhancing stability, and minimizing systemic exposure, offering a promising strategy for improved management of the condition.

Methodology: A silica-based hybrid platform was developed for enzyme immobilization. In one approach, a natural substrate was combined with colloidal silica to form a hybrid, which was then incubated with the enzyme solution. In another, a polymer–silica composite was prepared, and the enzyme was immobilized via controlled drying. These systems provide a protective environment that stabilizes the enzyme, preserves activity, and may enable controlled, localized delivery with reduced degradation for therapeutic applications.

Conclusion: A hybrid nanomaterial system is investigated for enzyme stabilization and delivery. Incorporation of porous silica is expected to enhance loading capacity and structural properties while maintaining enzyme functionality. This platform may enable localized, non-invasive administration, supporting potential development of advanced delivery strategies. This research will support the development of possible transdermal drug delivery.

Keywords: Gout, uric acid, enzyme, silica-based, nanomaterial

GC - MS PROFILING AND *IN SILICO* PHARMACOKINETIC EVALUATION OF BIOACTIVE COMPOUNDS FROM *MARSILEA QUADRIFOLIA* LINN.

Liza Kar, Dipayan Patra*, Partha Pratim Mahata

Department of Pharmacology, BCDA College of Pharmacy & Technology

Corresponding Author: baghapatra116@gmail.com

Abstract

The aquatic medicinal fern commonly referred to as water clover, *Marsilea quadrifolia* Linn. (family: Marsileaceae), has been traditionally recognized for its neuroprotective, anti-inflammatory, antidiabetic, and antioxidant activities. In modern drug discovery, in silico prediction of pharmacokinetic properties plays a vital role, as it allows early assessment of a compound's Absorption, Distribution, Metabolism, and Excretion (ADME) profile before experimental validation. Computational platforms such as SwissADME effectively evaluate parameters including drug-likeness, solubility, lipophilicity, and metabolic stability. These computational findings offer preliminary insights into the pharmacokinetic potential of phytoconstituents from *M. quadrifolia* and provide a theoretical foundation for subsequent pharmacological and toxicological investigations.

Keywords: Marsilea quadrifolia Linn., pharmacokinetics, SwissADME, in silico analysis, drug-likeness.

ROLE OF *SHARADIYA VIRECHANA* IN MITIGATING THE HEALTH IMPACTS OF CLIMATE CHANGE AND GLOBAL WARMING: AN *AYURVEDIC* PERSPECTIVE

Saurabh P. Bhagat*, Dr. Rahul S. Gandhi
Department of Panchakarma, ITRA, Jamnagar, Gujarat, India
Corresponding author: bhagatsaurabh2222@gmail.com

Abstract

Introduction: Climate change and global warming significantly affect human health by increasing heat exposure, environmental pollution, and seasonal irregularities. These changes aggravate *Pitta Dosha* and *Rakta Dushti*, leading to inflammatory and metabolic disorders. Ayurveda emphasizes *Ritucharya* (seasonal regimen) to maintain health, wherein *Sharadiya Virechana* is indicated during *Sharad Ritu* to eliminate aggravated *Pitta*.

Materials and Methods: This is a conceptual review based on classical Ayurvedic texts and modern literature. Ayurvedic principles of *Ritucharya*, *Pitta Dosha*, and *Virechana Karma* were analyzed along with current scientific data on climate change and its health impacts.

Result and Discussion: Rising temperatures and environmental stress mimic *Pitta* qualities such as heat (*Ushna*) and intensity (*Tikshna*), leading to its aggravation. *Sharadiya Virechana* helps eliminate vitiated *Pitta*, improves digestion (*Agni*), enhances immunity (*Bala*), and supports detoxification. It may reduce the risk of climate-related disorders, especially skin and metabolic conditions.

Conclusion: *Sharadiya Virechana* is an effective seasonal intervention for maintaining physiological balance in the context of climate change. Integrating such Ayurvedic practices into preventive healthcare may help reduce climate-induced health risks. Further clinical validation is needed.

Keywords: Climate Change, Global Warming, *Sharadiya Virechana*, *Pitta Dosha*, *Ayurveda*, *Ritucharya*, Preventive Healthcare

TRIPHALAADI BISCUIT AN INNOVATIVE FORMULA W.S.R CONSTIPATED BOWEL: A PILOT STUDY

Manjula*

Department of Samhita & Siddhanta, BLDEA'S AVS AMV, Vijayapura

Corresponding author: manjulahaiyalkar06@gmail.com

Abstract

Introduction: Prayojana of Ayurveda is to protect the health of the healthy and to cure disease in the diseased. Health, as well as diseases, is dependent on various factors. As Acharyas had described, Ahara, Nidra, and Brahmacharya are the three pillars of Ayurveda. A group of 10 subjects with GC normal, N/H/O any systemic disease, complaining of constipated stool, pain in abdomen, bloating, decreased appetite since 3months, were selected, who were habituated to take a biscuit early morning and even in the evening.

Aim & Objective: To evaluate the efficacy of triphalaadi biscuit as vata anulomana in malabadhata/hard stool.

Material & Method: Simple random, clinical study. Observation & results- all the symptoms were reduced after 7 days.

Discussion: Triphal biscuit is prepared by 500 grams of godhuma churna,250 grams of navanita saindhava lavana quantity sufficient, etc., ingredients. A combination of triphala with the biscuit is made, so that people can enjoy eating a biscuit, but without having any complications. Many people do not have a palatability towards the medicine because of its bitter taste. If the medicine is given in combination with a biscuit, it reduces the symptoms as it is a laxative, etc.

Observation & Results: All the symptoms were reduced after 7 days.

Conclusion: Triphaladi biscuit is very effective in constipation//hard stools.

Keywords: Triphaladi, biscuit, hard stool, Malabhadatta

AYURVEDA/2026/024

FORMULATION AND EVALUATION OF POLYHERBAL ANTI-PIGMENTATION CREAM

Deepa Cherian*

College of Pharmaceutical Sciences, Govt Medical College, Kottayam

Corresponding author: deepacherian74@gmail.com

Abstract

In recent years, there has been an increasing demand for herbal cosmetic formulations due to their better safety profile, biocompatibility and reduced adverse effects compared to synthetic products. Hyperpigmentation is a common dermatological condition characterized by excessive melanin production, leading to uneven skin tone and dark patches. The present study was undertaken to formulate and evaluate a polyherbal anti-pigmentation cream using selected medicinal plant extracts known for their skin-lightening, antioxidant and anti-inflammatory properties. The formulation was prepared using a suitable oil-in-water cream base incorporating herbal extracts with proven cosmetic benefits. The prepared cream was evaluated for various physicochemical and performance parameters, including organoleptic properties, pH, homogeneity, spreadability, washability, dilution test, dye test, phase separation and stability studies. The results indicated that the formulation exhibited good spreadability, smooth texture and uniform consistency. The pH was found to be within the acceptable range for topical application. No phase separation was observed during the study period, indicating good physical stability. Patch test studies revealed that the formulation did not produce any signs of irritation, redness or itching, confirming its safety for topical use. Stability studies conducted under different storage conditions showed no significant changes in colour, odour, or consistency. Based on the evaluation results, it can be concluded that the formulated polyherbal anti-Pigmentation cream is stable, safe and cosmetically acceptable, and may serve as a promising herbal alternative for the management of hyperpigmentation.

Keywords: Herbal cosmetic, Hyperpigmentation**,** skin-lightening, antioxidant, anti-inflammatory

DEVELOPMENT AND VALIDATION OF RP-HPLC METHOD FOR QUANTITATIVE ESTIMATION OF EUGENOL

Mandhati Harika*

Seven Hills College of Pharmacy

Corresponding author: harikamandhati@gmail.com

Abstract

The present study aims to develop and validate a simple, accurate, and reliable Reverse Phase High Performance Liquid Chromatography (RP-HPLC) method for the estimation of eugenol in bulk and plant extract samples, along with its characterization using High Resolution Mass Spectrometry (HRMS). Chromatographic separation was achieved using a C18 column with an isocratic mobile phase consisting of acetonitrile and 0.1% orthophosphoric acid (30:70 % v/v) at a flow rate of 1.0 mL/min, and detection at 280 nm. The retention time of eugenol was approximately 4.32 minutes. The method was validated as per ICH guidelines and showed excellent linearity over 25–200 µg/mL with a correlation coefficient of 0.9981. Precision studies indicated low %RSD values, confirming repeatability, while accuracy was within acceptable recovery limits. The method demonstrated good sensitivity with satisfactory LOD and LOQ values. System suitability parameters were within limits, and robustness studies confirmed the stability of the method under small variations. HRMS analysis further confirmed the molecular identity and purity of eugenol.

Keywords: Eugenol, RP-HPLC, Method Validation, HRMS, Linearity, Precision

ADVANCED CLAY NANOCOMPOSITES FOR BIOACTIVE DELIVERY SYSTEMS

Deepanshu Kharbanda*, Alok Sharma

Department of Pharmaceutical Technology, Meerut Institute of Engineering and Technology, Meerut 250005, Uttar Pradesh, India

Corresponding author: deepanshu.kharbanda.ceutics.2024@miet.ac.in

Abstract

The versatile class of materials known as bioactive-loaded clay nanocomposites has shown great promise for use in environmental, pharmaceutical, and biomedical applications. Usually made of naturally occurring or modified clay minerals like montmorillonite or kaolinite, these nanocomposites act as carriers for bioactive substances like medications, enzymes, antimicrobials, and plant extracts. These bioactive molecules can be efficiently intercalated or adsorbed by the clay's layered structure and large surface area, which improves their stability, controlled release, and bioavailability. These systems are especially useful for drug delivery because they offer targeted and sustained release, reducing side effects and increasing therapeutic efficacy. They are also appealing for large-scale applications due to their intrinsic biocompatibility, low toxicity, and affordability. Bioactive-loaded clay nanocomposites show improved mechanical properties and increased antibacterial activity in wound healing and antimicrobial coatings. Additionally, these materials' physicochemical characteristics can be precisely controlled by functionalization and surface modification, which enables interaction with biological systems and release kinetics. Even with encouraging developments, problems like aggregation, long-term safety, and regulatory issues still exist. All things considered, bioactive-loaded clay nanocomposites offer a promising platform for creative and long-lasting solutions in the medical and related fields.

Keywords: Nanocomposites, bioactives, drug delivery, nanotechnology

SAMANYA–VISHESHA SIDDHANTA: BRIDGING CLASSICAL AYURVEDA AND MODERN SCIENCE

Dr. Nija Chacko*

Govt Ayurveda College, Thiruvananthapuram

Corresponding author: nija16chacko@gmail.com

Abstract

Samanya–Vishesha Siddhanta, a fundamental principle in the Charaka Samhita, is key to understanding core concepts of Ayurveda. *Samanya* denotes similarity that promotes increase, while *Vishesha* represents dissimilarity that brings about reduction. Accordingly, deficiencies in the body are corrected using similar substances, and excesses are reduced through dissimilar ones, reflecting a balance between holism and reductionism, as well as subjectivity and objectivity. As a component of Shadpadarthas, Samanya–Vishesha Siddhanta serves as a guiding tool in treatment. The actions of *dravya* (substance), *guna* (qualities), and *karma* (functions) on the body are governed by this principle. Homeostasis is maintained by reducing excess and replenishing deficiencies, and *Tridosha prakopa* can be managed through Vishesha-based interventions. Its applicability extends to frameworks like Shadkriyakala, Dinacharya, Ritucharya, Dvividhopakrama, and Shadvidhopakrama. Modern parallels include glucose administration in hypoglycemia, fluid therapy in dehydration, and the use of probiotics. Samanya–Vishesha serves as a scientific analytical tool. It is reflected in the Paramanu doctrine and aligns with principles of systems biology. Thus, Samanya–Vishesha Siddhanta bridges Ayurveda with modern science, enhancing its relevance and application in contemporary healthcare

Keywords: Samanya, vishesha, system biology

EXPLORING THE ANTIDEPRESSANT EFFECTS OF PHYLLANTHUS MADERASPATENSIS LINN USING BEHAVIORAL MODELS

Neha Bhanudas Deokate*

Delonix Society Baramati College of Pharmacy

Corresponding author: nehadeokate2@gmail.com

Abstract

Phyllanthus maderaspatensis Linn. (Family: Phyllanthaceae) is a perennial medicinal herb widely used in traditional medicine for its hepatoprotective, anti-inflammatory, and neuroprotective properties. While several species of the Phyllanthus genus have shown antidepressant activity, the potential of P. maderaspatensis remains largely unexplored. The proposed study aims to evaluate the antidepressant-like activity of P. maderaspatensis Linn using an experimental mouse model. Adult Wistar mice will be divided into control, standard drug (e.g., Fluoxetine), and plant extract-treated groups. Behavioral assessments will include the Tail Suspension Test (TST) and Open Field Test (OFT) to measure depressive-like behavior and locomotor activity, respectively. Preliminary safety and toxicity of the extract will also be evaluated. This study will provide insights into the neuropharmacological potential of P. maderaspatensis, supporting its traditional use and forming the basis for future mechanistic and clinical research.

Keywords: Phyllanthus maderaspatensis, antidepressant activity, Tail Suspension Test, Open Field Test, experimental mice model, neuroprotection, phytochemicals

HERBAL APPROACH FOR DEPRESSION MANAGEMENT: STUDY OF *BARLERIA CRISTATA* IN MICE MODELS

Shreya Bharat Shinde*

Delonix Society's Baramati College of Pharmacy, Baramati

Corresponding author: shreyashinde3530@gmail.com

Abstract

Barleria cristata L. is a medicinal plant belonging to the Acanthaceae family, known for its rich phytochemical constituents such as flavonoids (luteolin), alkaloids, and phenolic compounds. It exhibits various pharmacological activities, including antibacterial, antifungal, anti-inflammatory, antioxidant, hepatoprotective, and antidiabetic effects, highlighting its potential as a natural therapeutic agent. The present study focuses on evaluating the antidepressant activity of Barleria cristata leaf extract in mice using behavioral animal models. The study is expected to demonstrate significant antidepressant effects, supporting its traditional use and potential development as a safe herbal antidepressant.

Keywords: Barleria cristata, Plant-based medicine, Antidepressant activity, Behavioral models, Mice

AYURVEDIC MEDICINE FOR DIABETES

Sapna*, Yatendra Kumar, Sanjar Alam

R.V. Northland Institute, Greater Noida, Dadri (203207)

Corresponding author: sapnaraghav158gmail.com

Abstract

Diabetes Mellitus, known as Madhumeha in Ayurveda, is a chronic metabolic disorder characterized by elevated blood glucose levels resulting from impaired insulin secretion or action. Ayurveda attributes the condition primarily to an imbalance in the Kapha Dosha, along with disturbances in Vata and Pitta, leading to deranged metabolism and accumulation of toxins (Ama). The Ayurvedic approach to diabetes management is holistic, focusing on restoring balance through herbal remedies, dietary control, lifestyle modification, and detoxification therapies such as Panchakarma. Various medicinal plants, including Gudmar (Gymnema sylvestre), Karela (Momordica charantia), Neem (Azadirachta indica), and Jamun (Syzygium cumini), are widely used due to their hypoglycemic and insulin -enhancing properties. Diet plays a crucial role, emphasizing low glycemic index foods, high fiber intake, and avoidance of sugary and processed items. Regular physical activity, along with practices like Yoga and Meditation, helps improve metabolic function and reduce stress. Ayurveda not only aims to regulate glucose levels but also focuses on preventing complications and promoting overall well-being. Its individualized and natural approach makes it an effective complementary therapy in the long-term management of diabetes.

Keywords: Madhumeha, Ayurveda, Doshas (Vata, Pitta, Kapha), Kapha Imbalance, Ama, Panchakarma, Herbal Medicine, Hypoglycemia Activity, Insulin Sensitivity, Glycemic Control.

AYURVEDA/2026/031

ANTI-OBESITY EFFECTS OF TRIPHALA: A REVIEW OF MOLECULAR AND CLINICAL EVIDENCE

Dr. Arpita Sulibhavi*

Department of Panchakarma, S V M Ayurvedic College and Research Center, India

Corresponding author: arpitahs460@gmail.com

Abstract

Obesity, a major global health concern, is correlated in Ayurveda with Sthaulya, characterized by Kapha–Meda vriddhi and impaired Agni, leading to excessive fat accumulation and metabolic dysfunction. Classical texts, including Charaka Samhita (Sutrasthana 21) recommend Langhana and Lekhana therapies for its management. Triphala, a polyherbal formulation comprising Amalaki, Haritaki, and Bibhitaki, exhibits Lekhana and Deepana-Pachana properties, making it relevant in obesity management. Molecular studies suggest that Triphala enhances lipid metabolism, reduces adipogenesis through modulation of pathways such as AMPK activation and PPAR-γ inhibition, and exerts antioxidant and anti-inflammatory effects. Clinical evidence indicates reductions in body mass index, waist circumference, and lipid profile following Triphala administration. Thus, Triphala demonstrates promising multi-targeted anti-obesity potential, integrating classical Ayurvedic principles with modern molecular insights. However, large-scale randomized clinical trials are required to validate its efficacy and establish standardized therapeutic protocols.

Keywords: Obesity, global health concern, Ayurveda, Molecular studies

EXPLORING KNOWLEDGE, ATTITUDES, AND PRACTICES RELATED TO COGNITIVE BEHAVIORAL THERAPY FOR ANXIETY: A PILOT STUDY

Saman Moin*, Neelanchal Trivedi

Invertis Institute of Pharmacy, Invertis University, Bareilly (243123), U.P., India

Corresponding author: samanmoin11@gmail.com

Abstract

Background: Anxiety disorders are among the most prevalent mental health disorders that significantly impair quality of life. However, there is a lack of data on these patients' knowledge, attitude, and practices (KAP).

Aims: The goal of this study is to create and validate a questionnaire and to assess the levels of knowledge, attitudes, and practices regarding anxiety among people in the target communities.

Materials and Methods: The 34 KAP-based questionnaire developed by literature review and validation involves assessing the questionnaire's suitability using scores provided by experts

Results: The current cross-sectional study included 60 randomly selected participants living in Rampur District. The questionnaire's overall standardized Cronbach alpha was 0.8849, indicating good internal consistency. The knowledge section revealed mixed awareness levels, with good understanding of anxiety symptoms and impacts (up to 80%). Attitude findings indicated a generally positive outlook toward anxiety management, with 80–84% of participants expressing willingness to discuss anxiety and seek professional help. Practice-related results showed encouraging trends, with a majority engaging in adaptive coping strategies such as relaxation techniques (92%), emotional support seeking (88%), and participation in stress-relieving activities (100%).

Conclusion: The questionnaire demonstrated excellent content validity and strong internal reliability, confirming its suitability for use in future research.

Keywords: Cognitive behavior therapy, Anxiety, Rampur, Knowledge, Attitude, Practice, Cronbach's alpha

INTEGRATIVE MEDICINE AND PUBLIC HEALTH WITH SPECIAL REFERENCE TO OSTEOARTHRITIS: BRIDGING TRADITIONAL AND MODERN HEALTHCARE SYSTEMS

Usharani Shyamasundar Sanu*, Sunil S. Vernekar

Associate Professor, Department of Samhita Siddhanta evum Sanskrit

KAHER's Shri BMK Ayurveda Mahavidyalaya, Belagavi, Karnataka, India

Professor, Department of Physiology

KAHER's Jawaharlal Nehru Medical College, Belagavi, Karnataka, India

Corresponding author: ushasanu@gmail.com

Abstract

WHO recognizes traditional medicine's role in universal health coverage. Acharya Susruta, the father of surgery, emphasized the concept of integrative medicine, where he quoted that a physician should know all contemporary sciences. His work represents the bridge between ancient wisdom and modern science. Integrative medicine combines conventional medical practices with evidence-based traditional and complementary therapies to provide holistic patient care and well-being. In the realm of public health, integrative methodologies can augment preventive care, tailor lifestyles, alleviate disease burden, and improve the quality of life. Osteoarthritis is a chronic degenerative condition best managed using a multimodal integrative approach combining Ayurveda, lifestyle therapy, and rehabilitation. This correlates to sandhivata, which is caused by Vata aggravation, causing dhatu kshaya. Many research studies have proved the efficacy of Boswellia Serrata, guggulu, Dashamoola, along with Basti, abhyanga, swedana, and Janu basti in these conditions, along with strengthening exercises (quadriceps), yoga, and meditation. Such treatment can reduce the exposure of patients to chronic use of anti-inflammatories and analgesics, which can be beneficial in acute conditions. This research explores the role of integrative medicine in osteoarthritis, its benefits, challenges, and future directions, with special emphasis on the healthcare context.

Keywords: integrative medicine, Ayurveda, Osteoarthritis

AYURVEDA/2026/034

PHYTOPHARMACEUTICALS: BRIDGING AYURVEDA AND MODERN DRUG DEVELOPMENT FOR SUSTAINABLE HEALTHCARE

Lhanzey Doma Bhutia*, Dr. J P Mohanty

Department of Pharmacognosy, Himalayan Pharmacy Institute

Majhitar, Rangpo, East Sikkim-737136

Corresponding author: lhanzi2001@gmail.com

Abstract

Phytopharmaceuticals represent a significant advancement in integrating traditional Ayurvedic knowledge with modern drug development. Ayurveda, an ancient system of medicine, extensively utilizes plant-based therapies for the prevention and treatment of various diseases. However, limitations such as lack of standardization, quality control, and scientific validation have restricted its wider global acceptance. Phytopharmaceuticals overcome these challenges by offering purified, standardized, and well-characterized plant-derived compounds that are evaluated for safety, efficacy, and quality using modern scientific approaches. This study highlights the role of phytopharmaceuticals in bridging the gap between traditional herbal medicine and contemporary pharmaceutical science. It outlines key stages involved in drug development, including extraction, isolation, characterization of bioactive compounds, standardization, and clinical evaluation. Notable examples such as Artemisinin and Curcumin demonstrate the successful transformation of traditional remedies into effective modern therapeutics. Phytopharmaceuticals offer multiple advantages, including multi-target mechanisms of action, improved safety profiles, and cost-effectiveness, making them suitable for sustainable healthcare systems. Despite these benefits, challenges such as variability in phytochemical composition, regulatory complexities, and limited clinical evidence remain. Advances in analytical techniques, nanotechnology, and drug discovery tools are expected to further enhance their development and global acceptance, supporting the vision of Viksit Bharat 2047.

Keywords: Phytopharmaceuticals, Ayurveda, Herbal Medicine, Drug Development, Standardization, Sustainable Healthcare, Curcumin, Artemisinin

AYURVEDA/2026/035

HERBAL NIOSOMAL FORMULATIONS FOR ENHANCED TRANSDERMAL DRUG DELIVERY: A COMPREHENSIVE REVIEW

Hiral Shah*, Tora Shah

Department of Pharmaceutics, Parul College of Pharmacy and Research, Ahmedabad, India

Corresponding author: hiral.shah29586@paruluniversity.ac.in

Abstract

Herbal therapeutics have gained significant attention due to their safety, efficacy, and wide therapeutic potential. However, their clinical application is often limited by poor solubility, low bioavailability, and instability. Transdermal drug delivery systems offer a promising alternative by bypassing first-pass metabolism, improving patient compliance, and enabling controlled drug release. In this context, niosomes, non-ionic surfactant-based vesicular carriers, have emerged as an effective strategy to enhance the transdermal delivery of herbal bioactives. This review focuses on the formulation, characterization, and evaluation of herbal niosomal systems designed for transdermal applications. It discusses various preparation techniques, including thin-film hydration, reverse phase evaporation, and microfluidization, along with key formulation variables affecting vesicle size, entrapment efficiency, and drug release. The role of niosomes in improving skin permeation and stability of phytoconstituents such as curcumin, quercetin, and silymarin is critically analyzed. Additionally, recent advancements, including the incorporation of penetration enhancers and hybrid nanocarrier systems, are highlighted. Overall, herbal niosomal formulations represent a promising approach for effective and controlled transdermal delivery, warranting further research and clinical translation.

Keywords: Herbal, Transdermal drug delivery systems, niosomes, clinical translation

AYURVEDA/2026/036

EVALUATION OF ANTIDYSLIPIDEMIC EFFICACY OF PERSEA AMERICANA ROOT EXTRACT THROUGH BIOCHEMICAL AND STATISTICAL ANALYSIS

Chadaragolam Akash Chandra*

Seven Hills College of Pharmacy

Corresponding author: akashchandra2029@gmail.com

Abstract

Dyslipidaemia is a major risk factor for cardiovascular diseases, characterized by abnormal lipid levels in the blood. The present study aims to evaluate the antidyslipidemic potential of Persea americana root extract using an experimental model. Preliminary phytochemical screening revealed the presence of bioactive constituents such as flavonoids, phenols, alkaloids, and glycosides, which are known for their therapeutic properties. Dyslipidemia was induced in albino Wistar rats using dexamethasone, and treatment groups received different doses of Persea americana extract. Various biochemical parameters, including total cholesterol, triglycerides, LDL, HDL, MDA, SOD, and GSH levels, were assessed. The results demonstrated that the extract significantly reduced total cholesterol, triglycerides, and LDL levels while improving HDL levels and antioxidant status. Statistical analysis using ANOVA confirmed significant differences among experimental groups. The findings suggest that Persea americana possesses promising antidyslipidemic and antioxidant activities, supporting its potential use as a natural therapeutic agent in the management of dyslipidemia and associated cardiovascular disorders.

Keywords: Persea americana, Dyslipidemia, Antioxidant, Lipid profile, Dexamethasone, Phytochemicals

AYURVEDA/2026/037

RASAYANA AND VAJIKARANA IN CHARAKA SAMHITA: PRINCIPLES, APPLICATIONS AND CONTEMPORARY RELEVANCE

Nilam Tadvi*

Department of Ayurveda, Vadodara, Gujarat, India

Corresponding author: tadvihelly315@gmail.com

Abstract

Rasayana and Vajikarana are two important therapeutic branches described in Charaka Samhita that focus on promoting longevity, vitality, immunity, and reproductive health. Rasayana therapy primarily aims to rejuvenate, nourish tissues, and enhance ojas, thereby improving overall health and resistance to disease. Vajikarana focuses on improving reproductive capability, sexual health, and psychological well-being. In the modern era, lifestyle disorders, stress, infertility, and age-related degeneration have increased significantly, highlighting the need for preventive and rejuvenative healthcare approaches. This paper aims to analyze the fundamental principles of Rasayana and Vajikarana as described in the Charaka Samhita and to explore their relevance in contemporary healthcare. The present study is a conceptual and descriptive review based on classical Ayurvedic literature and contemporary scientific publications. Primary data were collected from the Charaka Samhita along with its authoritative commentaries. Secondary sources included peer-reviewed journals, research articles, and modern medical literature related to rejuvenation therapy, immunomodulation, and reproductive health. The collected information was systematically reviewed and categorized to understand the therapeutic principles, indications, and formulations of Rasayana and Vajikarana therapies.

The review indicates that Rasayana therapies enhance tissue nutrition (dhatu poshana), improve immunity, delay aging, and promote longevity. Vajikarana therapies improve reproductive function, sperm quality, strength, and psychological satisfaction. Several formulations mentioned in Charaka Samhita demonstrate properties comparable to modern concepts such as antioxidants, adaptogens, immunomodulators, and fertility enhancers. The principles of Rasayana and Vajikarana represent a holistic approach to preventive and promotive healthcare. Their emphasis on rejuvenation, immunity enhancement, and reproductive health makes them highly relevant in addressing modern health challenges such as aging, infertility, and lifestyle disorders. Integrating these classical Ayurvedic concepts with modern scientific research may contribute to effective preventive healthcare strategies and improved quality of life.

Keywords: Rasayana, Vajikarana, Charaka Samhita, Ayurvedic, healthcare

AYURVEDA/2026/038

MANAGING COMPLICATIONS IN CHRONIC KIDNEY DISEASE: AN EVIDENCE-BASED PILOT STUDY

Lavanya S*, Mythreyi R

Chettinad Academy of research and education, Chennai

Corresponding author: lavsthiru06@gmail.com

Abstract

Chronic Kidney Disease (CKD) is a progressive disorder associated with multiple systemic complications, including anemia, hypertension, mineral and bone disorders, and electrolyte imbalances, which significantly impact patient outcomes and quality of life. This prospective observational pilot study aimed to evaluate the effectiveness of early identification and targeted management strategies in reducing the incidence and severity of CKD-related complications. The study was conducted over a period of three months in the nephrology outpatient department of a tertiary care hospital, involving 30 patients with CKD stages 3–5. Structured follow-ups, standardized treatment protocols, and regular monitoring of clinical and laboratory parameters were implemented. Key outcome measures included improvement in hemoglobin levels, blood pressure control, electrolyte normalization, and overall patient well-being. The results demonstrated notable improvements in anemia management, blood pressure stabilization, and correction of electrolyte imbalances. Patients also reported reduced fatigue and improved quality of life. The findings indicate that early intervention and systematic monitoring play a crucial role in managing CKD complications effectively. In conclusion, the study highlights the feasibility and clinical benefits of structured management protocols in CKD care. Further large-scale, multi-center studies are recommended to validate these findings and strengthen evidence-based management approaches.

Keywords: Chronic Kidney Disease (CKD), quality of life, evidence-based management

AYURVEDA/2026/039

EFFICACY OF AYURVEDIC THERAPIES IN CHRONIC NON–HEALING VENOUS ULCERS: A CASE STUDY

Dr. Priyansh K Chaudhary*

Shalyatantra Department, Parul Institute of Ayurveda

Corresponding author: priyanshc411@gmail.com

Abstract

Introduction: Venous or varicose ulcers are chronic, non-healing wounds caused by long-standing venous insufficiency and venous hypertension. Ayurveda describes such chronic wounds as Dushta Vrana or Sirajanya Vrana, caused by vitiated Pitta and Kapha, and treated through Shodhana and Ropana therapies. This case study evaluates the efficacy of integrated Ayurvedic treatment in a 44-year-old male with multiple non-healing venous ulcers for four years.

Material and Methods: A single case was managed with internal Ayurvedic medicines including Gandhak Rasayana, Panchatikta Ghrit Guggulu, Kaishore Guggulu, Manjishtadi Kwath, Sariwadi Bati, Manjishtadi Ghanvati, and Triphala Guggulu. External therapies involved daily dressing, Karanja Taila and Nimba Taila application, Pariseka with Panchavalkala Kwath, and Panchakarma procedures such as Siravyadhana, Jalaukavacharana, and Manjishtadi Kshar Basti. Dietary regulation, leg elevation, and lifestyle modifications were also advised.

Results: After 7–8 weeks of therapy, the patient showed significant improvement. Ulcer size is reduced with the formation of healthy granulation tissue. Surrounding hyperpigmentation, pain, itching, and edema decreased. The patient reported better sleep and overall quality of life. No adverse effects were noted.

Discussion: The positive healing response can be attributed to Ayurvedic therapies that improved circulation, reduced venous congestion, controlled inflammation, and enhanced tissue regeneration. Raktamokshana played a role in reducing venous stasis, while formulations such as Manjishtadi Kwath and Guggulu preparations provided Raktashodhaka, Shothahara, and Vranaropaka benefits. Local application of herbal oils contributed antimicrobial and wound-cleansing effects. This case demonstrates Ayurveda as an effective, low-cost, and safe modality for chronic venous ulcer management.

Keywords: *Dusthta Vrana*, varicose ulcer, Ayurvedic, Non-healing ulcer, Chronic, *Raktamokashana*

AYURVEDA/2026/040

RELEVANCE OF AYURVEDA IN CONTEMPORARY CLINICAL PRACTICE

Dr Aarsh Trivedi*

Shalya Tantra, Parul Institute of Ayurveda

Corresponding author: aarshtrivedi1912@gmail.com

Abstract

Background: The classical Ayurvedic text Charak Samhita is one of the most authoritative treatises describing the principles of medicine, disease understanding, and holistic patient care. Despite being written centuries ago, many of its concepts remain applicable to modern clinical practice. With increasing global interest in integrative and holistic healthcare, revisiting the clinical relevance of Charak Samhita is important for contemporary practitioners.

Methods: A narrative review approach was adopted to analyze key clinical principles described in Charak Samhita, including concepts of Tridosha, Agni, Ama, individualized treatment (Prakriti-based therapy), and preventive medicine. Classical references were examined and interpreted in the context of present-day clinical practice and integrative healthcare models. Relevant literature from Ayurvedic commentaries and contemporary research articles was also considered to understand the applicability of these principles in modern healthcare settings.

