







# ARDSICON-2025

**International Conference on** 

# **Dementia: Policy, Practice and Progress (DPPP)**

Organized by

Alzheimer's & Related Disorders Society of India, Mysuru Chapter

In Association with

Department of Geriatrics, JSS Hospital, JSSAHER, Mysuru Sarada Vilas College of Pharmacy, Mysuru People's Association for Geriatric Empowerment (PAGE)

# SCIENTIFIC PROCEEDINGS

28<sup>th</sup> & 29<sup>th</sup> November 2025 Mysuru Scientific Proceedings of International Conference on Dementia: Policy, Practice, and Progress (DPPP) organized by Alzheimer's & Related Disorders Society of India, Mysuru Chapter. In association with Sarada Vilas College of Pharmacy, Mysuru, Department of Geriatrics, JSS Hospital, JSSAHER, Mysuru and People's Association for Geriatric Empowerment (PAGE), Mysuru.

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# **ABOUT ARDSI**

### Alzheimer's and Related Disorders Society of India ®

Alzheimer's and Related Disorders Society of India (ARDSI) was established in 1992. We are India's largest group working to create a dementia friendly society. As a registered non-profit organization, we work in 24 cities across India. People with dementia need our care and support. We have been able to directly reach out to over 15 thousand patients and their families through our variety of services. Alzheimer's And Related Disorders Society of India (ARDSI) Mysore Chapter is a registered NGO under the Karnataka Societies Registration Act and the only specialized Dementia organization in the whole of Mysore and surrounding districts. This organization provides care and support for people living with Dementia and their caregivers. The members of ARDSI, Mysuru comprise of family care givers of persons with dementia, professional caregivers, specialized dementia care experts, eminent doctors, including practicing neurologists, psychiatrists, neuro-psychologists and geriatricians, professionals from different fields, eminent personalities from various walks of the society, social workers and persons having compassion and passion for working for those living with Dementia.



### SARADA VILAS COLLEGE OF PHARMACY

Sarada Vilas College of Pharmacy was started in the year 1992-93 with D.Pharm course and B. Pharm course was introduced in the year 2004-05. M. Pharm was introduced in the year 2010-11 and later Pharm. D course was introduced in the year 2012-13 and a PhD research center was established in 2021-22. The college has received many research grants from Rajiv Gandhi university of Health sciences (RGUHS), Bengaluru and Vision Group of Science and Technology (VGST), Govt. of Karnataka, Karnataka Rajya Vignana Parishath, Bengaluru.

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## **JSS AHER**

JSS Academy of Higher Education & Research, formerly known as JSS University, is a Deemed to be University located in Mysuru, Karnataka. It was established in 2008 under Section 3 of the UGC Act 1956 and is part of JSS Mahavidyapeetha, which runs a variety of educational institutions. This deemed-to-be university is recognized by Ministry of Education and accredited by NAAC with A++ Grade (3.61 CGPA). JSS AHER has been graded as Category-I Deemed-to-be University by UGC. The Deemed to be University has been focusing on teaching, research and health services since its inception. Under the leadership and gracious Patronage and Blessings of His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the Chancellor of JSS Academy of Higher Education & Research, Pro Chancellor, Dr. B. Suresh, a noted multifaceted leader of repute and Vice Chancellor, Dr. H. Basavanagowdappa, an acclaimed Administrator, the Deemed to be University has made great progress in grooming graduates, postgraduates, and Ph.D. researchers by providing effective value based education across our institutions by focusing on overall development of an individual through state-of-art facilities to make the learner a useful citizen to the society.

# **JSS Hospital**

The journey of healthcare services at Sri Math began in 1974 with the establishment of the JSS Primary Health Center on Ramanuja Road within the JSS institution complex, initially serving for annual student medical check-ups. In 1992, another center was established at the SJCE Campus. The JSS Medical College was founded in 1984, and by 1986, the primary health center was upgraded to a 60-bed teaching hospital. To meet the growing healthcare demands in the Mysore region, it eventually expanded to a 1,200-bed hospital, providing comprehensive medical services to the community.

# Department of Geriatrics JSS Hospital

The Department of Geriatrics at JSS Medical College and Hospital (JSSMCH), Mysore and plays a vital role in addressing the healthcare needs of the elderly population in the region. Established in 2014 as a specialized Geriatrics Clinic, the department was initiated in response to the growing geriatric demographic in India, where approximately 10-12% of the population is currently aged 60 and above—a figure projected to rise to 30-40% by 2050. This forward-thinking move underscores JSS Hospital's commitment to proactive healthcare, supported by the institution's management to develop a dedicated geriatric department for comprehensive elderly care.

Led by Dr. Prathiba Pereira, Professor and Head of the Department, the Geriatrics unit specializes in managing age-related conditions like chronic illnesses (e.g., diabetes, hypertension, arthritis), cognitive disorders, mobility issues, and polypharmacy challenges. Services include outpatient consultations, inpatient care, preventive health screenings, rehabilitation, and multidisciplinary approaches involving physiotherapy, nutrition, and psychology. The department actively engages in community education through lectures and programs.

## **Dept of Geriatrics:**

Dr Pratibha pereira, Prof & HOD Dr Tejaswini C J, Associate prof Dr Shilpa Avarebeel Associate prof Dr Kshama Ramesh, Asst Prof Dr Rajath Siddhu D S, SR

Dr Ajay Sharma S, DMO

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# MESSAGES



It is indeed a matter of pleasure that Alzheimer's & Related Disorders Society of India, Mysuru Chapter in association with dept of Geriatrics, JSS Hospital and people's Association for Geriatric Empowerment is organizing an international conference on 'Dementia: Policy, Practice & progress (DPPP)' on 28th and 29th November 2025.

Dementia, with a high incidence rate, fast-developing syndrome and large disease burden, raises challenges to global health and social systems. Detection of dementia requires knowledge of medical history and cognitive examination, while dementia diagnosis requires more professional medical examination results. In this regard, I am sure that this conference will deliberate and focus on innovative practices, emerging policies and progressive strategies at improving the lives of individuals living with dementia and their families by bringing various researchers, clinicians and policy makers and caregivers across the country and the world.

I take this opportunity to wish both the events a success.

With best wishes once again,

Dr. B Suresh Pro-Chancellor



It is indeed a matter of pleasure that Alzheimer's & Related Disorders Society of India, Mysuru Chapter in association with dept of Geriatrics, JSS Hospital and people's Association for Geriatric Empowerment is organizing an international conference on 'Dementia: Policy, Practice & progress (DPPP)' on 28th and 29th November 2025.

Dementia represents a significant global health crisis, characterized by its increasing incidence and substantial burden on affected individuals, families, and social systems worldwide. Addressing this challenge requires a multi-pronged approach encompassing robust detection protocols, professional diagnosis, and dedicated long-term support.

I am confident that this conference will serve as a vital international platform. By converging the expertise of researchers, clinicians, policy makers, and caregivers from across the country and the world, it is set to facilitate critical deliberations focused on innovative practices, emerging policies, and progressive strategies essential for enhancing the quality of life for those living with dementia and their care partners.

I extend my appreciation to the organizing committee for their initiative and leadership. I wish the conference a resounding success.

With best wishes,

Dr. H Basavanagowdappa Vice Chancellor



It is my privilege to extend warm greetings to all esteemed delegates, speakers, academicians, researchers, and participants attending the International Conference on Dementia: Policy. Practice and Progress, organized by the Alzheimer's and Related Disorders Society of India (ARDSI), Mysuru Chapter, in collaboration with ISS Hospital

Dementia poses a growing global challenge, with profound implications for individuals, caregivers, healthcare systems, and society at large. In this context, an international platform that brings together experts from diverse disciplines is both timely and indispensable. This conference provides an opportunity to exchange knowledge, deliberate on emerging evidence, and explore innovative strategies that strengthen dementia care, influence policy development, and enhance community support

I commend the tireless efforts of the organizing committee in curating a comprehensive scientific programme that reflects the latest advancements in dementia research clinical practice and public health initiatives. I am confident that the interactions and discussions over these two days will generate valuable insights, foster meaningful collaborations, and inspire future initiatives aimed at improving the lives of those affected by dementia

I extend my best wishes to all participants and sincerely hope that this conference serves as a catalyst for impactful ideas, strengthened partnerships, and continued progress in the field of dementia core and policy

Dr. B. Manjunatha Registrar



Dear Esteemed Delegates, Distinguished Experts, and Dedicated Local Organizers,

It is with immense warmth and pride that I welcome you all to ARDSiCON 2025 in the culturally rich city of Mysuru. As we gather at the Sri Rajendra Centenary Auditorium, JSS Hospital, our collective commitment to advancing dementia care and promoting a dementia-friendly society takes another meaningful step forward.

This year's conference, themed "Dementia: Policy, Practice & Progress," brings together a vibrant community of clinicians, researchers, policymakers, caregivers, and advocates from across India and beyond. Over the coming days, we will share cutting-edge research, explore the latest models in dementia care, and learn from each other's experiences through insightful presentations and workshops.

To the local organizing committee and volunteers: your tireless efforts and attention to detail have made this event possible. Your commitment ensures that every delegate experiences a welcoming, inclusive, and enriching environment. The hospitality and organizational excellence demonstrated by ARDSI Mysuru chapter and our partners (JSS college) are truly commendable.

Finally, to all delegates, I encourage you to engage deeply—ask questions, forge new connections, and take this opportunity to both share and gain knowledge. Let us together reaffirm our collective mission to make dementia care in India more accessible, compassionate, and effective.

Thank you for being part of ARDSICON 2025.

Let us make this gathering not just a meeting of minds, but a catalyst for enduring change

Warm regards,

Renu Vohra Chairperson, Alzheimer's and Related Disorders Society of India (ARDSI)

# <u>MESSAGE</u>

Hearty Welcome to ARDSICON, Mysuru

It gives me immense pleasure to extend my warm greetings to all delegates, speakers, researchers, practitioners, caregivers, policymakers, and industry partners participating in the International Conference on Dementia Policy, Practice and Progress, 28-29 November 2025, organized by Alzheimer's and Related Disorders Society of India, Mysuru chapter in association with Dept. of Geriatrics, JSS Medical College, JSSAHER, Mysuru.

On behalf of the Local Organizing Committee, I am honoured to welcome you to the historic city of Mysuru for this significant academic and professional gathering. Over the next two days, the conference will bring together distinguished experts from around the world to share cutting-edge research, innovative therapeutic approaches, care models, community support frameworks, and policy developments.

I take this opportunity to express my heartfelt appreciation to our advisory board, scientific committee, collaborators, sponsors and volunteers whose dedication and tireless efforts have made this conference possible. Most importantly, I extend my deep gratitude to all participants for their enthusiasm and contributions, without which this event would not have achieved its true purpose.

I hope that the discussions and deliberations during this conference inspire new ideas, partnerships and innovations that contribute to improved quality of life for individuals living with dementia and their families. May your time in Mysuru be professionally rewarding and personally memorable.

With warm regards and best wishes for a successful conference,

## Dr. Hanumanthachar Joshí

Chair, ARDSICON2025, Mysuru Principal, Sarada Vilas College of Pharmacy, Mysuru



Seeking the blessings of shri shri shivaratri Deshikendra Mahaswamiji it gives me me immense pleasure to welcome you all to the International conference on Dementia: Policy, Practice & Progress, hosted by \*\*JSS University, Mysuru\*.and ARDSI

Alzheimer's disease and other forms of dementia are rapidly emerging as major public health challenges across the globe. This conference is designed to provide a vibrant platform for researchers, clinicians, academicians, caregivers, and students to come together, share knowledge, exchange ideas, and explore innovative approaches in the prevention, diagnosis, and management of neurodegenerative disorders.

