



**18<sup>th</sup> OCTOBER  
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# **1<sup>st</sup> Annual Research Symposium of Postgraduate Institute of Indigenous Medicine University of Colombo**

**“Preserving Heritage Through Quality Research”**

## **ARS PGIIM PROCEEDING 2024**

**POSTGRADUATE INSTITUTE OF INDIGENOUS MEDICINE  
UNIVERSITY OF COLOMBO**

*1<sup>st</sup> Annual Research Symposium of Postgraduate Institute of Indigenous Medicine*  
**University of Colombo**  
**(ARS PGIIM - 2024)**

*“Preserving Heritage Through Quality Research”*

**PROCEEDINGS**



**“Preserving Heritage through  
Quality Research”**

**1<sup>st</sup> Annual Research Symposium of Postgraduate  
Institute of Indigenous Medicine  
University of Colombo**

**18<sup>th</sup> October 2024**

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**ARS PGIIM 2024**

**Postgraduate Institute of Indigenous Medicine**  
**University of Colombo**  
**Sri Lanka**

1<sup>st</sup> Annual Research Symposium of Postgraduate Institute of Indigenous Medicine (ARS PGIIM 2024), University of Colombo

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## **Postgraduate Institute of Indigenous Medicine, University of Colombo**

### **Vision**

To be a center of excellence, producing Ayurveda, Unani, Siddha and traditional health specialists of high professional standards, to meet health needs of the country and contribute to regional and world health in a responsive manner.

### **Mission**

To produce specialists who possess knowledge and skills in Ayurveda, Unani, Siddha and traditional medicine with sound clinical and research competence in order to provide optimum humane health care to the people of Sri Lanka, the region and the world.

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## **Message from the Vice Chancellor, University of Colombo**



I am excited to congratulate the Postgraduate Institute of Indigenous Medicine (PGIIM) on its First Annual Research Symposium scheduled to be held on October 18, 2024. This event is an important milestone for the institute, and I appreciate the Director and organizers for creating a platform that celebrates indigenous medicine and encourages scientific research in this vital area.

The symposium is a great opportunity for researchers, practitioners, and academics to come together, share ideas, and spark their collaboration. By exploring new findings in Ayurveda, Unani, Siddha, and other traditional medical systems, we can connect ancient wisdom with modern scientific knowledge that is essential for tackling today's health issues while honoring the cultural heritage of indigenous medicine.

I hope the discussions and presentations inspire new research, deepen our understanding, and improve the practical implementation of indigenous medicine. Best wishes to the Director, participants, presenters, and all involved for a successful and inspiring event. May the Annual Research Symposium of PGIIM continue to grow and lead to exciting discoveries and partnerships for years to come.

**Senior Professor (Chair) H.D. Karunaratne**

**Vice Chancellor**

**University of Colombo**

## Message from the Director of Postgraduate Institute of Indigenous Medicine



It is with great pleasure and anticipation that I welcome you to the 1<sup>st</sup> Annual Research Symposium of PGIIM which is scheduled to take place on October 18, 2024, at the Post Graduate Institute of Medicine (PGIM), which marks a significant milestone in our journey to advance and celebrate the rich heritage of traditional medical systems in Sri Lanka.

This symposium provides a unique platform for researchers, practitioners, and students from various institutions to share their insights, explore new advancements, and collaborate on future research. It is an honor to host such distinguished guests, including our Chief Guest Vice Chancellor of the University of Colombo, Senior Professor (Chair) H.D. Karunaratne, and our keynote speaker Emeritus Prof. Jayantha Jayawardane, former Director of PGIM and PGIIM. We are also privileged to have renowned Guest of Honor, Prof. Anup Thakar former Vice Chancellor of the Gujarat Ayurveda University and Director of Institute of Teaching and Research in Ayurveda, India and Dr. B.K. Ashok, Senior Manager and Researcher of the Himalaya Company Limited India, who will undoubtedly enrich our discussions with their expertise.

As we embark on this inaugural symposium, I am confident that the knowledge exchanged and connections made will pave the way for significant advancements in our field. Thank you for your participation and dedication to the advancement of traditional medicine.

Warm regards,

**Professor S.M.S. Samarakoon**

**Director**

**Postgraduate Institute of Indigenous medicine**

## Message from the Symposium Chair



It is my utmost pleasure as the symposium chair, to express my views at yet another crucial juncture where the Postgraduate Institute of Indigenous Medicine (PGIIM) hosting its' first Annual Research Symposium on "Preserving Heritage Through Quality Research (ARS – 2024)". To preserve this valuable indigenous medical heritage, scientific validation is mostly needed. However, there are many gaps within the indigenous medical system which requires high quality evidence to overcome them effectively. As such PGIIM ARS - 2024 is a critical and unique step in doing so together with established sciences to take over indigenous medical knowledge to a global recognition. Therefore, this symposium not only provides a wider platform for the exchange of ideas, research and knowledge but also offers a gateway to a wider network and research ecosystem for fostering further collaborations too. To hold a symposium of this magnitude together is not a small task. In this regard, I wish to offer my sincerer thanks to the Chief Guest, Senior Professor H.D.Karunarathna, Vice-Chancellor, University of Colombo, Guest of Honor Professor Anup Takar, former Director, Institute of Training and Research in Ayurveda, Jamnagar, India and two keynote speakers, Emeritus Professor Jayantha Jayewardana, Founder Director of PGIIM. Director PGIIM Professor S.M.S. Samarakoon, PGIIM Administrative Officers and the staff, the Board of study and the Specialty Board Chairpersons, Secretaries, members, trainers and trainees. Further, I would like to extend my thanks to all the sponsoring organizations for providing their generous financial support. Finally, I thank all the participants of the conference for their contribution which is the foundation of this significant event. I hope you find PGIIM 1<sup>st</sup> ARS – 2024 interesting and thought – provoking.

Warm regards

**Professor (Mrs.) K. Priyani P. Peiris**  
**Symposium Chair**

## **Introduction to the Guest of Honour**



Professor Anup Thakar has been working as an eminent expert in Ayurveda Panchakarma. He obtained academic qualifications; BAMS, MD (Ayu), and PhD in Panchakarma and has served as Professor & Head of the Department of Panchakarma, Institute for Postgraduate Training and Research in Ayurveda (IPGT & RA), Gujarat Ayurveda University, Jamnagar, India.

Professor Thakar had taken over the charge of the Vice-Chancellor of the Gujarat Ayurveda University, Jamnagar from 13<sup>th</sup> September, 2019. He had also served as the former Director of the Institute of Teaching and Research in Ayurveda (ITRA) Professor Anup Thakar has a teaching experience of 23 years. He has guided more than 60 MD and PhD scholars.

### **Professor Anup Takar**

**Former Vice Chancellor, Gujarat Ayurveda University and Former Director, Institute of Training and Research in Ayurveda, Jamnagar, India**

## ABSTRACT OF THE GUEST OF HONOUR SPEECH

### Researches on effective management of NCD through Ayurveda

#### Professor Anup Takar

The incidence of Non-Communicable Diseases (NCDs) is on constant rise and is currently the leading cause of death worldwide. According to WHO report, 74% of the deaths are due to non-communicable diseases globally, 77% of which are from low and middle income countries. The top five reasons of these deaths are cardiovascular diseases, cancer, stroke, respiratory diseases and diabetes mellitus. The key components for management of NCDs are detection, screening, treatment as well as palliative care. Ayurveda has always aimed at prevention of diseases at every level, along with management if any disease occurs, by daily regimen, seasonal regimes and *Panchakarma* (bio-purification) for the ailed as well as healthy. Few of palliative care studies NCDs are-use of *Rasayana Avaleha*, as protective agent against Radiotherapy and chemotherapy in a randomized controlled trial (RCT), and *Rasayana* effect of *Guduchi Churna* on increasing life span of *Drosophila melanogaster*. By RCTs, role of *Virechana* has been validated in various skin diseases, like- *Ekakushtha* (psoriasis), *Shvitra* (vitiligo), *Vicharchika* (eczema). A case report of successful management of epilepsy by *Virechana* procedure and *Nasya* is noted. Use of *Vasti* in Diabetes mellitus to improve microalbuminuria compared to Enalapril, *Vasti* and same medicine by oral route for *Grirdhrasi* (Sciatica) has been compared, with *Vasti* providing better result. Use of *Majja Vasti* (buffalo bone marrow) in 12 registered osteoporosis patients is noted significantly. *Siravedha*, a type of bloodletting and *Vasti* both provided relief in sciatica. Fall in blood pressure was studied after *Virechana*. RCTs prove both *Virechana* and *Vasti* to be lowering down LDL-VLDL, with rise in HDL. Triglycerides were significantly reduced by *Vasti*, while total cholesterol was also reduced by *Virechana*. The effect on serum electrolytes was studied after *Panchakarma* procedures. Such Ayurveda researches have been carried out on subjective and objective parameters of NCDs, on palliative care, and treatment as well.

#### Professor Anup Takar

**Former Vice Chancellor, Gujarat Ayurveda University and Former Director, Institute of Training and Research in Ayurveda, Jamnagar**

## **Introduction to the Keynote Speaker**



Emeritus Professor Jayantha Jayawardana, keynote speaker for the 2024 Annual Research Symposium at the Postgraduate Institute of Indigenous Medicine (ARS PGIIM), is a distinguished figure in medical education and leadership. With a medical degree (MBBS) from the University of Ceylon, where he earned Second Class Honours in 1975, Professor Jayawardene has consistently demonstrated his commitment to excellence throughout his career. He furthered his expertise by obtaining the membership of the Royal College of Obstetricians & Gynecologists (MRCOG) and a Master of Surgery (OG) from the University of Colombo in 1984.

Professor Jayawardena's leadership journey is marked by pivotal roles, including serving as the Director of the Teaching Hospital, Peradeniya, and holding significant positions at the Postgraduate Institute of Medicine, University of Colombo.

His contributions extend beyond academia, as he has held prominent positions in professional organizations such as the Sri Lanka College of Obstetricians & Gynecologists and served as a Council Member of both the South Asian Federation of Obstetrics & Gynecology and the Asia Oceania Federation of Obstetrician & Gynecologists. His leadership at the Sri Lanka Medical Council, particularly in shaping accreditation guidelines for medical faculties, further underscores his dedication to advancing medical standards.

During his brief tenure as the founder Director of the PGIIM in 2019, Professor Jayawardena's visionary approach led to transformative initiatives, fostering an environment of academic excellence and innovation in the field of indigenous medicine.