Results: The analysis shows that many principles of Charak Samhita align with modern concepts of personalized medicine, preventive healthcare, lifestyle modification, and holistic disease management. The emphasis on Nidana Parivarjana (removal of causative factors), diet and lifestyle regulation, and patient-centered treatment supports sustainable health outcomes. Additionally, the systematic diagnostic approach described in Charak Samhita provides a comprehensive framework for clinical evaluation.

Conclusion: Charak Samhita continues to hold significant relevance in contemporary clinical practice. Its holistic philosophy, focus on prevention, and individualized therapeutic strategies complement modern healthcare approaches. Integrating classical Ayurvedic wisdom with current scientific research can strengthen evidence-based Ayurvedic practice and contribute to the development of effective integrative healthcare models.

Keywords: Ayurved, Charak Samhita, lifestyle, holistic

GREEN SYNTHESIS AND CHARACTERIZATION OF METAL CONJUGATED QUANTUM DOT AND ITS POTENTIAL APPLICATIONS

Monalisa Samanta, Saikat Dewanjee*

Advanced Pharmacognosy Research Laboratory, Department of Pharmaceutical Technology, Jadavpur University, Kolkata-700032, India

Corresponding author: Saikat.dewanjee@jadavpuruniversity.in

Abstract

Green synthesis of zinc oxide quantum dots (ZnO QDs) has gained significant attention due to its eco-friendly, cost-effective, and sustainable approach. In this study, quantum dots (QDs) were synthesized using lemon peel powder, which acts as a natural reducing and stabilizing agent. Lemon peel, an agro-waste rich in bioactive compounds such as flavonoids, citric acid, and polyphenols, plays a crucial role in the formation and stabilization of nanoparticles. These QDs were further utilized in the synthesis of ZnO QDs by reacting with zinc acetate under alkaline conditions. The formation of ZnO QDs was confirmed through various characterization techniques such as UV–visible spectroscopy, which showed a characteristic absorption peak, indicating nanoscale formation. The synthesized ZnO QDs exhibited excellent optical properties, including fluorescence, making them suitable for biomedical and sensing applications. Particle size analysis revealed a uniform nanoscale distribution, while zeta potential confirmed good stability. This green synthesis method eliminates the use of toxic chemicals and reduces environmental impact. The study highlights the potential of lemon peel-mediated ZnO QDs in developing sustainable nanomaterials for applications in drug delivery, bioimaging, wound & scar healing.

Keywords: Green synthesis, Zinc oxide quantum dots (ZnO QDs), lemon peel-derived quantum dot, fluorescence properties, biomedical applications.

REVIVING TRADITION: IMPORTANCE OF *SAMSKARA* (*KARANA*) IN MODERN COOKING TECHNIQUES

Rahul Raval*

Department of Basic Principles, ITRA, Jamnagar.

Corresponding author: rahulraval006@gmail.com

Abstract

Introduction: Ayurveda dietetics includes specific factors of preparation, consumption, and the consumer of the food, which form the basis of obtaining the best results promoting health. *Karana* (*Samskara*) is the processing of substances to produce the desired qualities in the food by the transformation of their inherent attributes. This study explores the application of Ayurvedic traditional knowledge of *Samskara* in contemporary cooking techniques.

Aims & Objective: To analyze the relevance and application of *Samskara* (*Karana*) on cooking methods of the present era.

Materials & Methods: The relevant subject matter is compiled from Ayurvedic texts, material available for cooking methods, scholarly articles, and other sources. The traditional knowledge is analysed and pondered over its contemporary application.

Result & Discussion: According to Ayurveda, *Samskara* is used to enhance the health benefits of food through their effective preparation methods like contact with water and heat, cleaning, churning, fumigation, storage, etc. Today, people tend to choose cooking methods based on taste and convenience, leading to a loss of their nutritional value. These methods may make food incompatible, heavy to digest, thereby reducing its health benefits. By adopting the correct *Samskara* (*karana*) in cooking methods, adverse effects associated with improper food preparation are eliminated.

Conclusion: Integrating the right type of *Samskara* into present-day cooking methods is crucial, as it enhances the health benefits of food by correcting the deficiencies of modern practices, ensuring transformation of quality, improved digestibility, and greater overall well-being.

Keywords: Ayurveda, *Samskara, Karana,* Dietetics, Nutritive value.

ENHANCEMENT OF SOLUBILITY OF POORLY WATER-SOLUBLE DRUGS USING SOLID DISPERSION: A COMPARATIVE STUDY OF BCS CLASS II AND IV DRUGS

Hamida*, Aditi Singhal

Department of Pharmaceutics, Meerut Institute of Engineering and Technology, Meerut, Uttar Pradesh

Corresponding author: hhamidachoudhary@gmail.com

Abstract

A significant barrier to the development of many pharmaceutical medications, especially those in Class II and Class IV of the Biopharmaceutics Classification System (BCS), is poor water solubility. Due to their limited solubility, these medications have poor bioavailability and a slower rate of dissolution. The current study compares the BCS Class II and Class IV categories and focuses on the development and assessment of solid dispersion systems as a successful method to improve the solubility of poorly soluble pharmaceuticals. Solvent evaporation and fusion techniques were used to create solid dispersions with appropriate hydrophilic carriers. Both types were represented by model pharmaceuticals, whose physicochemical characteristics were assessed both before to and following formulation. The drug content, solubility enhancement, dissolving rate, and compatibility of the produced solid dispersions were evaluated. The findings showed that both drug classes' solubility and dissolution profiles had significantly improved, with BCS Class II medicines showing a relatively greater improvement because of their superior permeability properties. The study offers insights into formulation strategies for various BCS classes and emphasizes the efficacy of solid dispersion techniques in enhancing medication performance. All things considered, this study backs the use of solid dispersion systems as a viable strategy to get around problems with solubility and increase the oral bioavailability of poorly soluble medications.

Keywords: Solid dispersion, Solubility enhancement, BCS Class II drugs, BCS Class IV drugs, Dissolution rate, Bioavailability, Hydrophilic carriers, poorly soluble drugs

PRECLINICAL EVALUATION OF THE NEUROPROTECTIVE POTENTIAL OF *VIBURNUM OPULUS* BARK EXTRACT IN A MIDDLE CEREBRAL ARTERY OCCLUSION (MCAO)-INDUCED ISCHEMIC STROKE MODEL IN RATS

Harikrishna Jakka*[1], Lavanya Yaidikar[2]

[1]PG Student, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati-517561, AP, India

[2]Professor and HOD, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati-517561, AP, India

Corresponding author: jakkaharikrishna123@gmail.com

Abstract

Objective: This study investigated the neuroprotective efficacy of *Viburnum opulus* bark extract in a middle cerebral artery occlusion (MCAO)-induced model of focal cerebral ischemia in rats.

Methods: Phytochemical characterization was conducted using UV–Visible spectroscopy, high-performance liquid chromatography (HPLC), and Fourier-transform infrared (FTIR) analysis. Adult Wistar rats (n=6 per group) were randomized into control, MCAO, standard (edaravone - 3mg/kg, i.p.), and extract-treated groups (200 and 400 mg/kg, p.o.). Focal ischemia was induced via MCAO. Neurological deficits were evaluated post-occlusion. Oxidative stress indices, including malondialdehyde (MDA), superoxide dismutase (SOD), catalase (CAT), reduced glutathione (GSH), and thiobarbituric acid reactive substances (TBARS), were quantified. Pro-inflammatory mediators (IL-6, TNF-α) and NADPH oxidase (NOX) activity were assessed, followed by histopathological analysis using hematoxylin and eosin (H&E) staining to evaluate neuronal necrosis and perivascular cuffing.Statistical evaluation was performed using one-way ANOVA with Tukey's post hoc test.

Results: MCAO induction significantly elevated MDA, TBARS, IL-6, TNF-α, and NOX activity, while markedly reducing SOD, CAT, and GSH levels compared to control (**$p < 0.001$). Treatment with *V. opulus* extract (400 mg/kg) significantly restored antioxidant enzyme activities and attenuated lipid peroxidation and inflammatory responses ($p < 0.05$ vs MCAO). Accompanied by improved histoarchitectural integrity, with decreased neuronal degeneration, edema, and inflammatory infiltration.

Conclusion: *Viburnum opulus* bark extract confers robust neuroprotection against ischemic brain injury through coordinated modulation of oxidative stress and inflammatory pathways. These findings support its potential as a multi-target phytotherapeutic candidate for ischemic stroke management.

Keywords: Viburnum opulus, Edaravone MCAO, Cerebral ischemia, Oxidative stress, Neuroinflammation, Phytochemicals, Neuroprotection.

TETRAHYDROCURCUMIN LOADED NANO EMULGEL SHAMPOO: A NOVEL DUAL MECHANISM-BASED APPROACH FOR THE ERADICATION OF PEDICULUS HUMANUS CAPITIS INFESTATION

Dhilin Pathayappurakkal Mohanan[1*], Saranya Thekkila-Veedu[1], Lal Prasanth Mersy Lazar[2], Shibu[2]

[1]Prasanth Chandrika Ramachandran, Jiji Jose

[2]Dr. Moopen's college of pharmacy, Naseera Nagar, Meppadi, Wayanad, Kerala

Corresponding author: dhilin.p.mohan@gmail.com

Abstract

Pediculosis capitis is an ectoparasitic scalp condition caused by infestation with Pediculus humanus capitis, a tiny organism measuring 1–4 mm. This study was conducted to provide detailed insight into the condition and its treatment using tetrahydrocurcumin (THC), a metabolite of curcumin known for its antiparasitic properties. THC, a yellow to white crystalline compound, was selected for its dual mechanism of action, involving both physical and enzymatic effects on the parasite. In this work, THC was incorporated into a nanoemulsion system to enhance its delivery, which was further formulated into a shampoo for topical application. Various evaluation tests were performed to assess the physicochemical properties of the nanoemulsion and shampoo, as well as their pediculicidal efficacy. The results confirmed the effectiveness of THC against head lice and demonstrated the formulation's safety and suitability for topical use. The significance of this formulation comes into play because of the high toxicity and side-effect-inducing nature of the available marketed drugs for the treatment of the same. Our new formulation is effective and non-pernicious, which makes it a better alternative to the currently available products.

Keywords: Pediculosis capitis, ectoparasitic scalp, tetrahydrocurcumin (THC), nanoemulsion

ATMAN: ESSENCE OF HOLISTIC VISION OF AYURVEDA

Dr. Vaibhav P. Dadu*

Department of Samhita-Siddhanta, Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar

Corresponding author: vibhudadu@itra.edu.in

Abstract

From the day of first appearance of man on the earth, his pursuit is for happiness. Happiness is a holistic concept encompassing all aspects of an individual, such as lifestyle, diet, and environment. It is an Integration that envisages treating things together rather than in isolation. Ayurveda is a well-known system of holistic care deeply rooted in the philosophical and spiritual tradition of knowledge. The cause of this holistic vision is attributed to the strong basic principles of Ayurveda. These principles have been envisioned by the unbiased and truth-loving seers with pure intellect. One of these holistic aspects of Ayurveda is the consideration of Atman (~soul) as an integral part of life. Commencing from the definition of Ayu (lifespan), the Atman forms the essence of Ayurvedic understanding of health and disease. Health as well as fulfilment of basic pursuits of human life (Purushartha) are possible by proper intellect, which in fact is the product of appropriate utilization of the senses and mind governed by the supreme Atman. Ayurveda is a science of living, and therefore, consciousness is key to the manifestation of health. The philosophy of Ayurveda postulates that the root of all knowledge is Atman. A complete notion of medical ethics is based on the existence of Atman. An effort has been made by the author for the exploration of the value of understanding the 'Atman as an essence of the holistic vision of Ayurveda.

Keywords: Happiness, Ayurveda, philosophical, spiritual tradition, medical, ethics

DESIGN AND SYNTHESIS OF BIOACTIVE HETEROCYCLIC COMPOUNDS FOR THERAPEUTIC APPLICATIONS

Mohd Waris*, Hinna Hamid

SCLS, Jamia Hamdard, Department of Chemistry, New Delhi

Corresponding Author: hhamid@jamiahamdard.ac.in

Abstract

Aim: This study aims to design, synthesize, and assess the anticancer activity of a novel heterocyclic compound, MW01, targeting the EGFR protein. Molecular docking techniques were employed to evaluate its binding affinity, hydrogen bonding, and key interactions within the active site of EGFR, indicating its potential as a promising lead molecule for anticancer drug development and further biological investigations.

Methods: The three-dimensional structure of EGFR was obtained from the Protein Data Bank. The compound MW01 was constructed and optimized using molecular modeling tools. Docking simulations were carried out to predict binding affinity, hydrogen bonding interactions, and molecular contacts within the EGFR active site. The results were further analyzed to determine significant interactions and possible inhibitory activity.

Results: The synthesized heterocyclic compound demonstrated stable interactions with key amino acid residues, including LEU83, GLU81, and LEU134. Docking studies revealed strong hydrogen bonding along with hydrophobic interactions, suggesting efficient binding within the active site. These findings indicate the compound's potential to inhibit the target protein, making it a strong lead candidate.

Conclusion: The docking results confirm that the synthesized compound effectively interacts with crucial EGFR active site residues (LEU83, GLU81, LEU134), supporting its potential as a lead compound for the development of anticancer therapeutics.

Keywords: MW01, EGFR (Epidermal Growth Factor Receptor), Molecular Docking, Heterocyclic Compounds, Anticancer Agents, Drug Discovery, Binding Affinity

CHRONO-PHARMACOLOGY: OPTIMIZING BIOAVAILABILITY THROUGH BIOLOGICAL RHYTHM

Dr Mouneshwar P Pattar[1], Dr Prakash L Hegde[2]

[1]Postgraduate Scholar, Dept of Dravyaguna, SDM College of Ayurveda & Hospital, Hassan. Karnataka.

[2]Professor and Vice Principal, Dept of Dravyaguna, SDM College of Ayurveda & Hospital, Hassan. Karnataka.

Corresponding author: mouneshpp123@gmail.com

Abstract

Introduction: Traditional pharmacological models often assume static physiological states, yet biological processes exhibit significant circadian oscillations. Chrono-pharmacology explores how these rhythms influence the pharmacokinetics and pharmacodynamics of therapeutic agents. This study investigates the strategic timing of drug administration to optimize bioavailability and minimize toxicity. **Methods:** A systematic review of pharmacokinetic and pharmacodynamic data was conducted, focusing on the circadian variability of gastric emptying, hepatic flow, and enzyme activity. Data from clinical trials utilizing 'timed-release' and time-of-day' dosing protocols were analyzed to compare peak plasma concentration and area under the curve across different administrations. **Results:** The analysis reveals that many compounds exhibit significantly higher bioavailability when administered in alignment with specific metabolic peaks. For instance, Lipophilic drugs showed enhanced absorption during periods of increased biliary secretion, while certain anti-inflammatory agents demonstrated superior efficacy and reduced gastrointestinal distress when administered during nocturnal phases, correlating with peak pro-inflammatory cytokine activity. **Discussion**: The findings suggest that a 'one-size-fits-all' dosing schedule is suboptimal. By integrating chronobiological data into dosage regimens, clinicians can achieve 'precision timing', ensuring that drug concentration peaks exactly when the physiological demand is highest, or the risk of adverse effect is lowest.

Keywords: Chrono-pharmacology, Pharmacokinetics, Pharmacodynamics, Bioavailability, Biological timings.

POLYHERBAL GUMMY FORMULATION: A NOVEL APPROACH FOR DYSMENORRHEA MANAGEMENT

Tora Shah*, Hiral Shah

Department of Pharmaceutics, Faculty of Pharmacy, Parul College of Pharmacy and Research, Parul University, Ahmedabad, India

Corresponding author: tora.shah26471@paruluniversity.ac.in

Abstract

Introduction: Primary dysmenorrhea affects a significant population of menstruating women, often necessitating the use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), which are associated with adverse effects. There is a growing demand for patient-friendly, natural alternatives. This study aims to formulate medicated gummies containing a synergistic blend of Matricaria chamomilla, Zingiber officinale, and Foeniculum vulgare to manage pain and inflammation effectively. **Methods:** The formulation is under development using pectin as a plant-based gelling agent, with xylitol and mannitol employed as sugar substitutes to obtain a sugar-free and vegan dosage form. Initially, three base (blank) gummy batches (B1, B2, and B3) were prepared by varying pectin concentrations (2.5%, 3.0%, and 3.5% w/w) to optimize moldability, texture, and structural integrity of the gummy base. Based on the optimized base formulation, five medicated gummy batches (F1–F5) were developed by varying the pectin concentration (2.5–4.0% w/w) and xylitol: mannitol ratios using a trial-and-error approach. Standardized herbal extracts were incorporated uniformly into the gummy base. Preliminary evaluation parameters included appearance, weight variation, pH, texture, and in vitro dissolution behaviour. Dissolution studies were carried out. **Results:** Among the base batches, B2 (3.0% w/w pectin) exhibited optimal clarity, chewiness, and mechanical stability and was selected for herbal incorporation. All five medicated batches showed uniform appearance and acceptable physical characteristics. The average weight of the gummies ranged from 3.0 g to 3.6 g across batches, with pH values between 5.3 and 5.8, indicating suitability for oral administration. Batch F3, formulated using a xylitol: mannitol ratio of 1:1 and 3.0% w/w pectin, demonstrated superior texture, effective masking of herbal bitterness, and good structural integrity. Dissolution studies revealed a gradual and consistent release of herbal constituents, with batch F3 showing approximately 83% release within 30 minutes. Batches containing higher pectin concentrations exhibited comparatively slower dissolution profiles. **Conclusion:** The ongoing research aims to develop a novel, sugar-free, and plant-based dosage form for dysmenorrhea management. By utilizing Pectin and natural sweeteners, this formulation offers a promising, patient-compliant alternative to conventional analgesics. Preliminary batch-wise quantitative data support the ongoing formulation optimization through a trial-and-error approach, with further refinement in progress.

Keywords: Dysmenorrhea, Fennel, Ginger, Gummies, Herbal

INTEGRATING AYURVEDA WITH MODERN INSIGHTS IN ENDOMETRIOSIS: A MULTI-MECHANISTIC POLYHERBAL APPROACH

Dr. Hina Chaudhary*, Dr. Shilpa Donga

Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat-361008

Head of the Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat-361008

Corresponding author: hinachaudhary1081@gmail.com

Abstract

Endometriosis is a multifactorial gynaecological disorder characterized by the presence of functional endometrial tissue outside the uterine cavity, leading to chronic inflammation, fibrosis, and adhesions. Its complex pathophysiology involves hormonal imbalance, immune dysfunction, oxidative stress, and aberrant angiogenesis. From an Ayurvedic perspective, endometriosis does not correlate with a single disease entity but can be understood through conditions such as *Vatika Yonivyapada, Udavartini*, *Granthi,* and *Gulma*, involving *Dosha* imbalance, *Strotorodha*, and *Dhatu dushti*. This study proposes a multi-mechanistic polyherbal approach integrating Ayurvedic principles with modern insights. Key pathological drivers—namely inflammation, oxidative stress, and angiogenesis—are targeted using phytoconstituents like flavonoids, triterpenes, tannins, and phytosterols, which modulate cyclooxygenase pathways, VEGF signaling, and antioxidant defense systems. Many Herbal drugs exhibit anti-inflammatory, immunomodulatory, and antioxidant properties. Formulations including *Punarnavadi Guggulu*, *Khadirashtaka Kashaya*, and *Saptasara Kashaya* are proposed based on principles like *Deepana, Pachana, Shothahara,* and *Vatanulomana,* acting on *Rasa, Rakta*, and *Mamsa dhatu*. In conclusion, a multi-targeted Ayurvedic polyherbal strategy offers a promising integrative approach for endometriosis management; however, rigorous clinical validation is essential to establish its efficacy and safety.

Keywords: Endometriosis, Ayurveda, Polyherbal Approach, Inflammation, Oxidative Stress.

AYURVEDIC MANAGEMENT OF AVASCULAR NECROSIS OF THE FEMORAL HEAD WITH *PANCHATIKTA KSHEERA BASTI* AND *RAKTAMOKSHANA*

Dr. Anjali Krishnani*

Shalyatantra Department, Parul Institute of Ayurved

Corresponding author: krishnaniaa@gmail.com

Abstract

Introduction: Avascular Necrosis (AVN) of the femoral head is a progressive, ischemic degenerative disorder that leads to bone necrosis, functional impairment, and eventual joint collapse. Contemporary non-surgical management often provides limited symptomatic relief. This study presents a case evaluating the effect of *PanchaTikta Ksheera Basti* and *Raktamokshana* (cupping therapy) as conservative parasurgical interventions in improving pain and function in AVN patients.

Materials and Methods: The patients were diagnosed clinically and radiologically with bilateral AVN of the femoral head. Patient underwent a structured treatment protocol including *PanchaTikta Ksheera Basti* and *Raktamokshana* through cupping therapy. Shamana medications and physiotherapy were also included. Outcomes were assessed pre- and post-treatment using the Vas Score, Harris Hip Score (HHS), and range of motion (ROM) evaluations.

Results: Patients demonstrated significant improvement in pain and functional mobility. Harris Hip Scores improved substantially. ROM findings, Thomas test, FABER test, and femoral stretch test showed improvement. Patients reported better gait, reduced stiffness, and enhanced ability to perform daily activities. Follow-up after one month showed sustained functional improvement.

Discussion: The observed clinical benefits suggest an effect of *PanchaTikta Ksheera Basti* and *Raktamokshana* in reducing Vata aggravation. *Basti* therapy nourishes *Asthi* and *Majja Dhatu* while providing systemic Vata pacification. *Raktamokshana* promotes local detoxification and improves blood flow, thereby potentially slowing disease progression. These findings are consistent with Ayurvedic principles and prior supportive evidence on Panchakarma in degenerative bone disorders.

Keywords: Avascular Necrosis, Femoral Head, Asthi-Majjagata Vata, Panchatikta Ksheera Basti, Raktamokshana, Cupping Therapy

DINCHARYA HEALTH PRACTICE IN MADHUMEHA (DIABETES MELLITUS)

Dr. Asawari Lonsane*

SVM AMC Ikal, Karnataka

Corresponding author: lonsanea2310@gmail.com

Abstract

Introduction: Ayurveda, the science of life, which has the primary aim of preserving the health of a healthy individual, laid down all the preventive principles that are necessary in the maintenance of health under the subject swastavritta. Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. Spiritual, emotional, and vocational dimensions have also been proposed in defining health. Daily regimens begin with getting up from bed till one goes to bed at night. Aim and objectives: Diabetes mellitus, known in Ayurveda as Madhumeha, is a chronic metabolic disorder characterized by persistent hyperglycemia resulting from defects in insulin secretion, insulin action, or both. In Ayurveda, Madhumeha (diabetes) is understood as a chronic metabolic disorder falling under the broader category of Prameha (urinary disorders), primarily resulting from Agnimandya (weakened digestive fire) and Medo Dhatu dushti (vitiation of adipose tissue). Discussion: muhurte uttiste, shoucha vidhi, Danta Dhavana vidhi, jihwa nirlekhana, anjana, nasya, gandoosh, kavalgraha, doomrapana, abhyanga, vyayama, mardana, udvartana,snana, devatarchana help in preventing DM. Conclusion: In India, the prevalence of diabetes is rising rapidly. The only and best way to manage the situation is by following a healthy lifestyle pattern. Ayurvedic guidelines about healthy living, which are dealt with in the classical texts such as daily regimen, seasonal regimen, dietary rules, ideal code of conduct, avoidance of prajnaparadham, etc., are the best approach in the prevention of the increasing incidence of Diabetes Mellitus. This presentation will highlight the Ayurvedic dincharya principles for the prevention of diabetes mellitus.

Keywords: Ayurveda, Diabetes Mellitus, science of life, Health

ROLE OF *VIKRITI VIGYANA* IN EARLY DISEASE PREDICTION: A BRIDGE TO PREVENTIVE MEDICINE

Dr. H. S. V. Jayasuriya*

NIA, Jaipur

Corresponding author: shehanvidurangaja@gmail.com

Abstract

The global escalation of non-communicable diseases (NCDs), responsible for nearly 74% of all deaths worldwide according to the World Health Organization, underscores the urgent need for a transition from reactive to predictive and preventive healthcare models. Ayurveda, through the discipline of *Vikriti Vigyana* (science of pathological deviations), offers a comprehensive framework for early disease prediction by elucidating the dynamic progression from physiological equilibrium (*Prakriti*) to pathological states (*Vikriti*). Central to this framework is the concept of *Shat Kriya Kala*, which delineates six sequential stages of disease evolution, enabling identification of subclinical imbalances before overt clinical manifestation.

Unlike conventional biomedical approaches that largely focus on structural and symptomatic pathology, *Vikriti Vigyana* emphasizes functional disturbances at molecular, systemic, and behavioral levels, comparable to emerging concepts in systems biology and network medicine. Early stages such as *Sanchaya* and *Prakopa* may correlate with metabolic dysregulation, low-grade inflammation, and epigenetic alterations, while *Sthana Samshraya* reflects tissue-specific vulnerability akin to target organ susceptibility observed in modern pathophysiology.

Recent advancements in Ayurgenomics have demonstrated associations between constitutional types (*Prakriti*) and genetic polymorphisms, including variations in immune response and metabolic pathways. Furthermore, integration with artificial intelligence, machine learning, and digital health technologies enables objective assessment of traditional diagnostic parameters and continuous monitoring of physiological biomarkers, thereby enhancing predictive accuracy.

This review critically evaluates the relevance of *Vikriti Vigyana* in early disease detection and its potential integration with contemporary biomedical sciences. The convergence of traditional Ayurvedic principles with modern technological innovations may facilitate the development of a personalized, predictive, and preventive healthcare paradigm, contributing significantly to reducing the global burden of chronic diseases.

Keywords: *Vikriti Vigyana*, Ayurveda, Prevention, Wellness

DESIGN, SYNTHESIS, AND EVALUATION OF BENZOPYRANONE (CHROMENONE) DERIVATIVES AS NEPHROPROTECTIVE AGENTS TARGETING NF-KB-MEDIATED RENAL INFLAMMATION

Swapnil Deshmukh[1*], Vaibhav Tiwari[2]

[1]Kamla Institute of Pharmaceutical Sciences, Junwani Bhilai

[2]Shri Shankaracharya Professional University, Bhilai

Corresponding author: swapnilpharma020@gmail.com

Abstract

Renal inflammation mediated through the nuclear factor kappa-B (NF-κB) signalling pathway plays a central role in the pathogenesis of acute kidney injury (AKI) and chronic kidney disease (CKD). Benzopyranone (chromenone/chromone) scaffolds exhibit well-documented anti-inflammatory and antioxidant properties. The present study aimed to design, synthesise, and biologically evaluate a novel series of 2H-chromen-2-one (benzopyranone) derivatives bearing varied electron-donating and electron-withdrawing substituents at C-3 and C-6 positions as potent NF-κB inhibitors with nephroprotective potential. A library of 18 benzopyranone analogues (BP-01 to BP-18) was synthesised via condensation of resorcinol with β-keto esters, followed by Knoevenagel condensation and characterised by IR, ^{1}H NMR, ^{13}C NMR, and HRMS. Cytotoxicity was assessed in HEK-293 cells (MTT assay). NF-κB inhibitory activity was evaluated by luciferase reporter gene assay and ELISA-based p65 nuclear translocation in cisplatin-treated NRK-52E cells. In vivo nephroprotection was assessed using a cisplatin-induced AKI rat model; serum creatinine, BUN, and histopathological markers were recorded. Molecular docking was performed against the p65 subunit of NF-κB (PDB: 1IKU). Molecular docking of BP-07 revealed a binding energy of −9.4 kcal/mol at the p65 RHD domain with key interactions at Arg54, Tyr57, and Glu60.

Keywords: Benzopyranone, nephroprotection, NF-kB

AYURVEDA/2026/055

PEDIATRIC EVALUATION OF ANNAVAHA AND PURISHAVAHA SROTAS: INTEGRATING AYURVEDIC PRINCIPLES WITH CONTEMPORARY GASTROINTESTINAL ASSESSMENT

Dr Om Parkash*

National Institute of Ayurveda, Jaipur

Corresponding author: omthakur9250@gmail.com

Abstract

Pediatric digestive health is fundamental to growth, immune competence, and overall well-being. This review synthesizes classical Ayurvedic concepts of Annavaha and Purishavaha Srotas, functional pathways for ingestion, digestion, and excretion, with contemporary pediatric gastrointestinal assessment. Children are particularly vulnerable to srotas derangement due to developmental immaturity and dynamic feeding transitions. By integrating core Ayurvedic constructs such as *Agni* (digestive capacity), *Ama* (incomplete digestion), and *Purisha Pariksha* (stool examination), this study provides a complementary framework for evaluating common pediatric issues like feed intolerance, functional constipation, and growth faltering. The methodology involved a narrative synthesis of authoritative Ayurvedic texts alongside recent peer-reviewed clinical literature from 2023 onward. Findings highlight that while direct anatomical equivalence is avoided, Ayurvedic functional domains align closely with modern clinical observations of appetite, stool consistency, and nutritional status. Ultimately, an integrative evaluation of these srotas may enrich Balaroga practice and support the development of future validated clinical tools for pediatric digestive health and growth recovery.

Keywords: Balaroga, Annavaha Srotas, Purishavaha Srotas, Agni, Ama, pediatric gastrointestinal assessment, Ayurveda, growth faltering, stool assessment

AYURVEDA/2026/056

DEVELOPMENT AND EVALUATION OF NANOPARTICLE-LOADED PAVALA PARPAM TRANSDERMAL PATCH FOR ENHANCED THERAPEUTIC ACTIVITY

Mrs. Thanuja N K*

Department of Pharmacology, Visveswarapura Institute of Pharmaceutical Sciences,

Bengaluru

Corresponding author: thanujank97@gmail.com

Abstract

The present study focuses on the formulation and evaluation of a nanoparticle-loaded Pavala Parpam transdermal patch to enhance therapeutic efficacy and improve drug delivery. Pavala Parpam, a traditional Siddha mineral formulation, has shown promising bioactive properties but its clinical application is often limited by poor bioavailability. In the present work, nanoparticles of Pavala Parpam were prepared using the ionic gelation technique to improve drug dispersion and facilitate transdermal permeation. Hydroxypropyl methylcellulose (HPMC) (50 mg) and sodium alginate (50 mg) were dissolved in 10 ml of distilled water, and Pavala Parpam suspended in glacial acetic acid was gradually added to the polymer solution under continuous stirring. The drug–polymer mixture was then added dropwise into calcium chloride solution containing glycerol under vigorous stirring and sonicated for 10 minutes to obtain nanoparticulate dispersion. The resulting formulation was cast onto a backing laminate containing PVP-K30 (0.2 g) to prepare transdermal patches and dried in a hot air oven at 80°C. The developed patches were evaluated for physicochemical and mechanical characteristics. The patches were opaque with a pale yellowish color and exhibited good flexibility. Thickness ranged from 0.251±0.0032 to 0.271±0.0023 mm, folding endurance was greater than 262, and tensile strength ranged from 0.228±0.16 to 0.248±0.32. Moisture uptake was 0.005%, and drug content ranged from 91.08±0.42 to 97.07±0.51, indicating satisfactory uniformity. The novelty of this study lies in the integration of a traditional Siddha mineral formulation with nanotechnology-based transdermal delivery systems, which has been minimally explored. Furthermore, the development of nanoparticle-loaded transdermal patches offers a promising strategy to enhance the bioavailability and therapeutic effectiveness of mineral-based traditional medicines. The results suggest that Pavala Parpam can be successfully incorporated into transdermal drug delivery systems, providing a potential platform for improved delivery of traditional bioactive compounds.