At JSS University, Mysuru, we strongly believe in fostering interdisciplinary research and academic excellence. This conference reflects our commitment to advancing scientific understanding and improving the quality of life of individuals affected by Alzheimer's disease.

I sincerely thank Pro vive chancellor, vice chancellor, registrar of JSSAHER principal of JSS medical college, Director of JSS hospital, Mr satish chandra for all the support given. Thank all the distinguished speakers, delegates, sponsors, and organizing committee members whose dedicated efforts have made this event possible. Your active participation will undoubtedly make this conference a meaningful and enriching experience.

I wish you all a fruitful scientific deliberation and a pleasant stay in the beautiful city of Mysuru.

With warm regards, **Dr. Pratibha Pereira** Organising secretary, ARDSICON Head, Dept of Geriatrics, JSS Medical College, JSSAHER, Mysuru



Seeking blessings from His Holiness Jagadguru Sri Shivaratri Deshikendra Mahaswamiji

It gives me immense pleasure to extend my warm greetings to all delegates, speakers, researchers, and distinguished guests participating in this International Conference on Alzheimer's disease. As an Associate Professor in the Department of Geriatrics and the Joint Organizing Secretary of this conference, I am honored to contribute to an event that brings together some of the brightest minds committed to advancing the science and care of Alzheimer's disease.

This conference serves as a meaningful platform for clinicians, academicians, neuroscientists, public health experts, and caregivers to exchange knowledge, foster collaborations, and explore innovative strategies for early diagnosis, management, and improving quality of life for older adults.

Our scientific committee has curated a diverse and rich program featuring cuttingedge research, thought-provoking discussions, and interactive sessions. I hope these deliberations will inspire new ideas, strengthen interdisciplinary partnerships, and ultimately contribute to better understanding and better care for individuals living with Alzheimer's disease.

I extend my heartfelt gratitude to my parent institution JSSAHER and ARDSI, Mysuru chapter, speakers, delegates, sponsors, and organizing team members whose dedication and support have made this conference possible. Your participation enriches this academic gathering and strengthens our collective commitment in addressing the growing challenges of dementia.

Wishing you all an academically rewarding and memorable experience.

# Dr.Shílpa Avarebeel

Associate Professor, Department of Geriatrics Joint Organizing Secretary, ARDSICON-2025



It is my great pleasure to welcome all delegates, speakers, researchers, and esteemed guests to ARDSICON 2025 - the International Conference on "Dementia: Policy, Practice and Progress," being held on 28-29 November 2025 in Mysuru. As Joint Organizing Secretary, I am honored to be part of this important academic event that brings together leading professionals dedicated to advancing dementia research, care, and policy.

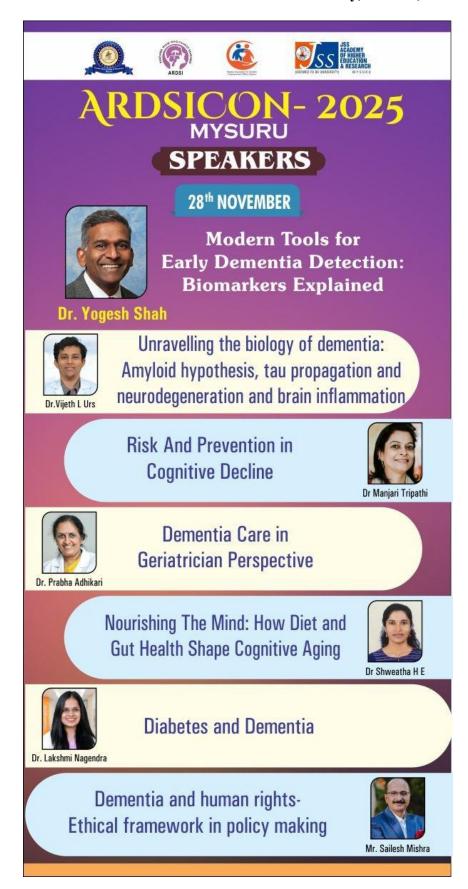
conference provides a vital platform for clinicians, neuroscientists, pharmacists, policymakers, and caregivers to share insights, discuss challenges, and explore innovative strategies aimed at improving the lives of individuals affected by dementia. The scientific program has been carefully designed to promote meaningful dialogue, foster collaboration, and encourage the translation of research into impactful practice.

I extend my sincere appreciation to ARDSI Mysuru Chapter, Sarada Vilas College of Pharmacy, our distinguished speakers, delegates, sponsors, and the entire organizing team for their unwavering support and commitment. Your collective efforts have made this conference possible and truly significant.

I wish all participants an enriching, inspiring, and memorable conference experience.

# Dr. Nagendra R

Joint Organising Secretary, ARDSICON 2025 Professor, Sarada Vilas College of Pharmacy, Mysuru







# PROGRAMME SCHEDULE

## PROGRAMME SCHEDULE

## DAY 1 (28th November 2025 - Friday)

Venue: Sri Rajendra Centenary Auditorium, JSS Hospital, Mysuru.

8:00AM- 9:00AM	REGISTRATION		
	RESOURCE PERSONS / SPEAKERS	TOPIC OF PRESENTATION	CHAIRPERSONS
9:00-9:25 AM	<b>Dr. Vijeth L Urs</b> Associate Neurologist, Narayana Multi Specialty Hospital, Mysuru	Unravelling the biology of dementia: Amyloid hypothesis, tau propagation neurodegeneration and brain inflammation.	Dr. Vidya C.S. Professor & Head, Department of Anatomy, JSS Medical College, Mysuru.  Dr. Vani K. Professor, Department of Pathology, JSS Medical College, Mysuru.
9:30-9:55 AM	Dr. Yogesh Shah Geriatrician and Director of Palliative Care Services at Broadlawns Medical Center in Des Moines, USA	Modern Tools for Early Dementia Detection: Biomarkers Explained.	Dr. Harsha S. Professor & HOD, Department of Neurology, JSS Hospital, Mysuru.  Dr. Sathish K. Principal, Mysore Medical College and Research Institute (MMC&RI), Mysuru.
10:00- 10:30 AM	INAUGURATION CEREMONY		
10-30- 10:45AM	TEA BREAK		
10:45- 11:30 AM	Moderator:  Dr. M. Kishor  Professor & Head,  Department of Psychiatry,  JSS Medical College  &Hospital, JSSAHER,  Mysuru  Dr. Steve Paul Manjaly  Senior Consultant	Debate: Resource allocation in dementia. Should dementia cure research be prioritized over care?  Cure research - Dr. Steve Paul Manjaly Care needs- Dr. Shasthara P.	
	Geriatrician, Apollo Hospitals Bannerghatta Road, Bengaluru		

11:30- 11.55AM	Dr. Shasthara P Associate Professor, Dept of Neurology, JSS Medical College & Hospital, JSSAHER, Mysuru  Dr. Manjari Tripathi Head of Department Neurology, All India Institute Of Medical Sciences, New Delhi, India	Risk and Prevention in Cognitive Decline	Dr. Bharathi M.B. Professor & Head, Dept. of ENT, JSS Medical College, Mysuru.  Dr. Srivatsa Principal, Govt. Ayurveda Medical College, Mysuru.
12:00- 12:25PM	Dr. Prabha Adhikari Vice President, PAGE, Professor of Geriatrics Yenopoya Medical College & Hospital, Mangalore	Dementia care in Geriatrician perspective	Dr. Ravikumar Y.S. Professor & HOD, Dept. of General Medicine, JSS Medical College, Mysuru.  Dr. Suneetha D. K. Professor & HOD, Dept. of Emergency Medicine, Adichunchanagiri Institute of Medical Sciences, Bellur.
12:30- 12.55PM	Dr. Trishala D Assistant Professor, Dept of Clinical psychology, JSS Medical College and Hospital, JSSAHER, Mysuru	Interventions to Enhance Cognitive Reserve in Early Alzheimer's Disease	Dr. Bindu Annigeri Assistant Professor, Department of Psychiatry, JSS Medical College, Mysuru.  Dr. Sudeep P.K. Assistant Professor, Department of ClinicalPsychology, JSS Hospital, Mysuru.
1:00 PM- 1.25PM	Dr. Lakshmi Nagendra Associate Professor, Department of Endocrinology, JSS Hospital, JSSAHER, Mysuru	Diabetes and Dementia	Dr. Ajay Hanumanthu Assistant Professor, Dept. of Endocrinology, JSS Medical College, Mysuru  Dr. K.C. Shashidhara Professor & Unit Chief, Dept. of General Medicine, JSS Medical College, Mysuru. Senate Member, Rajiv Gandhi

			University of Health Sciences (RGUHS) Bengaluru.
1:30-2:30 PM	LUNCH		
2:30-400 PM	of Mental Health and N (NIM 2) Social A Mrs. Ren Chairperson, Alzheimer's & F India, Ne Dr Jamuna Secretary of Mysore 3) Occupation Dr. Amitabh K Professor and Head, De Therapy at JSS Med 4) Geriat Dr. Arvind Head, St. John's Geriatr Professor of Community N	pai Shabadi partment of Community al College, Mysuru. e of piatrist — ivakumar Psychiatry, National Institute feuro Sciences, Bengaluru HANS) Activists — u Vohra Related Disorders Society of w Delhi prani V Mirle, e Art Gallery, Mysuru al Therapist — ishor Dwivedi, partment of Occupational dical College, Mysuru errician —	Panel discussion – Integrating care in Alzheimer's- Role of various specialists
4:00-4:25 PM	<b>Mr. Sailesh Mishra</b> Founder President Silver Innings Mumbai, India.	Dementia and human rights Ethical frame work in policy making  Dr. H. P. Shobha Medical Superintendent, Hospital, Mysuru  Dr. Archana. S, Associate Professor Department of Anesthesi Chief Coordinator of Ski Simulation Centre, JS Medical College, Mysu	
TEA BREAK			
CULTURAL EVENTS			

DAY 2 (29th November 2025 - Friday)

Venue: Sri Rajendra Centenary Auditorium, JSS Hospital, Mysuru.

	RESOURCE PERSONS / SPEAKERS	TOPIC OF PRESENTATION	CHAIRPERSONS
9:00-9:25 AM	Dr. Akila Prashant Professor and Head, Department of Biochemistry, JSS Medical College, Mysuru	Investigating Alzheimer's through Proteomics and Genetics	Dr. Deepa Bhat, Professor & Genetic Counselor, Department of Anatomy, JSS Medical College, Mysuru.  Dr. Kusuma K. S Associate Professor, Department of Biochemistry, JSS Medical College, JSSAHER, Mysuru.
9.30-9.55 AM	<b>Dr. Aumir Moin</b> Senior Neurologist, Apollo BGS Hospitals Mysuru	Real-World Experience with Anti-Amyloid Therapy	Dr. Nemichandra S.C Associate Professor, Department of Neurology, JSS Medical College, Mysuru  Dr. M D Krishna Narayanan Associate Professor, Department of Neurosurgery, JSS Medical College, Mysuru.
10.00-10.25 AM	Dr. Shwetha H. E. Assistant Professor, Department of Nutrition and Dietetics, JSSAHER, Mysuru.	Nourishing The Mind: How Diet and Gut Health Shape Cognitive Aging	Dr. Sridevi Annapurna Singh Former Director, CSIR— CFTRI, Mysuru.  Dr. Deepak Suvarna Gastroenterologist, Associate Professor, Medical Gastroenterology, JSS Medical College, Mysuru.
10.30-10.45 AM		TEA	

10.45-11.30 AM	Dr. DY Suharya Regional Director Asia Pacific Alzheimer's Disease International, 15 Bluelion Place, London, SE1 4PU,UK  Noriyo Washizu Director, Alzheimer's Association Japan, Kyoto,	From global vision to national action implementing WHO framework for dementia care (Virtual)  Advocacy of both people living with Dementia and their	Dr. Reji Paul National Treasurer, ARDSI, India  Mr. R. Narendhar Executive Director, ARDSI National Office, India
	Japan.	family members (Virtual)	Dr. Vikram Patil
11.30- 11.55 AM	Dr. Mahanand B. S. Professor, Information Science & Engineering, JSS Science and Technology University, Mysuru	Advanced interpretable diagnosis of Alzheimer's disease with explainable AI	Dy Dean, Research (Clinical), JSS AHER & Professor, Department of Radio-Diagnosis, JSS Medical College, Mysuru.  Dr. Shivananda Manohar J Associate Professor, Department of Psychiatry, JSS Medical College, Mysuru.
12.00-12.25 PM	Dr. S. P. Goswami Professor of Speech Pathology and Dean Research, All India Institute of Speech and Hearing, Mysuru	Enhancing Access to Dementia Care: Technology-Driven Assessment and Treatment of Cognitive-Communication Deficits	Dr. Suma R. Professor and Principal, JSS Institute of Speech and Hearing, Mysuru.  Dr. Hemanth N Professor and HOD of Audiology, JSS Institute of Speech and Hearing, Mysuru
12.30-12.55 PM	<b>Dr. Ramani Sundaram</b> Executive Director-Dementia India Alliance, India	Integrating Dementia Care into India's Public Health System: Lessons from Practice	Dr Anil S Bilimale Chief Program Coordinator and Associate Professor, School of Public Health JSS Medical College, JSSAHER, Mysuru  Dr. Manjunatha S. N Professor, Department of Community Medicine, MMCRI Mysuru.