**Emeritus Professor Jayantha Jayawardana**

**Former Director - Postgraduate Institute of Indigenous Medicine, Postgraduate Institute of Medicine**

## **ABSTRACT OF THE KEYNOTE SPEECH**

### **Understanding Research Culture**

#### **Emeritus Professor Jayantha Jayawardana**

Culture encompasses a broad range of intangible social aspects, including language, religion, clothing, and technology. Research is the process of gathering and analyzing data to gain knowledge and validate information, particularly important in fields like Ayurveda. Research in Ayurveda aims to confirm the efficacy of treatments, support societal and organizational benefits, and ensure adherence to national and international standards. Such research can drive policy changes that enhance public health.

Research culture is the collective set of values, behaviors, and practices that define how research is conducted within institutions or fields. It includes norms that shape research activities and the environment. This culture is composed of three key components: academic, personal, and social. Academic Component focuses on ethics, methodology, technology, data management, and related areas, whereas personal component involves teamwork, communication, mentorship, leadership, feedback, and fund distribution. Most importantly, social component concerns societal issues such as policy development, integration with modern medicine, and respect for traditional knowledge, particularly relevant to Sri Lankan culture.

A positive research culture promotes integrity, collaboration, and innovation, allowing researchers to explore ideas, learn from mistakes, and share best practices. Conversely, a negative culture can result in unethical behavior, isolation, and stagnation.

For Ayurveda to gain national and international recognition and to serve society effectively, practitioners and researchers must adhere to scientific standards and cultivate a positive research culture. This approach ensures that research is conducted ethically and contributes meaningfully to the field and society.

#### **Emeritus Professor Jayantha Jayawardana**

**Former Director - Postgraduate Institute of Indigenous Medicine, Postgraduate Institute of Medicine**

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## **Ayurveda Management of Uterine Fibroids with Subfertility: A Case Study**

S. H. K. Deepthika<sup>1</sup>, K. P. K. R. Karunagoda<sup>2</sup>

<sup>1</sup>*Postgraduate Institute of Indigenous Medicine, University of Colombo*

<sup>2</sup>*Department of Ayurveda Surgery, ENT, Ophthalmology and Gynecology, Obstetrics and Pediatrics, Faculty of Indigenous Medicine, University of Colombo*

Uterine fibroids are the most common solid pelvic tumors that affect women during their reproductive age. According to Ayurveda, fibroids are known as *Arbuda*, a disease characterized by a mass of growth of *Mamsa*. Specific Ayurveda drug regimens were tested, and the results were obtained through clinical trials. This case report explores the successful Ayurvedic treatment of a 34-year-old married woman who has been subfertility for five and a half years, has 5.2 cm<sup>3</sup> size submucosal and 2.07 cm<sup>3</sup> size sub-serosal uterine fibroids diagnosed by USS, and exhibits moderate dysmenorrhea (visual analog scale score of 7). She was treated with a scientifically proven Ayurveda formula consisting of *Punarnavashtaka* decoction, *Kanchanara guggulu*, and *Shatapushpa churn* for the 3-month duration with seven days of *Nirgundyadi* oil treatment and *Pattra Pottali Sweda* after cessation of menstruation. The pain was assessed using a visual analogous scale, and the volume of the menstrual blood was assessed using a pictorial menstrual assessment chart. Biochemical data such as FSH, Estradiol, Serum creatinine, GFR, FBC, UFR, AST, ALT, and Urine HCG and ultrasound scan reports were taken before and after the intervention. After three months of treatments, the volume of the fibroids was reduced as the size of the submucosal was 2.5 cm<sup>3</sup>, and the sub-serosal uterine fibroids were 0.5 cm<sup>3</sup>. Further, the visual analog scale score for dysmenorrhea was reduced to two from seven. During the follow-up period, she was conceived and did not develop any adverse effects. It can be concluded that the Ayurveda formulation gives relief to uterine fibroids patients with subfertility.

**Keywords:** *Uterine fibroids, Ayurveda, Visual analogue scale*

\*This has been published in the ARS Proceedings of the University of Colombo, 2024

## **Management of *Amavata* with *Rasnapanchaka Kwatha* with *Murungadi Lepa*: A Case Series**

A.M.M. Paranagama<sup>1</sup>, S.M.S. Samarakoon<sup>2</sup>

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*Amavata* is a generalized disease that causes severe pain with stiffness and swelling in the joints due to simultaneous production of *Ama* and vitiation of *Vata dosha*. Hence, it shows generalized features like fatigue, anorexia, thirst, laziness, body heaviness, fever, indigestion, and excessive micturition. According to clinical features of *Amavata*, it closely resembles with the Rheumatoid Arthritis (RA). Out of every 100,000 people, 71 are diagnosed with RA every year. Up to 14 million people around the world have RA. This study aimed to assess the effectiveness of *Rasnapanchaka Kwatha* & *Murungadi Lepa* on *Amavata*. Five patients aged between 20 – 60 years of either sex presented to the OPD, National Ayurveda Hospital were treated with *Rasnapanchaka Kwatha* with *Murungadi Lepa* for 14 days. After 14 days of treatment, it was observed that pain reduced 90% stiffness 80%, and swelling 90%, fatigue 90%, anorexia 86%, thirst 86%, laziness 88%, fever 88%, indigestion 90% reduced. Finally, it is concluded that selected treatment regime was effective on *Amavata*. However, larger sample sizes and further research are needed to validate these findings.

**KeyWords:** *Amavata, Murungadi Lepa, Rasnapanchaka Kwatha, Rheumatoid Arthritis*

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## **Effect of *Bilwadi Panchamula* in the secondary prevention of *Athisshaulya* (Obesity)**

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“*Athisshaulya*” in modern known as obesity is a global epidemic that is rapidly becoming a major public health problem. It has been identified that 8.9% of adult (aged 18 years and over) women and 3.7% of adult men are living with obesity. Sri Lanka's obesity prevalence is lower than the regional average of 10.3% for women and 7.5% for men. According to the WHO definitions, Adults’ whose BMI is greater than or equal to 25 is defined as overweight and whose BMI is greater than or equal to 30 is defined as obesity. This study aimed to identify the effect of *Bilwadi Mahapasmula* on the prevention of *Athisshaulaya*. The six patients aged between 40 and 50 years of female sex presented to the OPD, National *Ayurvedic* Hospital were selected by using relevant proforma. The *Bilwadipanchamul* decoction has been given daily morning and evening for 8 weeks. It consists of roots of *Bilwa* (*Aegle marmelos*), *Agnimantha* (*Oroxylum indicum*), *Shyanaka* (*Gmelina arborea*), *Kashmari* (*Stereospermum suaveolens*) and *Patala* (*Clerodendrum phlomidis*). Assessment of the condition was done based on the defaulted performa adapting the patients were assessed before and after the treatments. Anthropometric measurements were used to analyze the results. The DTA of these participants was used for statistical analysis. 100% of them were female and aged between 30-50 years. Patients had significant relief in all the complaints and were remarkable weight loss and, reduction of waist circumference and mid-upper arm circumference in two months of treatments. *Bilwadi panchamul Kashaya* with bee honey is very effective in the secondary prevention of *Athisshulya* is

**Keywords:** *Athisshaulya*, *Bilwadhi Panchamula*, *BMI*

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## **Analysing the Relationship between Socio-Demographic Factors and Lipid Profiles in Patients with Hyperlipidaemia**

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Socio-demographic characteristics reflect the demographic and social aspects of individuals within a population. These characteristics help us understand phenomena of lifestyle diseases. Hyperlipidaemia is high concentrations of lipids or lipoproteins in the blood. This study aimed to explore the relationship between the socio-demographic characteristics of hyperlipidemic patients and their lipid profiles. A total of 88 hyperlipidemic patients, both male and female, aged between 30 to 79 years, were randomly selected from the OPD at the National Ayurveda Hospital in Borella. Data on socio-demographic characteristics such as age, gender, religion, ethnicity, and others were gathered through a questionnaire. The lipid profile was investigated and compared with the socio-demographic data. Statistical analyses were performed using SPSS version 29.0. The mean age of the study population was 52.47 years, with 81% being females. Results showed that, TC was high in 88% of cases. HDL was near-optimal at 71%. Triglycerides were desirable in 51%. LDL was high in 60%. VLDL was desirable in 52%. The Risk Ratio was high in 74%. Age was significantly related to HDL ( $p=0.052$ ), and occupation was related considerably to TC ( $p=0.021$ ), triglycerides ( $p=0.027$ ), HDL ( $p=0.007$ ), LDL ( $p=0.026$ ), and the Risk Ratio ( $p=0.008$ ). Alcohol consumption was significantly associated with LDL ( $p=0.048$ ) and VLDL ( $p=0.027$ ). Ethnicity was significantly related to TC and LDL ( $p=0.002$  for both), religion to TC ( $p=0.016$ ), exercise to TC ( $p=0.009$ ) and LDL ( $p=0.014$ ), and the living environment to the Risk Ratio ( $p=0.027$ ). This study demonstrated that socio-demographic factors are significantly associated with lipid profiles in hyperlipidemic patients.

**Keywords:** *Hyperlipidemia, Relationship, Socio-demographic factors*

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## **Management of *Sandhigatavata* (Osteoarthritis) with *Koladi Lepa*: A Case Study**

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*Sandhigatavata* is a disorder in which *Vata dosha* is dominant. Clinical features of *Sandhigatavata* mostly resemble to Osteoarthritis in modern medicine. An estimated 30.8 million adults suffer from osteoarthritis. Pain, swelling, stiffness, and restriction movements lead huge impact on the quality of life. There is no satisfactory, comprehensive & time-bound treatment schedule for Osteoarthritis available at present. The objective of this study was to manage the disease with *Koladi Lepa* as *Upanaha Sweda*. A 52 years old female patient diagnosed as *Janu Sandhigatavata* presented with pain, stiffness, and restricted movements in bilateral knee joints for two years to the National Ayurveda Hospital. The *Koladi Upanaha Sweda* was applied externally and remained 12 hours per day for two weeks. After 14 days of treatment, it was observed that 100% relief of swelling and 90% relief of pain during extension and flexion with crepitus. Based on the above findings, it can be concluded that *Koladi Lepa* is as effective as *Upanaha Sweda* for the *Janu Sandhigatavata* successfully. Further clinical studies are recommended to evaluate the efficacy of the drug.