Keywords: Transdermal patch, Pavala Parpam, Nanoparticles, Ionic gelation, Drug delivery

GREEN SYNTHESIS AND CHARACTERIZATION OF BIMETALLIC NANOPARTICLE OF ZINC DOPED TITANIUM DIOXIDE AND ITS POTENTIAL APPLICATION

Shreyashi Banerjee*

Jadavpur University

Corresponding author: banerjeeshreyashi05@gmail.com

Abstract

Bimetallic nanoparticles are a complicated nanoscale combination of two metal components. From a scientific and technological standpoint, bimetallic nanoparticles (BNPs) have garnered significant attention due to their superior properties when compared to monometallic nanoparticles. The synthesis process of metallic nanoparticles can be physical, chemical, or biological, and they can be categorized based on their size, structure, and origin. Because of their distinctive mixing patterns and the synergistic effects of the two metal nanoparticles that compose the bimetal, bimetallic nanoparticles are more appealing than metal nanoparticles. This work presents a green synthesis method for producing bimetallic nanoparticles (BNPs) from agricultural waste and their characterization using a variety of methods, such as DLS, transmission electron microscopy (TEM), FTIR, X-ray diffraction (XRD) for crystallinity and phase composition, and scanning electron microscopy (SEM) for nanoparticle morphology and composition analysis. Lastly, a number of BNP applications are described.

Keywords: Bimetallic nanoparticles, transmission electron microscopy (TEM), FTIR, X-ray diffraction (XRD)

AYURVEDA/2026/058

AYURVEDIC MANAGEMENT IN MILD TO MODERATE MENTAL RETARDATION WITH GLOBAL DEVELOPMENTAL DELAY - A CASE STUDY

Dr Harshada. R. ladka*

Department of Panchakarma, SVM AMC, ILKAL, Karnataka

Corresponding author: hrladkat16@gmail.com

Abstract

Mental retardation also called as Intellectual disability (ID) is o neuro -development, al disorder characterized by significantly impaired intellectual cognition and adaptive functioning. The management of mentally challenged children needs special attention. Global developmental delay shows delayed cognitive functions, motor skills, language and speech considered a samvardhana janya vikara caused by vata dosha imbalance and majja dhatu kshaya. Ayurveda described these children have hypo function of dhi, dhriti and smriti. Described as jadatva by Acharya, the Ayurvedic approach to treat mental illness is to enhance dhi, dhriti and smriti, which ultimately enhance the mental coordination. Panchakarma procedures like shirodhara, basti, and swedana help in balancing the doshas, contribute to mental clarity, enhance psychological resilience, promoting relaxation. Single case study, duration- 14 days. To assess improvement in cognitive functions, behavioral patterns and social interaction. Improved attention and concentration, reduced irritability and hyperactivity, better social interaction, noticeable improvement in speech. Shirodhara produces calming effect on central nervous system, enhances alpha brain activity improving cognition. Matra basti does vata shamana, influences the gut-brain axis, improving neurological function. Shastikashali pinda sweda enhances muscle strength and neuro- muscular coordination. Approximately 1-3% of the general population is affected by intellectual disability. Panchakarma compounded with medhyarasayan, suvarna prashana, saraswatarishta and syp apotiz in shamana aushadi are very effective in treating children with buddimandya intellectual disability.

Keywords: Mental retardation, shirodhara, panchakarma

PHYTOCHEMICAL COMPOSITION AND PHARMACOLOGICAL ACTIVITIES OF *PYRUS PASHIA*: A COMPREHENSIVE REVIEW

Gauri Shankar*, Pushpendra Kumar Shukla

College of Pharmacy, Teerthankar Mahaveer University, Moradabad, India

Corresponding author: gauri7456899771@gmail.com

Abstract

Pyrus pashia Buch. -Ham. Ex D. Don, commonly known as wild Himalayan pear, is an underutilized medicinal plant widely distributed in the Himalayan region. Traditionally, it has been used for the treatment of various ailments such as gastrointestinal disorders, respiratory conditions, inflammation, and metabolic diseases. In recent years, growing scientific interest has focused on its phytochemical composition and pharmacological potential. The plant is rich in diverse bioactive compounds, including phenolic acids, flavonoids, tannins, alkaloids, glycosides, and terpenoids. Major constituents such as chlorogenic acid, quercetin, catechin, and β-sitosterol are known to contribute significantly to its therapeutic effects. These phytochemicals exhibit strong antioxidant properties, which play a key role in preventing oxidative stress and associated chronic diseases. Pharmacological studies have demonstrated that *Pyrus pashia* possesses a wide range of biological activities, including antioxidant, anti-inflammatory, antidiabetic, antimicrobial, hepatoprotective, cardioprotective, and neuroprotective effects. These activities are mainly mediated through mechanisms such as free radical scavenging, enzyme inhibition, and modulation of inflammatory pathways. Despite its promising medicinal value, research on *Pyrus pashia* remains limited, particularly in terms of clinical validation and standardization of extracts. Further studies are required to isolate active compounds, evaluate safety profiles, and explore their potential in drug development. Overall, *Pyrus pashia* represents a valuable natural resource with significant therapeutic potential. Its integration into modern medicine could contribute to the development of safe and effective plant-based treatments.

Keywords: *Pyrus pashia*, phytochemical composition, pharmacological activities, antioxidant, flavonoids, phenolic compounds

PHYTOCOSMECEUTICAL INFUSED NANOCOMPOSITE HYDROGEL FACE MASK: A PROMISING APPROACH FOR ACNE THERAPY

Shamnad Kolangottil, Bazil Shahabas, Anas Karimbanakkal, Muhammed Rasin Asharimakil, Fathima Hanan, Lal Prasanth Mercy Lazar, Shibu Prasanth Chandrika Ramachandran, Jiji Jose, Saranya Thekkila-Veedu*

Dr. Moopen's College of Pharmacy, Wayanad, Kerala

Corresponding author: saranyatvdmwims@gmail.com

Abstract

Acne is a common dermatological condition associated with excessive sebum production, microbial infection, and inflammation. The present study aimed to formulate and evaluate a berberine-loaded clay nanocomplex-incorporated film-forming hydrogel facemask for potential anti-acne activity. Berberine, a natural alkaloid known for its antimicrobial and anti-inflammatory properties, while the poor physicochemical parameters from its application. The study focused on the preparation of a complex between berberine and various inorganic clays using sucrose esters and incorporating the best clay nano complex into an optimized film-forming hydrogel matrix for effective treatment of acne. Among the prepared nano complexes, the FCSS complex (French green clay with sucrose stearate) was selected based on better encapsulation efficiency, size, and surface charge. Subsequently, FCSS loaded film-forming hydrogel was prepared using varying ratios of polymers and evaluated for drying time, spreadability, viscosity, film-forming ability, folding endurance, etc. The formulation with 1% gellan gum and 4% pullulan showed the most desirable characteristics, further evaluated for ex vivo ocular irritation, in-vitro antioxidant and antibacterial activity against Cutibacterium acne. The developed nanocomposite hydrogel facemask is expected to provide improved stability, enhanced skin adhesion, and effective antimicrobial activity, suggesting its potential as a promising topical therapeutic system for acne management.

Keywords: Acne, microbial infection, berberine, antimicrobial

AYURVEDA/2026/061

ROLE OF MEDICINAL CHEMISTRY IN THE STANDARDIZATION OF DRUGS IN AYURVEDA: A SYSTEMATIC REVIEW

Dr. Pradeep A*, Dr. Prakash L. Hegde

Postgraduate scholar, Department of Dravyaguna Vigyana, SDM College of Ayurveda, Hassan

Professor and Vice Principal, Department of Dravyaguna Vigyana, SDM College of Ayurveda, Hassan, Karnataka

Corresponding author: Karnataka. pradeepabomp@gmail.com.

Abstract

Ayurveda encompasses a vast repository of herbal medicines developed through centuries of experiential knowledge and individualized therapeutic principles based on Rasa, Guna, Virya, Vipaka, and Prabhava. However, variability in raw materials, adulteration, and lack of reproducible quality standards challenge global acceptance of Ayurvedic formulations. Medicinal chemistry provides a scientific framework for Ayurvedic drug standardization by integrating traditional concepts with modern analytical and molecular approaches. Techniques such as phytochemical profiling, chromatographic fingerprinting (TLC, HPTLC, HPLC, GC–MS), marker compound identification, and structure–activity relationship analysis help to establish identity, purity, potency, safety, and therapeutic consistency of herbal drugs. Medicinal chemistry further supports pharmacokinetic evaluation, mechanistic validation, and toxicity assessment, promoting evidence-based Ayurvedic practice. Correlation of Ayurvedic pharmacological attributes with chemical and biological parameters enhances scientific credibility, regulatory acceptance, and global integration while preserving the holistic philosophy of Ayurveda.

Keywords: Ayurveda, Medicinal Chemistry, Drug Standardization, Herbal medicines, HPTLC, Phytochemical profiling & Quality control.

INTEGRATED COMPUTATIONAL AND *IN VITRO* ASSESSMENT OF THE ANTIDIABETIC POTENTIAL OF *IPOMOEA MURICATA* SEEDS

Neethu Varghese[1*], Dr. R. Mythreyi[2], Dr. Arun Rasheed[3]

[1]Reseach scholar, Chettinad School of Pharmaceutical Sciences, Chettinad Academy of Research and Education, Tamil Nadu

[2] Chettinad School of Pharmaceutical Sciences, Chettinad Academy of Research and Education, Tamil Nadu

[3] Department of Pharmaceutical Chemistry, Al Shifa College of Pharmacy, Perinthalmanna

Corresponding author: neethu.va@gmail.com

Abstract

Introduction: Plant-based medicines have long been used in traditional medicine to treat various illnesses. Since India is a major source of medicinal plants, it is important for phytopharmaceutical research. The primary objective of phytochemistry is to identify bioactive components that increase therapeutic efficacy. *Ipomoea muricata* (family: Convolvulaceae) is considered to be a potential source of bioactive compounds and has been used in the past for the treatment of various diseases.

Methods: Using an integrated analytical, computational, and experimental approach, the current study explores the antidiabetic potential of *Ipomoea muricata* seed extract. Phytoconstituents with possible pharmacological significance were identified by QTOF LC–MS/MS characterization of the ethanolic extract. Molecular docking studies were carried out against α-amylase (PDB ID: 3CPU). An *in vitro* α-amylase inhibition assay was used to assess the antidiabetic activity.

Results and Discussion: QTOF LC–MS/MS characterization revealed the presence of several secondary metabolites, and molecular docking indicated favourable binding interactions with the target enzyme, which could indicate inhibitory activity. As with the standard drug, the extract demonstrated a concentration-dependent effect in the *in vitro* α-amylase inhibition assay. In conclusion, the study suggests that *Ipomoea muricata* seeds may be a valuable source of antidiabetic agents, and further research is warranted.

Keywords: *Ipomoea muricata*, LC–MS/MS, α-amylase inhibition, Molecular docking

QUALITY CONTROL–DRIVEN STANDARDIZATION AND COMPARATIVE EVALUATION OF COMMERCIAL SHATAVARI GUTIKA FORMULATIONS

Shebina Pareed Rasheed*

Al Shifa College of Pharmacy, Perinthalmanna. Malappuram, Kerala

Corresponding author: shebinaprasheed@gmail.com

Abstract

Ayurvedic formulations are increasingly recognized worldwide; however, their broader acceptance depends on scientifically validated standardization and robust quality control parameters as recommended by WHO guidelines. Shatavari gutika, a classical Ayurvedic formulation, is widely used for hormonal regulation, enhancement of prolactin secretion, and management of conditions such as polycystic ovarian syndrome (PCOS), infertility, and menopausal disorders. The present study aims to establish comprehensive standardization protocols and evaluate critical quality control parameters for selected formulations. Standardization was achieved through systematic evaluation of organoleptic and physicochemical parameters. Advanced analytical characterization was performed using High Performance Thin Layer Chromatography (HPTLC) to generate fingerprint profiles and quantify Shatavarin IV, a key bioactive marker compound. A comparative quality evaluation of three commercial brands (S1, S2, and S3) revealed notable variations in physicochemical properties and marker content, underscoring the importance of stringent quality control measures. Chromatographic separation was achieved on silica gel Merck 60 F254 plates using ethyl acetate: methanol: water (7.5:1.5:1, v/ v/ v), with detection at 425 nm. This study demonstrates that the integration of multiple quality control parameters with modern chromatographic techniques provides a reliable and reproducible framework for standardization, ensuring the safety, efficacy, and global acceptability of Ayurvedic formulations.

Keywords: Standardization, quality control parameters, Shatavari gutika, HPTLC, Shatavarin IV, comparative evaluation, WHO guidelines.

EFFECT OF SARASWATI MANTRA RECITATION ON COGNITIVE FUNCTIONS: MEMORY AND CONCENTRATION

Dr Swati Gupta*

Government Ayurveda College and Hospital, Raipur, C.G.

Corresponding author: sg2028444@gmail.com

Abstract

Introduction: In Ayurveda, promotion of memory and intellect is described under Vidya Vriddhi and Medha Vriddhi. Along with Mantra chanting as a therapeutic approach, Saraswati Mantra, dedicated to Goddess Saraswati, has been traditionally practiced since ancient times, especially during vidyaarambha, to enhance memory and concentration.

Therapeutic Approach: The effect of Saraswati Mantra is mainly attributed to its Prabhava, which acts on Manas, improves Satva Guna, and promotes mental stability and clarity. It also helps in reducing stress and improving attention, concentration, and memory, which are essential for cognitive functions. Despite its classical importance and wide traditional use, the practice has declined in the present era due to modernization, lack of awareness, and absence of scientific validation.

Research Gap: This has created a research gap regarding its academic and clinical relevance in improving memory and concentration. Therefore, there is a need to scientifically evaluate Saraswati Mantra chanting using standard assessment parameters and to redevelop this practice at the academic level.

Results & Conclusion: This may help in establishing Saraswati Mantra chanting as a safe, cost-effective, non-pharmacological method for enhancing cognitive functions and supporting students in achieving better academic performance.

Keywords: Ayurveda, Vidya Vriddhi, Medha Vriddhi, clinical relevance

EFFECT OF *VIRECHANA KARMA* FOLLOWED BY *VAITARANA BASTI* IN THE MANAGEMENT OF *AMAVATA* (RHEUMATOID ARTHRITIS)- A CASE REPORT

Dr. Avani Unadakat*, Dr. Anup Thakar

Department of Panchakarma, I.T.R.A., Jamnagar

Corresponding author: avani.unadkat002@gmail.com

Abstract

Background: Rheumatoid arthritis (RA) is a chronic, systemic autoimmune disorder characterized by joint pain, swelling, stiffness, and progressive disability. In *Ayurveda,* RA closely resembles *Amavata,* where impaired digestion leads to the formation of *Ama*, which, along with vitiated *Vata,* localizes in joints, causing inflammation and disability. Management aims at *Ama pachana, Shodhana,* and *Vata Shamana.*

Objective: To evaluate the combined effect of *Virechana Karma* followed by *Vaitarana Basti* in patients diagnosed with *Amavata* (Rheumatoid Arthritis).

Methods: A clinical study was conducted on patients fulfilling the diagnostic criteria of Rheumatoid arthritis. After *Deepana-Pachana* and *Snehapana*, patients underwent *Virechana Karma*, following adequate *Samsarjana Krama*. The course of *Vaitarana Basti* was administered for 6 days. Assessment was done based on clinical parameters, including joint pain, swelling, stiffness, and functional ability. Laboratory parameters such as ESR and RA factor were also evaluated before and after intervention.

Discussions: *Virechana Karma* (therapeutic purgation) is indicated for *Pitta-Rakta dushti* and systemic detoxification, while *Vaitarana Basti* is considered highly effective in *Amavata* due to its *Ama-pachana* and *Vata-Kapha shamana* properties.

Results: The combined therapy showed significant improvement in major clinical symptoms, including reduction in joint pain, swelling, and morning stiffness. Functional mobility improved markedly. There was a noticeable reduction in Objective parameters.

RA factor: 321 & ESR: 72 mm/hr (BT)

RA factor: 134 IU/ML & ESR:40 mm/hr (AT)

Conclusion: *Virechana Karma* followed by *Vaitarana Basti* is an effective and safe therapeutic approach in the management of *Amavata* (Rheumatoid Arthritis). The combination helps in systemic detoxification, reduction of inflammation, and restoration of joint function, thereby improving quality of life.

Keywords: Rheumatoid arthritis (RA), autoimmune, *Virechana Karma, Pitta-Rakta dushti*

EFFICACY OF *MADHUTAILIKA BASTI* AND *RASAYANA AVALEHA* IN THE MANAGEMENT OF SIDE EFFECTS OF POST-CHEMORADIATION THERAPY AND IMPROVING QUALITY OF LIFE IN HEAD AND NECK CANCER PATIENTS: A CASE STUDY

Dr. Pragati Thombare*

Department of Panchakarma, ITRA, Jamnagar, Gujarat, India.

Corresponding author: pragatithombare001@gmail.com

Abstract

Introduction: Head and neck cancer (HNC) is a growing public health crisis in India. While modern multimodal treatments incorporating adjuvant chemo-radiotherapy to limit surgical extent have advanced, they significantly increase treatment toxicity. From an Ayurvedic perspective, chemo-radiotherapy induces profound *Rukshata* (dryness) and *Dourbalya* (weakness) through the vitiation of *Tridosha,* predominantly *Vata*.

Case Presentation: A 43-year-old male presented to the Panchakarma OPD with complaints of fatigue, mucositis, altered taste, and restricted mouth opening. His past medical history includes carcinoma of the left lateral border of the tongue and floor of the mouth were treated with surgery, 2 cycles of chemotherapy, and 30 sessions of radiotherapy.

Management and Outcome: The patient received *Madhutailika Basti* and *Rasayana Avaleha* for a duration of 16 days. The treatment yielded significant improvements across symptoms, specifically reducing fatigue, mucositis, and altered taste sensation.

Conclusion: *Madhutailika Basti* is selected for its unique ability to simultaneously purify and nourish the body, helping to reverse degenerative changes and restore strength. Concurrently, *Rasayana* therapy acts as a targeted nutritional tool, improving metabolism and actively repairing the tissues (*dhatus*) damaged by chemo-radiotherapy.

Keywords: Head & Neck Cancer, Chemo-Radiation Therapy, *Madhutailika Basti*, *Rasayana Avaleha*

POTENTIAL OF ARTIFICIAL INTELLIGENCE IN AYURVEDIC MEDICINE

Priya Gupta*

Lloyd School of Pharmacy, Knowledge Park II, Greater Noida, Uttar Pradesh, India –201306

Corresponding author: priya.gupta@lloydcollege.in, priyagupta191995@gmail.com

Abstract

Ayurveda represents an ancient system of holistic medicine encompassing personalized medicines, rigorous health and disease and practical knowledge. Recently, the emergence of artificial intelligence (AI) has greatly revolutionized the field of pharmaceutical sciences, opening novel treatment avenues for both Ayurveda and traditional medicine. These are now being utilized for analyzing large and complex datasets, including botanical compounds, traditional knowledge, therapeutic effects and pharmacological properties. Various proficient methods, namely machine learning algorithms, neural networks, and natural language processing, are increasingly used for analyzing data sets. The application of these tools further aids in simplifying the identification of bioactive compounds, predicting synergistic effects and lastly facilitating the understanding the molecular mechanisms of herbal medications. Worldwide, the traditional medicine with AI is being rapidly integrated to support drug discovery, monitoring of safety and generation of evidence. Apart from this, the AI-driven clinical decision support systems (CDSS) can be utilized for predicting diagnosis by analyzing patient data, thereby recommending appropriate ayurvedic formulations. However, several critical issues, such as ethical considerations and robustness of algorithms, need to be addressed for harnessing the full potential of AI for ayurvedic medications.

Keywords: Artificial intelligence, Ayurveda, machine learning algorithms, neural networks, clinical decision support systems

EVIDENCE IN ACTION: CLINICAL CASE REVOLUTIONS IN AYURVEDIC MANAGEMENT OF NAFLD

Dr. Charmi Mehta*

Assistant Professor, Department of Kayachikitsa, Institute of Teaching and Research in Ayurveda (ITRA), Gurudwara Road, Jamnagar, Gujarat, India- 361008

Corresponding author: csmehta@itra.edu.in

Abstract

Background and Objectives: Non-Alcoholic Fatty Liver Disease (NAFLD), a progressive hepatic manifestation of metabolic syndrome, is increasingly prevalent due to sedentary lifestyles, improper dietary habits, and stress. In Ayurveda, such pathologies can be understood as Santarpanottha Yakrit Vikara, primarily stemming from Kapha-Meda Dushti and Agnivaishamya, with Srotorodha (microchannel obstruction) at the Raktavaha Srotas (liver being the Mulasthana). This case study aims to highlight the efficacy of Ayurvedic management, especially Virechana and Shamana Chikitsa, in reversing lifestyle-induced Grade 2 NAFLD.

Methodology: A 47-year-old female school teacher presented with complaints of progressive weight gain, central obesity, fatigue, and bloating. Ultrasonography revealed Grade 2 fatty liver, along with an incidental umbilical hernia. An integrative therapeutic plan was implemented with the following objectives:

- Deepana-Pachana to correct digestive fire,
- Virechana Karma (therapeutic purgation) for systemic detoxification,
- Internal administration of Katuki Churna, and Phalatrikadi Kwath, Sharapunkha Kshara

The intervention spanned three months with regular clinical monitoring.

Results: Post-intervention ultrasonography showed complete resolution of fatty infiltration, with normalization of liver echotexture. The patient reported a weight loss of 7 kg, enhanced digestion, reduced abdominal discomfort, and improved energy levels. No adverse effects were observed during or after therapy.

Conclusion: This case exemplifies the therapeutic potential of classical Ayurvedic interventions in the reversal of lifestyle-induced NAFLD.

Keywords: NAFLD, Lifestyle Disorder, Yakrit Vikara, Virechana Karma

NEUROPROTECTIVE ROLE OF BOERHAAVIA DIFFUSA ROOT IN NEURODEGENERATIVE DISORDERS

Abdul Rahim Khann*, Mr. Angesh Kumar, Kanika Tyagi

Department of Pharmaceutical Technology, Meerut Institute of Engineering and Technology, Meerut, Uttar Pradesh

Corresponding author: abdul.rahim.cology.2024@miet.ac.in

Abstract

Globally, neurodegenerative diseases like dementia, Alzheimer's, and Huntington's syndrome are serious health issues. These conditions are marked by a progressive loss of neurons, which causes cognitive decline, motor dysfunction, and memory impairment. Neuronal damage is thought to be primarily caused by oxidative stress, neuroinflammation, mitochondrial dysfunction, and neurotransmitter imbalance. The majority of the treatments that are currently available concentrate on managing symptoms, and they frequently have limited efficacy and possible side effects. For the prevention and treatment of neurodegenerative diseases, safer and more potent natural alternatives must be investigated. Punarnava, or Boerhaavia diffusa, is a traditional medicinal herb with several therapeutic uses in Ayurveda. Important bioactive substances such as alkaloids, flavonoids, glycosides, and phenolic compounds can be found in the root of Boerhaavia diffusa. These phytoconstituents may aid in preventing harm to neuronal cells because of their well-known anti-inflammatory and antioxidant qualities. By neutralizing free radicals, Boerhaavia diffusa root's antioxidant action helps lower oxidative stress and stop neuronal deterioration. The goal of this study is to investigate how Boerhaavia diffusa root protects against neurodegenerative diseases. By boosting antioxidant defense, lowering neuroinflammation, and preserving neurotransmitter balance—particularly dopamine levels—the root extract may enhance neuronal function. Boerhaavia diffusa root may also aid in enhancing mitochondrial function and avoiding neuronal cell death, both of which are critical for preserving brain health. In conclusion, because of its traditional use and medicinal potential, Boerhaavia diffusa root may be a viable natural neuroprotective agent. The development of plant-based neuroprotective treatments for the treatment of neurodegenerative diseases may benefit from more research.

Keywords: Boerhaavia diffusa, Neuroprotection, Neurodegenerative disorders, Antioxidant, Neuroinflammation, Dopamine, Medicinal plants, Oxidative stress, Herbal therapy, Punarnava

SHIRODHARA A PARADIGM FOR MANOVIKARAS - CLINICAL INSIGHTS AND ITS FUNCTIONAL PRINCIPLE

Dr. Swastika Chandel[1]*, Dr. Seetharam U M S[2], Dr. Lohith B A[2]

[1]PG Scholar, Department of Panchakarma, SDM College of Ayurveda and Hospital, Hassan.

[2]Department of Panchakarma, SDM College of Ayurveda and Hospital, Hassan

Corresponding author: swatichandel1997@gmail.com

Abstract

Ayurveda recognizes *Shiras* as the *uttamanga*, which controls the activities of the whole body. Recognizing the significance of *Shiras*, *Murdhini Taila* stands out as the key treatment modality, with *Shirodhara* specifically indicated for providing *sthairya* (stability) for speech and manas (mind). The procedure involves pouring a selected liquid over the forehead from a specific height in a continuous, uniform stream. It operates through traditional anatomical and energetic frameworks, targeting the *Sthapani Marma*, the *Ajna Chakra*, and the *Manomaya Kosha*.

In the contemporary era marked by mental stress, anxiety (*Chittodvega*), and insomnia (*Nidranasha*), *Shirodhara* offers a highly relevant therapeutic intervention. The continuous stream may generate momentum and soothing vibrations that stimulate tactile and thermoreceptors. This activation leads to the release of endorphins and serotonin, lowering sympathetic tone, reducing heart rate, and yielding a potent anxiolytic effect.

The present presentation aims to portray *Shirodhara* by exploring its clinical insights and functional principles through a modern scientific lens. The study seeks to reinterpret this classical procedure by correlating its effects with the law of energy conservation, thermal vasodilatation, and the stimulation of the pituitary and pineal glands.

Thus, *Shirodhara* represents a holistic therapeutic paradigm that combines procedural mechanical effects with the pharmacological absorption of medicaments. By bridging Ayurvedic wisdom with neurochemical normalization, it contributes significantly to stress reduction, improved mental clarity, and enhanced overall well-being.

Keywords: *shirodhara*, *manovikaras*, *murdhini taila*, *sthapani marma*, anxiolytic effect, *manomaya kosha*

AN AYURVEDIC INTERPRETATION OF POST-VIRAL SYNDROME: INSIGHTS FROM CHARAKA SAMHITA

Megha Suresh Kawale[1*], Shubhangi Kamble[2]

[1]Scholar, Department of Basic Principles, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat- 361008.

[2]Professor, Department of Basic Principles, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat- 361008.

Corresponding author: meghakawale21@gmail.com

Abstract

Background: Post-viral syndrome is increasingly recognized as a global health concern characterized by persistent fatigue, cognitive impairment, and reduced functional capacity following viral infections. The classical knowledge of Charaka Samhita provides a valuable framework for interpreting such post-infectious states through the concepts of *Agni*, *Ojas*, and *Dhatu* balance. The principle of *Trividha Bodhya Samgraha* further aids in understanding and managing previously unclassified conditions (*Anukta Vyadhi*) like post-viral syndrome.

Objectives: To reinterpret post-viral syndrome using the conceptual principles of Charaka Samhita and highlight its relevance in contemporary clinical practice.

Methods: A conceptual review of classical Ayurvedic literature, with primary focus on Charaka Samhita, was conducted. Descriptions of *Jwara*, *Agnimandya*, *Dhatu Kshaya*, and *Ojas* depletion were analysed and correlated with features of post-viral syndrome.

Results: According to Charaka, Incomplete recovery from *Jwara* may lead to persistent *Agnimandya*, impaired *Rasa Dhatu* formation, progressive *Dhatu* depletion, and *Ojas* loss. This results in decreased immunity (*Vyadhikshamatva*) and chronic debility, closely resembling post-viral syndrome. Therapeutic approaches such as *Deepana-Pachana*, *Rasayana*, and *Pathya-Apathya* aim to restore systemic balance and resilience.

Conclusion: *Charaka Samhita* offers a relevant framework for understanding post-viral syndrome and supports the application of Ayurvedic principles in modern healthcare.

Keywords: Charaka Samhita, Post-Viral Syndrome, *Trividha Bodhya Samgraha, Agnimandya, Dhatu Kshaya, Ojas, Rasayana.*

AYURVEDA/2026/072

MODERN TECHNOLOGIES SUPPORTING AYURVEDA: THE ROLE OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Vd Saurabh Hiwanj*

PG Scholar, Department of Dravyaguna Vigyana, National Institute of Ayurveda, Jaipur.

Corresponding author: hiwanjs2404@gmail.com

Abstract

Introduction: Ayurveda has always focused on understanding each individual and preparing medicines with great precision. Today, modern technologies such as artificial intelligence (AI) and machine learning (ML) are being used as supportive tools to strengthen these classical methods.

Methods: Published literature from PubMed, Google Scholar, and Ayurveda research databases was reviewed. Studies on digital diagnostic tools, Prakriti assessment systems, Ayurgenomics, and ML-based applications were examined to understand their practical usefulness.

Results: Work in Ayurgenomics continues to show scientific links between Prakriti and genetic patterns. In the pharmaceutical area, machine learning is being used to support raw material quality checks, analyse herb properties, predict combinations of ingredients, and improve formulation stability. Text-analysis systems like NLP are also helping scholars study ancient Ayurvedic manuscripts more easily by organising and interpreting large volumes of classical knowledge.

Conclusion: AI and ML are not replacing the wisdom of Ayurveda; rather, they are helping make it applicable in modern settings. Working together, Ayurvedic scholars and technology experts can help these tools grow while staying faithful to Ayurvedic principles.

Keywords: Ayurveda, Machine Learning, Prakriti, Artificial Intelligence, Nadi Pariksha

TARGETING ANTIMICROBIAL AND DIURETIC PATHWAYS: DESIGN, SYNTHESIS, AND PHARMACOLOGICAL EVALUATION OF NOVEL 1,3,4 OXADIAZOLE AGENTS

Hafsa Junaid*, M. Shahar Yar

Medicinal and Phytochemical ChemInnovation Lab, Department of Pharmaceutical Chemistry, School of Pharmaceutical Education and Research, Jamia Hamdard, Hamdard Nagar, New Delhi – 110062

Corresponding Author: hafsajunaidhps@gmail.com

Abstract

Background: The 1,3,4-oxadiazole ring is a privileged scaffold. Rising antimicrobial resistance and the need for novel diuretics make targeting DNA Gyrase and Carbonic Anhydrase with this nucleus a highly strategic therapeutic approach.

Objectives: To design, synthesize, characterize, and pharmacologically evaluate novel 1,3,4-oxadiazole derivatives against established standard drugs.

Methods: AutoDock-guided molecular docking evaluated target affinities. Compounds were synthesized via an economical four-step protocol (esterification, hydrazide conversion, cyclization) and validated using IR, NMR, and Mass Spectrometry. Pharmacological activity was evaluated in vivo using murine models.

Results & Discussion: Docking studies confirmed optimal enzyme binding interactions. The designed analogs were successfully synthesized via the cost-effective pathway, with structures thoroughly validated by spectral data. In vivo screening demonstrated significant biological efficacy, validating the rational structural modifications.

Conclusion: This integrated methodology successfully produced novel 1,3,4-oxadiazole derivatives with potent pharmacological promise, highlighting the scaffold's ongoing value in advanced drug discovery.

Keywords: Targeting Antimicrobial, Diuretic, Docking

A PHYTOESTROGEN-RICH AYURVEDIC FORMULATION IN PREMATURE OVARIAN INSUFFICIENCY: CLINICAL INSIGHTS ON *ARTAVA SAMVARDHINI BEEJA YOGA*

Dr. Vidhi Prajapati*, Dr. Hetal Baraiya

Scholar, Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat-361008

Associate Professor of the Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat-361008

Corresponding author: vhprajapati2000@gmail.com

Abstract

Premature Ovarian Insufficiency (POI) is a reproductive endocrine disorder characterized by impaired ovarian function before the age of 40 years, leading to hypoestrogenism, menstrual irregularities, and infertility. Conventional hormone replacement therapy provides symptomatic relief but possesses potential long-term risks, necessitating safer alternatives. Ayurveda correlates POI with *Kshin artavdushti*, emphasizing restoration of reproductive function. *Artava Samvardhini Beeja Yoga*, an Ayurvedic formulation, contains phytoestrogen-rich drugs such as *Kushmanda* (*Benincasa hispida*), *Atasi* (*Linum usitatissimum*), and *Shatapushpa* (*Anethum sowa*). These herbs are rich in lignans, flavonoids, and phytosterols, which exhibit estrogen-like activity through modulation of estrogen receptors and endocrine pathways. The formulation is hypothesized to act via *Rasayana*, *Balya*, and *Artavajanana* properties, contributing to hormonal balance, follicular development, and endometrial receptivity. Additionally, its antioxidant and anti-inflammatory effects may improve ovarian reserve and menstrual cyclicity. Preliminary observations indicate improvement in menstrual regularity and reduction in vasomotor symptoms. This integrative approach highlights the potential of phytoestrogenic Ayurvedic formulations as a safe and holistic alternative for POI management.