	The state of the s		
1.00-1.25 PM	Dr. Vishwanath Krishnamurthy Professor, Department of General Medicine, M S Ramaiah Medical College, Bengaluru	Advance care planning in Dementia. Guidelines and ethical issues	Dr. Akshay H.M. Associate Professor, HOD Department of Critical Care Medicine, JSS Medical College, Mysuru.  Dr. Anil Kumar M.R. Professor, Department of Anesthesiology, JSS Medical College, Mysuru.
1:30-2:30 PM	LUNCH		
	Symp	osium- Dementia care models in c	community
2.30-3.30	Moderator: <b>Dr. Priya Raghavan</b> , Consultant geriatric psychiatry, Cadabams Hospitals, Bengaluru. Speakers:		
	Dr. Radha S Murthy, President- Dementia India Alliance, Co-founder Nightingales Medical Trust, Bengaluru. Dementia healthcare framework in Dementia India Alliance		
PM	<b>Dr. Krishna K R</b> -Consultant Psychiatrist, Mysuru- Dementia care model in Mysuru.		
	Dr Pretesh R Kiran, Professor, Department of Community Health, Faculty, Department of Medical Education, Coordinator, Senior Citizen Health Service, Convener, Disaster Management Unit, St John's Medical College Bangalore- Dementia inclusive future. Where are we and what is awaited		
3.30-3.55 PM	<b>Dr. M. A. Shekar</b> , Former Vice Chancellor, Adichunchanagiri University, B G Nagara, Nagamangala, Mandya	A gentle reminder that you don't need a perfect memory to live a meaningful life	Dr. M. Premanath Senior Consultant in Internal Medicine. Mysuru  Dr. Purushotham Sastry, Former Professor Department of Orthopedics, JSS Medical College, Mysuru.
4.00-4.30 PM	Prize distribution to oral and poster presentation winners and Valedictory.		
4.30 PM	HIGH TEA		
PM	Nagamangala, Mandya	oral and poster presentation wi	of Orthopedics, JSS Medical College, Mysuru.

# PLENARY TALKS

#### Modern Tools for Early Dementia Detection: Biomarkers Explained

**Dr. Yogesh Shah,** M.D., M.P.H., FAAFM Geriatrician and Director of Palliative Care Services at Broadlawns Medical Center in Des Moines, USA



#### **Abstract:**

In India, primary care physicians are often the first point of contact for older adults with early memory complaints, yet Mild Cognitive Impairment (MCI) and early Alzheimer's disease (AD) frequently go undetected. Early recognition is vital—not only for initiating timely interventions but also for identifying reversible causes, enabling better patient and caregiver planning, and improving quality of life.

This session will equip primary care doctors with practical strategies to detect MCI during routine visits. The talk will also highlight the emerging role of **plasma-based biomarkers**—including plasma  $A\beta$ , phosphorylated tau (p-tau), and neurofilament light—in complementing clinical evaluation.

With the anticipated arrival of disease-modifying therapies, biomarkers will play a greater role in selecting appropriate patients, monitoring disease progression, and avoiding unnecessary treatments in those with mixed or non-AD dementias. The ethical considerations of biomarker use—especially in low-resource contexts—will also be addressed, including interpretation challenges and counseling for patients and families.

The session will conclude with a discussion on multimodal prevention strategies relevant to Indian practice: healthy diet patterns, physical activity, mental and social engagement, and management of comorbidities such as hypertension and diabetes. Through an interactive format, participants will gain tools to integrate early detection and biomarker-informed decision-making into everyday practice, fostering earlier intervention and better dementia care across India.

#### **Learning Outcomes:**

- Recognize MCI in primary care settings.
- Understand the utility and limitations of plasma biomarkers.
- Apply ethical and practical considerations in biomarker testing.
- Implement culturally relevant multimodal prevention strategies.

# Dementia Policy, Practice, and Progress – Lessons Learned from ADI Asia Pacific Regional Members

# Smt. Meera Pattabiraman Vice Chair, Alzheimer's Disease International President Emeritus, Alzheimer's & Related Disorders Society of India



#### **Abstract**

The Global Action Plan on the public health response to dementia is the only international instrument available to governments that provides holistic support to the over 55 million people worldwide who are living with dementia, through National Dementia Plans, a policy that when implemented and funded, are one of the most cost-effective means of ensuring care, support, and sometimes treatment options for those living with dementia and their carers.

Recent data by ADI has shown that dementia is set to become the third leading cause of death globally by 2040, making these interventions all the more critical and timely.

The Asia Pacific region is an area of great leadership and progress within the area of dementia care and support; nearly half of all people living with dementia globally live within this region (26 million).

Within the Asia-pacific region a number of robust National Dementia Plans have been implemented that prioritise dementia care and support for their communities. Japan has implemented a Long-Term Care Insurance scheme designed for older adults to provide support as they age. A second example comes from the Republic of Korea, where there have been 4 National Dementia plans since 2008, showcasing the longevity of their commitment to supporting their citizens living with dementia, and their carers. Other examples from the Asia Pacific region will also be showcased during this presentation. As well, examples will be given on how ADI's Asia Pacific Regional Members prioritise a strong sense of community in the spirit of 'members helping members' through civil society and community-based initiatives.

## Dementia and Human Rights – Ethical Framework in Policy making

#### Mr. Sailesh Mishra

Founder President - Silver Innings Group

Email: silverinnings@gmail.com

Mobile: 9819819145

#### **Abstract**



In India, the ethical framework for dementia care and policy is evolving, drawing on the principles of autonomy, beneficence, non-maleficence, and justice, and is largely governed by the Mental Healthcare Act, 2017, and the Maintenance and Welfare of Parents and Senior Citizens Act, 2007.

However, the country still lacks a dedicated, comprehensive national dementia policy, and implementation relies heavily on familial and local-level initiatives.

State of aging in India –according to NitiAayog's paper on senior care reforms in India:

- 1) The number of people aged 75 years and above is expected to increase by an astounding 340% between 2011 and 2050.
- 2) 71% of elderly persons reside in rural areas.
- 3) 75% of the elderly have one or more chronic diseases.
- 4) Every 4th Indian over 60 years reported having poor health.
- 5) Around 20% of the elderly in India have mental health issues.

The estimated prevalence of dementia in India is around 7.4% for adults aged 60 and older, which equates to approximately 8.8 million people. However, there is significant variation across different states, with higher prevalence rates found in states like Kerala, Goa, Andhra Pradesh, and Tamil Nadu. Dementia is more common in females than males and is higher in rural areas compared to urban ones.

Recognizing how often people living with dementia are denied their human rights, the World Health Organization recommends a human rights-based approach for people living with dementia. WHO prescribes a PANEL+1 approach, which stands for participation, accountability, non-discrimination, empowerment, and legality. It is a framework provided to ensure the rights and dignity of people with dementia. This framework is crucial and must be considered when designing strategies and policies at international, national, and local levels

# Beyond Neurology: A Geriatrician's Perspective on Dementia as a Multifactorial Geriatric Syndrome

#### Dr Prabha Adhikari M.R.

Professor and HOD Geriatric Medicine Yenepoya Medical College, Mangalore



Dementia stands as one of the **Geriatric Giants** that geriatricians frequently encounter. Consequently, the **Comprehensive Geriatric Assessment (CGA)**, a multicomponent evaluative tool, includes **memory assessment and screening** as a critical component.

The foundation of the CGA was laid by **Dr. Marjory Warren** (1947–1960), a pioneering British physician and the founder of Geriatric Care. In her long-term care ward, she utilized a comprehensive assessment of the elderly that encompassed memory, mood, medications, functional status, social needs, mobility, balance, and nutritional status. Crucially, she paired this assessment with **multicomponent intervention** delivered by a multidisciplinary team, including physiotherapists, nutritionists, and social workers, successfully mobilizing and discharging most patients.

This holistic view was later crystallized by **Bernard Isaac**, who coined the term "**Geriatric Giants**" to describe the **5 I's**: Intellectual impairment, Immobility, Instability, Incontinence, and Inappropriate medications. These conditions are characterized by **multiple interacting pathologies and risk factors** that significantly impair the quality of life of older adults. The core principle of geriatric medicine, however, is that **targeting these multiple reversible pathologies and risk factors can lead to significant functional improvement and improved quality of life.** 

#### Focus on Dementia as a Geriatric Giant

Viewing **dementia** through the lens of a Geriatric Giant reveals its susceptibility to multiple risk factors. Nearly **14 associated risk factors** are considered **modifiable**. Similarly, the presentation of cognitive impairment often involves **multiple pathologies and several potentially treatable conditions**.

True **reversible dementias** include conditions like Vitamin B12 deficiency, hypothyroidism, subdural hematomas, normal pressure hydrocephalus, and autoimmune encephalitis. Furthermore, numerous **pseudodementias** and potentially treatable causes of cognitive decline must be identified, such as ischemic events, **delirium** (which is itself multifactorial), and **depression**.

In a geriatric setting, additional reversible or contributing factors include:

- Orthostatic hypotension or other forms of low blood pressure.
- Associated vascular parkinsonism.
- Neuroinflammatory conditions.
- Thromboembolic conditions leading to cerebral small vessel disease and lacunar strokes, which accelerate dementia progression.

#### **Multicomponent Intervention and Local Experience**

Multicomponent lifestyle interventions are now recognized as foundational dementia management. **Nutrition therapy** using the **MIND diet**, regular **physical activity**, **cognitive stimulation activities**, and **socialization** are proven strategies to improve cognition. The **FINGER study** has clearly demonstrated that such multicomponent intervention is highly effective and offers a valuable, often more affordable and accessible, alternative to expensive anti-amyloid therapies.

In our clinical experience, managing comorbidities and applying targeted interventions has yielded positive outcomes. This includes:

- Demonstrated cognitive improvement in patients with Vascular dementia or mixed dementia (including vascular dementia) treated with **Pramipexole** (Our data)
- Aggressive management of **delirium and depression**.
- The appropriate use of statins and antiplatelet agents.
- Supplementation with Vitamin B12 and D3.
- Improvements in mobility and balance through exercise.
- Optimization of blood pressure and glucose control.
- Lifestyle adjustments such as avoiding air pollution, correcting vision and hearing deficits, improving sleep quality, controlling weight, and encouraging the learning of new skills to maintain engagement and purpose.