**Keywords:** *Sandhigatavata, Koladi Lepa, Upanaha*

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## **Management of *Panduroga* (IDA) with *Pippali* and *Amurta Choorna*:**

### **Case Series**

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*Panduroga* is a disease characterized by reduction of the complexion, strength, unctuousness and *Ojas* in the body. It occurs due to degeneration of *Agni*. *Panduroga* can be correlated with iron deficiency anemia (IDA) based on its signs and symptoms, which is one of the most prevalent types of nutritional disorder in the world. The aim of the study was to assess the effectiveness of *Pippali* (*P. longum*) and *Amurta* (*T. cordifolia*) *Choorna* treatment for *Panduroga*. The five patients aged between 20 – 70 years of either sex presented to the OPD, National Ayurveda Hospital were selected for the study and data was collected by using a clinical proforma. Patients were treated with 5g of *Pippali* and *Amurta* powder with 5ml of bee honey and ghee twice a day for 30 days. Therapeutic effect was assessed through symptomatic relief of the patients and observed the Red blood cell count and Hemoglobin percentage on before and after treatments. For obtaining results the Wilcoxon signed rank test was applied to data. After 30 days of treatment, it was observed that among 5 patients dyspnea, loss of appetite and body weakness were reduced by 100% of 4 patients; fatigue was reduced by 100% of 3 patients; pallor was reduced by 100% of 1 patient. Hemoglobin % was increased above 11.5g/dl and RBC count was increased to 3.9 cells/micro L of all patients. This treatment regime is effective in treatment of *Panduroga* (IDA). However larger sample sizes and further research is needed to validate these findings.

**Keywords:** *Iron Deficiency Anemia, Panduroga, P. longum, T. cordifolia*

## **Evaluation of efficacy of specific Ayurveda treatment protocol for the management of *Gridhrasi* W.S.R. to *Sciatica*-A case series**

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*Gridhrasi* is a pain predominant most prevailing health problem which has been categorized under Vata Vyadhi in Ayurvedic Authentic texts. The word “*Gridhrasi*” suggests the abnormal gait of patient, similar to a vulture due to the effect of the *Gridhrasi Nadi*. Signs and symptoms of *Gridhrasi* closely enumerated with the symptoms of sciatica which is described in Allopathic Medicine. In the present era, the incidence rate of *Gridhrasi* (sciatica) is quite significant as more than 75% of the world’s population. Most of the conventional systems of medicines have short term pain relief treatments or surgical interventions which has more after effects. In Ayurveda, it has various treatment modalities for the *Gridhrasi* disease based on the holistic approach. Among them *Vata shamana* or Vata pacification treatment has focused on the normalization of *Gati* and *Gundhana Kriya* which help to reduce the pain as well as the abnormal gait of the patient. The present study was conducted to evaluate the efficacy of a specific Ayurveda treatment protocol for five *Gridhrasi* patients. In this study *Sinhasya danthi* decoction was given internally and with *Sahachara* oil applied externally for two weeks. The assessment was done before start the treatment after the 7<sup>th</sup> day of treatment and at the End (after 14<sup>th</sup> day) of the treatment. Straight Leg Raising Test (SLRT), Movements of the lumbar sacral region and Visual Analog Scale (VAS) of pain used as assessment criteria. A Lumbar sacral x-ray was taken for diagnosis purpose. At the end of the treatment reduced clinical features could be observed; such as increased their SLRT angle, improve the movements of lumbar sacral region, decreased the VAS scale of pain and increased quality of life. The results indicate a green light for future treatment strategies for *Gridhrasi*.

**Keywords:** *Sinhasya danthi decoction, Sahachara oil, Gridhrasi, Vata Shamana*

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## Concept of *Vataroga* and its Management in Indigenous Medicine Perspectives: A Review

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Indigenous Medicine (IM) is a unique heritage of Sri Lanka that has diverse forms for curing and preserving the well-being of society. Sri Lanka has numerous branches of IM, and *Vataroga* is a wide-spread branch of them. The study was conducted to review the concept of *Vataroga* and its treatment in IM in Sri Lanka. It was carried out by obtaining data from authentic texts like *Deshiya Chikitsa Samgrahaya*, *Sara Samkeshapaya*, *Vatikaprakaranaya*, *Besajja Manjusawa*, and *Sarartha Samgrahaya*, Ola leaves, and high-index journals. The findings showed that concepts and treatment of *Vataroga* deal with the diseases caused by the disturbance of *Vata Dosha*, punitive influence of gods (*deva dosa*), bad influence of spirits (*yaksa* and *preta dosa*), bad influences of planets (*graha dosa*), fate or sin (*karma dosa*), supernatural danger (*vas*), personal inauspiciousness (*dos*), the evil eye (*es-vaha*), evil words (*kata-vaha*), evil thoughts (*ho-vaha*), intangible order for causing diseases (*ana*), enchantment (*vina*), and witchery (*huniam*) etc. Classification of *Vataroga* includes *Gatavata*, *Nanatanja Vataroga*, and *Sanni*. IM described various formulations including *Kashaya*, *Anupana*, *Dalu Anupana*, *Kwatha*, *Kshira Kwatha*, *Churna*, *Guli*, *Kalka*, *Tel*, *Swarasa*, *Dalu Anupana*, *Grita*, *Bashma*, *Wedu*, *Alepa*, *Basna*, *Pathmana*, *Kulambu*, *Kayam*, *Thambumhodi*, *Arka*, *Arakkau*, *Kavum*, *Kenda*, *Nasya*, and *Pottana* etc., for treating various stages of such types of conditions and they vary from family lines. This review concludes the uniqueness of the concepts of *Vataroga* and their treatments in IM in Sri Lanka.

**Keywords:** *Indigenous Medicine, Vataroga, formulations, Sanni*

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## **Clinical Effect of *Shirovasti* with *Granthikadi* Oil in the Management of *Pakshaghata* (Hemiplegia): A Case Study**

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*Pakshagata* or hemiplegia is the commonest manifestation of a stroke with a neurological deficit affecting face, limbs, and trunk on one side or either side of the body. This greatly impacts the quality of life of the patient. The study has been focused on managing the *Pakshaghata* based on the treatment principles mentioned in Ayurveda. A fifty-eight-year-old male patient of *Pakshaghata* presented with weakness, numbness, and heaviness in the right upper and lower limbs for 3 years and was reported to the I.P.D, Department of *Kayachikitsa*, National Ayurveda Hospital, Rajagiriya. The Patient was treated with *Snehana*, *Swedana*, and *Mridu Virechana* along with *Shirovasti* for 21 days. *Dantimuladi* decoction and *Mashabala shukashimbi* decoction were given along with *Narayana* oil *abhyanga* and *Granthikadi* oil *Shirovasti*. The assessment was made according to the National Institute of Health Stroke Scale (NIH-SS). Sensory functions were increased from grade 1 to 0, visual field from grade 1 to 0, and range of movements from grade 1 to 0. Overall, NIH-SS decreased from grade 4 to 0. Based on the above results, it is concluded that *Shirovasti* with *Granthikadi* oil is effective on *Pakshagata*, and further clinical studies with larger samples are needed for generalizing findings.

**Keywords:** *Pakshaghata, Shirovasti, Granthikadi oil, hemiplegia*

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## **Evidence Based Management of *Janu Sandhigata* through *Dashamooladee Gritha*: Case Series**

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*KJanu Sandigata Vata* (JSV) is a condition in Ayurveda that closely correlates with Knee Joint Osteoarthritis (KOA), primarily caused by an imbalance in the *Vata dosha*. KOA affects approximately 16% to 23% of the global population, and if not managed properly, it can lead to severe deformities, significantly impacting the quality of life worldwide. According to Ayurvedic principles, JSV is classified as a *Vata Vyadhi*, characterized by symptoms such as *Sandhi Shula* (joint pain), *Sandhi Shotha* (joint swelling), *Vatapurna Druti Sparsha* (joint crepitation), and *Prasarana Akunchana Vedana* (pain during extension and flexion) Conventional treatments for OA are often limited by side effects and the potential for adverse effects on other bodily systems. In contrast, Ayurvedic interventions, as described in classical texts, offer alternative approaches that may be more effective with fewer side effects. One such treatment is *Dashamooladee Gritha*, an herbal formulation detailed in Chapter 28 of *Chikitsa Sthana* in the *Charaka Samhita*, which is indicated for the management of *Vata Vyadhi*. This study aimed to evaluate the efficacy of oral administration (*Pana*) and external application (*Abhyanga*) of *Dashamooladee Gritha* in the management of *Janu Sandigata Vata*. A total of ten patients, aged 30 to 60 years, of both sexes, were selected using purposive sampling from the Outpatient Department of the National Ayurveda Hospital. The treatment regimen included 30 ml of *Dashamooladee Gritha* taken orally in the morning on an empty stomach, and 30 ml applied externally through *Abhyanga* once daily for a period of two weeks. Assessment of the patients was conducted before and after the treatment using a standardized preform. Data analysis was performed using the Wilcoxon signed-rank test. After 14 days of treatment, results indicated a 100% reduction in joint swelling, a 90% decrease in pain during extension and flexion, 100% relief in tenderness, and a 70% reduction in joint crepitation. The findings suggest that the combined *Pana* and *Abhyanga* administration of *Dashamooladee Gritha* is effective in managing *Janu Sandigata Vata*. However, further research with larger sample sizes is necessary to validate these preliminary findings.

**KeyWords:** *Janu Sandigata Vata, Dashamooladee Gritha, KneeJoint Osteo Arthritis*

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## **Psychedelic experience of *Kameshwari Modakaya* measured by Mystical Experience Questionnaire 30 (MEQ30) among individuals living in Colombo district: An Online Survey**

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*Kameshwari Modakaya* (KM) is an Ayurvedic drug traditionally used for aphrodisiac treatments, nevertheless it has recently been misused as an illicit substance in Sri Lanka, especially among younger people seeking ecstasy-like effects. This study aims to reveal the psychedelic effects of KM using the Mystical Experience Questionnaire 30 (MEQ30). An online cross-sectional survey was conducted with 102 participants in the Colombo district (average age: 28.59 years; 96% male, 4% female), who completed the MEQ30 and additional questions about KM usage. Results showed that KM induces mild mystical experiences, with a mean MEQ30 score of 28.91%. This score is significantly higher than the estimated 5% upper bound observed in a comparable placebo group from a previous study ( $t(98) = 7.49$ , ( $p < 0.05$ )). There was also a statistically significant increase in positive mood compared to mystical experience ( $p < 0.05$ ). However, limitations such as recall bias, underreporting, dosage, and body constitution must be considered. Beyond its aphrodisiac effects, high doses of KM can induce psychedelic effects, likely due to its high cannabis content. Chronic use and overdosing can lead to acute psychosis and mental health issues. Regulatory measures are necessary to control the misuse of KM among younger populations. Further clinical studies are required to validate these findings and elucidate the pharmacological mechanisms and psychoactive ingredients of KM. In conclusion, the study reveals that KM induces mild mystical experiences and increases positive mood, highlighting the importance of regulation and mitigate potential risks associated with its misuse.