Keywords: Premature Ovarian Insufficiency, *Artava Samvardhini Beeja Yoga*, Phytoestrogens, Ayurveda, *Kshin Artavdushti*, Herbal Pharmacology.

DHATU SAMYA AS A PREREQUISITE FOR NATIONAL RESILIENCE: OPERATIONALISING *AYURVEDIC* PARAMETERS OF HRQOL FOR VIKSIT BHARAT 2047

Nagjyoti Madhav Deshmukh[1*], Raja Rajeshwari N M[2]

[1]Scholar, Department of Ayurveda Samhita and Siddhanta, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital (Affiliated to Rajiv Gandhi University of Health Sciences), Hassan, Karnataka

[2]Professor, Department of Ayurveda Samhita and Siddhanta, Sri Dharmasthala Manjunatheshwara college of Ayurveda and hospital (Affiliated to Rajiv Gandhi University of Health Sciences), Hassan, Karnataka

Corresponding author: nagudeshmukh98@gmail.com

Abstract

India's vision for Viksit Bharat by 2047 necessitates a population that is not merely free from disease but possesses optimal functional capacity and well-being. India's 116th rank in the World Happiness Report 2026 indicates a major gap between economic growth and citizens' well-being. While National progress is typically measured by financial growth, true development depends on the 'Health- Related Quality of Life' (HRQoL) and functional efficiency of the population. This paper proposes a policy-making framework grounded in the Ayurvedic parameters of HRQoL. Unlike modern indices that merely record health outcomes, Ayurveda explains the underlying mechanisms of health and well-being. Maintaining *Dhatu Samya* - the equilibrium between the *Dosha, Dhatu, and Mala* through optimal functioning of *Agni* regulated by proper *Ahara* (dietary habits) and *Vihara* (lifestyle practices) leads to optimal quality of tissues (Dhatu Sarata), resulting in enhanced physical, psychological and functional capacity of an individual. Furthermore, following *Sadvrutta* (ethical and moral conduct), individuals achieve *Sukhayu* (happy and contented life) and *Hitayu* (wholesome and socially purposeful life). These states represent the optimal efficiency of the individual. While countries like New Zealand use "Wellbeing Budgets" and Bhutan utilizes "Gross National Happiness" to guide their nations, India can lead by operationalising Ayurvedic Parameters of HRQoL into national policy. A healthy community is not a byproduct of a developed Nation; it is the prerequisite. India can ensure that 2047 represents a Nation that is not only wealthy but also possesses the highest standards of human vitality and social harmony.

Keywords - *Ayurveda*, *Dhatu Samyata*, HRQoL, *Sukhayu*, *Hitayu*, Viksit Bharat 2047

PRAKRUTI-BASED PREVENTIVE STRATEGIES FOR HYPERTENSION: AN AYURVEDIC CONCEPTUAL STUDY

Movaliya Kwins Arvindbhai[1*], Prof. Hitesh A. Vyas[2]

[1]Scholar, Department of Basic Principles, ITRA, Jamnagar.

[2]Professor, Department of Basic Principles, ITRA, Jamnagar.

Corresponding author: kwinsmovaliya@gmail.com

Abstract

Background: Hypertension (HTN) is a prevalent modern lifestyle disorder often stemming from improper habits, categorized in Ayurveda as Prajnaparadha. While conventional approaches are often uniform, Ayurveda emphasizes Purusham Purusham Vikshya, asserting that every individual is unique and requires personalized care based on their Prakriti.

Aim and Objective: The primary objective is to outline a preventive framework for hypertension by identifying specific Samprapti and tailored lifestyle interventions for Vata, Pitta, and Kapha Prakriti individuals.

Method: The study adopts a conceptual approach based on classical Ayurvedic texts, specifically Charaka Samhita. It analyzes how specific Nidan Sevana lead to hypertension through different physiological pathways—such as Pratiloma Gati of Apana Vayu, increased Drava guna of Rakta, or Srotorodha—and identifies corresponding remedial measures.

Discussion: Prevention is categorized into general and specific measures. General measures include Panchakarma, Dinacharya and Sadvritta.

Specific interventions involve:

Vata: Avoiding Katu, Tikta, and Kashaya tastes; practicing Shirodhara and Basti in Varsha Ritu.

Pitta: Avoiding Amla and Lavana; utilizing Virechana and Raktamokshana in Sharad Ritu.

Kapha: Focusing on Vyayama, Langhana and Vamana in Vasanta Ritu.

Conclusion: By integrating personalized protocols for each Dosha with a generalized consideration of Vata, Rakta and Kapha Dushti, Ayurveda provides a comprehensive, constitution-based strategy for public health improvement and the prevention of hypertension.

Keywords: Hypertension, Prakriti, Ayurveda, Prevention, Tridosha

AYURVEDA/2026/077

FORMULATION AND EVALUATION OF HERBAL LIPSTICK

Stellah Yesaya Masangya[1], Shivanshu Sharma[2*]

[1]School of Pharmacy, Sharda University, Greater Noida

[2]Assistant Professor, School of Pharmacy, Sharda University, Greater Noida

Corresponding author: shivanshu.sharma@sharda.ac.in

Abstract

In recent times, lipsticks have been formulated using natural colorants. Lipsticks are formulation commonly used by women to improve the gorgeousness of lips, add a glamorous touch to makeup, build confidence, and enhance beauty. Herbal lipstick is a formulation that is made of pigments, perfumes, waxes, preservatives, antioxidants, oil, and colour. The use of herbal lipstick is safe, cost-effective, and non-toxic, and the pigments are easily available in plants and vegetables. Synthetic formulations have a lot of side effects in the market; therefore, evaluation of herbal lipstick is performed on the following parameters, such as colour, pH, skin irritation test, perfume stability, solubility study, aging stability, and surface anomalies. The study concludes that herbal lipstick formulations have fewer or no side effects since natural colorants are used during the preparation process.

Keywords: lipstick, glossy, pigments, anomalies

AYURVEDA/2026/078

THERAPEUTIC ROLE AND OUTCOMES OF TAMOXIFEN IN HORMONE DEPENDENT BREAST CANCER

Debbie Lameck Mchuma*

School of Pharmacy, Sharda University, Greater Noida

Corresponding author: Lameckdebbie@gmail.com

Abstract

One of the most popular anticancer medications in the world is tamoxifen. It has been given to treat estrogen receptor α (ERα/ESR1)-positive breast cancer in its early, advanced, and metastatic stages. It is a safe medication with generally well-tolerated adverse effects. In addition, tamoxifen medication lowers the risk of breast cancer in high-risk women. Because breast cancer depends on estrogen, it may regress if estrogen output is reduced through oophorectomy, hypophysectomy, or adrenalectomy. The development of tamoxifen, an antiestrogen that prevents estrogen from attaching to estrogen receptors, decreased the need for these surgical operations. In 1977, the Food and Drug Administration authorized tamoxifen for the treatment of women with metastatic breast cancer. A few years later, it was licensed for adjuvant therapy of initial breast cancer. Tamoxifen is now primarily used as adjuvant therapy for lower-risk premenopausal breast cancer and cancer prevention due to the development of newer drugs that target ERα-positive breast cancer. It is well acknowledged that tamoxifen, a selective modulator of the estrogen receptor, works therapeutically via competitively binding to ERα, which causes corepressors to be recruited and transcription of genes implicated in breast cancer epithelial growth to be inhibited. Over the years, tamoxifen's ERα-independent actions have been documented in a variety of in vitro and in vivo settings

Keywords: Breast cancer, Tamoxifen, estrogen, estrogen receptor β(ERβ/ESR2), tamoxifen therapy

AYURVEDA/2026/079

ROLE OF ARTIFICIAL INTELLIGENCE IN DRUG DISCOVERY AND PHARMACOVIGILANCE: A COMPREHENSIVE REVIEW

Robin Singh*, Rajat Goyal, Vanshika Mahajan, Sumeet Gupta

MM College of Pharmacy, Maharishi Markandeshwar (Deemed to be University), Mullana-Ambala, Haryana 133207, India

Corresponding author: robin717singh@gmail.com

Abstract

In the field of pharmaceutical sciences, the use of AI has emerged as a potent instrument, especially for finding new medicines and for tracking drug safety. The old way of creating a drug is slow, expensive plus uncertain - it usually lasts longer than ten years and often fails human trials. AI shortens this path because it reads huge data sets within minutes, builds forecasts, and takes over difficult choices that once demanded expert teams. When a new drug is sought, AI points to the right biological target, refines the first hit into a workable lead, and guesses how well it will work, but also flags any poison risks - each step now costs less and moves faster. Once the drug is on the market, AI screens reports of side effects, spots hidden safety signals and watches real-world use at a scale no human group could match. This review sets out the basic ideas behind AI in healthcare, traces how the technology entered pharmacy and shows how it is reshaping both the birth of new drugs or the systems that guard patients after launch.

Keywords: Artificial intelligence, pharmacovigilance, drug discovery, machine learning, adverse drug reactions, regulatory and ethical considerations.

FORMULATION OF A MUCOADHESIVE SUSTAINED-RELEASE TABLET CONTAINING CURCUMIN FOR THE MANAGEMENT OF GASTRIC WOUNDS HEALING

Shivanshu Sharma*

Assistant Professor, School of Pharmacy, Sharda University, Greater Noida

Corresponding Author: shivanshu.sharma@sharda.ac.in

Abstract

This study aims to elucidate the intricate roles of extracellular matrix (ECM) remodeling and degradation in inflammation and wound healing, particularly focusing on ranitidine-induced stomach ulcers and their healing mechanisms. Despite the widespread use of ranitidine, its specific effects on acute stomach ulceration and subsequent healing remain poorly understood. Our analysis reveals that MMP-2 activity in ulcerated stomach extracts is moderately reduced but also exhibits significant up-regulation. Importantly, the severity of the ulcer and the administered dosage of ranitidine demonstrate a substantial correlation with these outcomes. This highlights the complex interplay between ECM remodeling, inflammation, and the healing process in the context of ranitidine-induced ulcers. Understanding these mechanisms can provide valuable insights into the development of targeted therapeutic interventions for gastric ulcers and other related conditions.

Keywords: Helicobacter pylori, ranitidine, curcumin, gastric pain, peptic ulcer, and gastrointestinal ulcer.

MOLECULAR DOCKING BASED *IN-SILICO* STUDY OF PHYTOCONSTITUENTS FOR PCOS MANAGEMENT

Roshidat Bukola Musbaudeen, Kelie Shango*, Mr Nilanchala Sahu

School Of Pharmacy (SOP), Sharda University, Greater Noida, Uttar Pradesh-201310, India

Corresponding author: shangokelie120@gmail.com

Abstract

Polycystic Ovary Syndrome (PCOS) is a multifactorial endocrine and metabolic disorder affecting women of reproductive age worldwide, significantly contributing to infertility, metabolic dysfunction, and reduced quality of life. Despite the availability of conventional pharmacological interventions, therapeutic outcomes remain suboptimal, necessitating the exploration of novel and safer treatment strategies. In this context, phytoconstituents, particularly flavonoids, have emerged as promising bioactive compounds due to their diverse pharmacological properties, including antioxidant, anti-inflammatory, insulin-sensitizing, and hormone-modulating effects.

The present study employs a molecular docking–based *in silico* approach to investigate the therapeutic potential of selected flavonoid phytoconstituents in PCOS management. Key receptors implicated in PCOS pathogenesis, namely the androgen receptor and estrogen receptor alpha, were selected as molecular targets. Docking simulations were conducted to evaluate ligand–receptor binding affinity, interaction stability, and predicted biological activity. Structural preparation, docking analysis, and visualization were performed using advanced computational tools to identify compounds demonstrating favorable binding conformations and energetics.

The study is expected to provide mechanistic insights into the molecular interactions between flavonoids and hormonal receptors involved in PCOS, thereby supporting their potential role in restoring endocrine balance and improving metabolic outcomes. Overall, the findings aim to contribute to the rational design and development of plant-based therapeutic candidates for effective and targeted PCOS management, while laying a foundation for future in vitro and in vivo validation.

Keywords: Polycystic Ovary Syndrome, Molecular Docking, Flavonoids, Phytoconstituents, Androgen Receptor, Estrogen Receptor Alpha, In Silico Study, Hormonal Modulation, Insulin Resistance.

AYURVEDA/2026/082

MOLECULAR DOCKING OF POTENTIAL PHYTOCHEMICALS TARGETING PROTEINS AS THERAPEUTIC SITES FOR DIABETIC WOUNDS: AN IN SILICO STUDY

Euphrasia Ayubu*, Rajesh Gautam

School Of Pharmaceutical Sciences (SOPS), CT University, Ludhiana, Punjab, India

Corresponding author: ayubueuphrasia@gmail.com

Abstract

Diabetic wounds represent a significant clinical challenge due to impaired healing, persistent inflammation, and increased susceptibility to infection. Conventional therapies often fail to achieve complete recovery, prompting the search for novel, effective treatment strategies. Phytochemicals, derived from medicinal plants, have emerged as promising candidates owing to their diverse bioactive properties, including antioxidant, anti-inflammatory, and antimicrobial effects. Molecular docking, an in- silico computational approach, offers a powerful tool to predict and analyze the interaction of these phytochemicals with specific protein targets involved in wound healing pathways, such as growth factors, matrix metalloproteinases, and inflammatory mediators. This study consolidates current research on the molecular docking of potential phytochemicals against therapeutic protein targets relevant to diabetic wound management. The protein receptor was downloaded from the Protein Data Bank and utilized for docking. The proteins involved in the wound stage include Interleukin 6, Tumor necrosis factor, and Fibroblast growth factor receptor. For the selection of ligand molecules, we used a target-based ligand selection approach. ChemDraw was used to draw the most prevalent structure found in aloe vera. This study focuses on the use of aloe vera plants in managing diabetes and improving diabetic wounds since it contains diverse phytochemical constituents, including anthroquinones, chromones, anthrones, alkaloids, and phenolic compounds.

Keywords: Diabetic wound, Molecular docking, Phytochemicals, Protein receptors, in silico study, Aloe vera.

DEVELOPMENT AND VALIDATION OF RP-HPLC METHOD FOR METHYLPREDNISOLONE ACETATE

Rajarshee Putatunda*

Department of Pharmacy, KIET School of Pharmacy, India

Corresponding author: putatundarajarshee2001@gmail.com

Abstract

A simple, precise, and robust RP-HPLC method was developed and validated for the quantitative estimation of methylprednisolone acetate, a synthetic glucocorticoid ester widely used for its anti-inflammatory and immunosuppressive activity in depot formulations. Method development was guided by an understanding of the drug's chemical and physicochemical properties, with UV detection carried out in the 240–260 nm range. Methanol and acetonitrile were identified as suitable solvents, and an optimized acetonitrile–water mobile phase provided sharp peaks with good resolution and acceptable retention time. The method was validated in accordance with ICH Q2(R1) guidelines and showed excellent specificity, linearity ($R^2 > 0.999$), precision (%RSD < 2%), sensitivity, and robustness. The validated RP-HPLC method is economical, reproducible, and suitable for routine quality control, assay determination, and stability studies of methylprednisolone acetate in pharmaceutical formulations.

Keywords: Methylprednisolone Acetate, RP-HPLC, Stability-indicating method, injectable suspension, Method validation

INNOVATIVE CLOSED STERILE BLOOD COLLECTION SYSTEM FOR SIRAVYADHA (RAKTAMOKSHANA) IN AYURVEDA SHALYA TANTRA

Dr. Akansha Maurya*

Scholar, Shalya Tantra, Parul University

Corresponding author: drakansha50@gmail.com

Abstract

Siravyadha (Raktamokshana) is an important para-surgical procedure described in Ayurveda, traditionally performed by collecting blood in an open bowl or container; however, this method has several limitations, including risk of contamination, difficulty in measuring blood volume, improper disposal, and lack of standardization for research or laboratory analysis. To overcome these challenges, a prototype of a closed, sterile, and professional blood-collection system was conceptualized to make the procedure safer, more measurable, and research-friendly while preserving traditional principles. The proposed design consists of a transparent sterile bag with a capacity of 50–150 ml, a printed measurement scale for precise volume documentation, a one-way valve with a sterile connecting needle or butterfly set, a sampling port for laboratory investigations, and a safe biomedical waste disposal mechanism, intended to replace conventional open containers during Siravyadha. The implementation of this system offers several advantages, including reduced contamination and improved hygiene, accurate measurement of collected blood, ease of sampling for laboratory testing, enhanced patient confidence and understanding, and better support for clinical documentation and research, along with the potential to study doshic changes in blood as per Ayurvedic assessment. Overall, this innovative approach bridges classical Ayurvedic surgical practice with modern safety standards, promotes ethical handling of biological waste, ensures sterility, and facilitates accurate scientific evaluation of Raktamokshana, thereby enhancing clinical teaching, patient acceptance, and future research possibilities while supporting the integration of Ayurveda with evidence-based medical practice.

Keywords: Siravyadha, Raktamokshana, Innovation in Ayurveda, Blood Collection Device, Shalya Tantra, Biomedical Waste Management, Research Tool.

FORMULATION AND EVALUATION OF HERBAL COSMETICS

Faraja Burton*, Robin Singh

School of Pharmacy, CT University, Punjab, India

Corresponding author: aydreyburton102@gmail.com

Abstract

Herbal cosmetics have gained significant attention due to their safety, efficacy, and minimal side effects compared to synthetic products. This study focuses on the formulation and evaluation of herbal cosmetic preparations using natural ingredients such as plant extracts, essential oils, and herbal powders known for their therapeutic properties. The formulation process involves selecting suitable herbal components based on their skin-benefiting properties, including antimicrobial, antioxidant, and moisturizing effects. Various formulations such as creams, lotions, and face packs are prepared using standardized methods to ensure consistency and stability. The evaluation of these formulations is carried out using physicochemical parameters such as pH, viscosity, spreadability, and stability, along with organoleptic properties like color, odor, and texture. Microbial testing is also conducted to ensure product safety. Skin irritation tests are performed to confirm suitability for topical application. The results indicate that herbal cosmetic products exhibit good stability, compatibility, and effectiveness without causing adverse reactions. In conclusion, herbal cosmetics offer a natural, eco-friendly, and skin-compatible alternative, highlighting the need for further research and standardization to improve quality, safety, and commercial viability in the cosmetic industry. These findings support increasing consumer preference for plant-based products in modern skincare and personal care applications.

Keywords: Herbal cosmetics, physiochemical parameters, formulations

CHALLENGES AND LIMITATIONS OF PHARMACOTHERAPY OF HYPERTENSION IN TEENAGERS

Ujjwal Kumar *, Sanju Dahiya

[1]Department of Pharmaceutics, MM College of Pharmacy, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala-133207, Haryana, India

Corresponding author: ujjwalgpj70@gmail.com

Abstract

An estimated 1.4 billion adults worldwide suffer from hypertension, yet the prevalence among adolescents remains unpredictable and irritating. Key contributors include obesity, lack of physical activity and genetic factors. This condition carries major clinical weight, as unmanaged cases increase the chances of heart disease, kidney problems, and metabolic issues continuing into adulthood. Doctors recommend medication for teens with severe, ongoing, or characteristic hypertension that doesn't respond to initial lifestyle changes. Still, prescribing drugs in this group is tricky due to rare data available to youth, issues with accurate diagnosis, problems with sticking to treatment, unwanted side effects, effects on growth, and social-emotional barriers that delay safe, successful care. To conduct a systematic review of the difficulties and shortcomings in using antihypertensive drugs for adolescents, problem-solving evidence gaps and real-world barriers to improve treatment results. We examined studies from PubMed, MDPI, Scopus, Elsevier, Springer, Nature, and Google Scholar, focusing on the most current and recent publications for reliable findings. Key barriers in treating hypertension involve few randomized controlled trials, risks of overmedicating due to stress-related blood pressure surges, low adherence caused by too many pills and side effects, interference with puberty, and non-compliance linked to family dynamics. The review calls for customized treatment plans, team-based care involving multiple specialists, and more research targeted at teens to boost drug tolerance and lasting benefits.

Keywords: Adolescent hypertension, pharmacotherapy challenges, treatment adherence, personalized regions.

ROLE OF THE PHARMACIST IN DEPRESCRIPTION AMONG THE VULNERABLE POPULATION

Sachin Kumar[1], Dr. kala Bahadur Rawal[2*]

[1]Department of Pharmacy Practice, MM College of Pharmacy, MMDU, Mullana-Ambala, Haryana -133207

[2]Department of Pharmacy Practice, MM College of Pharmacy, MMDU, Mullana-Ambala, Haryana -133207

Corresponding author: *kbrawal52@gmail.com*

Abstract

Deprescription is defined as a systematic process of tapering, discontinuing, or withdrawing medicines to manage polypharmacy and improve patients' health outcomes. As deprescription mostly focuses on the elimination of unwanted drugs, deprescription can be considered as prescription metabolism. The highly susceptible population, such as elderly patients, pregnant women, infants, and patients with multiple chronic disorders, are at higher risk of polypharmacy because they undergo altered physiological changes, pharmacokinetic, and pharmacodynamic changes. Over the past two decades, the practice of polypharmacy has increased significantly due to policy changes caused by the introduction of new drugs. Similarly, Regulatory bodies are more selective in formulating policy on prescribing and formularies than in developing a suitable plan for the implementation of deprescribing in recent times. Pharmacists are well-positioned to identify patients living with excessive polypharmacy and address the risks like drug-related problems (DRPs). Deprescription is a crucial intervention done by pharmacists through medication review, medication reconciliation and through proper utilization of deprescribing tools and guidelines. This review article aims to explore the role of pharmacists in deprescribing and improving medication safety and highlight the need for policy-level intervention to promote the rational use of medication.

Keywords: Therapy optimization, Medication Reconciliation, Susceptible Patients, Drug-related Problems

AYURVEDIC MANAGEMENT FOR TRIGEMINAL NEURALGIA (*ANANTAVATA*): A CASE REPORT

Dr. Vishnupriya D Shenoy[1]*, Vd. Dhananjay V Patel[2]

PG scholar, Department of Kayachikitsa, Institute of Teaching & Research in Ayurveda, Jamnagar, Gujarat, India.

Associate Professor, Department of Kayachikitsa, Institute of Teaching & Research in Ayurveda, Jamnagar, Gujarat, India

Corresponding author: drvpshenoy2024@gmail.com

Abstract

Background: Trigeminal neuralgia is a debilitating neurological condition characterized by recurrent episodic facial pain. This condition can be correlated with *Anantavata*, a *Vata- Pradhana Shiroroga.*

Case Presentation: A 66-year-old retired male bank employee presented with a 5-month history of lancinating pain in the left temporal region, aggravating during attacks (VAS-08) and triggered by activities like eating, talking, and shaving. The pain episodes lasted for a few minutes and increased in frequency from weekly to 4-5 times daily. Associated symptoms included lacrimation, excessive perspiration during attacks, and sleep disturbance. Examination revealed hyperalgesia, impaired fine touch, temperature sensation deficit, and mild weakness of masticatory muscles on the left side. MRI showed vascular compression of the left trigeminal nerve.

Intervention: Treatment included *Deepana-Pachana, Koshtashodhana, Marsha Nasya*, and oral medications- *Pathyadi Kwatha, Shirashuladi Vajra Rasa,* and *Brihat Vatachintamani Rasa.*

Results: After treatment, he was able to discontinue allopathic medications, and pain reduced significantly (VAS 08 to 02), with attack frequency decreasing to 1-2 per month. Penn Facial Pain Score improved from 9 to 3, along with better sleep and quality of life.

Conclusion: This case report showed a significant role of Ayurvedic interventions in reducing symptoms and improving quality of life in trigeminal neuralgia.

Keywords: *Anantavata*, Trigeminal Neuralgia, Ayurveda, *Nasya*

NIDANA – ILLUMINATING THE ROOTS OF DISEASE IDENTIFICATION OF KHA VAIGUNGA AND SROTO DUSHTI

Paripoorna M.S*

MD Scholar, Dept. of Ayurveda Samhita Evam Maulik Siddhanta, National Institute of Ayurveda (DU), Jaipur, Rajasthan.

Corresponding author: paripoornams@gmail.com

Abstract

Introduction: In Ayurveda, understanding the etiopathogenesis of diseases requires a clear recognition of *Kha Vaigunya* and *Sroto Dushti*. *Kha Vaigunya* implies inherent weaknesses or defects in the *Srotas* (channels), which predispose to disease development when aggravated by causative factors. *Sroto Dushti* describes the pathological derangement or vitiation of these channels, disrupting their normal physiological functions. This study aims to elucidate the identification criteria and clinical significance of these fundamental concepts in disease manifestation.

Materials and Methods: A comprehensive review of classical Ayurvedic texts including *Charaka Samhita* and *Sushruta Samhita* was conducted to analyze descriptions of *Kha Vaigunya* and *Sroto Dushti*. Key terms such as *Prakriti*, *Dosha-Dushya Samurchana*, and *Samprapti Ghatakas* were examined. The study also incorporated traditional diagnostic techniques like *Trividha Pariksha* and assessment of *Doshic Linga* relevant to channel disorders.

Results: *Kha Vaigunya* was found to arise from *Hetu Sevana* (exposure to etiological factors), resulting in localized *Stanasamshraya* (concentration of vitiated doshas) in structurally impaired *Srotas*. *Sroto Dushti* presented in four classical forms: *Atipravrutti* (excessive flow), *Sanga* (obstruction), *Granthi* (nodal formations), and *Vimarga Gamana* (abnormal flow paths). Clinical identification was supported by observed changes in tissue function and symptoms arising from the affected channels.

Discussion: Accurate detection of *Kha Vaigunya* and *Sroto Dushti* supports personalized management by enabling early intervention through *Srotoshodhana* (channel purification) and *Bheda Chikitsa* (disease-specific treatment). The study underlines the importance of integrating these concepts for holistic *Swasthya Rakshana* and *Vyadhi Prashamana*, reducing disease recurrence by addressing underlying channel pathology. Traditional examination modalities remain invaluable in guiding therapeutic decisions.

Keywords: Kha Vaigunya, Sroto Dushti, Srotas, Dosha-Dushya Samurchana, Samprapti, Srotoshodhana, Bheda Chikitsa, Ayurvedic diagnosis

AYURVEDA FOR VIKSIT BHARAT 2047

Sakshi Aniket Pratapwar*

Shri Vijaymahantesh Ayurvedic Medical College, Ilkal

Corresponding author: sakshikomawar@gmail.com

Abstract

The vision of Viksit Bharat 2047 focuses on making India a developed nation by the 100th year of its independence. A key part of this vision is ensuring the wellness of every citizen. Wellness means not only being free from disease, but also having good physical health, a peaceful mind, and a clean environment. Traditional practices like yoga and Ayurveda can be combined with modern medical facilities to improve overall health. The use of digital technology, such as telemedicine, can help reach people in remote areas. Government programs and public awareness campaigns play an important role in promoting healthy habits. Today, many people in India suffer from problems like unhealthy eating habits, lack of exercise, stress, and pollution. Also, not everyone has equal access to good healthcare. To improve this, we need to focus more on prevention rather than just treatment. Simple habits like eating healthy food, doing regular exercise The youth and communities must also take responsibility for spreading awareness and adopting healthy lifestyles. By working together, India can build a healthier society. A nation with healthy citizens will be stronger, more productive, and ready to achieve the dream of Viksit Bharat 2047.

Keywords: Ayurveda, Viksit Bharat, tradition, health

AYURVEDA/2026/091

ROLE OF DIETARY AND LIFESTYLE REGULATION IN THE MANAGEMENT OF KSHUDRA ROGAS

Nisha Maheshwari*, Joban Modha

Institute of teaching and research in ayurveda, Jamnagar

Corresponding author: niamaheshwari12@gmail.com

Abstract

Introduction: *Kshudra Rogas* constitute a cluster of minor yet clinically significant disorders, primarily affecting skin and superficial tissues. Although considered mild, neglect of dietary and lifestyle regulations can lead to chronicity, recurrence, and cosmetic concerns. Classical Ayurvedic texts emphasize the role of *Pathya–Apathya* in *Chikitsa* for maintaining *Agni*, balancing *Doshas*, and promoting tissue health. Disease-specific dietary and lifestyle interventions are pivotal in enhancing therapeutic outcomes in *Kshudra Roga* management. **Methods:** A conceptual narrative review was conducted based on classical Ayurvedic literature, including Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya. *Twak Vikaras* were systematically analyzed in relation to *Dosha* predominance, *Agni*, *Dhatu*, and *Samprapti*. **Results:** Adherence to disease-specific *Pathya* restored *Agni*, balanced *Doshas*, and improved tissue health. Patients following *Pathya* showed shorter disease duration, lower recurrence, and better symptomatic outcomes. Conversely, *Apathya* practices led to *Dosha* aggravation, *Ama* accumulation, and reduced therapeutic efficacy. **Discussion:** *Pathya–Apathya* modulates digestion, metabolism, and tissue homeostasis, enhancing therapeutic efficacy and preventing disease progression. These principles align with modern dietary, lifestyle, and preventive dermatological strategies. **Conclusion:** Disease-specific dietary and lifestyle interventions (Pathya) play a critical role in the effective management of *Kshudra Rogas*. Integration of *Pathya* with medicinal therapy improves clinical outcomes, reduces recurrence, and promotes holistic health.

Keywords: *Kshudra Rogas, Pathya–Apathya, Chikitsa, Ayurveda, clinical relevance*

PHARMACOGNOSTICAL, PHYTOCHEMICAL, AND BIOLOGICAL EVALUATION OF SELECTED INDIAN MEDICINAL PLANTS FROM HIMACHAL PRADESH: *CHAMABIANIA CUSPIDATA*

Panshul Sharma[*], Nitin Verma

[1*]Chitkara School of Pharmacy, Chitkara University, Himachal Pradesh

Corresponding author: sharmapanshul17@gmail.com

Abstract

This study investigates the pharmacognostical, phytochemical, and biological properties of *Chamabainia cuspidata*, a medicinal plant from Himachal Pradesh, India. Pharmacognostical evaluation included macroscopic and microscopic characterization to establish identity and standardization parameters. Key diagnostic features such as leaf morphology, trichomes, and powder microscopy were examined. Preliminary phytochemical screening of plant extracts revealed the presence of bioactive constituents, including flavonoids, phenolics, alkaloids, tannins, and saponins. These compounds are associated with significant therapeutic potential. Biological studies demonstrated notable in vitro anti-inflammatory activity. The extracts also exhibited moderate anti-urolithiasis activity. The findings support the traditional use of *Chamabainia cuspidata* and indicate its potential as a source of natural bioactive compounds. Further studies are recommended for in vivo trials for their pharmacological validation.

Keywords: Pharmacognostical, Phytochemical, Biological, Anti-inflammatory, Anti-urolithiasis

SIGNIFICANCE OF *AHARA* IN MAINTAINING WOMEN'S MENTAL HEALTH

Dr Tejaswini R*

PG Scholar, Department of PG Studies in Swasathavritta, JSSAMC, Mysore – 570028, Karnataka

Corresponding author: tejaswiniramesh1829@gmail.com

Abstract

In the present era, many changes are seen in the life of women as compared to the past. They have many responsibilities regarding family, society, and Career. Due to this, many changes are seen in women as compared to men. Many physical, psychological, Psychological and Hormonal changes are seen in the life span of women during different stages, like - *Rajodarsan kala, Prajnana kala, Garbhavastha kala, Rajonirvritti kala,* etc. In these changes due to not following proper *Aahar-Vihara*, many types of diseases arise and aggravate, such as Dysmenorrhea, Irregular cycles, Premenstrual syndrome, Infertility, PCOD, *Garbhini Vyapad, Yoni Vyapad, Sutika Vikara*, Postnatal depression, Breast Cancer, Cervical Cancer, Ovarian Cancer, along with other systemic disorders such as Diabetes Mellitus, High Blood Pressure, Obesity, Osteoporosis, Osteoarthritis etc which indirectly contributes for above said diseases. According to recent statistics, about 90-92% of women of all ages suffer from one or another gynecological issue. A report of the WHO on depression reveals that almost 7.5% of Indian population suffers from major or minor mental disorders that require medical intervention and also dietary modifications. National health survey of India reveals that every 6th Indian needs mental health especially for women. Therefore, there is a need for a safe and effective way for the 21st century women to maintain health during each different phase of her life. Ayurveda has documented the 'Body-Mind' relationship years ago. Mental wellbeing is a cardinal integrant of *Swasthya* along with physical and spiritual wellbeing. *Satva, Rajas* and *Tamas* are the *Trigunas* and *Vata, Pitta*, *Kapha* are the *Tridoshas*, if any imbalance in these leads to *Sharirika* and *Manasika vyadhi*. Woman's mental health is closely linked to hormonal fluctuations; hence nutrients rich foods help regulate serotonin and dopamine, reducing stress, anxiety, depression etc. Ayurveda emphasizes on proper intake of *Ahara* and its *Ahara vidhi visheshayatana* which helps in nourishment of the body and also need to balances the imbalances that are caused in woman's body which directly impacts on mental health. Hence it is an attempt to elaborate the link between *Ahara* and *Manasika Arogya* in *Stree*.