Our findings confirm that these diverse, multicomponent interventions have a positive and measurable effect on cognition in the elderly.

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# Integrating Dementia Care into India's Public Health System: Lessons from Practice

# **Dr. Ramani Sundaram,**Executive Director, Dementia India Alliance

#### **Abstract**

Policy and advocacy are crucial in India to address the growing crisis of dementia due to a lack of public awareness, infrastructure, and specialized care, which is causing significant psychological and economic burdens on families and caregivers. A national dementia policy is needed to integrate dementia care into existing health programs, expand insurance coverage, fund research, and create standardized referral pathways and registries, while advocacy is necessary to push for these changes and reduce the stigma associated with the condition.

The Dementia India Alliance (DIA) has been actively working across states to support the integration of dementia care within public health structures, drawing on lived practice, partnerships, and continuous engagement with government systems.

DIA's work in Karnataka marks a significant milestone, with the state formally recognising dementia as a public health priority and working on the State Dementia Action Plan in collaboration with the Department of Health & Family Welfare and NIMHANS. This experience demonstrated how structured training pathways, primary healthcare integration, and inter-sectoral partnerships can form a scalable model for dementia-inclusive governance.

Subsequent consultative engagements in Tamil Nadu and Puducherry further strengthened DIA's understanding of region-specific needs and highlighted the importance of aligning dementia care with existing NCD programmes, elder care initiatives, and district-level health systems. In Andhra Pradesh, where an official announcement is anticipated, groundwork with state leadership has already laid the foundation for a future dementia policy framework.

The most recent milestone is the National Dementia Action Plan consultative meeting held in New Delhi, where DIA joined senior leaders from government, research institutions, and civil society to shape a unified national approach. The outcomes of this consultation are expected to be submitted to the Ministry of Health and Family Welfare (MoHFW), Ministry of Social Justice and Empowerment (MoSJE), and NITI Aayog.

Drawing from these multi-state and national experiences, this presentation details on the practical lessons and scalable strategies for embedding dementia care into India's public health system, with a focus on early detection, post-diagnostic support, workforce development, and community-based care models.

# **Enhancing Access to Dementia Care through Technology-Based Interventions Using the CT App**

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#### **Abstract**

Dementia is an escalating global health challenge, with prevalence expected to triple by 2050. Access to timely and sustained care remains limited, particularly in low-resource and rural regions where specialist services are scarce. To address this gap, the present study focuses on the development and evaluation of a Cognitive Therapy (CT) App, a technology-based intervention designed to enhance accessibility, engagement, and continuity of dementia care.

The CT App integrates cognitive stimulation exercises, memory aids, and caregiver support tools within a user-friendly mobile platform. It enables remote monitoring, personalized care planning, and data-driven feedback, allowing healthcare professionals to track progress and deliver tailored interventions. A pilot study involving individuals with mild-to-moderate dementia and their caregivers evaluated usability, engagement, and preliminary outcomes.

Findings indicated high user participation, improved adherence to cognitive tasks, enhanced caregiver confidence, and reduced stress. Participants reported better emotional well-being and satisfaction with the app's design and accessibility. The intervention demonstrated potential for early detection of cognitive decline and effective caregiver support through real-time monitoring.

The CT App bridges critical gaps between patients, caregivers, and professionals, extending care beyond clinical boundaries. Its scalable, low-cost model aligns with community-based rehabilitation and telehealth initiatives. By integrating cognitive rehabilitation with digital accessibility, the CT App exemplifies how technology can democratize dementia care, making it more inclusive, sustainable, and responsive to diverse population needs.

# Unravelling the Biology of Dementia- Amyloid Hypothesis, Tau Propagation and Neurodegeneration and Brain Inflammation.

**Dr. Vijeth L Urs**Associate Neurologist,
Narayana Multi Specialty Hospital, Mysuru



Neurodegenerative diseases such as Alzheimer's disease (AD) arise from a convergence of molecular, cellular, and network-level processes that progressively impair synaptic integrity and cognitive function. This presentation synthesizes current understanding of five key mechanistic domains—amyloid biology, tau pathology, prion-like propagation, neuroinflammation, and synaptic toxicity—and highlights their interdependence in driving disease evolution.

Genetic determinants, including mutations in APP, PSEN1, and PSEN2, as well as the APOE  $\epsilon$ 4 allele, alter amyloid precursor protein processing and shift cleavage toward the  $\beta$ -secretase/ $\gamma$ -secretase pathway, producing aggregation-prone A $\beta$ 42. These peptides oligomerize, impair clearance mechanisms, and initiate downstream neurotoxic cascades. Tau dysfunction emerges as hyperphosphorylation disrupts microtubule stability, generating misfolded species that assemble into paired helical filaments and neurofibrillary tangles. Distinct 3R and 4R tau isoforms contribute to phenotypic variability across tauopathies.

Both  $A\beta$  and tau exhibit prion-like properties, acting as conformational templates that recruit native proteins and propagate pathology trans-synaptically along large-scale neural networks, explaining stereotypic patterns such as Braak staging. Neuroinflammation further amplifies disease, as microglia transition to disease-associated phenotypes, astrocytes adopt reactive states, and complement-mediated synaptic pruning accelerates neuronal vulnerability. Cytokines, inflammasome activation, and impaired proteostasis reinforce amyloidogenic and tau-phosphorylating environments.

Synaptic toxicity represents the final common pathway, where  $A\beta$  oligomers, mislocalized tau, disrupted calcium signaling, and immune-mediated synapse loss converge to impair long-term potentiation and network connectivity, particularly within the default mode network.

Overall, this integrative framework underscores how amyloid, tau, inflammatory signaling, and network dysfunction interact to produce progressive neurodegeneration, offering insights relevant to biomarker development and therapeutic targeting.

#### Nourishing the Mind: How Diet and Gut Health Shape Cognitive Aging

**Dr. Shweatha H. E.**Assistant Professor,
Department of Nutrition and Dietetics,
JSSAHER, Mysuru.



#### **Abstract**

Emerging evidence underscores a pivotal role of gut microbiota and diet in modulating cognitive aging via the microbiome—gut—brain axis. Aging is frequently accompanied by dysbiosis—a decline in microbial diversity and altered abundances of beneficial taxa such as *Odoribacter* and *Butyricimonas*—which are associated with brain structural decline and cognitive impairment.

Dietary patterns rich in fiber and polyphenols, such as the Mediterranean diet, foster microbial communities that generate short-chain fatty acids (SCFAs), strengthen gut barrier integrity, reduce systemic inflammation, and support neuroprotection. Conversely, dietary fiber deficiency has been shown in animal models to elevate pro-inflammatory gut lipopolysaccharide (LPS), compromise barrier function, and trigger microglial activation, ultimately leading to synaptic loss in the hippocampus and cognitive decline.

Intervention studies further reveal that probiotic supplementation (e.g., *Lactobacillus rhamnosus* GG) in older adults correlates with improved cognition, possibly via modulation of taxa linked to mild cognitive impairment (MCI) and reductions in systemic inflammation. In preclinical Alzheimer's disease models, probiotics can reduce tau pathology, lower inflammatory cytokines, and boost SCFA-producing species, thereby enhancing cognitive performance.

Moreover, recent work suggests that "brain age"—an MRI-derived measure of structural aging—mediates the relationship between gut microbiome dysbiosis and cognitive performance, independent of chronological age.

Taken together, these findings implicate diet-induced modulation of gut microbiota as a promising, non-pharmacological strategy to preserve cognitive function during aging, highlighting the therapeutic potential of prebiotics, probiotics, and dietary interventions aimed at restoring microbial homeostasis.

# Molecular Profiling of Alzheimer's disease: Proteomic, Genetic, and Biochemical Insights

#### Dr. Akila Prashant

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#### **Abstract**

Alzheimer's disease (AD) arises from complex molecular changes that begin years before symptoms appear. Integrating proteomics, genetics, and biochemical markers has strengthened our ability to characterize these early events and move toward precision diagnosis. Proteomic studies have expanded understanding of amyloid processing, tau phosphorylation, synaptic dysfunction, neuroinflammation, and metabolic alterations. High-resolution mass spectrometry now enables identification of protein signatures in cerebrospinal fluid and plasma that reflect dynamic changes in neuronal injury.

Biochemical markers remain central to clinical evaluation. Core CSF biomarkers—Aβ42, Aβ42/40 ratio, total tau (t-tau), phosphorylated tau (p-tau)—continue to provide reliable support for AD diagnosis. Newer plasma-based markers such as p-tau181, p-tau217, p-tau231, neurofilament light chain (NfL), glial fibrillary acidic protein (GFAP), and Aβ42/40 are increasingly recognized for their utility in screening, risk stratification, and monitoring disease progression. Metabolic indicators including lactate, kynurenine pathway metabolites, lipidomic shifts, and alterations in antioxidant enzymes offer additional insights into mitochondrial dysfunction and oxidative stress.

Genetic discoveries add further clarity: APOE £4 remains the strongest risk factor for late-onset AD, while pathogenic variants in APP, PSEN1, and PSEN2 define familial disease. Genome-wide association studies identify additional pathways involving immune regulation, endosomal trafficking, and lipid metabolism. Combining proteomic signatures with genetic risk and validated biochemical markers improves predictive accuracy and supports patient selection for disease-modifying therapies.

This talk will outline how proteomics, genetics, and biochemical markers together enhance early detection, refine biological understanding, and guide therapeutic strategies, while highlighting practical considerations for integrating these tools in clinical and research settings.

#### Advanced interpretable diagnosis of Alzheimer's disease with explainable AI

#### Dr. Mahanand B S

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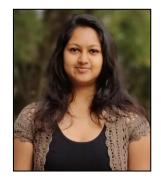


#### **Abstract**

Artificial Intelligence (AI) is a general term that implies the use of a computer to model intelligent behaviour with minimal human intervention. AI is generally accepted as having started with the invention of robots. The field of healthcare has arguably been more positively affected by modern AI techniques than any other industry. Although we are still in the early stages of its development, AI is already just as capable as (if not more capable than) doctors in diagnosing Alzheimer's disease patients. AI systems are good, but sometimes make mistakes, and human users will not trust their decisions without explanation There is a tradeoff between AI accuracy and explainability: the most accurate methods, such as convolutional neural networks, provide no explanations. The whole calculation process is turned into what is commonly referred to as a "black box" that is difficult to interpret. Explainable AI (XAI) aims to create a suite of techniques that produce more explainable models, while maintaining a high level of searching, learning, planning, reasoning performance and enable human users to understand, appropriately trust, and effectively manage the AI systems. Different types of XAI techniques include layer-wise relevance propagation (LRP), Uniform Manifold Approximation and Projection (UMAP), Local Interpretable Model-agnostic Explanations (LIME), SHapley Additive exPlanations (SHAP), contextual importance and utility (CIU), Training calibration-based explainers (TraCE), and Gradient-weighted Class Activation Mapping (Grad-CAM). Overall, explanation in AI shall provide better decision making insights for researchers, practitioners in the healthcare industry and in the years to come, XAI's role in diagnosis of Alzheimer's disease will only grow.

# Interventions to Enhance Cognitive Reserve in Early Alzheimer's Disease: A Multidomain Approach

# Dr Trishala D Assistant Professor, Dept of Clinical psychology, JSS Medical college and Hospital, JSSAHER, Mysuru



#### **Abstract**

Cognitive reserve—the brain's ability to compensate for neuropathological changes—plays a critical role in slowing the progression of early Alzheimer's disease (AD). Strengthening this reserve through structured, multidomain interventions can help individuals maintain independence and optimize daily functioning. Evidence supports combining cognitive stimulation, physical exercise, social engagement, and healthy lifestyle practices for maximum impact. Cognitive Stimulation Therapy (CST), computerized training, and reality orientation have shown improvements in memory, attention, and problem-solving. Physical activities such as walking and yoga enhance neuroplasticity and emotional well-being, while social participation reduces isolation, an increasingly relevant issue among older adults in India. Lifestyle strategies—including an Indian-adapted MIND diet, sleep regulation, and stress reduction—further promote brain resilience. Creative interventions like music and reminiscence therapy activate preserved memory pathways and are culturally meaningful. Together, these approaches offer a practical, culturally sensitive framework for enhancing cognitive reserve and improving outcomes in early-stage AD.