**Keywords:** *Kameshwari Modakaya*, MEQ30, Mystical, Psychedelic

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## **Clinical Study on the Efficacy of *Shreshtanimbadi* Decoction in the Management of *Kaphaja Shirsha Shoola***

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*Shirsha shoola* (Headache) is a very common condition in current society. Ayurveda *Acharyas* have explained *shirsha shoola* as a type of *Shiro Roga* (a disease in the head). *Kaphaja shirsha shoolais* a common type of 07 *Shirsha shoola* types. *Kaphaja Shirsha Shoola* occurs mainly due to the vitiation of *Kapha Dosha* and *Vata Dosha*. With Signs and Symptoms, this condition can be correlated with chronic sinusitis. *Shreshtanimbadi* decoction consist of ten ingredients; *Thriphala* (*Embllica officinalis*, *Terminalia bellirica*, *Terminalia chebula*), *Nimba Tvak* (*Azadirachta indica*), *Patola* (*Trichosanthes cucumerina L.*), *Megha* (*Cyperus rotundus*), *Rajini* (*Curcuma Longa*), *Thrayanthi* (*Baccopa Monneiri*), *Hema* (*Coscinium Fenertratum*), *Amrita* (*Tinospora ordifolia*). These herbs, which pacify vitiated *Vata Dosha* and *Kapha Dosha* to treat *Kaphaja Shirsha Shoola*. 40 selected patients were randomly divided into two groups of 20 for each treatment arm and controlled arm. The treatment group was treated with 120 ml of decoction of *Shreshtanimbadi* twice a day for 14 days. The second group was treated with 120 ml of placebo twice a day for 14 days. All patients were advised to follow *Pathya* (Wholesome food and behaviors). Assessment has been done before and after treatments. After treatment, treatments arm most of the patients' symptoms were completely or partially relieved compared to the control group. ( $P < 0.001$ ). Such as headache at 76.91%, Heaviness of the head at 87.9%, loss of appetite at 78.67%, peri-orbital edema at 73.20%, and ear itching at 70.00%. after the treatment, 09 patients were completely cured and all patients showed a reduction of symptoms. It is observed that the *Shreshta nimbadi* decoction is beneficial for *Kaphaja Shirsha Shoola* (chronic sinusitis) Management.

**KeyWords:** *Shirsha Shoola, Headache, Sinusitis, Shiroroga*

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## **Impact of Social Media on Health Seeking Behaviour: An Exploratory Study Based on Traditional Medicine**

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This study was conducted among social media users by using a purposive sampling method from July to November 2023. *Facebook* users were selected as it is the most popular and widely used social media in Sri Lanka. The main objective of the study is to analyze the factors that attract people to social media for health advice and what type of health-related information is sought through social media. Internet-based close-ended questionnaire and in-depth interviews were used for collecting data. Quantitative and qualitative data were collected from 96 Facebook users and five (05) in-depth interviews respectively. Descriptive content analysis was used to analyze qualitative data. The quantitative data were analyzed by independent sample t-test and chi-square test using SPSS statistical software. The majority of the respondents were female (56.3%) and there was no significant relationship between sex on health-seeking behaviour on traditional medicine. It was found a significant association with age and health-seeking behaviour ( $F=3.815$ ,  $p=0.007 < 0.05$ ). Young people (49%) are more likely to seek traditional medicine from social media and when the age advances it's gradually declined. The majorities of people who find social media-based traditional medicine are post-graduated (25%) and graduated (42.7%), therefore higher education is a determinant of health-seeking on social media. It was also found that distance to the health facility (79.2%) and family income (86.5%) affect the selection of health sources. It was also found that people rely on social media to find traditional medicine for cancer (41.7%) and joint disorders (22.9%), while accepting that unproven traditional drugs might aggravate existing diseases (31.2%). Some Social media users questioned about authenticity, safety, and efficacy of traditional medicine circulated on social media.

**Keywords:** *Social Media, Health-Seeking Behavior, Traditional Medicine*

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## **A review on *Shatapushpa Choorna* in the management of follicular maturity**

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The definition of Infertility is failure to reap pregnancy after 365 days of everyday unprotected sexual intercourse. Prevalence of subfertility of around 15% among Sri Lankan couples. Amongst the causes of female infertility, ovarian dysfunction contributes about 40% which includes anovulation. In Ayurveda, many herbs are described which are helpful to procure fertility. *Shatapushpa* (*Anethum sowa*) gave in Kashyapa Samhita directly points out its utility in ovulatory dysfunction. This review is intended to find out the benefits of *Shatapushpa* is the single drug of choice that is helpful in female reproductive disorders. Indication of *Shatapushpa* includes amenorrhea, oligomenorrhoea, and menopausal syndrome. Due to *ushna* and *tikshna guna* it possesses *kaphavata shamaka* effect. It has *deepana*, *pachana*, and *anulomana* properties and acts as *artavajanana* and *stnayanana* in the female reproductive system with good effect on *rajorodha*, *yonishoola*, *kastartava*, *prasuta*, and *stanyanasha*. Experimental studies reveal its uterine stimulant activity, *kosthavatahara*, and *artavajanana*. *Shatapushpa* has a direct effect on ovarian function. This may be due to individual modes of action based on the route. *Shatapushpa* mainly contains phytoestrogens that have mixed estrogenic and anti-estrogenic action, affect selective estrogen receptor modulators (SERM) and inhibit the enzymatic conversion of endogenous estrogen to oestradiol, and possess intrinsic estrogen activity. Its phytoestrogen properties bring down the levels of insulin resistance in the body and restore the cellular imbalance that is a major cause of PCOS. According to the above-revealed literature, *Shatapushpa* is effective in the management of follicular maturity.

**Keywords:** *Shatapushpa, Anethum sowa, Infertility*

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## **A clinical study on the effect of *Agnimantha shilajith yoga* on *Atisthaulya* w.s.r. to Overweight and Obesity**

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The dramatic increase in the prevalence of overweight and obesity in most countries has been of great concern globally. This is estimated to be the cause of more than 3.4 million deaths, 4% of years of life lost and at least 4% of disability-adjusted life all around the world. However, despite the urgency of this problem, there are some noticeable gaps in what is known about the subject. Obesity is referred to as “*Sthaulya*” and is considered to be a disease of “*Medodhatu*” meaning a disorder of lipid metabolism. A variety of different types have been detailed in the Ayurveda classics along with the treatment for the same. *Agnimantha-shilajith yoga* is one of treatment method, mentioned by *Charaka Acharya* of his protocol in *Charaka Sutrasthana*. Present study was planned to assess the role of *Agnimantha Shilajith yoga* in the management of obesity. 33 patients were selected according to inclusion and exclusion criteria and 30 patients were treated and 03 patients were dropout. 500mg of medicine were given two times per day with lukewarm water for 03 months with 03 months of follow-up. After completion the treatment, analyzed over role effect of treatment and showed that marked reduction of the weight, BMI and other clinical features was reduced.

**Keywords:** *Obesity, Overweight, Atisthaulya, Agnimantha, Shilajith*

## **Exploring the Nutritional and Health Benefits of Traditional Kandyan Rice Varieties and Selected Grains**

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In pursuit of understanding traditional dietary practices and their nutritional implications, this research delves into the rich history of rice varieties from the Kandyan era, as narrated by 17 key informants spanning three consecutive generations. The study focuses on seven specific cooked rice varieties: Diyabath, Sunusal Bath, Irigu Bath, Thanahal Bath, Kurakkan Kiribath, Meneri Bath, and Meneri Kiribath. Alongside these traditional rice varieties, the research also examines the nutritional profiles and health benefits of various grains, including finger millet, proso millet, foxtail millet, maize, and *Oryza sativa*. The primary objectives are to evaluate the nutritional content; proteins, dietary fibre, vitamins, and minerals of these grains, analyse their health benefits, and assess their effects on blood sugar levels, antioxidant capacity, and dietary fibre content. Articles for this research were sourced from Google Scholar and PubMed, focusing on peer-reviewed publications from 2014-2024. Finger millet offers antioxidant, antimicrobial, antidiabetic, nephroprotective, wound healing, and anti-cataractogenesis properties. Foxtail millet, rich in crude fibre, aids digestion, promotes bowel movements, and provides hypoglycaemic and hypolipidemic effects. Proso millet helps against heart disease, hypercholesterolemia, breast cancer, diabetes, and infections. Maize supports blood pressure regulation, liver function, and bile production. Overall, the findings reveal that the traditional rice varieties and selected grains offer distinctive nutritional and health benefits, which can significantly contribute to dietary recommendations and public health strategies, emerging through consecutive traditions.

**Keywords:** *Health Benefits, Kandyan Rice Varieties, Millets and Grains, Nutritional Profiles, Traditional Dietary Practices.*

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## **Development and Evaluation of an Anti-inflammatory Gel formulated with *Navahandi Telkira***

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*Navahandi (Rhipsalis baccifera)*, an epiphytic member of the Cactaceae family holds a revered position in Ayurvedic medicine for its efficacy in treating bone fractures, bruises, and rheumatism. The traditional formulation *Navahandi Telkira*, is meticulously prepared by blending equal parts of *Navahandi* and scraped coconut following the classical *Bhaanu paaka* method. Historically, this preparation has been employed in managing orthopedic conditions, particularly those characterized by inflammatory processes. This study aimed to evaluate the anti-inflammatory properties and phytochemical profile of *Navahandi Telkira*, and to develop it into a topical anti-inflammatory gel and assess the gel's organoleptic attributes. The investigation utilized two critical assays; the Nitric Oxide (NO) Scavenging Assay and the Human Red Blood Cell (HRBC) Membrane Stabilization Assay (heat-induced) to assess the anti-inflammatory effects. These assays were compared with established standards using Gallic Acid for the NO Scavenging Assay and Aspirin for the HRBC Membrane Stabilization Assay. Additionally, phytochemical analysis was conducted to identify the preparation's bioactive compounds. The results revealed that *Navahandi Telkira* exhibits significant anti-inflammatory activity with NO scavenging capabilities superior to Gallic acid at specific concentrations. The HRBC Membrane Stabilization Assay indicated that the anti-inflammatory effects of *Navahandi Telkira* are comparable to those of Aspirin, albeit with slightly reduced potency. The phytochemical analysis confirmed the presence of key bioactive constituents including reducing sugars, proteins, alkaloids, flavonoids, phenols, tannins, saponins, and fats and oils. The gel showed favorable organoleptic properties, consistency, and pH stability. These findings indicate that *Navahandi Telkira* offers significant potential as a natural anti-inflammatory agent, especially in traditional *kadum bidum* therapy. Further research and clinical trials are needed to validate its therapeutic efficacy.