Keywords: Mental Health, *Ahara,* Body-Mind.

AN EVALUATION OF BMI AND ITS IMPACT ON BASAL METABOLIC RATE AMONG PHARMACY FIRST-YEAR STUDENTS

Prof (Dr.) Babul Kumari*

School of Pharmacy, Al-Karim University, Katihar, Bihar, 854106

Corresponding author: babulpharm@gmail.com

Abstract

Background: In the modern era, the amount of daily physical work is decreasing day by day because information technology has developed extensively. As a result, we are cordially inviting some hypokinetic diseases like obesity, high blood pressure, etc. In a busy schedule, there is not enough scope to do some physical activity daily. So, we have to know about our BMI and BMR to control our physical status and weight by doing at least some exercises and taking a proper diet as per body weight. The present study aimed to evaluate BMI and its impact on basal metabolic rate among pharmacy first-year students. **Materials and Methods:** A study was conducted on 50 pharmacy students. Height, weight, age, and gender were recorded. BMI and BMR are calculated by using the standard formula**. Result:** Most participants fell within the overweight BMI category (29%), normal weight (3%), overweight (29%), obese (4%), and underweight (16%). Underweight individuals had the lowest mean BMR (1375.4 kcal/day), while obese individuals had the highest (1698.2 kcal/day). This trend indicates a positive association between BMI and BMR, supporting the hypothesis that greater body mass demands more energy for basic metabolic functioning. **Conclusion:** BMI and BMR are important health parameters. Both are positively correlated. Knowledge of BMI and BMR supports healthy living.

Keywords: Weight control, BMI, BMR, Physical activity.

PHARMACOGNOSTICAL, PHYTOCHEMICAL, AND ANTI-ARTHRITIC ACTIVITY OF SELECTED ETHNOMEDICINAL PLANTS

Dr. Leemol Varghese, Pondicherry S Hritika*

Senior Assistant Professor, Department of Pharmacognosy, Sarojini Naidu Vanita Pharmacy Maha Vidyalaya

UG Student, Sarojini Naidu Vanita Pharmacy Maha Vidyalaya

Corresponding author: hritika.ps15@gmail.com

Abstract

Medicinal plants have long been recognized as valuable sources of therapeutic agents in traditional systems of medicine. The present study focuses on the pharmacognostical, phytochemical, and anti-arthritic activity of *Sarcostigma kleinii*, an ethnomedicinal plant known for its potential healing properties. Pharmacognostical evaluation was carried out to establish the identity, purity, and quality of the plant. Phytochemical screening revealed the presence of important bioactive constituents such as alkaloids, flavonoids, tannins, glycosides, and saponins, which are known for their pharmacological activities. The anti-arthritic potential of the plant extract was assessed using standard experimental models, indicating significant inhibition of protein denaturation and reduction of inflammatory responses. These findings suggest that *Sarcostigma kleinii* possesses promising anti-arthritic properties, supporting its traditional use in the management of inflammatory disorders like rheumatoid arthritis. The study highlights the importance of ethnomedicinal plants as potential sources for the development of safer and effective therapeutic agents.

Keywords: Medicinal plants, pharmacognostical, phytochemical, anti-arthritic

AYURVEDA AS PREVENTIVE HEALTHCARE IN THE MANAGEMENT OF PCOD: A SUSTAINABLE AND INTEGRATIVE MODEL FOR VIKSIT BHARAT 2047

Dr. Aswani GS*, Prof. Shilpa B Donga

*Dr. Aswani GS, MS Second Year Scholar, Prasuti Tantra evum Stree Roga department, ITRA, Jamnagar, Gujarat-360018

, Prof. Shilpa B Donga, HOD, Prasuti Tantra evum Stree Roga department, ITRA, Jamnagar, Gujarat-360018

Corresponding author: aswanigv@gmail.com

Abstract

Polycystic Ovary Disease (PCOD) is one of the most prevalent endocrine and metabolic disorders affecting women of reproductive age. It is closely associated with sedentary lifestyle, unhealthy dietary habits, stress, and obesity. Conventional management primarily focuses on symptomatic relief and hormonal regulation, often overlooking preventive strategies. Ayurveda, the ancient Indian system of medicine, emphasizes prevention through lifestyle regulation, dietary discipline, and systemic balance. This paper explores the role of Ayurvedic preventive principles—*Rajaswala paricharya, Dinacharya, Ritucharya, Ahara, Vihara,* and *Rasayana*—in the management and prevention of PCOD. By correlating classical Ayurvedic concepts such as *Agnimandya, Kapha-Vata Dushti, Sthaulya,* and *Artava Dushti* with modern pathophysiology, this paper highlights the relevance of Ayurveda as a sustainable and cost-effective healthcare model. Integrating Ayurvedic preventive strategies into mainstream healthcare can significantly reduce the burden of PCOD and contribute to the vision of Viksit Bharat 2047.

Keywords: Ayurveda, PCOD, Preventive Healthcare, Lifestyle Disorders, *Dinacharya, Ritucharya, Rajaswala paricharya*

THE IMPACT OF THE MENSTRUAL CYCLE AS AN INFRADIAN RHYTHM ON METABOLIC AND SOCIO-EMOTIONAL FUNCTIONING: A NEURO-METABOLIC INTEGRATION

Dr. Suruchi Jain*, Dr. Sangeeta Verma

PG Scholar, Department of Swasthvritta and Yoga, National Institute of Ayurveda (NIA), Jaipur, Rajasthan.

Assistant Professor, Department of Swasthvritta and Yoga, National Institute of Ayurveda (NIA), Jaipur, Rajasthan.

Corresponding author: suruchi3627@gmail.com

Abstract

Introduction: The menstrual cycle in females is a fundamental infradian rhythm, yet its influence on metabolism and socio-emotional functioning remains under-investigated in clinical practice. This review explores how cyclical changes in ovarian steroids, specifically -estradiol and progesterone, alter functional brain networks, metabolic expenditure, and emotional valence, while integrating Ayurvedic perspectives on preventive care. **Methods**: A review was conducted on recent meta-analyses, neuroimaging studies, and longitudinal trials published between 2016 and 2026. Data were extracted regarding resting metabolic rate (RMR), insulin sensitivity, and amygdala reactivity. **Results**: Luteal phase physiology is characterized by a significant RMR increase of 30–120 kcal/day (3–5%), primarily driven by progesterone's thermogenic effects.[1] Central insulin sensitivity declines in the luteal phase, flipping network responsiveness and increasing food cravings.[3] Socio-emotionally, objective cognitive performance remains stable, debunking the "period brain" myth.[5] However, emotional processing shifts toward a negative bias during the luteal phase.[7] Ayurvedic regimens (*Rajaswala Paricharya*) and Yoga have shown significant efficacy in mitigating these fluctuations by modulating the autonomic nervous system and HPA axis. **Discussion**: The menstrual cycle plays a key role in maintaining homeostasis. These findings necessitate cycle-based health care and the integration of traditional preventive protocols to optimize metabolic and psychological health across the reproductive lifespan.

Keywords: menstrual cycle, infradian rhythm, RMR, Insulin sensitivity

AYURVEDIC MANAGEMENT OF FUNGAL NAIL INFECTION- KUNAKHA (ONYCHOMYCOSIS): A COMPREHENSIVE CASE STUDY

Divyanshu Pant[1*], Krutika Chaudhary[2]

[1]PG scholar, Department of Dravyaguna Vigyana, National Institute of Ayurveda, Jaipur

[2]Assistant Professor, Department of Dravyaguna Vigyana, National Institute of Ayurveda, Jaipur

Corresponding author: divyanshu.pant7@gmail.com

Abstract

Kunakha is a classical Ayurvedic condition classified under *Kshudraroga* (minor diseases) as described in the Sushruta Samhita. Based on clinical features, *Kunakha* can correlate with onychomycosis, which is a fungal infection of the nail unit that represents one of the most prevalent nail disorders in clinical dermatology. A 27-year-old male patient presented with progressive nail changes characterized by yellowish discoloration and brittleness of the right ring finger, and separation from the nail bed for 05 months. Associated symptoms included pruritus (itching), erythema (redness), mild edema (swelling), and localized pain around the affected nail. There were no other systemic clinical changes or nail diseases related to family history or any other medical conditions. The patient was treated with a comprehensive Ayurvedic protocol combining *Krimighna lepa*s (anti-fungal paste), *Abhyantara* (internal) *Shodhan,* and *Shaman Chikitsa* (purification and pacifying therapies) as well as *bahya* (external) *shodhana chikitsa* over 08 weeks, followed by 02 weeks. Assessment was done by changes in clinical features. After 10 weeks, complete resolution of symptoms and regrowth of normal nail tissue could be noticed. This report integrates classical Ayurvedic principles with modern clinical understanding of onychomycosis to provide a holistic perspective on fungal nail infections.

Keywords: Kunakha, onychomycosis, Ayurveda, Nail diseases

EMERGING DIAGNOSTIC WEARABLE TECHNOLOGIES FOR DIABETES MANAGEMENT: ADDRESSING CHALLENGES AND EXPLORING FUTURE DIRECTIONS

Mandira Ghimiray*, Sanju Dahiya, Ujjwal Kumar, Suleman Choudhary

Department of Pharmaceutics, MM College of Pharmacy, Maharishi Markandeshwar (Deemed to be a University) Mullana, Ambala-133207, Haryana, India

Corresponding author: mandiraghimiray27@gmail.com

Abstract

From 1990 to 2022, global diabetes cases have increased from 200 million to 830 million. Unlike standard diabetes therapies, wearable devices such as continuous glucose monitors (CGM), smart fitness watches and trackers, insulin biosensors, smart pens, and connected insulin pens have transformed diabetic care and reduced the burden on health care providers by constantly tracking glycemic changes and providing data for self-management. These innovations though are better compared standard therapies they have limitations that blocks the device's potential. The aim of this review is to analyze the limitations of wearable devices in diabetes management and explored future prospective that includes AI integration in devices for better prediction. Wearable devices prove to improve glycemic control but are restricted by reported limitations. The limitation to list is limited accuracy and durability with high maintenance, reduced patient engagement, population specific, data privacy violations and data overload risk, internet dependency and delayed regulatory approvals. Looking forward to the future, better sensors for enhanced accuracy, more user-friendly designs, AI-driven predictions, lower cost of devices, stronger data protection, smoother system connections, and quicker regulatory approvals, ultimately enhancing diabetes management and making it more accessible.

Keywords: Diabetes mellitus, digital health, wearable technology, limitations of wearable devices

TOGETHER TOWARDS TB-FREE INDIA

Dr. Jyothsna N.G*

Pg Scholar, Department of Swasthavritta and Yoga, Jssamc, Mysuru, Karnataka

Corresponding author: Saijyothsnareddy24@gmail.com

Abstract

This poster presents an overview of the essential approaches to control and eliminate tuberculosis in the community. It mainly focuses on the importance of early detection timely treatment and preventive measures to reduce the burden of TB. The poster highlights the identification of TB cases including drug sensitivity and drug resistance forms especially among high risk populations. It also emphasises the role of Accessible treatment strategies and public health initiatives in managing the disease. In addition, the poster illustrates various preventive aspects such as vaccination maintaining personal hygiene and ensuring early diagnosis through contact examination. It also brings attention to lifestyle factors that supports overall health including a balanced diet adequate sleep and regular physical activity which contributes to improve immunity. Furthermore, the poster underlines the need for strengthening health care system and encouraging community participation to create awareness and support TV elimination efforts. Combining medical strategies with preventive care and healthy lifestyle practises, the poster conveys a holistic approach towards achieving the goal of TB Free Society.

Keywords: TB, Community Participation, DPTB

VARIATION IN PHYTOCHEMICAL CONSTITUENTS OF MEDICINAL PLANTS: CONCEPT OF KALA PRABHAVA IN AYURVEDA AND MODERN PERSPECTIVE

Dr Umaganga M[1], Dr Anuradha K N[2]

[1]PG Scholar, Dept of Dravyaguna Vijnana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

[2]Associate Professor, Dept of Dravyaguna Vijnana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

Corresponding author: madhuraganga46@gmail.com

Abstract

Introduction: Medicinal plants are rich sources of bioactive phytochemicals responsible for their therapeutic efficacy. The concentration of these constituents varies significantly due to environmental factors such as season, temperature, rainfall, and sunlight. Ayurveda explains this phenomenon through the concept of Kala Prabhava and emphasizes Dravya Sangrahana (appropriate time of collection). **Methods:** A comprehensive review was conducted using classical Ayurvedic treatises and contemporary scientific literature. Data regarding the impact of seasonal variations (Rutu) on the chemical constituents of specific herbs were collected and interpreted. **Results:** Modern studies demonstrate that phytochemical content varies with time of collection. Withania somnifera root shows higher withanolide concentration when harvested in late winter (Shishira), Adhatoda vasica leaf exhibits peak vasicine levels during the rainy season (Varsha), and Curcuma longa yields higher curcumin in the autumn season (Sharad), aligning with classical Ayurvedic recommendations. **Discussion:** Seasonal variations influence secondary metabolite synthesis. The Ayurvedic concept of Kala Prabhava correlates well with modern findings, supporting season-specific harvesting for maximum potency. **Conclusion:** Integrating classical knowledge with scientific validation ensures improved efficacy, safety, and quality of herbal medicines, highlighting the importance of seasonal drug collection.

Keywords: Kala Prabhava, Seasonal variation, Phytochemicals, Dravya Sangrahana

ASSESSMENT OF DIABETES MELLITUS AMONG THE SOCIETY

Emmiliana Aloyce*, Mr Hardik Singh

School of pharmacy and pharmaceutical sciences SOPS, CT University, Ludhiana, Punjab

Corresponding author: emmilia.ak@gmail.com

Abstract

Diabetes mellitus is one of the most prevalent public health issues currently affecting millions of people worldwide, and it is largely due to lifestyle and a lack of awareness of this condition. The current research explored the knowledge, attitude, and practices of the selected population concerning diabetes mellitus. The methodology used for data collection involved a cross-sectional data design and an application of a structured questionnaire. It turned out that although participants knew about such common signs of the problem, like constant thirst and frequent visits to the toilet, their knowledge about possible complications and the ways to prevent the condition appeared to be inadequate. The findings also revealed different attitudes towards diabetes, namely, the concerns of certain individuals, who sought proper medical help for themselves, and the underestimation of the danger of the disease by others. The findings also indicated insufficient practices concerning the prevention of diabetes mellitus through balanced nutrition, physical activity, and other means. As for barriers, they included a lack of information about diabetes, low accessibility to healthcare services, and various cultural beliefs and stereotypes. The results suggest the necessity of launching targeted educational campaigns to raise awareness and promote the establishment of healthy habits and behaviors.

Keywords: Diabetes mellitus, public health, nutrition, health

AYURVEDA PRACTICES THAT PROMOTE WELLNESS AND BALANCE

Dr Neetu Gurjar*, Prof. Nisha Gupta

PG Scholar, Department of Samhita and Siddhant, National Institute of Ayurveda, Jaipur

Corresponding author: neetugurjar005@gmail.com

Abstract

Ayurveda, the ancient system of holistic medicine originating in India, emphasizes the maintenance of health through balance in body, mind, and spirit. This paper explores key Ayurvedic practices that contribute to overall wellness and disease prevention. Central to Ayurveda are the concepts of *Dinacharya* (daily routine) and *Ritucharya* (seasonal regimen), which align human activities with natural biological rhythms. Practices such as early rising, tongue scraping, oil pulling, yoga, and meditation help detoxify the body and enhance mental clarity. Diet (*Ahara*) plays a crucial role, with emphasis on fresh, seasonal, and dosha-specific foods that support digestion and metabolic balance. Therapeutic practices like *Abhyanga* (oil massage) improve circulation, reduce stress, and promote relaxation. Additionally, the use of natural herbs such as Ashwagandha, Turmeric, and Triphala enhances immunity and supports bodily functions. Adequate sleep (*Nidra*) is recognized as a pillar of health, essential for physical and psychological restoration. By integrating these practices into daily life, Ayurveda offers a preventive and sustainable approach to health. The study highlights how adopting Ayurvedic principles can lead to improved quality of life, reduced stress, and long-term well-being in modern society.

Keyword: Dincharya, Ritucharya, Ahara, Abhyanga, Nidra

UDWARTHANA: A SUSTAINABLE THERAPEUTIC APPROACH FOR METABOLIC REGULATION IN ADOLESCENT OBESITY – CLINICAL INSIGHTS AND FUNCTIONAL PRINCIPLES

Dr. Charupriya Changmai[1]*, Dr. Lohith B A[2]

[1]PG Scholar, Department of Panchakarma, SDM College of Ayurveda and Hospital, Hassan.

[2]Professor, Department of Panchakarma, SDM College of Ayurveda and Hospital, Hassan.

Corresponding author: charupriyachangmai.2202@gmail.com

Abstract

Ayurveda emphasizes the management of *Sthaulya* (obesity) as a vital step toward *Sampoorna Swasthya* (holistic health). In the contemporary era, characterized by sedentary lifestyles and metabolic disturbances, *Udwarthana*—a specialized *Bahya Upakrama*—emerges as a potent non-pharmacological intervention. The procedure involves a vigorous, deep-tissue massage using dry herbal powders (*Churnas*) performed in a *Pratiloma* (reverse) direction to hair follicles.

This treatment operates by stimulating the *Bhrajaka Pitta* and opening the *Srotas* (channels), thereby mobilizing morbid *Medas* (adipose tissue) and enhancing peripheral circulation. Through a modern scientific lens, the mechanical friction and thermal effects of *Udwarthana* generate pressure gradients that stimulate lymphatic drainage and enhance the metabolic rate of subcutaneous fats.

The present study seeks to reinterpret this classical procedure by correlating its effects with the mobilization of triglycerides and the activation of the sympathetic nervous system to induce lipolysis. Integrating *Udwarthana* into modern integrative healthcare models offers a transformative path forward for preventive medicine, directly supporting the national vision of a healthy and developed India by 2047.

Keywords: *udwarthana*, *sthaulya*, metabolic regulation, *bahya upakrama*, lipolysis, Viksit Bharat 2047.

PROLIPOSOMES-BASED APPROACH FOR IMPROVING ORAL BIOAVAILABILITY OF A BIOACTIVE PHYTOCHEMICAL

Samyakt Jain*

Department of Pharmacy, SGSITS, Indore, (M.P.)

Corresponding author: samyakt41199@gmail.com

Abstract

Bioactive phytochemicals possess significant therapeutic potential; however, their clinical application is often limited due to poor aqueous solubility, low permeability, and reduced oral bioavailability. The present study focuses on the development of a proliposome-based delivery system to enhance the oral bioavailability of a selected bioactive phytochemical. Proliposomes were prepared using suitable phospholipids and cholesterol by an appropriate formulation technique to improve drug stability and dissolution characteristics. Upon hydration, proliposomes form liposomal vesicles that facilitate enhanced drug absorption through biological membranes. The prepared formulations were evaluated for physicochemical properties such as vesicle size, entrapment efficiency, zeta potential and in-vitro drug release profile. Compatibility between the drug and excipients was assessed using analytical techniques such as DSC and FTIR. The optimized formulation demonstrated improved drug release and enhanced stability compared to the pure phytochemical. The proliposomal system also showed potential for improved gastrointestinal absorption due to its lipid-based carrier nature. Overall, the study suggests that proliposome-based delivery represents a promising strategy for improving the oral bioavailability and therapeutic effectiveness of poorly soluble bioactive phytochemicals, thereby supporting their wider pharmaceutical application.

Keywords: proliposomes, phytochemicals, drug delivery, bioavailability, solubility, drug efficiency.

INTEGRATIVE MANAGEMENT OF PARKINSON'S DISEASE: AYURVEDIC INTERVENTION AS AN ADD-ON TO STANDARD THERAPY- A CASE REPORT

Dr. Haritha K S[1*], Dr. Neha G Tank[2]

[1]PhD Scholar, Department of Panchakarma, ITRA, Jamnagar, Gujarat, India.

[2]Associate professor, Department of Panchakarma, ITRA, Jamnagar, Gujarat, India.

Corresponding author: drksharitha@gmail.com

Abstract

Parkinson's disease (PD), a progressive neurodegenerative disorder characterized by motor symptoms such as bradykinesia, resting tremor, rigidity, and postural instability, affects diverse populations worldwide. Globally, PD represents a significant and growing public health burden, reaching approximately 11.7 million cases by 2021. Existing management strategies for PD largely focus on alleviating symptoms rather than altering disease progression; therefore, there is an increasing need to explore adjunctive approaches with potential neuroprotective benefits. A 55-year-old female presented with a 2-year history of gradually progressive tremors involving bilateral upper and lower limbs, along with bradykinesia, slowness of speech, reduced sleep, and postural instability. Despite two years of levodopa therapy, the patient experienced only slight tremor control, with other motor symptoms persisting. Therefore, she presented for the first time to ITRA, Jamnagar, seeking more comprehensive management. She underwent a one-month inpatient regimen consisting of internal Shamana medication and structured Panchakarma interventions under close supervision. The treatment showed a significant reduction in signs and symptoms and improved the quality of life.

Keywords: Parkinson's disease (PD), bradykinesia, resting tremor, rigidity

THERAPEUTIC PURGATION (*VIRECHANA KARMA*) IN THE MANAGEMENT OF CHRONIC PLANTAR BURNING AND ITCHING: A CASE REPORT

Dr. Kuldeep Kumar[1]*, Dr. Vipin Kumar[2]

PG Scholar[1*], Assistant Professor[2], Department of *Panchkarma,* National Institute Of Ayurveda (Deemed University), Jaipur

Corresponding author: kuldeepdayma1998@gmail.com

Abstract

Introduction: Persistent plantar burning (*Daha*) and itching (*Kandu*) often signify a deep-seated *Pitta-Rakta* imbalance, clinically aligning with the chronic stages of *Vatarakta*. When peripheral inflammatory symptoms persist for a year despite conventional topical care, they indicate that morbid *Doshas* have infiltrated deeper tissue layers (*Dhatus*). This report evaluates the systemic resolution of such symptoms through structured Ayurvedic purification.

Methods: A male patient with a 12-month history of refractory bilateral foot irritation was managed via a comprehensive *Shodhana* protocol.

- **Preparation:** *Deepana-Pachana* was initiated with *Panchakola Churna*, followed by escalating internal oleation (*Snehapana*) using *Murchhit Go Ghrita*.
- **Mobilization:** *Sarvanga Abhyanga* and *Bashpa Swedana* were performed for three days to facilitate the movement of toxins from the periphery to the gastrointestinal tract.
- **Purification:** *Virechana* was induced with *Trivrit Avaleha* (100g) and *Abhyadi Modak*
- **Recovery:** A 7-day graded nutritional regimen (*Samsarjana Krama*) was strictly enforced.

Results: The procedure resulted in 26 purgation movements (Vegas), achieving a superior level of purification (*Pravara Shuddhi*). Despite the 1-year chronicity of the complaint, the patient experienced a complete clinical resolution of all burning and itching sensations within 30 days. Follow-up at one month confirmed sustained relief and improved skin integrity (*Varna-Prasada*).

Conclusion: Systemic *Virechana*, supported by thorough preparatory oiling and steaming, effectively addresses long-standing *Vatarakta* symptoms where localized treatments fail. The successful outcome in this case highlights the necessity of high-volume purgation to "reset" the inflammatory state of peripheral tissues in chronic conditions.

Keywords: *Vatarakta, Virechana Karma,* Chronic Plantar Burning, *Samsarjana Krama*, Refractory Dermatitis.

TARGETED THERAPEUTICS IN AYURVEDA: A CONCEPTUAL COMPARISON OF *UTTARABASTI* AND LIPOSOMAL DRUG DELIVERY

Dr. Afrin Ansari*, Prof. (Dr) Neha Pandya

[1]Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar

[2]Professor, Department of Prasutitantra Evam Streeroga, Institute of Teaching and Research in Ayurveda, Jamnagar

Corresponding author: afrin.ansari504@gmail.com

Abstract

Introduction: Targeted drug delivery systems have revolutionized modern therapeutics by enhancing drug efficacy while minimizing systemic side effects. Among these, liposomal drug delivery has gained prominence due to its ability to deliver drugs in a site-specific and controlled manner. Interestingly, classical Ayurvedic procedures such as *Uttarabasti* may reflect similar principles of localized therapy. **Objective:** To explore *Uttarabasti* as a potential site-specific drug delivery system and establish a conceptual parallel with liposomal drug delivery technology. **Methods:** A narrative review of classical Ayurvedic texts and contemporary scientific literature was conducted to analyse the procedure, pharmacological basis, and clinical applications of *Uttarabasti*. Its functional attributes were then compared with the principles of liposomal drug delivery systems. **Results:** *Uttarabasti* involves the intrauterine or intravesical administration of medicated *Sneha* (oil or ghee) or decoctions, ensuring direct delivery of drugs to the target organ (Uterus). This route facilitates enhanced local bioavailability, bypasses first-pass metabolism, and minimizes systemic exposure. The lipid-based formulations (*Sneha Kalpana*) used in *Uttarabasti* resemble the structural and functional characteristics of liposomal carriers, enhancing drug permeability and sustained release. Clinical studies have demonstrated its efficacy in conditions such as infertility, thin endometrium, and tubal blockage, supporting its role as a localized therapeutic modality. **Conclusion:** *Uttarabasti* can be interpreted as a traditional form of targeted drug delivery system with conceptual similarities to liposomal technology. This integrative perspective provides a scientific lens to reinterpret Ayurvedic practices and encourages further research in developing novel drug delivery models and nano-carriers inspired by classical therapies.

Keywords: *Uttarabasti*, Targeted Drug Delivery, Liposomes, Nano-carriers, *Sneha Kalpana*.

ROLE OF INTERNAL AND EXTERNAL AGNI IN THE MAINTENANCE OF HEALTH AND WELL-BEING

Hetal Khadola[1], Nisha Parmar[2], Suhag Raval[3]

[1]Scholar, Department of Basic Principles, Institute of Teaching and Ayurveda, Jamnagar.

[2]Assistant professor, Department of Basic Principles, Institute of Teaching and Ayurveda, Jamnagar.

[3]Professor, Dept. of Basic Principles, Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar.

Corresponding author: khadolahetal@gmail.com

Abstract

Introduction: Agni is the key factor responsible for digestion, metabolism, and transformation in the body. Internal Agni regulates physiological processes, while External Agni influences it through factors like Swedana (Niragni and Sagni), Seasonal variations (Ritucharya), and Daily practices (Dinacharya) such as Vyayama and Dhoomapana. Maintaining a balance between Internal and External Agni is essential for health and well-being.

Aim: To evaluate the role of Internal and External Agni in maintaining health and promoting overall well-being.

Objectives

1. To understand the concept and types of internal Agni in Ayurveda.
2. To analyse the influence of external Agni on health.
3. To assess the interrelationship between internal and external Agni in disease prevention.

Material and Methods: Primary references were taken from the Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya and other Samhitas. Relevant Indian literature was also reviewed. Secondary data were collected from peer-reviewed and indexed journals.

Results: Proper functioning Internal Agni supports proper digestion, absorption, and nourishment of tissues (Dhatu Poshana) along with waste elimination. Its impairment (Agnimandya) leads to Ama formation, a major cause of disease. Proper use of External Agni enhances and maintains Internal Agni by promoting digestion, metabolism, and detoxification. When applied according to season and individual capacity, it helps maintain balanced Agni, essential for overall health in Ayurveda.

Discussion: The balance between internal and external Agni is essential for maintaining health and preventing disease. Ayurvedic guidelines such as appropriate diet (Ahara), daily routine (Dinacharya), and seasonal regimen (Ritucharya) are important in regulating Agni. Emphasizing these principles can support preventive healthcare and promote holistic well-being.

Keywords: Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya

ANTIDIABETIC AND ANTIOXIDANT POTENTIAL OF MATTEUCCIA STRUTHIOPTERIS: A PHARMACOGNOSTIC APPROACH

Sugam Sharma*, Rajat Das

Department of Pharmacognosy, Himalayan Pharmacy Institute, Majhitar E, Sikkim, India.

Corresponding author: sugamsharma090@gmail.com

Abstract

Matteuccia struthiopteris (ostrich fern) is an edible pteridophyte recognized for its nutritional and medicinal value, particularly its potential antidiabetic and antioxidant properties. This study highlights the phytochemical composition and biological activities of *M. struthiopteris*, emphasizing its role in managing oxidative stress and diabetes mellitus. The plant is rich in bioactive compounds such as flavonoids, phenolic acids, terpenoids, and polysaccharides, which are known for their therapeutic effects. Antioxidant activity of the fern has been demonstrated through various in vitro assays, including DPPH, ABTS, and FRAP, indicating its strong free radical scavenging capacity. These antioxidant properties play a crucial role in reducing oxidative stress, a key factor in the progression of diabetes and its complications. Furthermore, *M. struthiopteris* exhibits antidiabetic potential by inhibiting carbohydrate-hydrolyzing enzymes such as α-amylase and α-glucosidase, thereby regulating postprandial blood glucose levels. It may also enhance insulin sensitivity and glucose uptake, contributing to improved glycemic control. The combined antioxidant and antidiabetic effects suggest a synergistic mechanism in preventing pancreatic β-cell damage. Although preliminary findings are promising, further in vivo studies and clinical trials are necessary to validate its safety and efficacy. Thus, *M. struthiopteris* holds potential as a natural therapeutic agent for diabetes management.

Keywords: *Matteuccia struthiopteris*, antidiabetic, antioxidant

AYURVEDA - A WAY FORWARD FOR WELLNESS: VIKSIT BHARAT 2047 (RASA SHASTRA & PHARMACEUTICAL PERSPECTIVE)

Arvinder Kaur[1*], Dr. Raju Thomas[2]

[1]PG scholar, Dept. of Rasashastra & Bhaishajya Kalpana, ITRA Jamnagar, 361008.

[2]Professor, Dept. of Rasashastra & Bhaishajya Kalpana, ITRA Jamnagar, 361008

Corresponding author: arvinder99dr@gmail.com

Abstract

The vision of Viksit Bharat 2047 necessitates the integration of traditional knowledge systems with contemporary pharmaceutical sciences to achieve accessible and evidence-based healthcare. Rasa Shastra, a specialized branch of Ayurveda, provides a scientifically structured framework for the preparation of Herbo-mineral formulations with enhanced therapeutic efficacy and bioavailability. Classical processes such as Shodhana, Marana, and Bhavana facilitate detoxification, transformation, and potentiation of raw materials, yielding nano- and micro-sized particles with improved pharmacokinetic attributes. Recent advancements in analytical techniques have substantiated the physicochemical properties, safety, and targeted action of Rasaushadhi, aligning them with principles of nanomedicine and modern drug delivery. From a pharmaceutical perspective, the adaptation of these formulations into novel dosage forms, including transdermal systems, medicated dressings, and sustained-release preparations, offers promising avenues for clinical application. However, challenges related to standardization, quality assurance, and regulatory harmonization remain critical. Strengthening interdisciplinary research, incorporating Good Manufacturing Practices, and establishing robust validation protocols are essential for global acceptance. Integrating Rasa Shastra with modern pharmaceutics can significantly contribute to innovative, cost-effective, and scalable healthcare solutions, thereby reinforcing India's leadership in integrative medicine under the framework of Viksit Bharat 2047.