#### Real World Experience with AntiAmyloid Therapy

# Dr. Aumir Moin Senior Consultant Neurologist Apollo BGS hospitals, Mysore



#### **Abstract**

Anti-amyloid monoclonal antibodies (MABs) are the first agents approved by the FDA as Disease Targeted Therapies (DTTs) for the treatment of early Alzheimer's Disease (AD). They change one of the defining pathophysiological features of AD, the "Amyloid Plaques". Anti-amyloid MABS do not improve symptoms, but arrest progression of AD; they slow clinical decline by about 30% and offer patients with AD the opportunity to function at a higher level for a longer time. Provide a foundation for developing more efficacious, safer, and more convenient MABs as well as other types of DTTs for AD and other neurodegenerative disorders. The real-world experience across the world has shown similar benefits to phase 3 RCTs and no increased adverse effects. Only issues have been logistics and patient fatigue, and demotivation in the long run

#### You don't need a perfect memory to live a meaningful life - A gentle reminder

#### Dr. M. A. Shekar. MD (Med0, FRCP (Edin)

Former Vice Chancellor, Adichunchanagiri University, B G Nagara, Nagamangala, Mandya



#### **Abstract**

Scientific thought with philosophical overtures: Human life to be meaningful is not dependent on perfect memory, but on the adaptive integration of experience, emotion, and attention. Contemporary research in cognitive neuroscience challenges the longstanding assumption that robust memory is essential for living a meaningful and purposeful life. Emerging evidence suggests that meaningful living is not just about exhaustive recall but more of the dynamic processes of interpretation, narrative construction, and present-moment engagement. Memory declines naturally as age advances, and fluctuates with stress, aging, and neurological variation. But the capacity for purpose, connection, and well-being remains resilient. Forgetting, once viewed as a deficit, is now recognized as a functional feature of the brain, supporting emotional regulation, and creative recombination.

Thus, the pursuit of a "perfect memory" is both biologically unrealistic and philosophically unnecessary. A "meaningful life" arises not from the precision with which we store our past, but from the wisdom with which we live in our present and envision our future. Thismeaning arises through dynamic interactions between memory, emotion, and conscious engagement,

This concept of memory redefines it not as a measure of human worth, but as one component of a cognitive ecology that enables purpose, resilience, and flourishing.

# Dementia Inclusive Future: Where We Are and What Awaits - International and Indian Context

#### Dr Pretesh Rohan Kiran,

Associate Professor, Department of Community Health, Coordinator, Senior Citizen Health Service, St John's Medical College, Bengaluru. preteshkiran@stjohns.in, Tel 9845272765



Dementia currently ranks as the seventh leading cause of death globally and represents a major source of disability among older populations. Global projections estimate dementia cases will surge from approximately 57 million in 2019 to 153 million by 2050, driven primarily by population aging and demographic shifts.

Internationally, the 2024 Lancet Commission identified 14 modifiable risk factors accounting for roughly 45% of dementia cases, though recent research suggests expanding risk models to include poverty, wealth shocks, income inequality, and HIV could potentially increase preventable cases to about 65%. As of May 2025, 45 WHO Member States have developed national dementia plans, falling short of the WHO's 75% target for 2025. Japan exemplifies best practices with its Basic Act on Dementia enacted in 2023 and comprehensive 2024 Basic Plan that meaningfully involves people living with dementia in policymaking. In India, the challenge is particularly acute. India expects 340 million older adults by 2050, with 5.3 million already living with dementia since 2020. Despite comprehensive reports in 2010 and 2020, India lacks a national dementia policy, dedicated funding, and clear implementation targets as of 2024. The treatment gap remains severe at nearly 90%, attributed to poor awareness, insufficient trained professionals, and lack of public health prioritization.

St. John's Medical College plays a significant role through its comprehensive community-based elderly care model. The St. John's Geriatric Centre, operational since 2024, provides holistic services including day-care, short-term and long-term care, and hospice services under one roof. The Department of Community Medicine leads health camps, mobile clinics, and awareness drives reaching over 300,000 underserved individuals yearly, with specific initiatives in geriatric care. This community engagement model promotes healthy aging through outreach programs, caregiver training, and research, serving as a vital link between tertiary care and community-level interventions.

The future demands coordinated action: expanding prevention frameworks, developing culturally appropriate interventions, ensuring meaningful involvement of affected individuals, and establishing comprehensive national policies. Success requires addressing socioeconomic determinants alongside clinical care, particularly in low and middle-income countries where the burden will increase most dramatically.

International Conference on "Dementia: Policy, Practice, and Progress (DPPP)"

# SCIENTIFIC ABSTRACTS

### **Online Oral Presentations**

S. NO	ABSTRACT NUMBER	PRESENTING AUTHOR	TITLE OF THE PAPER
1	PN003	Tiratha Raj Singh	Integrative Multi-Omics and AI-Driven Approaches for Molecular Characterization and Therapeutic Targeting in Alzheimer's Disease
2	PN005	Dr Sivakumar B	Ellambai - a major source of forskolin for the treatment of Neurodegenerative diseases
3	PN009	Devi Tharanya	Transforming Dementia Care in India: An Innovative Primary Health Care Model for Patients, Families, and Communities
4	PN010	Mohamed Safik	Exploring Clinical Perspectives on Non- Pharmacological Interventions in Dementia Care
5	PN012	Dr.Kamal Shigli	Barriers to oral health care in older adults as perceived by non-medical professionals

### **Offline Oral Presentations**

S. NO	ABSTRACT NUMBER	PRESENTING AUTHOR	TITLE OF THE PAPER
1	PN007	Vinit N.Kaushik	Raised Well-Being 1m
2	PN011	Dr. Leemalol Mathew	Attachment Behaviours in Dementia: Understanding Emotional Expressions
3	PN016	Suma V. S	From Sleep To Synapses: Melatonin's Role In Geriatric Dementia
4	PN017	Dr. Sumaiya Taj	Malnutrition And Cognitive Decline In Dementia: Exploring Micronutrient Roles And The Pharmacist's Contribution
5	PN018	Charan Raj N	Evaluation Of The Dietary Fibres Of Chia Seeds In Alleviating Depression Associated With Type2 Diabetes In Rats
6	PN019	Tejas D. M	Screening Of Anti-Parkinsonian Potency Of Test Drug Using Rotenone Induced Rat Model
7	PN020	Sneha S.	Regenerative Effect Of Resveratrol And Ginsenoside Rg1 With Camel Milk Suspension On D- Galactose Induced Aged Neurons
8	PN022	Daneshwari	Anti-Parkinsonian Potency Of Test Drug Solid Lipid Nanoparticles In Murine And Alternative Animal Model
9	PN024	Dr Hareeth Reddy	Bringing Compassion To The Frontline: Integrating Palliative Care For Advanced Dementia In The Emergency Department – A Case Series
10	PN025	Ganavi K N	Gender Disparities In Nutrition And Cognition Among The Elderly: Insights From A Community- Based Study.
11	PN026	Ranjitha C	Evaluation Of Therapeutic Potential Of The Repurposable Drug Formulation In Ethidium Bromide -Induced Demyelination In Rodents

### **Online Poster Presentations**

S. NO	ABSTRACT NUMBER	PRESENTING AUTHOR	TITLE OF THE PAPER
1	PN008	Pratiksa P R	Strengthening Dementia Caregiving: Practical Insights on Psychoeducation, Acceptance and Resilience.
2	PN013	Jaivarshini V	Caregivers stories and lived experience as tools for public enegement in dementia.
3	PN015	Jamuna P	Salivary metabolites in Geriatric Oral Health

### **Offline Poster Presentations**

S. NO	ABSTRACT NUMBER	PRESENTING AUTHOR	TITLE OF THE PAPER
1	PN021	Rachana H	Development of novel method for the induction of multiple sclerosis in trangsenic rodents and exploring the ameliorative potential of test formulation
2	PN023	Raghvi Misra	Mild cognitive impairment - transit phase to dementia - 40 hz sound and its effect on mild cognitive impairment on elderly
3	PN024	Vinutha Y P	Pharmacist-Led Counselling and Cognitive Support in Alzheimer's Disease: Emerging Roles and Therapeutic Advancements
4	PN025	Pruthviraj V	Drug Safety in Dementia: The Role of Pharmacovigilance in Protecting Vulnerable Patients
5	PN029	Prajwal Y S	Drug-Induced Dementia: Insights from Real- World Pharmacovigilance Data Using the FDA Adverse Event Reporting System
6	PN030	Jayaprakash	Radationtherapy induced cognitive impairements brain cancer patients
7	PN031	Gagan	Chemotherapy-Induced Cognitive Impairment ("Chemo Brain") in Elderly Cancer Patients
8	PN032	Trishala D	Interventions to Enhance Cognitive Reserve in Early Alzheimer's Disease: A Multidomain Approach

### **Offline Poster Presentations**

9	PN033	Ajeet Pawar	Therapeutic role of medhya rasayana—supported panchakarma in early-stage dementia: a clinical perspective.
10	PN034	Meenakshi Valmiki	Role and efficacy of ayurvedic nootropic drugs in dementia care
11	PN035	Lohith	Formulation and evaluation of ointment containing coleus amboinicus and salvia rosmarinus l
12	PN036	Meghana C	A Comprehensive Prospective Observational Study By Clinical Pharmacist on Immediate Hypersensitivity Reactions Among Cancer Patients Undergoing Systemic Treatment Regimens
13	PN037	Prajwal B	A prospective observational study of toxicity profile related to immune checkpoint inhibitors

#### **Online Oral Presentations**

Abstract Code: PN003

# Integrative Multi-Omics and AI-Driven Approaches for Molecular Characterization and Therapeutic Targeting in Alzheimer's Disease

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#### **Abstract**

Alzheimer's disease (AD) is a progressive neurodegenerative disorder driven by complex molecular alterations, including synaptic dysfunction, neuroinflammation, and abnormal protein aggregation. Advances in high-throughput omics and artificial intelligence (AI) now enable a systems-level understanding of AD. This study integrates transcriptomics, epigenomics, metabolomics, and lipidomics with machine learning to map the molecular architecture of AD. Gene expression analysis across key brain regions achieved over 92% diagnostic accuracy, revealing dysregulated pathways such as PI3K-Akt signaling, mitochondrial impairment, and neuroimmune activation. Network analyses highlighted hub genes including APP, MAPT, TREM2, and PTK2B, each showing strong diagnostic potential. Drug-repurposing using transcriptomic reversal identified small-molecule candidates capable of counteracting AD-associated signatures. Metabolomic and lipidomic integration further uncovered disruptions in sphingolipid metabolism and purine biosynthesis, suggesting early metabolic shifts. Deep learning models combining omics with neuroimaging reached 94% accuracy in predicting AD severity. Regulation by non-coding RNAs, particularly miR-34a and lncRNA BACE1-AS, further emphasizes post-transcriptional control in AD pathology. Overall, this multi-omics and AI-driven strategy enhances early diagnosis, biomarker discovery, and therapeutic prioritization, supporting precision medicine in AD.

**Keywords:** Alzheimer's disease, multi-omics, systems biology, AI, biomarkers, drug repurposing, neurodegeneration.

#### Ellambai – A Major Source of Forskolin for the Treatment of Neurodegenerative Diseases

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#### **Abstract**

Alzheimer's disease (AD) is a progressive neurodegenerative disorder characterized by memory loss, cognitive decline, and increased neuroinflammation. Reduced adenylate cyclase (AC) activity and impaired G-protein-mediated AC stimulation have been reported in the brains of AD patients. Natural compounds, including diterpenoids, show potential therapeutic benefits in modulating AC pathways. Forskolin, the only known diterpene capable of directly activating AC, is abundantly present in Plectranthus malabaricus (Ellambai).