**Keywords:** *Navahandi Telkira, Traditional medicine, Anti-Inflammatory, Phytochemicals, Topical gel*

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## **Efficacy of *Bilvadi Panchamula Churna* in the Management of *Sthaulya***

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*Sthaulya* (Obesity) is a global health concern with far-reaching implication for both physical and mental well-being. While there are various approaches to manage this issue, many individuals are increasingly turning to alternative healing systems including Ayurveda. Clinical features of *Sthaulya* according to *Charaka Samhita* are pendulous buttocks, abdomen and breasts due to excess deposition of *Meda* and *Mamsa*. This clinical study designed to investigate the impact of *Bilvadi Panchmula Churna* (BPC) on purposive sample of 30 patients who had BMI between 30 - 40 kg/m<sup>2</sup> treated at the OPD of National Ayurveda Hospital. Patients were included in this study. They were subjected to clinical examination and laboratory investigations to rule out underlying diseases. After confirming that they were free from any occult disease based on the normal laboratory results, they were treated with BPC 6 g twice daily before meals with bee honey (5g) for a period of 8 weeks. Both subjective and objective assessment criteria were evaluated. Data were analyzed by SPSS statistical software. BPC reduced BMI (33.55±0.59 to 31.12±0.59), skin fold thickness (Biceps) (27.44±1.60 to 24.26±1.60), serum cholesterol (200.9±19.64 to 186.16±19.64), and fasting blood sugar (106.26±7.75 to 97.95±7.75) significantly (p<0.01) whereas the improvement of pendulous buttocks, abdomen and breasts (2.37±0.49 to 1.33±0.48) is statistically significant (p<0.01). Overall effects showed that BPC has significant effect on *Sthaulya*.

**Keywords:** *Bilvadi Panchmula Churna, Sthaulya, Obesity, Lipid Profile, Fasting Blood Sugar*

## **Effectiveness of mud therapy in the management of *Yuvana pidaka* with special reference to *Acne vulgaris* - A case study**

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*Yuvana pidaka* is a dermatological disorder observable on the face with disfiguration. The symptoms are explained in Ayurveda textbooks and are correlated with *Acne vulgaris*. This common inflammatory skin disease affecting adolescents identifies with a wide range of morbidities including physical, social, psychological, and emotional distress. The estimated affection is 9.4% of the global population and approximately the eighth most prevalent disorder in the world. Adolescents seek modern emollients and lotions with an expeditious effect to overcome their various personal ergo, especially concerning their outward appearance. According to the Ayurveda concept, administration of mud therapy on *Yuvana pidaka* is quite interesting and proved from an ancient time that the reaction of inflammation can be relieved and upgrading immune levels. The research objective is to study the efficacy of mud therapy in the management of *Yuvana Pidaka*. After giving *Mrudu-shodana* treatment for 7 days, a processed mud pack will be applied on the face, kept until it dry and washed off with water, and subsequently ice water applied as a toner. A mud pack was applied once every two days for 6 days in the morning. This case study is of a 17-year-old female patient who visited complaining of eruptions over her face with mild pain, itching, discharge, discoloration and disfiguration for 2 years. The patient was successfully improved without any complication proving that mud therapy is an easy, safe, and cost-effective treatment method for *Yuvana pidaka*.

**Keywords:** *Yuvana Pidaka, Acne Vulgaris, Mud therapy*

**Application of *Irsal e Alaq* (Hirudotherapy) in the management of *Varm e Ghudad e Darqiyyah* (Swelling of the thyroid gland): A case report**

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*Varm e Ghudad e Darqiyyah* (swelling of the thyroid gland) is a broad term that corresponds with goitre in modern medicine. Iodine deficiency is the most prevalent cause of goitre, which is a thyroid gland that is enlarged. Goitre is caused by hypothyroidism, hyperthyroidism, thyroid nodules, thyroid inflammation, and malignancy as well. Thyroid palpable focal lesions occur 3-7% of adults, with women encountering them more frequently than men. The primary causes of pathological alterations in the glands are fluid imbalances and *mawaad-e-faasida* buildup. This case study is aimed at highlighting the potential of Unani therapy in the management of thyroid swelling. It was conducted in the outpatient department of Ayurveda Teaching Hospital, Borella. This study described a 56-year-old female who presented with swelling of the neck for 6 years with a recent enlargement in size. She also reported hand tremor, palpitations, and breathing difficulty on exertion. Ultrasound scan neck revealed for Multi Nodular Goitre (MNG). She was administered Itrifal Ghududi orally with the application of *Irsal e Alaq* over the gland for 6 weeks. Parameters were assessed at baseline and after the treatment. It was observed that a reduction of the size of neck circumference by around 3-4 cm from the baseline. Changes in thyroid profile were observed, and TSH level improved from low (0.226 mIU/L) to normal (0.720 mIU/L) after treatment. The results of the present study were in complete accordance with the statements provided by Rabban Tabri, Ibn Sina, and Abu Bakr Zakaria Razi. Therefore, it is concluded that further clinical trials should be done in large samples to evaluate the efficacy and safety of Unani medicines in the management of MNG.

**Keywords:** *Varm e Ghudad e Darqiyyah, Irsal e Alaq, Hirudotherapy, Multi nodular goitre*

## Management of *Iltihaab e Tajaveef e Anf Haad* using *Dalak* therapy: a case report

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The term *Iltihaab Tajaveef Anf* has not been mentioned in the Unani classical texts, clinical features of *Nazla Baarid* resemble *Iltihaab Tajaveef Anf*, which occurs with the involvement of various factors. Individuals with *Baarid mizaj* (cold temperament) and exposed to cold environments or cold consumption are more prone to develop this condition as the *maaddaah* (matter) infiltrates from the anterior part of the brain towards the nose or throat. This condition corresponds with sinusitis in modern and is the inflammatory condition of the paranasal sinuses. It is one of the most common reasons for an antibiotic prescription. The study aimed to evaluate the therapeutic effect of *Dalak* (massage) with *Roghan e Sambahlu* in managing *Iltihaab e Tajaveef e Anf*. It was conducted in the outpatient department of the National Teaching Hospital of Ayurveda, Borella. In this study, a 60-year-old male presented with a two-week history of severe headache, facial tenderness, nasal discharge, nasal congestion, and anosmia bilaterally. Based on the characteristic features, the condition was diagnosed as *Iltihaab Tajaveef Anf* and he was treated by *Dalak* therapy using 3 mL of *Roghan e Sambahlu*, applied over the areas of frontal and maxillary sinuses for 5 days. Before the intervention, the Visual Analogue Score (VAS) was 08 and the Total Nasal Symptom Severity (TNSS) was 13. Following the treatment, the VAS was 02 and TNSS was 03. This case study demonstrates that *Dalak* can be valuable in reducing symptoms of sinusitis. However, to make the study more comprehensive, it could be conducted in large sample sizes on various parameters.

**Keywords:** *Iltihaab e Tajaveef e Anf, Sinusitis, Dalak, Nazla Baarid, Roghan e Sambahlu*

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## ***Wajaul Mafasil* and its Correlation with Osteoarthritis in Unani Medicine: A review**

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*Wajaul Mafasil* is a general term for arthritis or joint pain. Osteoarthritis (OA) is a degenerative joint condition that is characterized by cartilage degeneration, joint stiffness, oedema, and reduced mobility. The objective of this review is to investigate the Unani concepts of *Wajaul Mafasil* and its relationship with Osteoarthritis. A search of the literature was done, focusing on works published between 1990 and 2023 from databases such as PubMed, Google Scholar, and traditional Unani manuscripts. The inclusion criteria comprised research addressing the efficacy of Unani treatments as well as studies outlining the Unani approach to joint diseases, particularly the terms “*Wajaul Mafasil*”, “*Wajaul Mafasil Barid*”, “*Wajaul Rakba*” and their relationship to osteoarthritis. After a thorough review, 16 of the 150 articles satisfied the inclusion criteria. The accumulation of hot or cold humour in the joints tends to be related to this illness, which can cause symptoms such as joint deformities, restricted movement, stiffness in the morning, and persistent pain that are comparable to the clinical presentation of osteoarthritis. The degeneration of joint tissues can be attributed to the cold humor, which therefore seems to be an apparent connection between *Wajaul Mafasil* and Osteoarthritis. The literature also emphasizes *Wajaul Mafasil* treatment employing Unani medicine. Herbal treatments with anti-inflammatory, analgesic, and chondroprotective qualities include *Boswellia serrata* (Kundur), *Withania somnifera* (Ashwagandha), and *Azadirachta indica* (Neem). Whilst traditional remedies have immense potential, more clinical research and scientific evidence are necessary before Unani methods can be fully integrated into modern medical practices.

**Keywords:** *Wajaul Mafasil, Osteoarthritis, Wajaul Mafasil Barid, Humour*

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## **Concept and management of *Waja-ul-mafasil* (Arthritis) from the purview of Unani system of medicine (special reference to Osteoarthritis)**

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Waja-ul-Mafasil is a comprehensive term in the Unani system of medicine that encompasses various joint diseases, including inflammatory, non-inflammatory, infectious, metabolic, and other musculoskeletal disorders. This literature survey aims to explore traditional Unani perspectives on Waja-ul-Mafasil, particularly in relation to osteoarthritis, in order to provide insights that could enhance clinical practice. The study employed a systematic literature review to gather authentic information on Waja-ul-Mafasil and arthritis. Data were sourced from classical Unani texts, peer-reviewed scientific journals, research papers, and reputable websites using electronic databases like Google Scholar, PubMed, and Scopus. The inclusion criteria focused on Unani research conducted within the past 15 years, clinical trials, case studies, animal studies, and classical Unani literature. Excluded were literature reviews, research older than 15 years, and laboratory-based research. Renowned Unani scholars have categorized Waja-ul-Mafasil based on factors such as the severity of the disease, presence of inflammation, etiology, involved morbid substances (Madda), swelling, accumulation of abnormal fluids (Akhlata-e-fasidah), and the specific joints involved. A close examination of Unani literature reveals that arthritis, particularly osteoarthritis, can be correlated with Waja-ul-Mafasil Barid, as both share similar clinical features. According to Unani medicine, the pathological changes in joints are primarily due to a disruption in humoral temperament (Su-e-Mizaj Madda) and the accumulation of morbid material (Fasid madda) in joint spaces. Therefore, the treatment of Waja-ul-Mafasil in Unani involves restoring the normal temperament and correcting the humoral imbalance. This is achieved through a multidimensional approach, including Ilaj Bil Ghiza (dietary therapy), Ilaj Bit Tadbeer (regimenal therapy), and Ilaj Bid Dawa (pharmacotherapy), which collectively aim to divert (Imala) and evacuate (Istifraagh) the morbid material from the joints.