Keywords: Rasashastra, Ayurveda, Shodhana, Marana, Nano technology.

INTEGRATING AYURVEDA WITH MODERN PHARMACEUTICAL SCIENCES FOR PRIMARY DYSMENORRHEA

Dr. Ramila Bhinde[1]*, Dr. Grishma Solanki[2]

[1]Scholar, Dept. Of PTSR, ITRA Jamnagar

[2]Asst. Professor Dept. Of PTSR, ITRA Jamnagar

Corresponding author: ramilabhinde1@gmail.com

Abstract

Primary dysmenorrhea, characterized by painful menstruation without pelvic pathology, significantly impacts adolescent girls and young women. Modern medicine attributes this condition to increased prostaglandin synthesis (PGF2α and PGE2), which triggers uterine hypercontractility, ischemia, and pain. While NSAIDs offer symptomatic relief, their long-term use poses risks of gastrointestinal and renal complications, necessitating safer, holistic alternatives. In Ayurveda, this condition correlates with Udavarta Yonivyapad or Kashtartava. It is primarily caused by Apana Vata Dushti resulting from Vegodharana (suppression of natural urges), improper diet, and stress. This leads to Vata Prakopa and Srotorodha (obstruction), manifesting as painful and obstructed menstrual flow. Management focuses on Vata Shamana and Shoolahara (pain-relieving) therapies. Classical texts like the Charaka Samhita highlight drugs such as Shunthi (Zingiber officinale), Hing (Ferula asafoetida), and Ashoka (Saraca asoca) for their pharmacological efficacy. These herbs function as COX inhibitors and antispasmodics, mimicking modern analgesic mechanisms while providing uterine tonic effects. By addressing the root cause, Pratiloma Gati of Vata, Ayurvedic interventions reduce uterine contractions and restore physiological balance. Integrating these traditional principles with modern pathophysiology offers a synergistic, comprehensive approach to managing primary dysmenorrhea effectively and safely.

Keywords: Primary dysmenorrhea, Udavarta Yonivyapad, Kashtartava, Apana Vata, Shunthi, Hingu, Ashoka, Integrative approach.

PROTOCOL-BASED AYURVEDIC EYE CARE

Dr. Abhishek Pathak*

Asst. Prof. in the Department of Shalakya Tantra, Vijyashree Ayurvedic Medical College & Hospital, Jabalpur, Madhya Pradesh

Corresponding author: aumayurvedayanamah@gmail.com

Abstract

Ayurvedic ophthalmology, described under Shalakya Tantra, provides a comprehensive and holistic framework for the prevention and management of ocular disorders. However, variability in clinical application necessitates the development of standardized, protocol-based approaches to enhance reproducibility, safety, and clinical outcomes. The present study aims to conceptualize and implement a protocol-based Ayurvedic eye care model integrating classical principles with contemporary clinical requirements. The proposed protocol incorporates systematic patient assessment based on Dosha, Dushya, Roga Avastha, and Rogi Bala, supported by diagnostic methods such as Nadi Pariksha and Drik Pariksha. Therapeutic interventions are structured into standardized modules, including local ocular procedures such as Netra Tarpana, Aschyotana, Anjana, and Putapaka, along with systemic management using Rasayana and Chakshushya Dravyas. Preventive components emphasize Dinacharya, Ritucharya, dietary regulation (Ahara), lifestyle modification (Vihara), and management of digital eye strain, addressing emerging ocular health challenges. The protocol-based framework ensures uniformity in treatment delivery, facilitates clinical documentation, and supports evidence generation for Ayurvedic interventions. It is particularly relevant in the management of conditions such as dry eye syndrome, computer vision syndrome, and early refractive errors. Additionally, this model enhances the scope for integrative ophthalmology by aligning traditional practices with evidence-based methodologies. In conclusion, protocol-based Ayurvedic eye care represents a structured, patient-centric, and reproducible approach that strengthens the clinical and research potential of Ayurveda in ophthalmology.

Keywords: Ayurvedic Ophthalmology, Shalakya Tantra, Protocol-Based Care, Netra Tarpana, Nadi Pariksha, Dry Eye Syndrome, Computer Vision Syndrome, Chakshushya Dravyas, Rasayana Therapy, Integrative Eye Care

CONCEPT OF *VYADHIKSHAMATVA* (IMMUNITY)

Bhagvati P Vadhel [1], Dr. Suhag D Raval [2]

[1]Scholar, Department of Basic Principles, ITRA, Jamnagar

[2]Associate Professor, Department of Basic Principles, ITRA, Jamnagar

Corresponding author: dr.bhagvativadhel467@gmail.com

Abstract

Background: *Vyadhikshamatva* in *Ayurveda* refers to the body's resistance against disease, including prevention of disease manifestation (*Vyadhi-utpada-pratibandhakatva*) and opposition to disease progression (*Vyadhi-bala-virodhitva*). It is closely associated with *Ojas, Bala* and the equilibrium of *Dosha, Dhatu, Agni, and Srotas*. This concept aligns with modern immunological understanding of host defence mechanisms.

Objective: To study the concept of *Vyadhikshamatva* with its components (*Ojas and Bala*) and correlate it with modern immunology and highlight its role in disease prevention and health promotion. Methods: A conceptual and literary review was conducted using classical Ayurvedic texts, including *Charaka Samhita, Sushruta Samhita* and *Ashtanga Hridaya* along with relevant modern immunology literature. Key concepts related to *Vyadhikshamatva, Ojas, Bala* and immunological principles were critically analysed and compared.

Result and Discussion: *Vyadhikshamatva* is influenced by multiple factors such as proper *Ahara, Vihara*, mental status, and *Dhatu* integrity. *Ojas* acts as the essence of all *Dhatus* and is directly responsible for immunity. *Bala* is categorized into *Sahaja, Kalaja* and *Yuktikrita*. Factors like malnutrition, improper diet, stress and *Dhatu* imbalance reduce immunity. The *Ayurvedic* concept shows strong parallels with innate and adaptive immunity described in modern science.

Conclusion: *Vyadhikshamatva* provides a holistic framework for understanding immunity, integrating physical, mental, and lifestyle factors. Strengthening *Ojas* and *Bala* through appropriate diet and lifestyle plays a crucial role in preventive and promotive healthcare.

Keywords: *Vyadhikshamatva, Ojas, Bala*, *Ayurveda,* Immunity

MANAGEMENT OF *STHAULYA* IN CHILDREN THROUGH AYURVEDA – A CASE STUDY

Dr. Anandkumar M. Patel*[1], Prof. (Dr.) V. K. Kori[2]

[1]Ph. D. Scholar, [2]Professor & Head, Department of Kaumarbhritya

Institute of Teaching and Research in Ayurveda (INI), Jamnagar- 361008

Corresponding author: ampatel224@gmail.com

Abstract

Introduction: The incidence of childhood obesity has increased rapidly, and it has many adverse health effects. Obesity has been described by the term *Sthaulya*/*Medoroga* in Ayurvedic texts and also included in the *Ashtanindita Purusha*. Increased *Kapha Dosha*, *Agnidushti*, and vitiated *Medo Dhatu* are the leading components in the pathogenesis of *Sthaulya*. Line of treatment includes *Nidan Parivarjana*, *Guru Apatarpan Chikitsa*, *Satat Karshana*, *Langhana* (with *Shodhana* and *Shamana*), *Pathy-apathya*. **Main Clinical Finding**: A 15-year-old female child brought by her parents with complaints of excessive weight gain and increased desire of food since 2 – 2.5 yrs. After clinical examination and evaluation, the patient was diagnosed as *Sthaulya* due to *MedoDhatvagniMandya.* **Interventions**: The patient was treated with *Bilwadi Ghana Vati* (10 *Vati* of 500 mg each; three times a day, before food) as internal medication for 12 weeks. She was also advised for diet & lifestyle modification. **Outcome**: After the treatment, the patient's weight was reduced from 63.35 to 57.20 kg; skin fold thickness at triceps from 27.90 to 25.60, and along with improvement in other clinical subjective parameters. **Conclusions**: This case study has shown that *Bilwadi Ghana Vati,* as internal medication and diet & lifestyle modification, is helpful in the management of *Sthaulya* in children.

Keywords: Childhood obesity, *Medoroga, Sthaulya*, *Bilwadi Ghana Vati*.

BREAST MILK AS OPTIMAL NEONATAL NUTRITION: INSIGHTS FROM *AYURVEDA* AND MODERN SCIENCE

Amar Marode[1], Nisha Kumari Ojha[2]

[1]PG Scholar, Post Graduate Department of Kaumarbhritya, National Institute of Ayurveda, Jaipur

[2]Professor and HoD, Department of Kaumarbhritya, National Institute of Ayurveda, Jaipur

Corresponding Author: Dr. Amar Marode, Mail ID- amarmarode9119@gmail.com

Abstract

Breast milk (*Stanya*) is universally recognized as the optimal nutrition for newborns; a principle consistently affirmed across both classical Ayurvedic texts and contemporary paediatric science. This study is a narrative integrative review, synthesizing insights from foundational Ayurvedic treatises such as Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhava Prakasha, and Kashyapa Samhita, with evidence from modern paediatric literature, including WHO guidelines and PubMed-indexed research. The review focuses on the intrinsic qualities (*Guna*), physiological actions (*Karma*), and immunological properties of breast milk, alongside its impact on digestibility and developmental outcomes. Ayurveda describes *Stanya* as possessing qualities of *Madhura* (sweet), *Sheeta* (cold), Snigdha (unctuous), and *Laghu* (light), emphasizing its role in fostering *Ojas* (vital essence and immunity) and supporting *Agni* (digestive fire). Colostrum, termed *Piyusha*, is particularly highlighted for its unique protective attributes. Modern science corroborates these ancient insights, demonstrating that breastfed infants exhibit superior gastrointestinal tolerance, reduced incidence of infections, and enhanced neurodevelopmental outcomes. The immunological richness of colostrum, replete with protective factors, is a key area of convergence between both systems. Conversely, alternatives such as cow's milk, goat milk, and commercial formula feeds are critically evaluated. Cow's milk is often characterized as *Guru* (heavy) and less digestible, frequently leading to intolerance. While goat milk is relatively *Laghu*, it presents nutritional deficiencies, notably in folate and vitamin B12. Formula feeds, despite advancements, inherently lack the dynamic immunological components and beneficial impact on gut microbiota that are unique to human breast milk. The profound alignment between Ayurvedic concepts, where *Ojas* mirrors modern understanding of immunity and *Agni* elucidates digestive physiology. And contemporary scientific findings underscore the irreplaceable value of Stanya, including colostrum, as the ideal nourishment for newborns. Early and exclusive breastfeeding is paramount, with alternatives to be considered judiciously and within an integrative framework to optimize neonatal health and well-being.

Keywords: Breast milk (*Stanya*), neonatal, health, paediatric science

MANAGEMENT OF DEGENERATIVE MUSCULOSKELETAL DISORDER THROUGH AYURVEDA: A CASE REPORT

Dr. Amit Tarachand Yadav*

Scholar, Shalya Tantra, Department, Parul Institute of Ayurved, Parul University,

Corresponding author: ay673507@gmail.com

Abstract

Degenerative musculoskeletal disorders are a major cause of chronic pain, stiffness, and functional limitation, especially in the aging population. In Ayurveda, these conditions are broadly understood under *Vata Vyadhi*, particularly *Sandhigatavata*, where *Vata Dosha* vitiation leads to degeneration of joints and surrounding structures. This case report presents the Ayurvedic management of a patient suffering from a degenerative musculoskeletal disorder with complaints of joint pain, stiffness, and restricted movements affecting daily activities. The treatment protocol included a combination of *Shamana* and *Shodhana Chikitsa*. External therapies such as *Snehana* and *Swedana* were administered, followed by *Basti Karma*, which is considered the prime therapy for *Vata* disorders. Internal medications with *Vata-shamaka* and *Rasayana* properties were also prescribed. The patient showed marked improvement in pain, stiffness, and range of motion, along with better functional ability. Assessment was based on both subjective and objective parameters. The findings suggest that Ayurvedic interventions can effectively manage degenerative musculoskeletal disorders and improve quality of life through a holistic and patient- centered approach.

Keywords: Degenerative Musculoskeletal Disorder, Ayurveda, Sandhigatavata, Vata Vyadhi, Basti Karma

TRIVIDHA BODHYA SANGRAHA - A TOOL FOR UNDERSTANDING NEW DISEASES IN THE PRESENT ERA THROUGH *AYURVEDA* PERSPECTIVE

Valani Vishwa [1], Prof. Hitesh A. Vyas[2*]

[1]Scholar, Department of Basic Principles, ITRA, Jamnagar. Mo. No: 9427518584

[2]Professor, Department of Basic Principles, ITRA, Jamnagar. Mo. No: 9426433231

Corresponding author: hiteshayu@gmail.com

Abstract

Trividha Bodhya Sangraha (TBS), outlined in Charaka Samhita Sutrasthana, *Ashtodariya Adhyaya*, provides a framework for comprehending *Anukta* (unmentioned) diseases in modern times through *Ayurvedic* principles. **Aim:** The presentation aims to demonstrate *Trividha Bodhya Sangraha* as a tool for understanding emerging diseases like POST-COVID MUCORMYCOSIS from an *Ayurvedic* viewpoint, addressing the rise of conditions absent in classical Samhitas. **Objective:** To explain TBS components, *Vikara Prakriti* (disease nature), *Samutthana* (origin/process), and *Adhishthana* (site), enabling direct treatment planning for novel pathologies. **Method:** TBS is derived from *Ashtodariya Adhyaya*, classifying pathogenesis via *dosha* provocation, localization variations (e.g., *Kupita dosha Samutthanavisheshat, Sthanaantaragata*), and applied to Rhino-orbital-cerebral Mucormycosis. Analysis of chief symptoms (e.g., hair/nail loss, tissue necrosis) to *doshas* (*Vata, Pitta, Kapha*), *dushyas* (*Twak, Mamsa, Rakta), srotas* (*Rasavaha*, etc.), and *agni mandya*, corroborated by references which is mentioned in Charak chikitsa sthan,*vish chikitsa adhyaya.* **Results:** Mucormycosis aligns with *Kushta nidana*: *Hetu (Kushta* causes), *Dosha (Vyana vayu, Bhrajaka pitta), Sthana* (*Ura, Kanta, Shira*), *Ama Avastha (Jwara, Nasarodha)*, and *Pakva Avastha (Mukhashopha, Dhatupaka*). **Discussion:** TBS offers a comprehensive protocol for *Ukta/Anukta rogas*, linking specific locations, symptoms, and causes to permutations of *dosha-dushya*. Proper grasp ensures targeted *Chikitsa* success, vital amid contemporary epidemics.

Keywords: *Trividha Bodhya Sangraha, Anukta vyadhi*, Mucormycosis, Charaka Samhita, *Tridosha* pathogenesis.

PHYTOPHARMACEUTICALS: BRIDGING AYURVEDA AND MODERN DRUG DEVELOPMENT FOR SUSTAINABLE HEALTHCARE

Lhanzey Doma Bhutia*

Dr. J P Mohanty Department of Pharmacognosy, Himalayan Pharmacy Institute, Majhitar, Rangpo, East Sikkim-737136

Corresponding author: lhanzi2001@gmail.com

Abstract

Phytopharmaceuticals represent a significant advancement in integrating traditional Ayurvedic knowledge with modern drug development. Ayurveda, an ancient system of medicine, extensively utilizes plant-based therapies for the prevention and treatment of various diseases. However, limitations such as lack of standardization, quality control, and scientific validation have restricted its wider global acceptance. Phytopharmaceuticals overcome these challenges by offering purified, standardized, and well-characterized plant-derived compounds that are evaluated for safety, efficacy, and quality using modern scientific approaches. This study highlights the role of phytopharmaceuticals in bridging the gap between traditional herbal medicine and contemporary pharmaceutical science. It outlines key stages involved in drug development, including extraction, isolation, characterization of bioactive compounds, standardization, and clinical evaluation. Notable examples such as Artemisinin and Curcumin demonstrate the successful transformation of traditional remedies into effective modern therapeutics. Phytopharmaceuticals offer multiple advantages, including multi-target mechanisms of action, improved safety profiles, and cost-effectiveness, making them suitable for sustainable healthcare systems. Despite these benefits, challenges such as variability in phytochemical composition, regulatory complexities, and limited clinical evidence remain. Advances in analytical techniques, nanotechnology, and drug discovery tools are expected to further enhance their development and global acceptance, supporting the vision of Viksit Bharat 2047.

Keywords: Phytopharmaceuticals, Ayurveda, Herbal Medicine, Drug Development, Standardization, Sustainable Healthcare, Curcumin, Artemisinin

PHARMACEUTICAL INNOVATION IN AYURVEDA: DEVELOPMENT OF *IKSHVAAKUBEEJAADI* VAGINAL SUPPOSITORY FOR THE MANAGEMENT OF SECONDARY AMENORRHEA

Dr Durgesh Nandini Bajhaiya[1]*, Dr Sipika Swati[2]

[1]Scholar, Dept. of PTSR, ITRA Jamnagar

[2]Associate Professor Dept. of PTSR, ITRA JAMNAGAR

Corresponding author: nandini11111997@gmail.com

Abstract

Secondary amenorrhea, defined as the cessation of menstruation for 3 or more consecutive months in women with previously regular cycles, or 6 months in those with irregular cycles (excluding pregnancy, lactation, or menopause)[1]. Modern management involves hormonal therapy, which has adverse effects like spotting, breast tenderness, weight gain, mood changes, low libido[2]. In *Bhavaprakash Samhita,* there is mentioned about *Ikshvaakubeejaadi Yoni Varti* in *Anartava* (secondary amenorrhea) due to *Vata-Kapha Dosas.* The traditional *Varti* preparation though therapeutically effective, often causes local irritation and discomfort, so to overcome these limitations, the development of suppository form is needed, as it offers better comfort, ease of insertion, uniform dosing and makes it patient-friendly. The glycerogelatin base reduces mucosal irritability. The suppository was formulated using powdered herbal *ingredients (Ikshvaakubeeja, Danti, Pippali, Madanphala, Yavashooka, Kinva)* processed with *Snuhi Ksheera Bhawana* [3] and incorporated into a glycerogelatin base using the fusion moulding technique. Pharmaceutical evaluation included organoleptic assessment, physicochemical parameters (pH, melting time, uniformity of weight, and hardness), and microbiological analysis. *Ikshvaaku* seeds balance *Vata-Kapha* and clear *Srotorodha*. The suppository form ensures localized action on *Artavavaha Srotas*, promoting menstrual flow and ovulation by stimulating pelvic circulation and hormonal balance. Vagina being highly vascular, enhances the rate of drug absorption. It works through a transvaginal drug delivery system (TVDDS). In conclusion, the developed suppository demonstrated acceptable physicochemical characteristics, microbiologically safe & offers a non-hormonal therapeutic strategy for *Anartava*, integrating traditional knowledge with modern pharmaceutical principles.

Keywords: Secondary Amenorrhea, *Anartava*, Vaginal Drug Delivery, Ayurvedic Formulation, Pharmaceutical Standardization, *Yonivarti*.

AVASTHAPAKA: CONCEPTUAL UNDERSTANDING AND ITS PATHOPHYSIOLOGICAL SIGNIFICANCE

Akbari Bhavik Keshavlal[1*], Prof. Hitesh A. Vyas[2]

[1]Scholar, Department of Basic Principles, ITRA, Jamnagar

[2]Professor, Department of Basic Principles, ITRA, Jamnagar

Corresponding author: bhavikakabari200@gmail.com

Abstract

Background: In Ayurvedic physiology, Pachana is the transformation of food into nourishable elements for the Dhatus and Ojas. This process is governed by Agni and occurs through three sequential stages known as Avasthapaka.

Objectives: This study explores the conceptual framework of Avasthapaka and its clinical importance in diagnosing and treating digestive disorders.

Methodology: The presentation synthesizes classical references from Charaka Samhita and Dalhana, categorizing digestion by stage, site, and biological markers.

Results:

- Madhura Avasthapaka: Occurs in the Amashaya (1-2 hours post-meal), producing Phenabhut Kapha.
- Amla Avasthapaka: Occurs in the Grahani (3-5 hours), where semi-digested food (Vidagdha) becomes sour, stimulating Achha Pitta.
- Katu Avasthapaka: Occurs in the Pakvashaya (6-12 hours), involving dehydration and bolus formation, which stimulates Vayu.

Clinical Significance: Avasthapaka is essential for targeted diagnosis; symptoms like Hrullas (1-2 hours) or Daha (3-5 hours) indicate stage-specific Dushti. It guides stage-specific treatment, such as using Chitraka for Kapha-stage imbalances. Proper adherence to Rasa Sevana Krama prevents diseases like Amlapitta by maintaining these natural physiological sequences.

Keyword: Ayurvedic physiology, Pachana, Amlapitta, Dalhana

AHARA AS *CHIKITSA* IN *SANTARPANAJANYA VYADHIS*: AN AYURVEDIC NUTRITIONAL PERSPECTIVE ON LIFESTYLE DISORDERS

Simranjeet Kaur[1*], Nisha Kumari Ojha[2]

[1]PG Scholar, Department of Kaumarbhritya, National Institute of Ayurveda, Jaipur

[2]Professor and HoD Department of Kaumarbhritya, National Institute of Ayurveda, Jaipur

Corresponding Author: simmi9351524620@gmail.com

Abstract

Introduction: Lifestyle disorders such as diabetes mellitus and obesity represent chronic metabolic derangements primarily arising from dietary excess and sedentary behavior. Ayurveda classifies these conditions under *Santarpanajanya Vyadhis*, chiefly *Prameha* and *Sthaulya*, wherein impairment of *Agni*, vitiation of *Kapha Doṣha*, and pathological augmentation of *Meda Dhatu* constitute the core pathogenesis. Classical Ayurveda accords prime importance to *Ahara*, recognizing it as one of the *Trayopastambha* essential for maintenance of health and prevention of disease.

Aim: To critically analyze the role of *Ahara* as *Chikitsa* in the prevention and management of *Santarpanajanya Vyadhis* with special reference to *Prameha* and *Sthaulya*.

Methods: A conceptual and narrative review of classical Ayurvedic texts including *Caraka Saṃhita*, *Susruta Saṃhita*, and *Aṣṭanga Hṛudaya,* was undertaken. Classical references related to *Ahara Nidana*, *Ahara Vidhi Vidhana*, and *Pathya–Apathya* prescribed for *Prameha* and *Sthaulya* were systematically examined and critically analyzed.

Results: Excessive intake of *Guru, Snigdha,* and *Madhura Ahara*, along with *Avyayama* and *Divasvapna*, is identified as the principal etiological basis for *Prameha* and *Sthaulya*. Classical texts advocate *Apatarpaṇa Ahara* endowed with *Laghu, Rukṣha,* and *Lekhana* qualities to restore *Agni*, mitigate *Ama*, and normalize *Medovaha Srotas*. The foundational role of diet is emphasized in the dictum, "*Aharah praninam pranah"*.

Discussion: Ayurvedic nutrition, when applied as *Ahara Chikitsa*, offers a rational, individualized, and etiopathogenesis-based approach for lifestyle disorders. By addressing causative dietary factors and restoring metabolic homeostasis, it serves both preventive and therapeutic roles, underscoring Ayurveda's enduring relevance in contemporary lifestyle disease management.

Keywords: *Ahara Chikitsa, Santarpanajanya Vyadhis, Prameha, Sthaulya, Agni, Meda Dhatu,* Lifestyle Disorders, Ayurvedic Nutrition

NANOTECHNOLOGY-ENABLED DELIVERY SYSTEMS FOR PROBIOTICS: ADVANCES, CHALLENGES AND CLINICAL TRANSLATION

Alpana Maurya*, Vishal Singh

Saraswati Higher Education and Technical College of Pharmacy, Varanasi, U.P., India

Corresponding author: alpanamaurya62@gmail.com

Abstract

In order to overcome the inherent drawbacks of traditional probiotic formulations namely, their poor stability, low gastrointestinal survival, and uneven therapeutic efficacy nanotechnology-enabled delivery systems have emerged as a crucial development. These nanoscale platforms, which include polymeric nanoparticles, lipid-based nanocarriers, nanoemulsions, and nanofibers, enable improved defence of probiotic strains against bile salt exposure, enzymatic destruction, and acidic stomach conditions. Additionally, they optimize colonization efficiency and therapeutic results by enabling targeted intestine administration, enhanced mucosal adherence, and controlled spatiotemporal release. These developments greatly increase the clinical application of probiotics in a variety of indications, such as immunological dysregulation, gastrointestinal disorders, metabolic disorders, and neuropsychiatric disorders. Furthermore, co-delivery techniques, prebiotic inclusion, and stimuli-responsive release mechanisms are made possible by nanocarriers, which further improve the functional efficacy and accuracy of microbiome manipulation. Even with these encouraging developments, there are still a number of important issues. Rigorous evaluation is required due to concerns about nanotoxicological safety, long-term biocompatibility, and unexpected interactions with host tissues and microbiota. Clinical translation is also hampered by the lack of uniform regulatory frameworks, challenges with scalable production, and stability problems during storage and distribution. Crucially, an additional layer of complexity is presented by inter-individual diversity in gut microbiota composition, highlighting the necessity of customized formulation techniques.

Keywords: Probiotics, nanotechnology, gut microbiota, prebiotics, formulation

AYURVEDIC MANAGEMENT OF INFECTED SEBORRHEIC DERMATITIS (*DARUNAKA*) IN A 6-YEAR-OLD FEMALE: A CLINICAL CASE REPORT

Dr. Namrata Patidar*, Prof. (Dr.) Shrinidhi Kumar K.

Department Of Kaumarbhritya, National Institute of Ayurveda (Deemed University), Jaipur

Corresponding author: namratapatidar101@gmail.com

Abstract

Introduction (I): *Darunaka* (Seborrheic Dermatitis) is a common scalp disorder in the pediatric population, often presenting with scaling and pruritus. In this case, a 6-year-old female presented with a complicated manifestation featuring secondary bacterial infection (pyoderma), characterized by purulent discharge and thick, adherent crusts. While conventional topical antifungals often fail in infected cases, this study explores the efficacy of a specialized Ayurvedic internal and external protocol.

Methods (M): The patient was treated with a dual-phase regimen for 3months . Internal medication consisted of a 1g mixture of *Kanchnar Guggulu, Shuddha Gandhak, Arogyavardhini Vati,* and *Manjistha Churna* administered twice daily on an empty stomach. External management involved a two-step process: first, a local wash using a decoction (*Kashaya*) of *Panchvalkal, Triphala, Neem,* and *Amaltas*; second, the application of a specialized *Lepa*. This *Lepa* was prepared by frying the herbal decoction extract in *Nisoria Oil* and applied for 3–4 hours daily, followed by cleansing with *Nisoria Soap*.

Results: Follow-up from May to August 2024 showed a 100% resolution of symptoms. The acute purulent discharge resolved in the first month, followed by the complete clearance of thick scalp plaques. The August 4th clinical assessment confirmed a healthy scalp with no signs of inflammation or relapse.

Discussion: The success of this protocol is attributed to the synergistic action of systemic blood purification (*Raktaprasadana*) and localized lipid-mediated drug delivery. The "Oil-Fry Extraction" method enhanced the bioavailability of the herbal active principles (lipophilic alkaloids) in the scalp's sebum-rich environment. The 3-month duration was critical for neutralizing deep-seated *Dhatugata Doshas*, ensuring long-term remission without the use of corticosteroids.

Keywords: Pediatric Ayurveda, *Darunaka*, Infected Seborrheic Dermatitis, *Kleda-shoshaka*

OBESITY MANAGEMENT THROUGH AYURVEDA: PREVENTING LIFESTYLE DISORDERS

Dr. Shubham Mishra*

PG Scholar, Department of Shalyatantra, Parul Institute of Ayurveda

Corresponding author: 2402022300007@paruluniversity.ac.in

Abstract

Lifestyle disorders, including obesity, diabetes, and cardiovascular diseases, have emerged as major global health challenges due to sedentary habits, unhealthy diets, and stress. Obesity, defined as excessive accumulation of body fat, is a significant risk factor for multiple non-communicable diseases. In Ayurveda, obesity is described as *Sthoulya* or *Medoroga*, primarily resulting from an imbalance of Kapha dosha, impaired Agni (metabolism), and improper dietary and lifestyle practices. This study highlights the role of Ayurveda in the prevention and management of obesity through a holistic and root-cause-based approach. Key strategies include *Dinacharya* (daily regimen), *Ritucharya* (seasonal regimen), dietary modifications, and herbal interventions such as *Guggulu* and *Triphala*, along with detoxification therapies like *Panchakarma*. Furthermore, the integration of yogic practices, including *Surya Namaskar* and *Pranayama*, supports metabolic function and facilitates weight reduction. Evidence suggests that Ayurvedic interventions not only aid in weight management but also enhance overall quality of life by addressing the underlying causes of disease. Thus, Ayurveda offers a sustainable, preventive, and personalized approach to combating obesity and associated lifestyle disorders in the modern era.

Keywords: Lifestyle disorders, obesity, diabetes, cardiovascular diseases

THE FORGOTTEN ANCIENT PHARMACOGNOSY

Dr. U. Sharanabasava*

Scholar, Department of Kriya Shareera, Shri Jagadguru Gavisiddeshwar Ayurvedic Medical College and Hospital, Koppal

Corresponding author: sharanisback7799@gmail.com

Abstract

The term "forgotten" refers to the vast, largely undocumented, and historically neglected knowledge of medicinal plants preserved in ancient systems like Ayurveda. In recent times, there has been a growing gap in understanding the Ayurvedic perspective of pharmacognosy, particularly in areas such as identification, collection, standardization, preparation of formulations, and, most importantly, cultivation of medicinal plants.

With increasing challenges related to authentication, adulteration, and variability in the efficacy of herbal products, pharmacognosy plays a crucial role as the scientific backbone in ensuring the safety, efficacy, and consistency of herbal drugs. Classical Ayurvedic texts (Samhitas) describe a systematic approach for the identification, evaluation, standardization, and preservation of medicinal plants and their derivatives. This ensures that the final product delivered to the consumer is not merely plant-based, but a scientifically validated therapeutic agent.

Furthermore, pharmacognosy serves as a vital bridge between traditional knowledge and modern scientific approaches. Therefore, there is an urgent need for a thorough understanding and revival of ancient pharmacognostic principles to develop robust and reliable tools for the standardization and global acceptance of Ayurvedic drugs.

Keywords: medicinal plants, pharmacognosy, Ayurvedic texts (Samhitas)

DINACHARYA AND *RITUCHARYA* FROM SAMHITA: A BLUEPRINT FOR PREVENTIVE HEALTHCARE IN FUTURE INDIA

Dr. Sanjay Kumar*

NIA, Jaipur

Corresponding author: sk0293794@gmail.com

Abstract

Ayurveda, as elucidated in classical texts of *Brihatrayi* (Charaka, Sushruta, Vagbhata) and *Laghutrayi,* emphasizes the fundamental principle of *"Swasthasya Swasthya Rakshanam"* preservation of health through preventive measures. Among these, *Dinacharya* (daily regimen) and *Ritucharya* (seasonal regimen) constitute the cornerstone of *Swasthavritta,* providing a structured lifestyle aligned with biological rhythms and environmental changes. Classical references from *Charaka Samhita (Sutrasthana)* and *Ashtanga Hridaya* detail daily practices such as *Brahmamuhurta Uttishtha, Abhyanga, Vyayama,* and proper *Ahara-Vihara*, while *Ritucharya* outlines seasonal modifications in diet and behavior across six *ritus* to maintain *Dosha* equilibrium.

Contemporary research supports these principles through emerging evidence in chronobiology and lifestyle medicine. Studies indicate that synchronization of daily activities with circadian rhythms regulates metabolic functions, hormonal balance, and gut microbiota, thereby maintaining *Agni* and preventing metabolic disorders. Seasonal adaptation, as described in *Ritucharya,* has been shown to mitigate lifestyle disorders by preserving physiological homeostasis and enhancing immunity. The increasing burden of non-communicable diseases is closely linked to deviation from such natural rhythms and lifestyle regimens.