Ethnobotanical surveys among Kurumba and Irula tribes of the Nilgiris document traditional use of Ellambai for asthma management and heart health through leaf paste, vapour inhalation, and oral leaf juice. The presence of forskolin, combined with its traditional medicinal applications and scientific evidence of AC modulation, highlights Ellambai as a promising herb for supporting neurological function and potentially mitigating AD progression.

Keywords: Forskolin, Ellambai, Plectranthus malabaricus, Alzheimer's disease, Adenylate Cyclase

# Transforming Dementia Care in India: An Innovative Primary Health Care Model for Patients, Families, and Communities

#### **Authors:**

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#### **Abstract:**

Dementia affects over eight million older adults in India and remains a major public health challenge due to fragmented services and limited integration into primary health care. Current systems provide inadequate access to palliative care, caregiver support, and co-morbid condition management. This study proposes the SAMBHAV model—Shared, Accessible, Multi-disciplinary, Built-for-Home, Holistic, Active, Value-led dementia care—as a localized, integrated primary health care approach for India. The model emphasizes early detection, co-morbidity management, caregiver education, small homelike living units, community-based and palliative support, and technology-enabled coordination. Evidence from global and Indian studies indicates that collaborative primary-care-based models improve caregiver confidence, reduce hospitalizations, enhance cognitive stimulation, and lower behavioral symptoms. The paper also outlines evaluation methods including stepped-wedge designs, mixed-methods assessments, and meta-analytic pooling. Integrating dementia care through the SAMBHAV model offers a scalable and sustainable pathway for person-centered, affordable dementia care in India.

**Keywords:** Dementia, Primary Health Care, Integrated Care, Person-Centered Care, Technology-Enabled Models

#### **Exploring Clinical Perspectives on Non-Pharmacological Interventions in Dementia Care**

#### **Authors:**

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Paul Kennedy S Social Work Trainee, School of Social Work, Kumaraguru College of Liberal Arts and Science, Coimbatore

Dr. Santhosh J. S Assistant Professor & Head, School of Social Work, Kumaraguru College of Liberal Arts and Science, Coimbatore

#### **Abstract:**

Dementia presents significant clinical and psychosocial challenges, and with limited pharmacological options, non-pharmacological interventions play a crucial role in improving quality of life. This qualitative study explores how mental health professionals understand, select, and deliver interventions such as cognitive-behavioural techniques, psychosocial approaches, lifestyle-based activities, and sensory therapies for individuals with dementia. Semi-structured interviews with experts were used to examine their clinical reasoning, person-centred tailoring of interventions, and strategies for managing behavioural symptoms and relational complexities. The study also identifies key facilitators and barriers to effective practice, along with how clinicians define meaningful therapeutic outcomes beyond symptom reduction. Insights from this inquiry aim to strengthen professional skills, guide training, and support best practices in dementia care.

**Keywords:** Dementia, Non-Pharmacological Interventions, Clinical Perspectives, Mental Health Professionals, Qualitative Study, Person-Centred Care

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# Barriers to Oral Health Care in Older Adults as Perceived by Non-Medical Professionals: A Systematic Review

#### **Author:**

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#### **Abstract**

The growing population of older adults is increasingly affected by chronic oral conditions such as dental caries, periodontal disease, tooth loss, mucosal lesions, and oral cancer. These conditions significantly impact nutrition, self-esteem, general health, and overall quality of life. Access to oral health care in older adults is often limited by factors such as affordability, availability of services, transportation barriers, and reduced mobility. Cognitive impairment further complicates oral health maintenance by affecting memory, hygiene practices, pain reporting, treatment consent, and compliance.

Non-medical professionals—including nurses, social workers, physiotherapists, occupational therapists, and psychologists—often encounter older adults who do not routinely visit dentists. Their perceptions and involvement provide valuable opportunities to identify oral health issues early, educate communities, and improve referral pathways. With appropriate training, these professionals can support oral health promotion, encourage timely dental consultations, and contribute to better oral health outcomes in aging populations.

This systematic review explores how non-medical professionals perceive barriers to oral health care in older adults and highlights strategies to enhance access through interdisciplinary collaboration.

**Keywords:** Older adults, oral health barriers, non-medical professionals, cognitive impairment, access to care, interdisciplinary collaboration

#### **Offline Oral Presentations**

Abstract Code: PN007

#### Raised Well-Being 1M

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#### **Abstract:**

Dementia care, mental health, and healthy ageing in low- and middle-income communities require scalable, people-centered solutions. This work proposes "Raised Well-Being 1M", a societal initiative aimed at improving the well-being of one million people—60% from low-income groups—within three years. The approach is grounded in generating future-oriented action and addressing the missing "speech acts" that enable individuals and caregivers to create new possibilities for health and purpose. The model integrates four key components: Ontological leadership interventions to shift personal and caregiver capacities; Digital human-in-loop coaching for multilingual, multimodal access and scalable support; Leadership projects that anchor behavioural change and community action; Financial portfolio-optimization and rebalancing, enabling sustainable impact financing. Preliminary outputs include >100 individuals coached pro bono, shared open-access knowledge assets, and a demonstrated financial model (pf4pf) achieving 36% CAGR with INR 20 crore AUM, showing promise for impact-investment mechanisms. With appropriate consents, conversational data can be used to assess improvements in intrinsic capacity and subjective well-being aligned with WHO indicators. This integrated social business model offers a replicable pathway for policy, caregiving capacity, and technological innovations in dementia care and healthy ageing.

**Keywords:** Well-being, Ontological Leadership, Digital Coaching, Dementia Care, Healthy Ageing, Low-Income Populations, Impact Investing, Human-in-Loop AI

#### International Conference on "Dementia: Policy, Practice, and Progress (DPPP)"

Abstract Code: PN011

#### **Attachment Behaviours in Dementia: Understanding Emotional Expressions**

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#### **Abstract**

Secure attachment relationships act as protective factors across the human lifespan, and research consistently highlights the enduring nature of attachment needs. Notably, neurocognitive decline does not diminish the fundamental human drive for attachment. Individuals with dementia continue to display organized attachment behaviours, observable across different stages of the condition. Although scientific literature remains limited, existing evidence affirms the persistence of these emotional expressions.

This study addresses the scarcity of research on attachment behaviours in dementia by examining how individuals living with the condition express these needs, using a case study approach. Common attachment-related behaviours include parent fixation (believing deceased parents are still alive), grieving behaviours (mourning significant losses), insecure attachment responses (distress in unfamiliar environments or with unfamiliar people), and repeated requests to "go home" even when already at home. These behaviours represent natural reactions to perceived threats, insecurity, or emotional discomfort.

Interpreting these expressions through the lens of attachment theory emphasizes the importance of empathy in caregiving. Providing emotional safety, reassurance, and unconditional support—particularly from spouses or primary caregivers—can significantly enhance the well-being and overall quality of life of individuals with dementia.

**Keywords:** Dementia, Attachment Behaviour, Parent Fixation, Insecure Attachment, Caregiving, Emotional Expression, Empathy

#### International Conference on "Dementia: Policy, Practice, and Progress (DPPP)"

Abstract Code: PN016

From Sleep to Synapses: Melatonin's Role in Geriatric Dementia

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#### Guided By:

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#### **Abstract**

Geriatric dementia is a major global health concern marked by progressive cognitive decline and behavioural disturbances. Melatonin, a neurohormone produced by the pineal gland, plays a crucial role in circadian rhythm regulation, sleep maintenance, and neuroprotection. Its potent antioxidant and anti-inflammatory properties help reduce oxidative stress, stabilize mitochondrial function, and prevent neuronal apoptosis.

Melatonin also enhances synaptic plasticity and supports neuronal homeostasis by modulating neurotransmitter activity and neurotrophic signalling. Through interactions with MT1 and MT2 receptors in the hippocampus and cortex, melatonin contributes to improved synaptic function, long-term potentiation, and memory consolidation. Clinical findings suggest that melatonin supplementation may improve sleep quality, reduce sundowning, and potentially slow cognitive decline in dementia patients.

This review highlights melatonin as a safe, affordable, and promising adjunct in managing age-related cognitive impairment. Further research is required to better elucidate its mechanisms and therapeutic potential in geriatric dementia.

**Keywords:** Melatonin, geriatric dementia, circadian rhythm, neuroprotection, synaptic plasticity, ageing, MT1/MT2 receptors

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### Impact of Micronutrient Deficiencies on Cognitive Decline in Individuals With Dementia: A Review

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#### **Abstract**

Dementia is a progressive neurodegenerative disorder in which inadequate nutrition and micronutrient deficiencies can significantly accelerate cognitive decline. Older adults with dementia are particularly susceptible to malnutrition due to physiological, cognitive, and functional limitations. This review explores the relationship between malnutrition, specific micronutrient deficiencies, and cognitive dysfunction, while highlighting the potential role of pharmacists in early detection and intervention. A comprehensive literature search was conducted using PubMed, Scopus, and Google Scholar, focusing on studies examining essential micronutrients such as vitamins B12, D, and E, folate, omega-3 fatty acids, and iron. Evidence indicates that deficiencies in vitamins B12 and D are strongly associated with cognitive impairment. Additionally, inadequate levels of antioxidants and omega-3 fatty acids contribute to oxidative stress, neuronal damage, and impaired neurotransmission. Pharmacist-led initiatives—including nutritional screening, counseling, and supplementation guidance—play a vital role in managing these deficiencies. Addressing nutritional gaps and improving overall dietary intake can significantly enhance patient outcomes and support better dementia management.

**Keywords:** Dementia, Micronutrient Deficiency, Malnutrition, Cognitive Decline, Pharmacist Intervention, Vitamins B12 & D, Omega-3 Fatty Acids.

### **Evaluation of the Dietary Fibres of Chia Seeds in Alleviating Depression Associated with Type 2 Diabetes in Rats**

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#### **Abstract**

Type 2 diabetes mellitus (T2DM) is often accompanied by depression due to gut-brain axis disruption and gut microbiota imbalance, leading to inflammation, oxidative stress, and altered neurotransmitter activity. Chia seeds (Salvia hispanica L.) contain soluble dietary fibres such as mucilage and polysaccharides that may modulate gut microbiota, enhance GLP-1 secretion, and improve metabolic and behavioural outcomes.

This study extracted and characterized chia seed fibres and evaluated their antidepressant potential in a rat model of T2DM-induced depression. Fibres were assessed for swelling index, water-holding capacity, viscosity, and FTIR properties. T2DM was induced using a high-fat diet and streptozotocin (25 mg/kg, i.p.). Behavioural tests (tail suspension, Cook's pole climbing, actophotometer), intestinal permeability assays, and biochemical analyses (OGTT, TNF-α, IL-10, dopamine, GLP-1, GSH, SOD, catalase) were performed.

Chia seed dietary fibres significantly improved depressive-like behaviours, reduced inflammatory markers and gut permeability, increased GLP-1 and dopamine levels, and restored antioxidant status. These results indicate that chia fibre supplementation ameliorates T2DM-associated depression by modulating the gut—brain axis, supporting its potential as a natural therapeutic intervention.

**Keywords:** Chia seeds, dietary fibre, Type 2 diabetes mellitus, depression, GLP-1, gut-brain axis

#### Screening of Antiparkinsonian Potency of Test Drug Using Rotenone-Induced Rat Model

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#### **Abstract**

Parkinson's disease (PD) is the second most common neurodegenerative disorder, marked by progressive loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies. Dopamine depletion leads to cardinal symptoms such as resting tremor, bradykinesia, rigidity, postural instability, and impaired motor coordination. Although the exact etiology remains unclear, factors including oxidative stress, inflammation, genetic susceptibility, toxic exposure, and aging contribute to PD progression.