**Keywords:** *Waja-ul-Mafasil, Arthritis, Akhlata, Unani Medicine.*

## ***Ustukhuddus (Lavandula Stoechas Linn.) in the Management of Malankholia (Melancholia) : A Systematic Review***

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Unani medicine, an ancient system of traditional medicine, promotes human wellness through various methods, with herbs playing a vital role in managing numerous disorders. Ustukhuddus (UK), also known as lavender, is a prominent herb in Unani medicine, widely used to treat neurological and psychological conditions. These include anxiety disorders (Infiyalat e nafsaniya), convulsions (Daf-e-tasannuj), paralysis (Faliij), headaches (Suda), epilepsy (Sara), tremors (Rasha), dementia (Nisyan), and melancholia (Malankholia). Despite its extensive use, research on Ustukhuddus, particularly concerning its effects on psychological disorders, remains limited. Therefore, this study aims to gather authentic information about UK and its medicinal properties, with a special focus on its role in treating melancholia. A systematic literature review was conducted, gathering data from digital databases such as Google Scholar, PubMed, ResearchGate, and Web of Science, as well as from classical Unani texts. The review included Unani research from the past 15 years, clinical trials, case studies, animal studies, and classical Unani literature. Excluded were literature reviews, research older than 15 years, and laboratory-based studies. In Unani pharmacodynamics, Ustukhuddus is used to pacify and evacuate vitiated Phlegmatic and Black bile humors, which are primarily responsible for neurological disorders. The herb is employed in treating various neurological conditions such as epilepsy, melancholia, paralysis, and anxiety. It exhibits neuroprotective, anticonvulsant, anxiolytic, sedative, and analgesic activities. Notably, lavender oil, derived from UK, has been found to improve associated symptoms of melancholia, including restlessness, disturbed sleep, and somatic complaints. Based on the available data, it is hypothesized that Ustukhuddus may be effective in managing melancholia. However, this hypothesis requires validation through comprehensive clinical trials to confirm its efficacy in treating this psychological disorder.

**Keywords:** *Unani, Ustukhuddus, , Malankholia, Herb*

## **Comparative review of *Pitha Mega Neer* in *Mathumegam*: Analyzing characteristics and Modern therapeutic applications**

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Diabetes mellitus, a prevalent endocrine disorder characterized by hyperglycemia and its complications, has parallels in the Siddha medical system's *Mathumegam* classification, which includes the types of *Vatha*, *pitha*, and *kapha neer*. *Pitha Mega Neer*, described in classical texts, correlates with osmotic diuresis due to secondary endocrine diabetes, which commonly result in electrolyte imbalance. This study aims to compare the Siddha descriptions of *Pitha Mega Neer* with modern endocrinology to enhance understanding and explore integrative therapeutic applications. The study looks at *Pitha Mega Neer* types from classical Siddha texts, like "*Yugi Vaithya Sinthamani*", and compares them in detail to scientific literatures from Science direct, Frontiers and journals between 2002 and 2024 on osmotic diuresis caused by secondary endocrine diabetes. Key characteristics such as causes, symptoms, urine traits, and fatal periods were tabulated and compared to modern endocrine disorders and electrolyte imbalances due to osmotic diuresis. The six types of *Pitha Mega Neer*—*Yaanaai Kozhuppu Neer*, *Kattralai Mana Neer*, *Sunna Mann Neer*, *Inippu Megam*, *Palingu Neer*, and *Muyat Kuruthi Neer*—were found to align with non-parasitic chyluria, UTI-related mucusuria, renal hypercalciuria, glycosuria, albuminuria, and hematuria, respectively. The study highlights traditional therapeutic approaches, emphasizing the relevance of Siddha Medicine in treating osmotic diuresis due to diabetes mellitus secondary to endocrine disorders, aligning with modern conditions. Findings suggest Siddha Medicine, with its holistic approach, offers valuable insights and potential treatments for modern endocrine disorders. Management procedures vary according to different types of *Pitha Mega Neer*, posing practical challenges. Incorporating modern therapies with traditional insights can enhance understanding, improve patient care, and expand treatment options. Future biochemical and clinical studies could explore molecular mechanisms underlying *Pitha Mega Neer* and its correlation with modern endocrine disorders, aiding in integrative therapeutic strategies.

**Keywords:** *Diabetes mellitus, Endocrine disorders, osmotic diuresis, Pitha mega neer, Siddha Medicine*

## **Role of Ayurveda in the Management of Spastic Quadriplegic Cerebral Palsy:**

### **A Case Study**

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Spastic quadriplegic cerebral palsy (SQCP) which is a permanent neuromuscular disorder affects motor functions following a lesion on the developing brain. This condition is comparable to *Sarvangaghata* among children. The aim of the study is to describe the role of Ayurveda in the management of SQCP. A 12 year-old girl was admitted to NATH on 19 March 2024 with complaining of difficulty in walking for one year. Further, she complained of difficulty in raising arms and stiffness in the bilateral shoulder joint, left knee and ankle joint. Patient was treated with *Trikatukaadi* decoction, *Dashamoolan Panchakoolan* decoction, *Danthimooladi* decoction, and *Mashabaladee* decoction for a period of two months. Patient was also received *Abyanga* with medicated oils for affected parts of the body throughout the treatment. The outcome was assessed using the anthropometric measurements (AM), modified ashworth scale (MAS), and reflex scale (RS) before and after the treatment. After two months of treatment, MAS showed 30% improvement in spasticity, knee flexion improved by 20° after treatment, right upper limb nearly returned to normal. Enhancement of deep tendon reflexes and muscular strength also pointed to a successful treatment result. It can be concluded that Ayurvedic medicines and *Panchakarma* therapy are highly effective in managing spastic cerebral palsy and significantly enhance the quality of life.

**Keywords:** *Ayurveda, Modified Ashworth Scale, Sarvangaghata, Spastic Quadriplegic Cerebral Palsy*

## **Comprehensive Ayurveda Management of Chronic Foot Ulcer in a Diabetic Patient: An Observational Study**

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Chronic ulcers in diabetic patients present significant clinical challenges due to the multifaceted effects of diabetes mellitus including poor blood circulation, neuropathy, and immune dysfunction which hinder wound healing and increase infection risk. This study evaluates an Ayurvedic treatment protocol for a chronic non-healing foot ulcer (*Dushta Vrana*) in a 60-year-old male diabetic patient admitted to the Provincial Ayurveda Hospital, Meegoda, with an ulcer on his left foot, accompanied by edema, severe pain, and a burning sensation. Effectiveness was assessed by measuring symptom relief and wound healing. Symptom relief was evaluated using standardized gradation parameters for pain, edema, and burning sensation. Wound healing was systematically assessed using the International Wound Measurement and Classification System (IWMCS), which provided a standardized framework for evaluating wound size, depth, and tissue type changes. Additionally, visual documentation of the healing process was compared. Internal therapies included, *Navakaarshaka Kashaya*, *Panchamulee Lagudraksha Kashaya*, *Gokshura Guggulu*, *Sudarshana Churna*, and *Chandrapraba Vati*. Externally, *Nuga Karati* paste was applied, followed by *Amu Gaslabu* paste and *Udupiyaliya* paste. Daily wound cleansing was performed using *Panchavalkala* boiled water. Over four weeks, significant improvements were observed. The ulcer size was reduced by 65.4%, and symptoms such as burning sensation, swelling, and pain were reduced by 75%, 75%, and 71.4%, respectively. The unpleasant odor, pus, and white fluid discharge resolved completely. The patient reported a significant improvement in overall well-being, with increased mobility and no discomfort related to the ulcer. These results highlight the effectiveness of Ayurveda treatments in managing chronic foot ulcers in diabetic patients.

**Keywords:** *Ayurveda treatment, diabetic foot ulcer, Dushta Vrana, wound healing*

## **Therapeutic and Medicinal Uses of Shatavari (*Asparagus racemosus* rhizome) in Reproductive Health**

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*Shatavari* (*Asparagus racemosus* rhizome) has been extensively studied for its therapeutic potential in reproductive health, particularly within the scope of Ayurveda. This review analyzes research articles from PubMed Central, published between 2010 and 2023, to evaluate the efficacy of *Shatavari* in addressing hormonal balance, fertility, and menstrual disorders. A meta-analysis of 15 peer-reviewed studies conducted over the past 13 years revealed that 73% of the research demonstrated significant improvements in female reproductive health, particularly through enhanced levels of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), attributed to *Shatavari*'s phytoestrogenic properties. Among studies focusing on fertility, 66% reported enhanced ovulation rates and increased pregnancy outcomes in women supplemented with *Shatavari* extracts. Additionally, 58% of the articles highlighted a reduction in premenstrual symptoms, menstrual discomfort, and cycle irregularities. In male reproductive health, 72% of the studies confirmed improvements in sperm quality, motility, and count, with antioxidant properties of *Shatavari* mitigating oxidative stress. Notably, research involving male infertility found that *Shatavari* supplementation significantly improved overall sperm parameters. Furthermore, 60% of the articles exploring the treatment of polycystic ovary syndrome (PCOS) indicated improvement in menstrual regularity and a reduction in insulin resistance following *Shatavari* treatment. This body of research underscores the therapeutic efficacy of *Shatavari* in both male and female reproductive health, with benefits ranging from improved hormonal balance to enhanced fertility outcomes. However, while the findings are promising, further large-scale randomized clinical trials are required to establish comprehensive guidelines for its use.