Furthermore, practices like *Abhyanga* and regulated *Ahara* contribute to stress reduction, improved circulation, and Dosha balance, reinforcing their role in holistic health maintenance. Integrating these classical regimens into modern healthcare frameworks offers a cost-effective, sustainable, and culturally rooted preventive model.

In the context of preventive medicine, *Dinacharya* and *Ritucharya* serve as a blueprint for national wellness strategies by promoting personalized, and environment-synchronized healthcare. Bridging classical Ayurvedic wisdom with contemporary scientific validation can pave the way for integrative health systems, reducing disease burden and enhancing quality of life at both individual and population levels.

Keywords: Dinacharya, Ritucharya, Swasthavritta, Preventive Healthcare, Ayurveda

AYURVEDA: THE PILLAR OF HOLISTIC HEALTH FOR VIKSIT BHARAT 2047 – INTEGRATING TRADITIONAL WISDOM WITH MODERN WELLNESS

Dr. Sai Hari Rajkumar*, **Dr. Lakshmiprasad L Jadhav**

Scholar, Department of Kayachikitsa, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

Professor, Department of Kayachikitsa, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

Corresponding author: harirajkumarkovur25@gmail.com

Abstract

As the global healthcare landscape struggles with escalating costs and a surge in chronic lifestyle disorders, realizing the vision of a developed India-Viksit Bharat 2047 demands a paradigm shift from reactive disease management to proactive, holistic wellness. Ayurveda is uniquely positioned to drive this transformation. By addressing the root causes of illness and recognizing the intricate connection between the mind, body, and environment, Ayurvedic principles offer a personalized, evidence-based approach to preventive care. The roadmap to 2047 requires the seamless integration of traditional wisdom with modern scientific innovation. Utilizing core practices like *Dinacharya* (daily regimens) for lifestyle management and *Rasayana* (immunity building) empowers citizens at the grassroots level. Bolstered by strategic governmental support, including a ₹4,409 Crore AYUSH budget and the expansion of Ayushman Arogya Mandirs, India is actively building a robust, integrative healthcare infrastructure. Ultimately, embracing Ayurveda not merely as a medical system, but as a sustainable national lifestyle will foster a physically resilient and mentally thriving society, positioning India as the global vanguard of natural therapeutics.

Keywords: global healthcare, chronic lifestyle disorders, Ayushman Arogya Mandirs

DRUG REPURPOSING FOR ALZHEIMER'S DISEASE (AD)

Muhammad B Muhammad*

CT university

Corresponding author: mbmuhammad070@gmail.com

Abstract

Drug repurposing has emerged as a promising strategy to accelerate the discovery of effective therapeutics for complex diseases such as Alzheimer's disease (AD). Alzheimer's disease is a progressive neurodegenerative disorder characterized by cognitive decline, memory loss, and behavioral impairment, associated with pathological features including amyloid-beta plaque accumulation, tau protein hyperphosphorylation, oxidative stress, neuroinflammation, and synaptic dysfunction. Traditional drug discovery approaches for AD have faced significant challenges, including high failure rates, long development timelines, and substantial financial burden. The present study focuses on the identification of potential therapeutic candidates for Alzheimer's disease through computational drug repurposing strategies. The approach involves the selection of diverse drug classes with known pharmacological profiles, followed by in silico evaluation using molecular docking, virtual screening, and pharmacokinetic modeling techniques. Target proteins relevant to Alzheimer's pathology, such as acetylcholinesterase, beta-secretase, and glycogen synthase kinase-3 beta, are utilized to assess binding affinity and interaction stability of selected compounds. By integrating computational methods with existing pharmacological data, this study aims to identify multitarget drug candidates capable of modulating multiple disease pathways simultaneously. The findings are expected to contribute to the development of safer, cost-effective, and time-efficient therapeutic strategies for Alzheimer's disease management, thereby addressing the urgent need for improved treatment options.

Keywords: Drug repurposing, Alzheimer's disease (AD), behavioral impairment, pharmacological profiles

GENDERED BODIES AND NATURAL HEALTH DISCOURSES: A FEMINIST SOCIOLOGICAL STUDY OF AYURVEDA IN CONTEMPORARY INDIA

Shraddha Gaikwad*

Assistant Professor, Maharashtra National Law University, Mumbai

Corresponding author: shraddha.gaikwad@mnlumumbai.edu.in

Abstract

This paper examines the intersection of gender, embodiment, and health within the framework of Ayurvedic knowledge systems in contemporary India. It argues that Ayurveda, as it is increasingly re-articulated within public health discourse and developmental imaginaries, operates not merely as a medical tradition but as a cultural and epistemic system that produces normative understandings of the body. Through a feminist sociological lens, the paper explores how natural health discourses shape and regulate gendered bodies by embedding ideals of balance, discipline, purity, and lifestyle regulation into everyday practices of wellbeing. Rather than treating Ayurveda as a monolithic or purely therapeutic system, the paper situates it within broader processes of knowledge production, where meanings of health are socially constructed and historically situated. It particularly focuses on how gendered subjectivities are formed through prescriptions related to diet, reproduction, menstruation, and bodily conduct, often reinforcing differentiated expectations for women's bodies as sites of care, control, and moral responsibility. The paper further engages with how traditional health frameworks are mobilized within contemporary nation-building narratives, where wellness becomes intertwined with ideas of cultural authenticity and developmental progress. In doing so, it highlights the tension between empowerment through indigenous knowledge systems and the reproduction of subtle normative constraints on gendered embodiment. The study contributes to feminist sociology of health by critically unpacking how nature becomes a socially regulated category in shaping bodily experience and identity.

Keywords: Gendered Bodies, Ayurveda, Feminist Sociology, Natural Health Discourses, Embodiment

DETERMINATION OF PHYTOCHEMICAL PROFILE AND ANTIOXIDANT CAPACITY OF *TAGETES PATULA*

Shivani Prajapati, Dr. Chhavi*

JP College Of Pharmacy, Mohanlalganj, Lucknow-226301, India

Corresponding author: prajapatishivani806@gmail.com

Abstract

Tagetes patula (French marigold) is traditionally valued for its ornamental and medicinal properties, yet its stem remains largely underutilized. This study explores the stem of Tagetes patula as a potential source of antioxidant bioactives using well-established in vitro assays. Stem extracts were prepared using organic solvents and subjected to phytochemical screening, which revealed the presence of phenolics, flavonoids, tannins, and alkaloids. The antioxidant potential of the extracts was evaluated using 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging assay, Ferric Reducing Antioxidant Power (FRAP) assay, and ABTS radical cation decolorization assay. The extracts exhibited significant dose-dependent antioxidant activity across all assays, indicating strong free radical scavenging and reducing capabilities. Total phenolic content (TPC) and total flavonoid content (TFC) were also quantified and showed a positive correlation with antioxidant activity. The results suggest that the observed bioactivity is largely attributed to the high phenolic and flavonoid composition of the stem. These findings highlight Tagetes patula stem as a promising, sustainable source of natural antioxidants, with potential applications in pharmaceutical, nutraceutical, and functional food industries. Further studies focusing on compound isolation and in vivo validation are warranted.

Keywords: Tagetes patula, stem extract, antioxidant activity, phytochemicals, phenolic compounds, flavonoids.

A CROSS-SECTIONAL STUDY ON DISPOSAL PRACTICES OF EXPIRED MEDICINES AND ASSOCIATED RISKS IN LUDHIANA

Lucy Gabriel Gewe*

Career Transformation University (CT University)

Corresponding author: lucygewe@gmail.com

Abstract

Background: The disposal of unwanted medicines, both expired and unused, has been a concern in India, but it is a neglected issue. CDSCO explains only how to dispose of unused medicine in Ludhiana.

Aim: To assess improper disposal practises of unused and expired medicines among the general population in Ludhiana.

Methodology: This is a cross-sectional prospective study used to collect information on the disposal of expired medicines within the community of Ludhiana. It was randomly sampling of a member from each household and only asking for medicines that are not in use and assessing how they dispose of these expired medicines. Evaluating what they know about the proper disposal of expired and left-over medicines, what they know about the effects of improper disposal of expired medicines on their health and the surrounding environment. The importance of ensuring proper disposal of unwanted medicines in the household.

Result: The study found that a majority of residents in Ludhiana dispose of expired and unused medicines in household trash or drains. This practice poses environmental risks and increases the chance of accidental ingestion or misuse. Lack of awareness and proper disposal infrastructure were identified as major contributing factors.

Conclusion: Improper disposal of medicines in Ludhiana poses serious environmental and public health risks. The study highlights a lack of awareness and disposal facilities as key issues. Immediate action through education and enforcement of policies is essential for safer pharmaceutical waste management.

Keywords: CDSCO, unwanted medicines, dispose of, lack of awareness

NEUROPROTECTIVE EFFECTS OF INDOLE-3-CARBINOL AGAINST SCOPOLAMINE-INDUCED COGNITIVE AND MEMORY IMPAIRMENT IN RATS: MODULATION OF OXIDATIVE STRESS, INFLAMMATORY, AND CHOLINERGIC PATHWAYS

Vinjavarapu. L. Anusha*

Sims College Of Pharmacy

Corresponding author: anushapharmacy90@gmail.com

Abstract

Indole-3-carbinol (I3C), a bioactive compound from cruciferous vegetables, exhibits neuroprotective properties through modulation of oxidative stress, inflammation, and cholinergic pathways. This study evaluated its effect against scopolamine-induced cognitive impairment in male Wistar rats divided into six groups: Control, Scopolamine (1 mg/kg), I3C (25, 50, 100 mg/kg), and Donepezil (5 mg/kg). Cognitive function was assessed using Y-maze and Novel Object Recognition tests. Biochemical analyses included acetylcholinesterase (AChE), oxidative stress markers (MDA, SOD, CAT), and ELISA-based evaluation of NRF2, HO-1, inflammatory cytokines (NF-κB, TNF-α, IL-6, IL-1β), and apoptotic markers (Cytochrome C, caspase-9). Histopathological changes were examined using H&E and Nissl staining. Results showed that I3C significantly improved memory performance, reduced AChE activity, enhanced antioxidant defences (NRF2, HO-1), and decreased oxidative stress, inflammation, and apoptosis. Overall, I3C demonstrates significant neuroprotective potential and may serve as a promising therapeutic agent for cognitive impairment.

Keywords: Indole 3-carbinol, Scopolamine, Memory deficits, Acetylcholinesterase, Oxidative stress, and Neuroinflammation

IN-SILICO DESIGN, SYNTHESIS, AND BIOLOGICAL EVALUATION OF METFORMIN SCHIFF BASES AS POTENTIAL α-GLUCOSIDASE INHIBITORS

Mohd Nadeem *, Shainda Tyagi

Department of Pharmaceutical Chemistry, Dr K.N Modi Institute of Pharmaceutical Education and Research, Modinagar, Uttar Pradesh, India.

Corresponding author: nadeembajhera0398328@gmail.com

Abstract

Metformin is one of the most widely used oral medications for the treatment of Type 2 Diabetes Mellitus(T2DM). It belongs to the class of biguanide drugs and is considered the first-line therapy for managing type 2 diabetes due to its effectiveness, safety, and low risk of causing hypoglycemia. Diabetes mellitus is a metabolic disorder characterized by high blood glucose levels resulting from defects in insulin secretion or insulin action. Metformin works primarily by decreasing hepatic glucose production, particularly by inhibiting gluconeogenesis in the liver. It also improves insulin sensitivity in peripheral tissues such as skeletal muscles and adipose tissue, which enhances glucose uptake and utilization by the cells. Additionally, metformin reduces intestinal absorption of glucose, contributing to better glycemic control. Because of these mechanisms, it helps lower blood sugar levels without significantly increasing insulin secretion. The present study was designed to synthesize and preliminarily evaluate metformin-aldehyde-based Schiff base as multifunctional therapeutic agents. Metformin was chemically modified through a condensation reaction using glacial acetic acid as the catalyst, with ethanol or methanol employed as the reaction solvent under reflux conditions at 60-70 °C for 3-5 hours. Overall, six metformin aldehyde-based Schiff base derivatives were successfully synthesized and characterized for further biological evaluation of their anti-diabetic and gluconeogenesis-related potential applications.

Keywords: Metformin, Anti-diabetic, Drug Design, Schiff Bases

CONCEPT OF AGRAY DRAVYA IN CHIKITSHA

Dr. Jaishree Tak*

MD scholar, Dept. of Dravyaguna, National Institute of Ayurveda, Jaipur

Corresponding author: jayshreetak5@gmail.com

Abstract

Introduction: Agrya Dravyas, denoting excellence (*agrYa* = superior), hold a central role in Ayurvedic pharmacology. These are singled-out, potent, first-line substances chosen for their affordability, safety, and ease of use. Predominantly Eka Dravyas (single agents), they offer targeted interventions in the early (Poorvārūpa) stages of disease, thus preventing progression. Classical sources such as *Charaka Saṁhitā* (Sūtrasthāna) document 152 such Agrya Aushādhis, with systematic compilations found in *Aṣṭāṅga Hṛdaya* and *Aṣṭāṅga Saṁgraha*. The purpose of this paper is to define, categorize, and highlight the clinical relevance of Agrya Dravyas in Ayurvedic practice.

Methods: A qualitative review was conducted by surveying classical Ayurvedic texts (e.g., *Charaka*, *Aṣṭāṅga Hṛdaya*, *Saṁgraha*). Relevant passages defining Agrya Dravyas, their therapeutic classifications (āhāra, vihar, pañcakarma, dhātu-related, swasthavṛtta), and their clinical rationales, especially in Poorvārūpa management, were compiled and synthesized.

Results: The analysis revealed that *Agrya Dravyas* are predominantly Eka Dravya, meaning they are administered as single drugs rather than in combination formulations. These substances were found to span across five major therapeutic domains, namely āhāra (dietary measures), vihāra (lifestyle practices), pañcakarma (detoxification procedures), dhātu-related interventions, and preventive healthcare approaches. Furthermore, Agrya Dravyas hold a significant place in *Dravya Yojanā*, emphasizing the importance of appropriate drug selection, dosage, and timing in treatment planning. Classical Ayurvedic texts repeatedly highlight their utility, particularly in the early stages of disease, where their timely administration can effectively prevent disease progression and support restoration of health.

Conclusion: Agrya Dravyas represent a refined and effective pharmacological class within Ayurveda. Their structured inclusion—rooted in classical literature and early-stage therapeutic strategy, reinforces their value in clinical practice. Future research should aim to empirically assess their efficacy in preventing disease progression within contemporary settings.

Keywords: Agray, Dravyachikitsha, Aushadhi, Ekal Dravya

AN EXPLORATORY REVIEW OF THE ROLE OF *BILVADI LEHA* IN THE MANAGEMENT OF IRRITABLE BOWEL SYNDROME (IBS) – A PSYCHOSOMATIC DISORDER

Dr. Shradha Mamde[1*], Dr. Abhishek Upadhyay[2]

[1]PG Scholar, Kayachikitsa Department, National Institute of Ayurveda, Deemed to be University, Jaipur-302002, Rajasthan.

[2]Assistant Professor, Kayachikitsa Department, National Institute of Ayurveda, Deemed to be University, Jaipur-302002, Rajasthan.

Corresponding author: ssmamde@gmail.com

Abstract

Introduction: Irritable Bowel Syndrome (IBS) is a chronic, relapsing functional gastrointestinal disorder characterized by abdominal pain, bloating, and altered bowel habits without any structural abnormality. It is widely recognized as a psychosomatic disorder, where psychological factors such as stress and anxiety influence gastrointestinal motility. In Ayurveda, this condition is closely correlated with *Vatika Grahani Roga*, a disorder of *Agni Mandya* and *Ama* formation, involving both *Sharirika* and *Manasika Doshas*. The pharmacodynamic profile of *Bilvadi Leha* supports *Agnideepana*, *Amapachana*, *Srotoshodhana, Vedanasthapana, Krimighna, and Anulomana,* and it also acts on the *Manovaha Srotas* by stabilizing *Vata* and *Pitta Doshas*. Thus, addressing both somatic and psychological components of IBS pathogenesis.

Methods: An exploratory review was conducted by searching databases such as PubMed, Scopus, and Google Scholar for studies on the effects of *Bilvadi Leha* in IBS. The inclusion criteria encompassed randomized controlled trials (RCTs), cohort studies, and clinical trials that assessed the impact of these practices on signs and symptoms like feeling of incomplete evacuation, constipation or diarrhoea, weakness.

Result and Discussion: Clinical studies, including those by Tiwari et al. (2013), Kumawat et al. (2017), and a study conducted in NIA Jaipur, demonstrated significant improvement ($p < 0.001$) in IBS symptoms and quality of life with *Bilvadi Leha* (10 g twice daily). Across 12–16 week open-label trials, marked relief in abdominal discomfort, bloating, and bowel irregularities was observed without adverse effects, establishing *Bilvadi Leha* as an effective Ayurvedic formulation for holistic IBS management.

Keywords: *Bilvadi Leha, Grahani Dosha*, Irritable Bowel Syndrome, Psychosomatic Disorder, *Agni Mandya*.

A CASE STUDY OF MULTIPLE SCLEROSIS WSR TO *SIRA-SNAAYU-KANDARA GATA VATAVYADHI*

Pragneshkumar Parmar[1*] Krutika Chaudhary[2], B. Swapna[3]

[1]PG Scholar, Post Graduate Department of Dravyaguna Vigyan, National Institute of Ayurveda, Jaipur,

[2]Assistant Professor (Sr.), Post Graduate Department of Dravyaguna Vigyan, National Institute of Ayurveda, Jaipur

[3] Professor, Post Graduate Department of Shalyatantra, National Institute of Ayurveda, Jaipur

Corresponding author: pragnesh2198@gmail.com

Abstract

Multiple Sclerosis (MS) is a chronic autoimmune demyelinating disorder of the central nervous system characterized by progressive neurological impairment. The global burden of MS is rising, including in India, necessitating exploration of alternative and integrative treatment approaches. In Ayurveda, MS can be correlated with *Siraa-Snaayu-Kandaraa* Gata *Vaatavyaadhi,* a condition involving the vitiation of *Vata Dosha* affecting deeper tissues. This case report describes a 35-year-old female diagnosed with Primary Progressive Multiple Sclerosis presenting with bilateral lower limb pain, gait disturbances, sensory deficits, visual impairment, chronic constipation, and bladder dysfunction. The patient had previously undergone conventional therapy with limited benefit and opted for Ayurvedic management. Based on classical Ayurvedic assessment, the condition was diagnosed as Siraa-Snaayu-*Kandaraa* Gata *Vaatavyaadhi* with Pitta *Anubandha*. The treatment protocol included a combination of *Shodhana* and *Shamana* therapies such as *Sarvanga Kashaya Dhara*, various Vasti procedures, internal medications, and *Samana Snehapana*, along with strict dietary and lifestyle modifications. Following a 41-day inpatient treatment, significant improvement was observed in pain, mobility, bowel and bladder function, sleep, and visual symptoms. Recurrence and worsening of symptoms were noted during periods of treatment discontinuation. This case suggests that Ayurvedic management may provide symptomatic relief and improve the quality of life in patients with Multiple Sclerosis. The findings support the need for further systematic research to validate the role of Ayurveda in the management of chronic neurodegenerative disorders

Keywords: Multiple sclerosis, *Siraa-snaayu-kandaraa gata Vaatavyaadhi, Samana snehapaanam*

LEENA DOSHA: A KEY TO UNDERSTANDING CHRONIC AND RECURRENT DISORDERS

Zankhana V. Garasiya[1], Shubhangi Kamble[2]

[1]MD Scholar, Department of Basic Principles, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat- 361008.

[2]Professor, Department of Basic Principles, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat- 361008.

Corresponding author: zankhnagarasiya39@gmail.com

Abstract

Introduction: Ayurveda considers health as a state of equilibrium of *Dosha*, *Dhatu*, and *Mala*. Classical texts like Charaka Samhita describe various functional states of *Doshas* influencing disease development. *Leena Dosha* refers to the concealed or dormant state of vitiated *Doshas* hidden within *Dhatus* or *Srotasas* without clear clinical symptoms.

Methods: This conceptual review is based on classical Ayurvedic literature. References regarding *Leena Dosha*, *Dosha Avastha*, and related pathological concepts were collected from Charaka Samhita and other texts, and analyzed for definition, causes, pathogenesis, and clinical relevance.

Results: *Leena Dosha* represents a latent stage where vitiated *Doshas* persist due to incomplete elimination, improper treatment, or suppression of symptoms. Though initially asymptomatic, these *Doshas* may aggravate under favorable conditions, leading to disease manifestation. This highlights the importance of assessing *Dosha Avastha* and *Samprapti*.

Discussion: The concept reflects the depth of Ayurvedic understanding of disease progression. Identification of *Leena Dosha* helps explain recurrence and chronicity, emphasizing complete removal of vitiated *Doshas.*

Conclusion: *Leena Dosha* is a significant pathological state that aids in understanding hidden disease processes. Early recognition supports the timely use of *Deepana, Pachana, Srotoshodhana*, and *Shodhana Chikitsa* for restoring balance.

Keywords: Chronic Disorder, *Dosha Avastha, Leena Dosha*, Recurrent Diseases.

INVESTIGATION OF LIPID-LOWERING POTENTIAL OF *WITHANIA COAGULANS (DUNAL)* USING IN-VITRO ENZYME INHIBITION ASSAYS AND COMPUTATIONAL APPROACHES

Kruthika. S.G*

Department of Pharmacognosy, The Oxford College of Pharmacy, Bangalore, Karnataka, India

Corresponding author: kruthikasg9@gmail.com

Abstract

Objective: Hyperlipidaemia is a major metabolic disorder linked to cardiovascular diseases, characterised by elevated cholesterol, triglycerides, and low-density lipoproteins. This research aims to evaluate the Anti-hyperlipidaemic potential of *Withania coagulans* leaves.

Research Methodology: Comprehensive research of published literature will be conducted, including phytochemical studies, in vitro enzyme inhibition assays, and in silico molecular docking analyses. LC–MS studies were also considered to identify bioactive constituents.

Result: Studies might demonstrate that *Withania coagulans* exhibits significant lipid-lowering activity. In vitro findings will show antioxidant and enzyme inhibitory effects, particularly against pancreatic lipase and HMG-CoA reductase. Molecular docking studies should reveal strong binding affinity between withanolides and key enzymes of lipid metabolism. LC–MS analysis will confirm the presence of bioactive compounds, such as withanolides, flavonoids, and phenolics.

Conclusion: *Withania coagulans* shall show promising anti-hyperlipidaemic potential through antioxidant action, enzyme inhibition, and lipid regulation, supporting its use as a natural therapeutic agent.

Keywords: Withania coagulans, Hyperlipidaemia, Withanolides, Antioxidant, Enzyme inhibition.

HPLC-ASSISTED DEGRADATION STUDIES OF DIFFERENT ANTIVIRAL DRUGS

Abinash Kumar sah*, Dr. Anjali Gupta

MM College of Pharmacy, Mullana-Ambala, MMDU

Corresponding author: guptaabinash307@gmail.com

Abstract

Drug degradation refers to the chemical and physical breakdown of the drug substance under the influence of environmental conditions such as temperature, light, moisture, pH, and oxygen. Stress/forced degradation studies are defined as intentional degradation of drug substances under amplified stress conditions such as acidic and alkaline hydrolysis, oxidation, photolysis and thermal stress. HPLC- Assisted method is used to determine the degradation behaviour, stability, hydrolysis, oxidation, photolysis, and thermal degradation of an anti-viral drug. The various anti-viral drugs such as cabotegravir, favipiravir, lertermovir, oseltamivir, nirmatrelvir and peramivir are selected to determine the degradation behaviour through an HPLC-assisted method. HPLC (High-Performance Liquid Chromatography) is widely used for analysing degradation products because it offers high sensitivity and accuracy, allowing detection of even trace impurities. HPLC also enables precise quantitative analysis of each component and provides reproducible results. Additionally, it helps identify potentially toxic degradation products, ensuring drug safety, and meets regulatory requirements set by organizations like the International Council for Harmonisation**.**

Keywords: drug degradation, stress, photolysis, sensitivity

ETHNOMEDICINAL PLANTS OF UTTARAKHAND FOR THE TREATMENT OF EAR DISORDERS

Somesh Thapliyal*, Aman Patel

Department of Pharmaceutical Sciences, HNB Garhwal (A Central University) Srinagar Garhwal, Uttarakhand

Corresponding author: Somesh.thapliyal@gmail.com

Abstract

Ear disorders such as otitis, tinnitus, and hearing loss are common conditions caused by infections, trauma, or environmental factors, often leading to significant health complications if untreated. The limitations of conventional therapies and rising antimicrobial resistance have increased interest in herbal medicine as a safer and cost-effective alternative. Uttarakhand, a biodiversity-rich Himalayan region, possesses a vast range of medicinal plants traditionally used for ear-related ailments.

This review highlights the role of key herbal plants, including *Allium sativum*, *Azadirachta indica*, *Ocimum sanctum*, and *Zingiber officinale*, which exhibit antimicrobial, anti-inflammatory, analgesic, and antioxidant properties due to bioactive compounds such as allicin, eugenol, and gingerol. These plants are used in various forms, including medicated oils, decoctions, and extracts, to relieve ear pain and treat infections.

Scientific studies support the therapeutic potential of these herbs; however, challenges such as lack of standardization and dosage control remain. Integrating traditional knowledge with modern research can lead to the development of effective and safe herbal formulations. This review emphasizes the importance of Uttarakhand's medicinal flora in ear healthcare and its potential in future phytopharmaceutical development.

Keywords: Ear disorders, Herbal medicine, Uttarakhand, Ayurveda, Medicinal plants

ROLE OF *AYURVEDIC AHARA* (NUTRITION) IN THE MANAGEMENT OF *SANTARPANJANYA VYADHI* (OVER-NUTRITION) LIFESTYLE DISORDERS: AN INTEGRATIVE REVIEW

Dr. Baishali Paul[1*], Prof. Dr. Sumit Nathani[2]

[1]MD Scholar of Dravyaguna Department, Nia, Jaipur

[2] Professor of Dravyaguna Department, Nia, Jaipur

Corresponding author: paulbaishali1@gmail.com

Abstract

Introduction: Lifestyle disorders are increasing due to unhealthy diet, physical inactivity, and stress. In *Ayurveda,* these are described as *Santarpanjanya Vyadhi,* mainly caused by over-nutrition and improper lifestyle.

Methods: This review is based on classical *Ayurvedic* texts and relevant modern literature to understand the role of *Ahara* (diet) in managing lifestyle disorders.

Results: *Ayurveda* emphasizes that diet is not only about nutrients but also quality, quantity, timing, *Agni* (digestive fire), and *Prakriti* (individual constitution). Disturbance in these factors leads to impaired digestion and the formation of *Ama,* which contributes to disorders like obesity, diabetes, and dyslipidaemia. The findings highlight the importance of a balanced diet, proper eating habits, adequate sleep, and regular physical activity. *Agni* plays a central role in maintaining metabolic balance.

Discussion: An integrative approach combining *Ayurvedic* dietary principles with modern nutrition can be more effective, as it addresses both qualitative and quantitative aspects of food. *Ayurveda* offers a simple, personalized, and sustainable way to prevent and manage lifestyle disorders.

Keywords: *Ayurvedic* nutrition, *Ahara, Santarpanjanya Vyadhi, Agni, Ama,* Lifestyle disorders.

IDENTIFICATION AND BIOLOGICAL EVALUATION OF A SELECTIVE HISTAMINE INHIBITOR FROM PUMPKIN SEEDS

Akriti Singh*

JP College of Pharmacy, Lucknow

Corresponding author: tannusinghsingh51@gmail.com

Abstract

Pumpkin seeds (Cucurbita pepo) are rich in bioactive compounds that contribute to their medicinal and nutritional value. This study investigated the phytochemical composition and histamine inhibitory activity of pumpkin seed extracts to evaluate their potential anti-allergic properties. Dried pumpkin seeds were pulverized and extracted using ethanol and aqueous solvents by maceration. Preliminary phytochemical screening was conducted using standard qualitative tests to detect the presence of alkaloids, flavonoids, tannins, saponins, phenolic compounds, steroids, and glycosides. The histamine inhibitory activity of the extracts was evaluated *in vitro* using a histamine-induced contraction model, with diphenhydramine serving as the reference antihistamine drug. The results of phytochemical analysis revealed a high abundance of flavonoids, phenolics, and tannins, while moderate amounts of saponins and alkaloids were also detected. The ethanolic extract exhibited significantly higher histamine inhibition compared to the aqueous extract in a concentration-dependent manner. The observed antihistaminic activity may be attributed to the presence of polyphenolic compounds known for their mast cell-stabilizing and anti-inflammatory effects. These findings suggest that pumpkin seed extracts possess promising histamine-inhibitory activity and could serve as a natural alternative for the management of allergic reactions. Further studies are warranted to isolate the active constituents and elucidate their molecular mechanisms of action.

Keywords: Pumpkin seeds, Cucurbita pepo, phytochemical screening, histamine inhibition, antihistaminic activity, flavonoids, phenolic compounds

EVALUATION OF PECTOLINARIGENIN'S ANTIHYPERGLYCEMIC EFFECTS IN A RAT MODEL OF TYPE 2 DIABETES MELLITUS

Samiksha Jayswal*

Assistant Professor, Department of Pharmacology, Parul College of Pharmacy and Research, Parul University, Ahmedabad, Gujarat, India

Corresponding author: samikshajayswal1107@gmail.com

Abstract

Background: Type 2 Diabetes Mellitus (T2DM) is a chronic metabolic disorder characterized by insulin resistance, inadequate insulin secretion, chronic inflammation, and impaired glucose metabolism. Identifying drugs with multi-target effects could play a key role in disease management.

Aim: To evaluate the therapeutic effects of pectolinarigenin on key T2DM molecular targets using computational and experimental approaches.

Methods: Molecular docking simulations assessed pectolinarigenin's interactions with major T2DM targets, including Peroxisome Proliferator-Activated Receptor (PPAR), Dipeptidyl Peptidase 4 (DPP4), and Sulfonylurea Receptor 1 (SUR1). Sprague-Dawley male rats were divided into five groups: normal control, disease control, reference standard (glibenclamide), and pectolinarigenin (20 mg/kg and 50 mg/kg, oral). Over five weeks, parameters such as fasting serum glucose, insulin sensitivity, oxidative stress, inflammatory markers, lipid profiles, and HbA1c were measured.

Results: Docking studies revealed strong binding affinities of pectolinarigenin to T2DM targets, supporting its multi-target therapeutic potential. In vivo, pectolinarigenin improved glucose tolerance, significantly lowered fasting blood glucose, and enhanced insulin sensitivity compared to disease controls and the reference standard. The 50 mg/kg dose yielded superior outcomes, including better weight maintenance, improved lipid profiles, stronger antioxidant defenses, reduced inflammation, and lower HbA1c levels. These results demonstrate its efficacy in glycemic control and in mitigating diabetes complications.

Conclusion: Pectolinarigenin showed robust antidiabetic activity in computational and experimental models by improving metabolic parameters and reducing inflammation. It holds promise as a novel therapeutic candidate for T2DM, though clinical trials are needed to confirm efficacy in humans.

Keywords: DPP4, Diabetes Mellitus, Flavonoid, PPAR, T2DM.

AYURVEDIC AHAR AND SANSKAR: THE SCIENTIFIC PRINCIPLES OF NOURISHMENT, FOOD PROCESSING, AND TRANSFORMATION

Dr. Pratyusa Parida[1*], Dr.Sudipta Rath[2]

[1]MD Scholar of Dravuaguna Department, Nia, Jaipur

[2]HOD, Professor of Dravyaguna Department, Nia, Jaipur

Corresponding author: pratyusa464@gmail.com

Abstract

Introduction: Ayurveda regards *Ahar* (diet) as a fundamental pillar of health and longevity. ***Sanskar*** refers to processing methods that modify the qualities, digestibility, and therapeutic value of food. These concepts are relevant in the era of processed foods and lifestyle disorders.

Methods: A literary review was conducted using classical Ayurvedic texts, namely *Sharangdhar Samhita, Nalakalpa Druma*, and *Ayurveda Mahadadhi*. References related to dietary principles, food processing methods, and transformed food products were collected and analyzed.