In this study, PD was experimentally induced in rats using rotenone mixed with sunflower oil and administered intraperitoneally for 21 days. The test drug treatment commenced on day 7 and continued until day 21. Antiparkinsonian effects were evaluated using behavioural assessments (Rota rod, beam walk, elevated plus maze, and catalepsy) along with antioxidant biomarkers such as SOD, catalase, MDA, and glutathione. The efficacy of the test drug was compared with a standard marketed formulation. Findings indicate that the test drug demonstrates potential neuroprotective and antioxidant activity against rotenone-induced Parkinsonism.

**Keywords:** Parkinson's disease, Rotenone, Neuroprotection, Antioxidant activity, Behavioural parameters.

# Regenerative Effect of Resveratrol and Ginsenoside Rg1 with Camel Milk Suspension On D-Galactose Induced Aged Neurons

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#### **Abstract**

Ageing is an inevitable biological process characterized by progressive morphological and physiological changes in cells, tissues, and organs. Deterioration of sensory, motor, and cognitive abilities is one of the key indications of neuronal ageing. Oxidative stress plays a major role in accelerating aging, and antioxidants have shown significant potential in mitigating oxidative damage and delaying age-related disorders.

The present study aimed to develop a neuroprotective oral suspension combining Ginsenoside Rg1, Resveratrol, and camel milk. Neuronal ageing was induced in mice by subcutaneous administration of D-galactose (100 mg/kg). The test suspension was administered once daily via intragastric gavage for six weeks at three dose levels: high dose (10 mg/kg: 7.5 mg RES + 5 mg Rg1), mid dose (5 mg/kg: 3.75 mg RES + 2.5 mg Rg1), and low dose (2.5 mg/kg: 1.87 mg RES + 1.25 mg Rg1).

Cognitive and behavioural assessment parameters were used to evaluate neuroprotective activity. The test suspension significantly improved learning and memory deficits and reduced brain oxidative stress, as evidenced by increased total antioxidant capacity and reduced malondialdehyde levels. Real-time quantitative PCR demonstrated moderate inhibition of p21 expression compared with the control group. Overall, the study findings indicate that the Ginvera suspension ameliorates ageing-related neuronal damage induced by D-galactose by inhibiting oxidative stress and cellular senescence.

**Keywords:** Ageing, Oxidative Stress, Resveratrol, Ginsenoside Rg1, Camel Milk, Neuroprotection, D-galactose, Cognitive Function

### Anti-Parkinsonian Potency of Test Drug Solid Lipid Nanoparticles in Murine and Alternative Animal Models

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#### **Abstract**

Parkinson's disease (PD) is a progressive neurodegenerative disorder marked by tremors, bradykinesia, rigidity, and impaired postural reflexes. It involves rapid dopaminergic neuronal loss followed by gradual Lewy body accumulation. Current therapies offer only symptomatic relief, highlighting the need for targeted neuroprotective strategies. This study evaluated the anti-Parkinsonian efficacy of SCLC-loaded Solid Lipid Nanoparticles (SCLC-SLNs) in rotenone-induced PD models in rats and zebrafish. SCLC was docked with PD-related proteins to explore molecular mechanisms. Solid Lipid Nanoparticles were formulated using the solvent evaporation—emulsification method and characterized

Nanoparticles were formulated using the solvent evaporation–emulsification method and characterized by FTIR, zeta potential, particle size analysis, XRD, SEM, and TEM. Rats received rotenone (2 mg/kg, i.p.) for 28 days, while SCLC, SCLC-SLNs, and standard drug treatments were administered orally from days 14–28. Zebrafish were exposed to rotenone (5  $\mu$ g/L) with concurrent treatments.

SCLC-SLNs demonstrated significant improvement in locomotor activity, grip strength, exploratory behavior, reduction in oxidative stress, and protection against neuronal damage with fewer Lewy bodies in rats. Zebrafish showed enhanced locomotion and reduced AChE levels, confirming neuroprotection. Overall, SCLC-SLNs exhibited strong therapeutic potential in alleviating PD symptoms and preventing neurodegeneration.

**Keywords:** Parkinson's disease, Solid Lipid Nanoparticles, SCLC, Rotenone, Neuroprotection, Zebrafish Model

#### Bringing Compassion to the Frontline: Integrating Palliative Care for Advanced Dementia in the Emergency Department – A Case Series

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#### **Abstract**

Patients with advanced dementia frequently present to Emergency Departments (EDs) with life-threatening complications where curative options are limited. In India, the absence of formal DNR orders and advance directives creates challenges in balancing life-prolonging interventions with comfort-focused care. This case series highlights three ED encounters where early palliative integration improved decision-making and ensured dignified care. Across the cases, key themes included recognizing medical futility, facilitating family consensus, and delivering proportionate treatment focused on symptom relief. Incorporating palliative principles—through clear communication, shared decision-making, and basic comfort measures—enabled compassionate, goal-aligned management for patients with end-stage dementia. Palliative integration within emergency care can transform critical encounters into experiences of comfort, dignity, and ethical clarity.

**Keywords:** Palliative care, dementia, emergency medicine, end-of-life care, shared decision-making.

#### Gender Disparities in Nutrition and Cognition among the Elderly: Insights from a Community-Based Study

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#### **Abstract**

Gender plays a significant role in shaping nutritional behaviour, dietary intake, and cognitive health among the elderly. Biological differences, sociocultural expectations, and access to food influence the nutritional status and cognitive well-being of older men and women. This community-based study assessed gender disparities in nutrition and cognition among elderly adults in Mysuru.

A total of 100 participants aged ≥60 years were selected using stratified random sampling from urban and semi-urban regions. Data were collected using demographic profiles, the Mini Nutritional Assessment (MNA), and cognitive tools including the Six-Item Cognitive Screening Test and Montreal Cognitive Assessment (MoCA).

Among the participants, 54% were women and 46% men. Malnutrition and nutritional risk were higher in women (35% and 48%) compared to men (28% and 43%). Mean MoCA scores reflected better cognitive performance in men (5.6) than women (4.8). A significant positive correlation was observed between MNA and MoCA scores (r = 0.61, p < 0.001), indicating that better nutritional status is associated with improved cognition. Elderly women also reported reduced food intake (42%) and swallowing difficulties (13%) more frequently.

The study concludes that elderly women experience higher nutritional vulnerability and poorer cognitive outcomes than men. These findings highlight the need for gender-sensitive nutritional counselling, targeted dietary interventions, and geriatric support programs to promote equitable healthy aging.

**Keywords:** Gender Differences, Cognitive Function, Elderly, Malnutrition, Mini Nutritional Assessment, Montreal Cognitive Assessment, Dietary Behaviour

# **Evaluation of Therapeutic Potential of a Repurposable Drug Formulation in Ethidium Bromide- Induced Demyelination in Rodents**

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#### **Abstract**

This study evaluated the anti-inflammatory, antioxidant, and neuroprotective effects of the repurposed drugs Flufenamic acid and Mefenamic acid in an ethidium bromide—induced demyelination model in Wistar rats. Animals were divided into four groups: sham control, ethidium bromide, ethidium bromide + Flufenamic acid, and ethidium bromide + Mefenamic acid. Behavioural assessments (rotarod, beam walk), antioxidant markers (AChE, SOD, MDA, catalase, glutathione), and histopathology were analysed on days 7, 14, and 21.

Ethidium bromide caused significant motor impairment, elevated oxidative stress, decreased antioxidant levels, and notable neuronal loss. Treatment with Flufenamic acid and Mefenamic acid led to marked improvement in motor coordination, reduced oxidative stress, restoration of antioxidant parameters, and minimal neuronal degeneration compared to the ethidium bromide group. Progressive histological recovery was evident across all time points.

These findings suggest that both drugs exhibit strong neuroprotective and remyelinating potential through modulation of oxidative stress and inflammatory pathways.

**Keywords:** Drug Repurposing, Flufenamic Acid, Mefenamic Acid, Demyelination, Neuroprotection

#### **Online Poster Presentations**

Abstract Code: PN008

## Strengthening Dementia Caregiving: Practical Insights on Psychoeducation, Acceptance, and Resilience

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#### **Abstract**

Caring for individuals with dementia places significant psychological and emotional demands on caregivers. This study explores how psychoeducation, acceptance, and resilience interact to shape caregiver adaptation. Guided by the Transactional Model of Stress and Coping, Acceptance and Commitment Theory, and Resilience Theory, the research examines how caregivers perceive stress, develop acceptance, and build psychological flexibility. Using a qualitative design and purposive sampling, in-depth interviews were conducted with early-stage and long-term caregivers. Interpretative Phenomenological Analysis (IPA) revealed that psychoeducation enhances preparedness, acceptance develops gradually through lived experience, and resilience acts as a protective factor in managing ongoing challenges. The study highlights the need for tailored psychoeducational and emotional support interventions to strengthen caregiver wellbeing across the dementia care journey.

Keywords: Dementia Caregiving, Psychoeducation, Acceptance, Resilience, Emotional Well-being

#### Caregiver Stories and Lived Experience as Tools for Public Engagement in Dementia

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#### **Abstract**

Caregiving for individuals with Alzheimer's disease and related dementias (ADRD) is emotionally, socially, and physically demanding. Lived experiences of caregivers provide powerful insights into patient behaviour, stigma, health disparities, and the limitations of current support systems. While research typically focuses on clinical or pathological aspects, caregiver narratives highlight important psychosocial dimensions such as burden, distress, disrupted routines, loneliness, and declining quality of life.

This case study uses narrative methodology to understand how family dynamics, gender roles, patient symptoms, and social expectations shape the caregiving experience. The stories reveal how advancing symptoms increase both objective stressors (daily care tasks, time demands) and subjective stressors (emotional exhaustion, depression, and social isolation). Meta-analysis of similar studies shows that supportive social structures, community engagement, and shared storytelling can reduce caregiver burden and enhance resilience.

Caregiver narratives are effective tools for public engagement in dementia—supporting awareness campaigns, reducing stigma, and guiding the development of equitable, culturally sensitive dementia care systems. Sharing these experiences strengthens advocacy, informs policy, and promotes inclusive dementia research.

**Keywords:** Family caregiving, Dementia, Public engagement, Lived experience, Quality of life, Support systems.

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#### International Conference on "Dementia: Policy, Practice, and Progress (DPPP)"

Abstract Code: PN015

#### Salivary Metabolites in Geriatric Oral Health

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#### **Abstract**

The oral cavity is a dynamic biological environment where saliva plays a key role in maintaining oral homeostasis and protecting dental and mucosal tissues. As a "mirror" of systemic health, saliva reflects physiological and pathological changes, making salivary metabolomics a valuable non-invasive tool for disease assessment. Aging significantly affects salivary gland function, immune response, and oral tissues. In geriatric populations, reduced salivary flow, altered electrolyte balance, diminished antimicrobial components, and metabolic shifts increase susceptibility to dental caries, periodontal disease, xerostomia, and mucosal vulnerability.

Metabolomic studies have identified age-related changes in amino acids, organic acids, lipid metabolites, and oxidative stress biomarkers, indicating disruptions in protein turnover, energy metabolism, lipid regulation, and redox balance. These salivary metabolites serve as potential indicators of oral health status and systemic disease burden in older adults. This review highlights the diagnostic relevance of salivary metabolites in geriatric oral health and their role in supporting early detection, prognosis monitoring, and targeted interventions.