**Keywords:** *Shatavari, Asparagus racemosus, reproductive health, fertility*

## **Effect of Ayurveda Treatment Regimen in the Management of Complications of Russell Silver Syndrome: – A Case Study**

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Russell Silver Syndrome (RSS) is a rare genetic condition which affects body growth and development of the children before and after birth. According to Ayurveda, this is a congenital disorder (*Sahaja roga*). A pre diagnosed RSS aged 11 year-old girl was admitted to professorial unit of National Ayurveda Hospital with failure to thrive and recurrent respiratory infection since childhood. Objective of this study was to evaluate the effect of Ayurveda treatment regimen on complications of RSS. The patient was treated with *Shodana*, *Shamana*, and *Tharpana* protocol for seven weeks. Treatment plan was designed to regulate functions of *Vata dosha* and to increase body weight. *Trikatukadi* decoction, *Chandrakalka* with *Mahadalu anupana*, *Balachaturbhadra Choorna*, *Vachadi Choorna*, and *Saraswatadi Choorna* were prescribed for fourteen days, followed by *Rasayana* medications for *Tarpana* for the rest of period. As *Bahirparimarjana* treatment *Abyanga*, *Shirodhara*, *Shirovasti*, *Sarvangadhara* were done during the entire period of treatment. After treatment, satisfactory improvement was shown such as; increased body weight measured by digital scale and anthropometry, reduced incidence of recurrent respiratory infection measured by American Academy of Allergy, Asthma and Immunology (AAAAI). Further clinical studies with more sample of patients should be done to validate the efficacy of selected Ayurveda treatment regimen on the complications of Russell Silver Syndrome.

**Keywords:** *Russell Silver Syndrome, Sahaja roga, Vata dosha, Rasayana medications*

## **Ayurvedic Management of *Amavata* W.S.R. to Rheumatoid Arthritis - A Case Study**

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*Amavata* refers to the clinical condition where in aggravated vata is associated with metabolic toxic substances (*Ama*) and mainly affects joints. *Amavata* is considered to be its close equivalent to Rheumatoid arthritis, an autoimmune disorder in modern medicine. The main culprit of this illness is abnormal digestion and metabolism (*Agni*). Whenever *Ama* gets localized in body tissue or joints, it can cause associated joints to experience pain, stiffness, swelling, tenderness and other symptoms. The goal of the treatment is to keep the *Vata Dosha* in balance while also enhancing metabolism and digestion. The study was conducted to evaluate the efficacy of an *Ayurveda* treatment plan for *Amavata* with special reference to Rheumatoid Arthritis. A 33 years old female patient with positive rheumatoid factor with severe bilateral wrist, knee and interphalangeal joints pain and stiffness accompanied by swelling was enrolled in the study. Before the commencement of the treatment, consent was obtained and clinical signs and symptoms were recorded. The patient was treated with internal medicines (*Bilvamrutha Kashaya*, *Rasnairanda Kashaya*, *Rasnashigrupunarnawa Kashaya*, *Rasnadi Guggulu*, *Yogaraja Guggulu*, *Nawarathna Kalka*, *Vata Roga Kalka*, *Vata Gajendrasinghe Rasa*, *Sudarshana choorna* and *Dhatri Choorna*) and external treatments (*Snehana*, *Nadi Sveda*, *Upanaha* and *Vaitarana Vasti*) for 30 days. Throughout the duration of treatment, the degree of symptom reduction was evaluated using 2010 ACR/EULAR rheumatoid arthritis classification criteria and Larsen's grading system. Excellent progress was seen in the, which decreased from grade 7 to grade 3 in the ACR/EULAR Rheumatoid Arthritis classification criteria and grade 2 to grade 1 in Larsen's grading system, as well as the rheumatoid factor became negative. Thus, it can be concluded that the ailment has been effectively managed by the *Ayurveda* treatment plan and suggested that, in order to generalise the results, the clinical trial be scheduled for the future with a bigger sample size.

**Keywords:** *Amavata, Ayurveda treatment plan, Rheumatoid Arthritis, 2010 ACR/EULAR rheumatoid arthritis classification criteria, Larsen's grading system*

## Management of *Ardita* (Bell's Palsy) through Ayurveda Treatment Protocol-A Case Study

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Bell's Palsy is one of the common neurological disorders of seventh cranial nerve which cause weakness of one side of the face. It can occur at any age but the exact cause is unknown and it is a lower motor neuron lesion. It can be correlated to *Ardita* described under *Vata Vyadhi* in *Ayurveda* Medicine. The study was conducted to find out the role of *Ayurveda* treatment modality for *Ardita* with special reference to Bell's Palsy. The major signs and symptoms were inability to wrinkle of forehead, inability to close the right eye, drooping right corner of mouth and asymmetry of face. A 45 years old female patient with weakness of right side of the face was enrolled in the study and before the commencement of the treatment, consent was taken and signs and symptoms were recorded. The examinations and investigations were done by the researcher and data were collected based on available clinical facilities. The patient was treated with internal (*Denibadiya Kashaya, Danadanayanashunti Kashaya, Nirgundilashunanshigru Kashaya, Danthimuladhi Kashaya, Kaluduru Thippili Leha, Yogaraja Guggulu, Triodhashanga Guggulu, Chandra Kalka, Vata Roga Kalka, Vata Gjendrasinghe Rasa, Dhathri Choorna* and *Hinguvastaka Choorna*) and external (*Shiro Abyanga, Pottali Sveda, Upanaha Sveda, Anuvasana Vasti* and *Nasya Karma*) were given for 30 days. Reduction of the signs and symptoms were assessed using House-Brackmann Scale. It was observed that excellent improvement in House-Brackmann Scale from grade 5 to 1. It can be concluded, that the *Ayurveda* treatment modality has managed *Ardita* successfully and gives significant relief in signs and symptoms. The clinical trial should be planned in the future with a larger sample size to generalize the findings.

**Keywords:** *Ardita, Ayurveda treatment modality, Bell's Palsy, House-Brackmann Scale*

## **Clinical Study on Effect of Ketakeladhi Paste for without anatomical deformed Janu Sandhigata Vata**

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*Janu Sandhigata vata* is the second commonest musculoskeletal problem and the leading cause for chronic disability in elderly in developing countries. Since Ayurveda is a medical system which provides proper methods, techniques and medication, not only for cure but also to prevent diseases with proper investigations, examination and proper intervention of treatment. Objectives of the study were to reduce inflammation and return the ligament to its correct safe state and to role of *Ketakeladhi Paste* in the treatment of early stage of *Janu Sandhigata vata* as an external application. Diagnosis was done radiological image with cardinal sign and symptoms of *janu sandhi* and radiologically absence of fracture or dislocation. *Ketakeladhi Paste* was applied affected *janu* according to the norms of the *ardha maheesha charma* for six weeks. Study showed that complete (100%) remission of *janu sandhi shula*, *shota* of supra patella, *akunchana prasarana vedana* and *sandhi hanthi* (knee joint stiffness) and *atopa*. The mean value of 3.0 of *sandhi hanthi* and 2.7 for pain, 2.5 for edema, 2.8 for pain on flexion and extension and 2.6 for crepitus the other four signs and symptoms were reduced to zero gradually with six weeks of treatments. *Ketakeladhi Paste* showed *ushana veerya* 78% and *sheetha veerya* 22%. Most of ingredients possess *Kashaya rasa*, which assist in *Ropana* and *Sandhana* action and *polpeni* which has *Madhura rasa*, provide nourishes to the affected tissue to regenerate. The ingredients of the *Ketakeladhi Paste*, possess the property of *Shothahara*, *Ropana*, *Stambana*, *Sandhanakara*. Therefore, *Ketakeladhi Paste* exhibited acceleration of healing process can be attributed to the regenerative action of *Janu sandhi*. *Ketakeladhi Paste* is very effective on enhancing the *Janu sandhi* health and recovery of degenerate of the *Janu sandhi gata vata*.

**KeyWords:** *Ketakeladhi Paste, Shothahara, Ropana, Stambana, Sandhanakara*

## **Ayurveda Medicine: Overview of Research Indexed in the PubMed Database**

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Ayurvedic medicine is a rapidly evolving field that relies on research. In terms of medical research, focuses on discovering or developing new molecules or drugs that are beneficial to patients. Ayurveda medicine has played an essential role in primary health care globally. This study aims to present an overview of Ayurveda Medicine research productivity over 10 years. The data was gathered from the PubMed database covering the period from 2013 to 2023. In total, 365 articles consisting of systematic reviews published in PubMed were retrieved using the search term "Ayurveda" in the title of the journal article, with a publication date between January 1, 2013, and December 31, 2023. After excluding publication type, editorial issues and comments, 319 articles were included in the final analysis. The extracted data was analyzed and synthesized using quantitative approaches. Based on the study, the highest number of research articles (80%) were published as collaborative research. Among them (19%) articles published with two authors collaborating, and (61%) articles published by more than two authors collaborating. In addition, there were (20%) single-author articles. The highest number of articles was published in year 2022 (18%) and 2023 (16%). The majority of the research articles related to Ayurveda have been conducted in India (92%), followed by Sri Lanka with the next largest contribution 3%. According to the keywords, the majority of the research articles (n=159) have examined Ayurveda in a general aspect, followed by studies on COVID-19 (n=29) and yoga (n=16.). This research study has revealed that most of the articles were published by authors from India. The study noted a yearly increase in the number of publications after 2020. It was also suggested that authors from Sri Lanka should pursue collaboration opportunities with India or other countries, given the limited extent of local collaborations.

**KeyWords:** *Ayurveda Medicine, Research, PubMed, Sri Lanka*

## **Analyzing the Impact of Artificial Intelligence on Educational Practices: A Case Study on Indigenous Medicine in Sri Lanka**

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This study investigates the impact of artificial intelligence (AI) on the educational experiences of MD trainees of the Postgraduate Institute of Indigenous Medicine (PGIIM), University of Colombo, Sri Lanka. As AI becomes increasingly integrated into various sectors, its role in education particularly medical education is gaining prominence. This study aims to explore MD trainees' familiarity with AI, their usage of AI tools, perceptions, and the impact of AI on academic performance. A purposive sampling method was employed, involving 30 participants (Pre-MD, Post-MD, and SR trainees), with 26 completing the survey. Data were collected using a detailed questionnaire covering AI awareness, usage, perception, and its impact on education. The findings revealed that a varied level of AI familiarity, with the majority of trainees (58%) reporting moderate to high familiarity. Tools like ChatGPT (65%) and Grammarly (50%) were commonly used, primarily for improving writing skills and conducting research. Most respondents (69%) believed that AI positively influences their learning experience, enhancing problem-solving skills and academic performance. However, 23% expressed concerns about AI's negative implications, such as ethical and privacy issues. Despite these concerns, the study indicates that AI has a significant role in modernizing medical education, particularly in indigenous medicine. This research offers critical insights for educators and policymakers to improve the integration of AI in medical education. While the positive impact of AI is evident, addressing ethical concerns and promoting responsible use is essential. Future research should focus on long-term studies to evaluate the sustained influence of AI on medical education.