Results: The texts describe various Sanskar methods such as washing, soaking, grinding, heating, roasting, fermentation, and churning. These processes improve taste, preservation, digestibility, and medicinal utility of foods. Examples include milk transformed into curd, buttermilk, butter, and ghee, each having distinct properties. Proper diet selection is also based on constitution, digestive capacity, age, and season.

Discussion: Ayurvedic Ahar and Sanskar provide a scientific foundation for personalized nutrition and healthy food processing. These principles correlate with modern concepts of nutrient enhancement and preventive healthcare. Their application may help reduce lifestyle disorders and support sustainable well-being in contemporary society.

Keywords: Ayurveda, Ahar, Sanskar, Nutrition, Food Processing, Personalized Diet, Preventive Healthcare.

AYUSHMAN BHARAT AND BEYOND: TRANSFORMING HEALTHCARE ACCESS IN INDIA

Dr. A. Aparanji*

Assistant Professor, Department of Rasasahastra and Bhaisajya Kalpana, Dr. AL Government Ayurvedic Medical College, Warangal, Telangana

Corresponding author: appi375375@gmail.com

Abstract

India's public healthcare system is vast and diverse, serving a population of over 1.4 billion, including Primary, secondary, and tertiary care, signifying preventive, promotive, and curative health. Central Government has Sponsered and initiated many schemes as Main objective of Ayurveda is to maintain the healthy person and to treat the diseased one to achieve this Schemes Such as Ayushman Bharath Pradhan Mantri Jan Arogya Scheme And Pradhan Mantri Jan Arogya Yogana, National Ayush Mission, Ayurswasthya Yojana, Ayurgyan, AOUGUSY schemes and many more for Promoting Good health and Expand outreach of health care to vulnerable sections of society get acess to quality and affordable healthcare which is done by some means like Ayushman arogya mandir by which primary health care is brought nearer to people. Together with these schemes under the Ministry of Ayush, they provide affordable, good-quality, and comprehensive healthcare, ensuring universal health coverage for all. The details of different schemes, Application procedures, Eligibility, coverage, etc., are all discussed in the main paper.

Keywords: Public healthcare, Ayurveda, Ayushman Bharath Pradhan Mantri Jan Arogya Scheme, Pradhan Mantri Jan Arogya Yogana, National Ayush Mission

AYURVEDIC AND CONTEMPORARY UNDERSTANDING OF DIARRHOEA (ATISĀRA): ROLE OF BILVĀDI KWĀTHA DVITIYA IN MANAGEMENT

Dr. Vikash Kaushik*

PhD Scholar, I.A.S.R., Shree Krishna AYUSH University, Kurukshetra

Corresponding author: vickykaushik19@gmail.com

Abstract

Atisāra (diarrhoea) is a common gastrointestinal disorder described extensively in Ayurveda, characterized by frequent passage of loose stools due to derangement of Agni (digestive fire) and Doshas. It may arise from dietary indiscretions, infections, psychological factors, or impaired digestion. In modern medicine, diarrhoea is understood as increased stool frequency and liquidity, often caused by infections, malabsorption, or inflammatory conditions. This paper presents a comparative overview of Atisāra from both Ayurvedic and modern perspectives, highlighting etiology, pathogenesis, classification, and management approaches. Special emphasis is given to *Bilvādi Kwātha Dvitiya*, a classical Ayurvedic formulation known for its Deepana (appetizer), Pachana (digestive), and Grahi (absorbent) properties. The ingredients of this formulation, particularly Bilva (Aegle marmelos), have demonstrated anti-diarrhoeal, antimicrobial, and gut-stabilizing effects. By integrating classical Ayurvedic principles with contemporary understanding, this study underscores the relevance of traditional formulations in managing diarrhoeal disorders effectively and safely.

Keywords: Ayurveda, Bilvadi kwath {Divitya, Atisara

YOGA AS A TOOL FOR ENHANCING PHYSICAL HEALTH IN THE ELDERLY

Dr. Shambhavi A M*

PG scholar, Department of Swasthavritta, JSSAMC, Mysore

Corresponding author: shambhaviam2@gamil.com

Abstract

Introduction: According to the WHO, as of 2025, the global population aged 60 years and older will reach approximately 1.4 billion, representing about 18% of the world's total population. The elderly population in India and in the entire world faces a high prevalence of physical health problems such as hypertension, diabetes, obesity, sensory impairments, and musculoskeletal disorders. Yoga, an ancient mind-body practice, has gained popularity as a holistic intervention for promoting health and well-being. To reduce physical health problems, an attempt has been to made systemic review by searching yogic texts.

Materials/Methods: Relevant information is collected from yogic classical texts and Park's textbook of preventive and social medicine.

Results: Evidence indicates that regular yoga practice significantly improves balance, muscular strength and flexibility, thereby reducing the risk of falling. It can also reduce the stiffness and improve the range of motion. Mental health outcomes also showed notable improvement, with decreased levels of depression and anxiety and enhanced cognitive performance. Several studies reported improved sleep quality and overall life satisfaction among elderly yoga practitioners.

Discussion: Yoga offers a safe, adaptable and cost-effective intervention for elderly individuals, supporting both physical health and mental resilience. Its emphasis on breath control, mindfulness and gentle movement aligns well with the capabilities and needs of aging populations. While more longitudinal studies are needed to confirm long-term benefits. Existing data strongly support integrating yoga into geriatric health problems.

Keywords: Yoga, Elderly, Physical health

AYURVEDA – A WAY FORWARD FOR WELLNESS: VIKSIT BHARAT 2047

Dr. Naushaba Aijaz Husain*

N.I.A. Jaipur Rajasthan

Corresponding author: naushaba.nia@gmail.com

Abstract

Introduction: Achieving the vision of *Viksit Bharat 2047* requires a holistic, preventive, and sustainable healthcare model. Ayurveda, as an ancient system of medicine, offers personalized and lifestyle-based approaches that align with modern wellness needs.

Methods: This paper adopts a narrative review approach, analyzing classical Ayurvedic texts alongside recent research, national health policies, and integrative healthcare models. Secondary data from government initiatives, WHO reports, and peer-reviewed studies were examined to evaluate Ayurveda's relevance in contemporary public health.

Results: Findings indicate that Ayurvedic principles such as *Dinacharya*, *Ritucharya*, and *Ahara-Vihara* significantly contribute to disease prevention, health promotion, and improved quality of life. Integration of Ayurveda with modern healthcare systems enhances accessibility, affordability, and patient-centered care. Government initiatives like AYUSH have strengthened its global recognition and implementation.

Discussion: Ayurveda can play a transformative role in achieving universal health coverage by emphasizing prevention over cure. However, challenges such as standardization, scientific validation, and awareness need to be addressed. Strengthening research, education, and policy support will be crucial for its wider acceptance and integration.

Conclusion: Ayurveda provides a sustainable pathway for holistic wellness, making it a key contributor to the realization of a healthy and developed India by 2047.

Keywords: Ayurveda, Viksit Bharat 2047, Holistic Health, Preventive Medicine, AYUSH, Integrative Healthcare, Wellness.

MARKETED AYURVEDIC FACE PACKS AND SKIN SAFETY: A COSMETOVIGILANCE-BASED ANALYSIS

Dr. Neha Rathore*

M.D. Scholar Department of Dravyaguna Vigyan, NIA, Jaipur.

Corresponding mail: dr.rathoreneha@gmail.com

Abstract

Marketed Ayurvedic face packs *(Mukhalepa)* containing *Nimba* (Azadirachta indica), *Haridra* (Curcuma longa*), Manjistha* (Rubia cordifolia), *Arjuna* (Terminalia arjuna), *Lodhra* (Symplocos racemosa), *Chandana* (Santalum album), *Priyala* (Buchanania lanzan), *Kumkuma* (Crocus sativus) and Aloe vera (Aloe barbadensis Miller) are widely used for *Kanti-vardhana* and *Tvakprasadana.* Classical Ayurveda emphasises evaluation of *Prakriti, Dosha, Agni, Rasa-Rakta Dhatu* and *Bhrajaka Pitta* prior to topical application; however, unsupervised over-the-counter use may predispose to adverse cutaneous reactions. The present study employed an organized Ayurvedic safety review strategy integrated into cosmetovigilance perspective, integrating *Rasa-GuṇaVirya-Vipaka* evaluation with *Dosha-prabhava* analysis. Ingredient pharmacodynamics were correlated with *Dosha-prakopa* and *Twak-vikara* based on adverse reaction patterns reported in published dermatological literature on herbal and botanical topical preparations. Reactions such as *Mukhadaha* (burning), *Kandu* (pruritus), *Twak-rukshata* (dryness), erythema, acneiform eruptions and hyperpigmentation were observed or predicted. *Ushna-Tikshna dravyas* like *Haridra* and *Kumkuma* were associated with *Bhrajaka Pitta* aggravation and *Rakta-dushti*, *Kashaya-Ruksha dravyas* such as *Lodhra, Arjuna* contributed to *Vata-prakopa* and barrier dysfunction, while *Snigdha-Guru Priyala* showed potential for *Kapha-Meda dushti* and comedogenesis. The findings indicate that marketed Ayurvedic face packs are not universally safe and require *Prakriti*-based prescription and systematic cosmetovigilance monitoring to ensure rational and personalised cutaneous safety.

Keywords: Cosmetovigilance, Ayurvedic Face Packs, Mukhalepa, Skin Safety, Adverse Cutaneous Reactions, Dosha-Prabhava, Rasa-Guna-Virya-Vipaka, Prakritibased Prescription.

ROLE OF JAK/STAT RECEPTORS IN RESPIRATORY DISORDERS

Saloni Saini*, Sonu Kumar Yadav, Inderjeet Verma

MM College of Pharmacy, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana 133207, India

Corresponding author: salonisaini051@gmail.com

Abstract

Disorders such as asthma, chronic obstructive pulmonary disease [COPD], pulmonary fibrosis and Acute Respiratory Distress Syndrome [ARDS] represent a major global health burden contributing significantly to morbidity and mortality. In recent years, the Janus kinase/signal transducer and activator of transcription [JAK/STAT] signaling pathway has gained attention for its central role in regulating respiratory disorders. Growing evidence indicates that dysregulation of JAK/STAT signaling contributes to the pathogenesis of multiple respiratory disorders, including asthma, chronic obstructive pulmonary disease, pulmonary fibrosis, acute respiratory distress syndrome, and viral infections. In respiratory disorders, the JAK/STAT signaling pathway is a central regulator of cytokine-mediated communication and plays a pivotal role in maintaining respiratory homeostasis. In the respiratory system, activation of Janus kinases (JAKs) and signal transducers and activators of transcription (STATs) governs inflammatory responses and epithelial integrity. This review synthesizes current knowledge on the molecular mechanisms of JAK/STAT signaling in the respiratory tract, highlighting its interactions with pro-inflammatory cytokines and respiratory disorders. We also examine emerging therapeutic strategies targeting JAK/STAT components, including selective JAK inhibitors, and discuss their clinical implications in inflammatory and immune-mediated lung diseases. A deeper understanding of pathway regulation and cross-talk with other signaling networks may facilitate the development of precision-based interventions for respiratory pathologies.

Keywords: JAK/STAT signaling pathway, cytokine signaling, transcription factors, phosphorylation, receptor-associated kinase, signal transduction

FORMULATION AND WOUND HEALING EFFICACY OF A POLYHERBAL GEL CONTAINING EXTRACTS OF MORINGA OLIEFERA, AZADIRACHTA INDICA, AND OCIMUM SANCTUM

Dr Amit Kumar*, Dr Manish Kumar Mishra

Faculty of Pharmaceutical Science Motherhood University Roorkee Haridwar Uttarakhand 247667

Corresponding author: amitsmdit011@gmail.com

Abstract

Background: Wounds involve disruption of skin and soft tissues, and their healing is a complex process of tissue repair and remodeling. Based on ethnobotanical evidence, *Moringa oleifera*, *Ocimum sanctum*, and *Azadirachta indica* were selected for developing a polyherbal wound healing formulation. Ethanolic leaf extracts were subjected to physicochemical and phytochemical evaluation. Antioxidant activity assessed using DPPH and FRAP assays showed strong free radical scavenging potential, attributed to high phenolic and flavonoid content. Polyherbal formulations prepared using Carbopol 940 exhibited good compatibility, with formulations F1 and F3 showing superior performance. Anti-inflammatory activity was evaluated using the paw edema method, while wound healing efficacy was assessed through wound contraction, tensile strength, and hydroxyproline content. In-silico molecular docking further supported the proposed mechanism of action, validating the wound healing potential of the polyherbal formulation.

Keywords: Wound healing, Polyherbal formulation, Herbal drug development, Phytopharmaceuticals, Molecular docking, Skin tissue regeneration, Natural product-based therapeutic

PRAKRITI - BASED PERSONALIZED MEDICINE: AN AYURGENOMIC APPROACH TOWARDS PREVENTIVE HEALTHCARE FOR VIKSIT BHARAT 2047

Deviprasad M V[1*], Parameshwar G Hiremath[2]

[1]PG Scholar, Department of Kriya Shareera, Shri Jagadguru Gavisiddeshwara Ayurvedic Medical College and Hospital (Affiliated to Rajiv Gandhi university of health science), Koppal, Karnataka.

[2]Professor, postgraduate Department of Kriya Shareera, Shri Jagadguru Gavisiddeshwara Ayurvedic Medical College and Hospital (Affiliated to Rajiv Gandhi University of Health Science), Koppal, Karnataka

Corresponding author: mvdeviprasad7@gmail.com

Abstract

Introduction: In *Ayurveda*, *Prakriti* - determined at *Garbhotpatti* - represents the fundamental constitution of an individual. It governs *Dosha* predominance (*Vata, Pitta, Kapha*), influencing *Shareera*, *Manas* and disease susceptibility. Modern sciences like genetics and epigenetics similarly explain individual variability. This study explores the integration of *Prakriti* with contemporary personalized medicine for achieving the preventive and predictive healthcare goals of Viksit Bharat 2047.

Methods: A conceptual review was carried out using classical *Ayurveda* texts (*Charaka Samhita*, *Sushruta Samhita*) and modern literature on genomics and epigenetics. Comparative analysis was done correlating *Prakriti lakshanas* with genetic predisposition, metabolic variability, and environmental modulation.

Results: *Prakriti* exhibits correlations with metabolic patterns, immune responses, and disease predisposition. Emerging evidence supports associations between *Dosha* predominance and genetic as well as epigenetic variations, validating *Ayurvedic* phenotypic classification.

Conclusion: *Prakriti* - based personalized medicine provides a physiology - driven framework that complements modern precision medicine, with strong potential to transform future healthcare through an integrative and preventive approach.

Keywords: Ayurgenomics, Prakriti, Personalised medicine, Viksit Bharat

AYURVEDA MEETS NANOTECHNOLOGY: THE FUTURE OF PERSONALIZED MEDICINE

Ankit Sharma*, Kavita Attri

Department of Pharmaceutics, SGT College of Pharmacy, SGT University, Gurugram, Haryana-122505

Corresponding author: ankittsharma011@gmail.com

Abstract

Ayurveda, the ancient Indian system of medicine, emphasizes individualized therapy based on *Prakriti* (body constitution), offering a strong foundation for personalized healthcare. However, challenges such as poor bioavailability, variability in herbal formulations, and lack of targeted delivery have limited its global integration into modern medicine. Nanotechnology, an emerging frontier in pharmaceutics, provides innovative solutions to overcome these limitations through advanced drug delivery systems. The convergence of Ayurveda and nanotechnology represents a transformative approach toward next-generation personalized medicine. Nano-formulations such as phytosomes, liposomes, solid lipid nano-particles, and nano-emulsions have demonstrated significant potential in enhancing the solubility, stability, and bioavailability of Ayurvedic bioactives. Furthermore, nano-carriers enable targeted and controlled drug delivery, reducing systemic toxicity and improving therapeutic efficacy. By integrating Ayurvedic principles of individualized treatment with nanotechnological advancements, it is possible to design precision-based therapies tailored to an individual's genetic makeup, lifestyle, and disease profile. This approach aligns with the vision of *Viksit Bharat* by promoting innovation, sustainable healthcare, and global acceptance of traditional medicine systems. Despite promising prospects, challenges such as standardization, regulatory approvals, safety evaluation, and large-scale manufacturing remain critical considerations. Future research focusing on evidence-based validation, integration with artificial intelligence, and interdisciplinary collaboration will be essential to fully realize the potential of this synergy. In conclusion, the integration of Ayurveda with nanotechnology offers a novel paradigm in personalized medicine, bridging traditional wisdom with modern science to achieve safer, more effective, and patient-centric therapeutic solutions.

Keywords: Ayurveda, Nanotechnology, Personalized Medicine, Prakriti, Novel Drug Delivery Systems; Herbal Nano-formulations, Bioavailability Enhancement

EVALUATION OF ANTI-INFLAMMATORY ACTIVITY OF PLECTRANTHUS AMBOINICUS (Willd.) Link AND LEUCAS ASPERA (Lour) USING IN-VITRO MODELS

Trisha Lokesh*

Department of Pharmacognosy, The Oxford College of Pharmacy, Bangalore, Karnataka, India

Corresponding author: trishavenger@gmail.com

Abstract

Background: *Plectranthus amboinicus* and *Leucas aspera* are medicinal plants widely used in traditional systems for inflammation, infections, and skin disorders. They possess anti-inflammatory, antioxidant, and antimicrobial properties due to bioactive compounds such as flavonoids, alkaloids, thymol, and carvacrol.

Objective: To extract and identify phytoconstituents, compare flavonoid content, and evaluate antimicrobial, antioxidant, and anti-inflammatory activities using RAW 264.7 cell lines.

Methodology: Plant extracts were prepared using suitable solvents and screened for phytochemicals. Antimicrobial activity was assessed by agar well diffusion, antioxidant activity by DPPH and FRAP assays, and anti-inflammatory activity by measuring nitric oxide inhibition in RAW 264.7 macrophages.

Results: Both extracts might show the presence of flavonoids and bioactive compounds with dose-dependent antioxidant and antimicrobial activity. Significant inhibition of nitric oxide indicated anti-inflammatory effects.

Interpretation and Conclusion: Both plants may exhibit notable pharmacological activities, supporting their traditional use. Variations in activity suggest differences in phytochemical composition, indicating their potential as natural therapeutic agents.

Keywords: *Plectranthus amboinicus*, *Leucas aspera*, anti-inflammatory, antioxidant, antimicrobial.

AN OVERVIEW OF COMPUTER-AIDED DRUG DESIGNING (CADD): TOOLS, TECHNIQUES, AND APPLICATIONS

Linda Y Nyamealor*, Mr Akshay

School Of Pharmacy, CT University, Punjab, India

Corresponding author: lindayali247@gmail.com

Abstract

Computer-aided drug designing (CADD) is an advanced approach that uses computational tools and techniques to discover, design, and optimize new therapeutic compounds efficiently. It integrates bioinformatics, molecular modeling, and cheminformatics to predict the interaction between drug candidates and biological targets such as proteins or enzymes. CADD methods are broadly classified into structure-based drug design (SBDD) and ligand-based drug design (LBDD). SBDD relies on the three-dimensional structure of the target to identify binding sites and design molecules with high affinity, while LBDD uses known active compounds to develop new drugs with similar properties. Techniques such as molecular docking, virtual screening, quantitative structure–activity relationship (QSAR), and molecular dynamics simulations play a crucial role in predicting drug behavior, reducing experimental costs, and saving time. CADD also helps in improving drug efficacy, minimizing toxicity, and enhancing pharmacokinetic properties. It has been widely applied in the development of drugs for various diseases, including cancer, infectious diseases, and neurological disorders. Overall, computer-aided drug design significantly accelerates the drug discovery process and increases the success rate of developing safe and effective medicines.

Keywords: CADD, classification of CADD, techniques in CADD.

SADVRITTA: WHERE CONDUCT BECOMES CURE

Toral Nayaka[1*], Kalpesh Panara[2]

[1]Dr. Toral Nayaka - Second Year M.D. Scholar, Department of Dravyaguna, Institute of Teaching and Research in Ayurveda, Jamnagar

[2]Dr. Kalpesh Panara - Associate professor, Department of Dravyaguna, Institute of Teaching and Research in Ayurveda, Jamnagar

Corresponding author: 167wish@gmail.com

Abstract

Introduction: The increasing burden of lifestyle and psychosomatic disorders will demand a preventive and holistic approach to health. Ayurveda will emphasize *Sadvritta* (code of conduct) as an essential principle for maintaining harmony of body, mind, and society. *Sadvritta* will provide a practical foundation for achieving balanced and healthy living.

Methods: A narrative review will be undertaken based on classical Ayurvedic texts. Core components of *Sadvritta*, including ethical conduct, personal hygiene, mental discipline, and social behavior, will be systematically analyzed to understand their role in preserving health and preventing disease.

Results: *Sadvritta* will promote disciplined living, emotional stability, and positive social interactions. Practices such as truthfulness, self-control, cleanliness, respect, and regulation of sensory activities will contribute to maintaining equilibrium of mind and body. Regular observance of these principles will help in preventing psychosomatic disturbances and will promote overall well-being.

Discussion: Despite its significance, the practical application of *Sadvritta* will often be overlooked in daily life. Increasing awareness and incorporating its principles into routine practices will strengthen its role in maintaining health and harmony at individual and societal levels.

Conclusion: *Sadvritta* will offer a simple, cost-effective, and timeless approach to wellness. Its adoption will support Ayurveda's vision as a way forward for achieving sustainable and holistic health.

Keywords: Lifestyle, psychosomatic disorders, ayurveda, *Sadvritta*

SWASA IN CHILDREN AND THE AYURVEDIC APPROACH

Dr Aswathi K M[1], Dr Brahm Dutt Sharma[2]

[1]PG Scholar, Kaumarbhritya, Department, National Institute of Ayurveda (Deemed to be University), Jaipur

[2]Associate Professor, Department of Kaumarbhritya, National Institute of Ayurveda, Jaipur (Deemed to be University), Jaipur

Corresponding Author: draswathikm@gmail.com

Abstract

Swasa, a significant respiratory ailment described by Acharya Susrutha as a Mahavyadhi and by Acharya Charaka as Sheekrapranahani (life-threatening), presents a unique challenge in pediatric care. This presentation explores the Ayurvedic approach to childhood Swasa, focusing on its etiology (Nidana), pathogenesis (Samprapti), and multi-dimensional management.

The pathogenesis involves Dushta Vata obstructed by Kapha, leading to the dysfunction of Prana, Udaka, and Anna Vaha Srotas. Originating from the Amashaya (stomach), the condition manifests through cardinal signs like Hrit parswa shoolam (chest/flank pain) and Pranavilomata (difficult breathing). While Kshudra Swasa is easily manageable (Sadhya), variants like Tamaka Swasa are chronic (Krichra Sadhya), and others are often considered grave (Asadhya).

The management strategy prioritizes Kapha-Vatahara, Ushna, and Vatanulomana therapies. Acute attacks are addressed through Abhyanga with Lavana Taila, Nali Sweda, and innovative approaches like nebulization with Vasa and Parnayavani Arkam. Long-term care utilizes formulations such as Nayopayam Kashayam, Agasthya Rasayanam, and Vasa Ghritha alongside strict dietary adherence to Pathya (e.g., goat milk, warm water) while avoiding Apathya (e.g., cold exposure, heavy foods). This comprehensive protocol offers a robust framework for managing pediatric respiratory health.

Keywords: *Swasa, nidana, samprapti, chikitsa*

ROLE OF PHARMACOVIGILANCE IN ENSURING DRUG SAFETY MANAGEMENT

Vikas Panwar[1*], Dr.Vishal Sharma[2]

[1]MM College of Pharmacy, Mullana-Ambala, MMDU

[2]MM College of Pharmacy, Mullana-Ambala, MMDU

Corresponding author: vilaspanwar8@gmail.com

Abstract

Pharmacovigilance is an essential component of healthcare systems aimed at ensuring drug safety through the detection, assessment, and prevention of adverse drug reactions (ADRs). Although medicines significantly reduce morbidity and mortality, their use may lead to unintended harmful effects, making continuous monitoring necessary. This review highlights the importance, scope, and methodologies of pharmacovigilance in ensuring drug safety. Key approaches such as spontaneous reporting systems, cohort event monitoring, targeted spontaneous reporting, electronic health records, prescription event monitoring, and post-authorisation safety studies are discussed. The role of regulatory agencies, national pharmacovigilance centers, and healthcare professionals in ADR reporting and risk management is also emphasized. Furthermore, the integration of pharmacovigilance into clinical practice and the use of advanced technologies for signal detection are explored. Despite advancements, challenges such as underreporting and limited awareness persist. Strengthening pharmacovigilance systems through improved reporting practices, education, and technological innovation is crucial to enhance patient safety and ensure the rational use of medicines.

Keywords: Pharmacovigilance, Adverse Drug Reactions, Drug Safety, Signal Detection, Risk Management, Patient Safety

SUCCESSFUL CASE STUDIES OF HAEMORRHOIDS (ARSHA) BASED ON PRINCIPLES OF CHARAKA SAMHITA

Dr. Annpurna Chauhan*

Shalya Tantra Department, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat

Corresponding author: annuvishnu1999@gmail.com

Abstract

Introduction: Haemorrhoids, commonly known as piles, are swollen and inflamed veins in the anal canal that cause symptoms such as bleeding per rectum, pain, itching, and prolapse. In Ayurveda, this condition is described as Arsha, which is considered a disease that significantly disturbs normal life and health. According to Maharshi Charaka in the Charaka Samhita, improper dietary habits (Ahara), unhealthy lifestyle (Vihara), and psychological stress (Manasika factors) contribute to the vitiation of Doshas leading to Agnimandya and Malabaddhata, which ultimately result in Arsha. Modern lifestyle factors such as a low-fiber diet, prolonged sitting, irregular bowel habits, and stress further aggravate the condition. The objective of this study is to evaluate successful case outcomes of hemorrhoids managed according to the therapeutic principles described by Maharshi Charaka.

Methods: This study is based on a descriptive clinical case study approach. Patients presenting with symptoms of haemorrhoids were assessed through detailed history taking, clinical examination, and evaluation of symptoms such as bleeding, pain, prolapse, and itching. Management was planned according to Ayurvedic principles including Nidana Parivarjana (removal of causative factors), Shamana Chikitsa (palliative treatment), Shodhana therapies such as Virechana and Basti, and para-surgical procedures like Kshara Karma and Ksharasutra. Dietary regulation, lifestyle modification, and Rasayana therapy were also incorporated.

Results: The case studies demonstrated significant clinical improvement, including reduction in bleeding, pain, itching, and constipation. Ayurvedic medicines such as Triphala, Kutaja, and Abhayarishta improved digestive function and bowel regularity, while para-surgical procedures effectively reduced the pile mass and minimized recurrence.

Discussion/ Conclusion: The successful outcomes of these case studies highlight the continued relevance of Charaka's principles in the management of hemorrhoids. A holistic approach combining dietary regulation, detoxification therapies, para-surgical procedures, and lifestyle correction provides effective and sustainable management of Arsha. These findings support the integration of Ayurvedic principles with modern clinical practices for better management of hemorrhoids as a lifestyle disorder.

Keywords: Haemorrhoids, Charaka's, Ayurvedic medicines, therapy

FORMULATION AND EVALUATION OF A ROSEMARY OIL NANOEMULSION SERUM FOR DANDRUFF MANAGEMENT

Janeth Derick Rugina*

Ct University

Corresponding author: janellycallaxy999@gmail.com

Abstract

This study focuses on the formulation, development, and evaluation of a nanoemulsion-based herbal hair serum incorporating rosemary oil and vitamin E to enhance antidandruff efficacy and improve scalp penetration. Dandruff, a common scalp disorder often associated with seborrheic dermatitis, requires effective delivery of active ingredients for optimal management. In this research, a stable oil-in-water nanoemulsion system was developed using suitable surfactants and co-surfactants to achieve small droplet size and improved dispersion.

The formulated serum was evaluated for key physicochemical properties including particle size, pH, viscosity, and stability under various storage conditions. Additionally, in vitro diffusion studies were conducted to assess the penetration ability of the formulation. The incorporation of rosemary oil, known for its antifungal and antimicrobial properties, along with vitamin E, a potent antioxidant, was aimed at reducing dandruff and promoting scalp health.

Results indicated that the optimized nanoemulsion exhibited good stability, enhanced permeation, and significant antidandruff activity compared to conventional formulations. The study concludes that nanoemulsion-based delivery systems offer a promising approach for improving the therapeutic effectiveness of herbal hair care products by enhancing bioavailability and targeted action at the scalp.

Keywords: rosemary oil, nanoemulsion, dandruff management, antimicrobial properties

SOCIO-ECONOMIC STATUS OF PREGNANT WOMEN: AN ANALYTICAL STUDY

Nida Khanam*

Venkateshwara University, Gajraula, Amroha

Corresponding author: nidakhanam627@gmail.com

Abstract

Pregnancy is not just a biological process—it is deeply influenced by a woman's social and economic conditions. This study explores how factors like income, education, occupation, and living conditions affect the overall experience of pregnancy among 100 expectant mothers. By examining these aspects, the research highlights clear differences in access to nutrition, healthcare services, and emotional support. Women from lower socio-economic backgrounds were found to face more challenges, including limited healthcare access, financial stress, and lack of awareness about proper maternal care. The findings bring attention to the gap between different groups and how it directly impacts maternal health and well-being. This study emphasizes the need for practical and inclusive health policies that reach vulnerable populations. Improving awareness, strengthening public healthcare systems, and providing financial and social support can make a meaningful difference. Overall, the research aims to encourage policymakers and healthcare providers to take focused steps toward reducing inequalities and ensuring safer, healthier pregnancies for all women, regardless of their socio-economic status.

Keywords: pregnancy, socioeconomic, nutrition, health, women.

FORMULATION OF A NON-EMULSIFIED OIL-BASED HERBAL HAIR SERUM FOR HAIR GROWTH

Lilian Baltazar Munishi*

CT University

Corresponding author: baltazarlilly62@gmail.com

Abstract

This project focuses on the formulation and evaluation of a non-emulsified oil-based herbal hair serum designed to promote hair growth, improve hair texture, and reduce breakage. The formulation utilizes a blend of natural carrier oils such as castor oil, coconut or almond oil, and jojoba or argan oil, which are known for their nourishing, moisturizing, and conditioning properties. Vitamin E oil is incorporated as an antioxidant to enhance product stability, while essential oils like rosemary and lavender are added for their hair growth–stimulating and aromatic benefits. Tea tree oil may be optionally included for its anti-dandruff activity. The preparation method involves simple mixing of ingredients without the need for emulsification, making it suitable for beginners and small-scale production. The formulated serum is evaluated based on key parameters, including physical appearance, pH, viscosity, spreadability, and stability under different temperature conditions. Additionally, a skin irritation (patch) test is conducted to ensure safety, and performance is assessed through parameters such as hair smoothness, shine, and ease of combing. Overall, the study demonstrates that a stable, effective, and natural hair serum can be formulated using readily available herbal ingredients, offering a safe alternative to synthetic hair care products.

Keywords: non-emulsified, Oil-based, hair serum, herbal, hair growth

P.R.S Educational Trust
Director's Message

"It gives me great pleasure to welcome you to the conference on **"Ayurveda – A Way Forward for Wellness: Viksit Bharat 2047,"** scheduled on 18 April 2026. As India moves toward its vision of becoming a developed nation by 2047, Ayurveda stands as a vital pillar of holistic healthcare. With its focus on prevention, balance, and natural healing, it offers sustainable solutions to modern health challenges. This conference provides an important platform to explore the integration of traditional wisdom with contemporary research and innovation. Bringing together academicians, researchers, practitioners, and young minds, we aim to encourage meaningful dialogue, collaboration, and knowledge exchange. Such collective efforts will help strengthen Ayurveda's role in building a healthier and self-reliant nation. I sincerely thank all participants and organizers for their contributions and wish the conference every success."

Dr. Akhil Sharma

P.R.S Educational Trust

BS-1202 & 1206 12th Floor,
Galaxy Diamond Plaza, Sector-4,
Greater Noida (West), G.B. Nagar, U.P-201308
8766381032, 9634308658
www.prseducationaltrust.com

Published by
Weser Books, No. 79737
Äussere Weberstr. 57
02763 Zittau, Germany
Email: weserbooks@gmail.com

ISBN 9783964927507
9 783964 927507
Price - € 18