**Keywords:** *Artificial Intelligence, Medical Education, Problem-Solving Skills, Indigenous Medicine, MD Trainees*

## **The anti-bacterial potential of Siddha Herbo-mineral formulation *Linga Chenduram* through the In-vitro study**

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Many existing antibiotics have limitations regarding their effectiveness against various pathogens and often cause adverse side effects. Overuse of these antibiotics has led to the emergence of drug-resistant microorganisms. The Siddha system of medicine offers promising potential for combating these resistant pathogens. *Linga Chenduram* (LC), a traditional herbal-mineral preparation mentioned in the ancient Siddha text *Anuboga vaithiya navanitham*, was the focus of this study. The aim was to compare the antimicrobial effectiveness of LC against various pathogens. Anti-bacterial activity of the sample was tested for *E coli* (ATCC 25922), *Pseudomonas aeruginosa* (ATCC 27853) and *Staphylococcus aureus* (ATCC 25923) to determine the diameter of inhibition zone (DIZ), minimum bactericidal concentration (MBC) and minimum inhibitory concentration (MIC). The study results demonstrate that a concentration of 1000 µg/mL of LC significantly inhibited the growth of all tested organisms. The minimum bactericidal concentration was 250 µg/mL, which was effective against *E. coli* (14.2 x 10<sup>3</sup> CFU/mL), *Pseudomonas aeruginosa* (4.8 x 10<sup>3</sup> CFU/mL), and *Staphylococcus aureus* (1.65 x 10<sup>3</sup> CFU/mL). The minimum inhibitory concentration (MIC) at which 50% of the bacteria were inhibited (MIC<sub>50</sub>) was 405.584 µg/mL, 459.61 µg/mL, and 515.575 µg/mL for *E. coli*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*, respectively. Based on these results, it can be concluded that *Linga Chenduram* (LC) exhibits promising antibacterial activity against *E. coli*, *P. aeruginosa*, and *S. aureus*. This suggests its potential as a natural alternative or adjunct therapy for infections caused by these pathogens

**Keywords:** *Linga Chenduram*, *Anti-bacterial*, *E coli*, *Pseudomonas aeruginosa* and *Staphylococcus aureus*.

## **In-Vivo Animal Experiment of a Siddha Formulation - *Karappan Chooranam* for The Management of *Pitha Karappan* (Atopic Dermatitis)**

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One of the intrinsic factor Skin disease is denoted by the term of Karappan, mentioned in Siddha paediatric text book of “Balavakadam. The Pitha Karappan is a type of Karappan and these symptoms are probably similar to “Atopic Dermatitis” mentioned in contemporary modern literatures. As per the siddha texts, treatment of Pitha Karappan can be effectively done by using various traditional Siddha poly herbal preparations. So this study is aimed to evaluate the Siddha formulations of Karappan Chooranam (KC) is mentioned in the Sarabenthira Vaidhya Muraigal, Karappan Viranaroga Sikichai for the management of Pitha Karappan. The aim of the study is to evaluate the anti-histamine action of the test drug Karappan Chooranam. The study protocol was approved by the Institutional Animal Ethical Committee, S. A Raja’s College of Pharmacy, Raja Nagar, Vadakkangulam, Nagarkovil, Tamilnadu, India and anti histamine study was done in vivo animal (swiss albino mice) experiment. Bar test was used to study effect of extracts on Clonidine induced catalepsy to determine indirect anti histamine activity. Mice were randomly divided into five groups; First group consist of 3 animals and other four groups consisting of four animals. Group of animals were pretreated with KC at doses (100, 200, 300 mg/kg ) and chlorpheniramine maleate (10 mg/kg ) and receive Clonidine (1 ml/kg ) 30 minutes after treatment. The maximum catalepsy (169 ±0.21) was observed in 90 min of clonidine administration (1 mg/kg) in control group. The KC at doses low, mid and high mg/kg and chlorpheniramine maleate at 10 mg/kg, showed significant (P < 0.001) These study concluded that the Karappan Chooranam Possess Anti Histamine activity.

**Keywords:** *In-vivo animal experiment, Siddha, Karappan Chooranam, Karappan*

## Phytochemical and Chromatographic analysis of Sanjeevanie Kameshwari Rasayanaya

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*Ayurveda* provides a holistic approach to health, encapsulating a comprehensive understanding of medicinal formulations through *Bhaisajya Kalpana*. *Modaka* is a special preparation mentioned in *Bhaisajya Kalpana* which involves grinding powdered ingredients with base like bee honey and ghee. This study aims on *Kameshwari Rasayanaya* (KR) which is well-known for its rejuvenation and aphrodisiac properties. KR was prepared according to Sri Lankan Ayurveda pharmacopeia following standard operating procedures at the *Sanjeevani Ayurveda* Drug Company, *Embilipitiya*. It includes 25% of *Cannabis sativa* L. tempered with ghee, 75% of 23 herbal ingredients (*Terminalia chebula* L., *Terminalia catappa* L., *Nigella sativa* L., *Acorus calamus* L., *Zingiber officinale* Roscoe, *Phyllanthus emblica* L., *Piper nigrum* L. and *Piper longum* L. etc.) from the total weight along with rock salt, sugar, ghee and bee honey. KR extract was prepared by mixing 50g of the drug with 100ml of dichloromethane for 24 hours in the shaker at 140rpm speed, followed by concentration using rotary evaporator at 40<sup>o</sup>C. The prepared dichloromethane extract was subjected to phytochemical and chromatographic analysis. Developed chromatogram (Ethyl- acetate: Dichloromethane: Cyclohexane 0.1:3.4:1.5) were visualized under 254nm and 366nm UV light and then was scanned with the HPTLC scanner using winCATS software. The KR extract was positive for alkaloids, tannins, saponins, flavonoids, steroids, cardiac glycosides, terpenoids and carbohydrates and negative for proteins. Previous research studies shows that phytochemicals like alkaloids, flavonoids, saponins, terpenoids and steroids are responsible for rejuvenation and aphrodisiac properties. HPTLC fingerprint of KR gave 6 peaks with Rf values 0.01, 0.38, 0.53, 0.66, 0.69 and 0.85. In conclusion, KR exhibits promising pharmacological potential due to its rich chemical composition, suggesting its efficacy in promoting rejuvenation and enhancing aphrodisiac properties, as supported by the presence of bioactive compounds like alkaloids, flavonoids, saponins, terpenoids and steroids.

**Keywords:** Kameshwari Rasayanaya, Phytochemicals, TLC, HPTLC

## Study of Chemical Components of Herbal Formulation of Neer Perukki Chooranam

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The Siddha system of medicine is purely scientific and the peculiar complex system of science and philosophy. Fourier Transform Infrared Spectroscopy (FTIR) is certainly one of the most important analytical techniques for herbo mineral medicine. FTIR can be implemented during herbal drug development in production for process monitoring or in quality control laboratories. The aim of study is to evaluate the morphology and elemental characterization of the *Neer Perukki Chooranam*. The functional groups of their formulations are analyzed through FTIR spectroscopy and the biological roles of the functional groups are discussed in this study. The raw drugs is collected and purified as per Siddha literature. Drug *Neer Perukki Chooranam*, which has been illustrated in the Pharmacopeia of Indian Medicine for the management of *Neerkattu*, *Soabai* and *Makotharam*. The Fourier Transform Infrared Spectroscopy compounds show 13 functional groups. There are O-H Stretching (Alcohol), C-H Stretching (Alkane), O=C=O Stretching (Carbon dioxide), C-C bending, (Alkene), O-H bending (Carboxylic acid), C-O Stretching (Aromatic ester), C-O Stretching (Tertiary alcohol), S=O Stretching (Sulfoxide), C-H bending (1,2-disubstituted) and C-1 Stretching (Halo compound) which ensures the therapeutic effect of the drug. The instrumental analysis FTIR study of *Neer Perukki Chooranam* is the presence of functional groups through the stretch and bends which is responsible for its functional activity. The functional groups in *Neer Perukki Chooranam* has diuretic activity. According to the FTIR analysis, the research drug “*Neer Perukki Chooranam*” is very effective for the indications of *Neerkattu*, *Soabai* and *Makotharam*.

**Keywords:** *Fourier Transform Infrared Spectroscopic (FTIR), Neer Perukki Chooranam, Siddha Medicine, Neerkattu, Soabai, Makotharam.*

## **Phytochemical Analysis of Neem toddy collected from an old Neem tree**

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Plants are the main source of human diet and health. The nutritional value of plants have been discussed in many literatures but there are only few research was done to find their biologically active compounds, known as phytochemicals. Among all medicinal plants, Neem tree (*Azadirachta indica*) is considered to be one of the most important plant containing the richest source of phytochemicals. All parts of Neem tree has medicinal value. Every different part of the Neem tree has different phytochemicals accordingly has different organoleptic characters and therapeutic value. Neem exudate/ toddy is a milky white liquid with a strong smell secreted from the angle between the 2 main branches from old trees. It is an important therapeutic agent, a rare medicine. Neem Toddy is refreshing, nutrient, and alternative tonic. It is used in some chronic and long standing cases of leprosy and other skin diseases, atopic dyspepsia and general debility. According to Siddha system of medicine it increase appetite and gives strength to body. Neem Toddy is used in chronic fever, venereal diseases and other vata related conditions. The objective of the present study was to screen the different phytochemicals present in Neem toddy. It was collected from an approximately 80 years old Neem tree in June 2024 at Point Pedro, Jaffna District during our field visit. Then the toddy was sent to laboratory, Department of chemistry, University of Jaffna, for phytochemical analysis. Toddy was tested for phytochemicals like alkaloids, flavonoids, phenolic compounds, tannin, glycoside, saponins, terpenoids, reducing sugar, protein and steroids using different test methods for qualitative analysis. The test result revealed that the toddy contain phytochemicals like alkaloids, flavonoids, phenolic compounds, tannin, glycoside, reducing sugar and protein. The results shows that the presence of many beneficial phytochemicals justifies its therapeutic action.

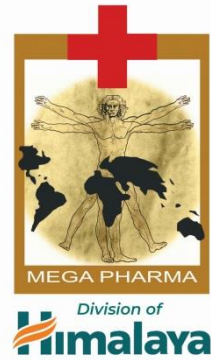
Key words: Phytochemical Analysis, Neem Toddy

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