**Keywords:** Salivary metabolomics, geriatric oral health, aging, biomarkers, oral-systemic health, oxidative stress, metabolic profiling

#### **Offline Poster Presentations**

Abstract Code: PN021

## Development of A Novel Method for The Induction of Multiple Sclerosis In Transgenic Rodents And Evaluation of The Ameliorative Potential of A Test Formulation

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#### **Abstract**

Multiple Sclerosis (MS) is a neurodegenerative disorder characterized by immune-mediated myelin sheath destruction, leading to impaired neural communication and progressive neuronal damage. This study developed a novel method for MS induction in transgenic rodents using intra-pontine administration of 0.5% ethidium bromide and 1% copper sulphate, followed by treatment with fenofibric acid at varying doses.

Treatment efficacy was assessed through hematological parameters, rotarod performance, and molecular docking scores. Dimethyl fumarate served as the standard comparator. Statistical analysis was performed using GraphPad Instat.

Results showed that medium and high doses of fenofibric acid significantly reduced neuronal hyperplasia in the pons and hippocampus, along with decreased gliosis and Lewy body formation. Low-dose treatment preserved normal hippocampal morphology but showed persistent inflammation and neuronal hyperplasia in the pons. These findings suggest that fenofibric acid demonstrates dose-dependent neuroprotective and ameliorative potential in induced MS models.

**Keywords:** Multiple Sclerosis, Neurodegeneration, Myelin Sheath, Fenofibric Acid, Dimethyl Fumarate, Neuronal Hyperplasia

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# 40 Hz Sensory Stimulation as a Non-Pharmacological Intervention for Mild Cognitive Impairment: A Concise Review

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#### **Abstract**

Mild Cognitive Impairment (MCI) represents a transitional phase between normal ageing and dementia, characterised primarily by early memory deficits. Longitudinal studies, including those by Petersen et al., confirm its progressive nature, with decline faster than normal ageing but slower than Alzheimer's disease (AD). Emerging research highlights 40 Hz gamma-frequency sensory stimulation as a promising non-pharmacological strategy to target early neurodegenerative mechanisms. Preclinical GENUS experiments demonstrate significant reductions in amyloid-β deposition, improved microglial phagocytosis, enhanced synaptic function, and restored gamma coherence. Early human trials show feasibility, safety, improved sleep, preserved brain volume, and modest gains in memory and functional connectivity. Studies on binaural beats, amplitude-modulated music, and whole-body vibration at 40 Hz also report improvements in working memory, attention, and neural activation. Qualitative research in older adults indicates good acceptability, especially when 40 Hz modulation is combined with familiar music. With strong mechanistic evidence and growing clinical support, 40 Hz stimulation represents a potential low-cost, non-invasive adjunct for cognitive enhancement in older adults with MCI, warranting larger controlled trials.

**Keywords:** Mild Cognitive Impairment, 40 Hz Stimulation, Gamma Entrainment, Cognition, Alzheimer's Disease, Non-pharmacological Therapy, Neuroplasticity.

# Pharmacist-Led Counselling and Cognitive Support in Alzheimer's Disease: Emerging Roles and Therapeutic Advancements

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# **Abstract**

Alzheimer's disease (AD) is a progressive neurodegenerative disorder marked by cognitive decline, memory loss, and reduced functional independence. While existing pharmacological therapies offer limited disease-modifying benefits, growing evidence highlights the importance of multidisciplinary, patient-centered care. Pharmacists, as accessible healthcare professionals, are uniquely positioned to support Alzheimer's management through medication optimization, caregiver education, and cognitive assistance.

This review summarizes literature from 2010–2025 on pharmacist-led interventions in AD. Studies consistently show that pharmacist counselling improves medication adherence, reduces errors, and strengthens caregiver understanding. Cognitive support strategies—including memory prompts, reminder tools, medication diaries, and digital adherence aids—help maintain functional independence in early stages of AD. Collaborative care models involving pharmacists also demonstrate reduced anticholinergic burden, fewer hospitalizations, and improved caregiver satisfaction.

Overall, pharmacists significantly contribute to safer, more effective, and holistic Alzheimer's care. Expanding these roles across community and clinical settings can enhance patient outcomes and support caregivers in managing the challenges of dementia.

**Keywords:** Alzheimer's Disease, Pharmacist Interventions, Patient Counselling, Cognitive Support, Dementia Care, Medication Adherence

# International Conference on "Dementia: Policy, Practice, and Progress (DPPP)"

Abstract Code: PN025

# Drug Safety in Dementia: The Role of Pharmacovigilance in Protecting Vulnerable Patients

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#### **Abstract**

Dementia patients face heightened vulnerability to adverse drug reactions (ADRs) due to age-related pharmacokinetic changes, polypharmacy, and cognitive impairment. Ensuring drug safety is a critical challenge, especially as several commonly used medications carry potential neurocognitive risks without adequate label warnings. This study utilized real-world pharmacovigilance databases to identify and evaluate drug-associated dementia-related ADRs. Signal detection methods—including Reporting Odds Ratio (ROR) and Proportional Reporting Ratio (PRR)—were applied, followed by manual validation of clinically relevant endpoints. Anticholinergic agents and benzodiazepines showed disproportionately high associations with cognitive decline and dementia risk, underscoring gaps in current drug labeling and monitoring practices. Pharmacovigilance activities facilitated early identification of safety signals and informed clinical protocol adjustments, leading to improved patient monitoring and safety outcomes. The findings highlight the essential role of continuous pharmacovigilance, post-marketing surveillance, and patient-centered safety strategies in reducing preventable ADRs among dementia patients.

**Keywords:** Dementia, Pharmacovigilance, Drug Safety, Adverse Drug Reactions, Polypharmacy, Elderly, Real-world Evidence, Patient Safety

# Drug-Induced Dementia: Insights from Real-World Pharmacovigilance Data Using the FAERS Database

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# **Abstract**

Background: Dementia is a growing clinical challenge, yet drug-associated dementia remains underreported. The FDA Adverse Event Reporting System (FAERS) provides real-world insights into medication-linked adverse events.

Objective: To identify medications potentially associated with dementia using FAERS data.

Methods: A retrospective analysis of FAERS reports (2004–2023) was conducted. Dementia-related events were identified using MedDRA terms. Drug classes, demographics, and reporting trends were assessed, and signal detection was performed using ROR, PRR, and IC methods.

Results: A total of 31,881 dementia-related cases were identified, with increasing reports among females and elderly patients (>65 years). Apixaban showed the highest number of dementia reports (1631). Strongest signals were observed for rivastigmine, nicergoline, aducanumab, amlodipine/atorvastatin, and dihydroergometrine. Only valproate and tramadol currently include dementia-related warnings in their labels.

Conclusion: Several medications demonstrated strong associations with dementia, many lacking formal safety warnings. Enhanced pharmacovigilance, clinician awareness, and further prospective studies are essential to validate causal relationships and improve patient safety.

**Keywords:** Dementia, Pharmacovigilance, FAERS, Drug Safety, Disproportionality Analysis, Adverse Drug Reactions.

# Radiation-Therapy-Induced Cognitive Impairments in Brain Cancer Patients

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#### **Abstract**

Radiation-induced cognitive decline is a major long-term complication in survivors of primary and metastatic brain tumors. As survival improves, late neurotoxicity associated with cranial radiotherapy—particularly whole-brain radiotherapy (WBRT) and high cumulative doses—has become increasingly evident. This review synthesizes current evidence on mechanisms, clinical features, and evolving therapeutic strategies for radiation-related cognitive deficits and dementia. Key pathophysiological contributors include chronic neuroinflammation, oxidative stress, microvascular and blood—brain barrier injury, reduced hippocampal neurogenesis, and white-matter demyelination. Clinically, survivors commonly exhibit impairments in memory, executive function, processing speed, and attention, with up to 90% showing measurable deficits long after treatment. A subset may progress to severe dementia with gait and bladder disturbances. Major risk factors include older age, larger irradiated brain volume, and combined-modality therapy. Emerging approaches—such as hippocampal-sparing radiotherapy, neuroprotective drugs, anti-inflammatory interventions, and advanced imaging biomarkers—show promise but require further validation. Strengthening early detection and developing targeted neuroprotective strategies are essential to preserving long-term cognitive function in brain tumor survivors.

**Keywords:** Cranial radiotherapy, WBRT, neurocognitive decline, radiation-induced dementia, hippocampal injury, neuroprotection, brain tumors

# Chemotherapy-Induced Cognitive Impairment ("Chemo Brain") in Elderly Cancer Patients

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## **Abstract**

Background: Chemotherapy-induced cognitive impairment (CICI), or "chemo brain," is a common yet under-recognized toxicity. Elderly cancer patients are particularly vulnerable due to age-related cognitive decline, comorbidities, frailty, and genetic susceptibility.

Objective: To summarize current evidence on the prevalence, mechanisms, risk factors, and clinical implications of CICI in older adults.

Methods: A narrative review of systematic reviews, cohort studies, geriatric-oncology research, and mechanistic literature involving patients ≥65 years receiving chemotherapy.

Results: CICI in older adults most frequently affects memory, attention, processing speed, and executive function. Up to 18–25% may develop new cognitive impairment during treatment. Risk is higher with baseline cognitive decline, depression, malnutrition, and low education level. Recovery is slower in the elderly, with many experiencing persistent deficits. Proposed mechanisms include neuroinflammation, oxidative stress, white-matter injury, disrupted neurogenesis, direct neurotoxicity, and genetic factors such as APOE-ε4. Cognitive impairment increases chemotherapy toxicity, reduces treatment completion, raises hospitalization risk, and impacts survival.

Conclusion: CICI significantly affects quality of life and treatment outcomes in elderly cancer patients. Early cognitive screening, incorporation of geriatric assessment, identification of biomarkers, and targeted rehabilitation strategies are essential. Future research should focus on longitudinal and interventional studies tailored to older adults.

**Keywords:** Chemo Brain, Cognitive Impairment, Elderly Cancer Patients, Geriatric Oncology, Chemotherapy Toxicity, Neuroinflammation.

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# Interventions to Enhance Cognitive Reserve in Early Alzheimer's disease: A Multidomain Approach

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# **Abstract**

Cognitive reserve—the brain's capacity to adapt and compensate for neurodegeneration—plays a key role in delaying functional decline in early Alzheimer's disease (AD). Multidomain interventions that combine cognitive, physical, social, and lifestyle components have shown the greatest benefit in strengthening this reserve. Cognitive Stimulation Therapy (CST), computerized cognitive training, and reality orientation improve memory, attention, and executive skills. Physical activities such as walking and yoga promote neuroplasticity and emotional stability. Social engagement reduces loneliness and supports mental well-being, particularly important in the Indian elderly population. Lifestyle strategies, including an Indian-adapted MIND diet, regular sleep, and stress-reduction practices, enhance overall brain resilience. Additionally, music therapy and reminiscence therapy activate preserved neural pathways and offer culturally meaningful enrichment. Together, these evidence-based approaches provide a practical and holistic framework for improving cognitive reserve and functional outcomes in early-stage AD.

**Keywords:** Alzheimer's disease, Cognitive Reserve, Cognitive Stimulation, Physical Activity, Social Engagement, MIND Diet, Reminiscence Therapy, Early Intervention

# Therapeutic Role Of Medhya Rasayana—Supported Panchakarma In Early-Stage Dementia: A Clinical Perspective

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## **Abstract**

Dementia is a rapidly growing neurodegenerative condition with significant clinical, social, and economic implications in India. Early-stage dementia offers a crucial window for therapeutic intervention to slow cognitive decline and enhance quality of life. In Ayurveda, memory impairment is explained under entities such as Smritibhramsha and Vata Vyadhi, with an emphasis on the role of Panchakarma and Medhya Rasayana in restoring cognitive functions.

This paper presents a clinical perspective on the therapeutic potential of a combined Panchakarma–Medhya Rasayana protocol in early-stage dementia. Key Panchakarma therapies—Nasya (nasal instillation of medicated oils or herbal preparations), Shirodhara (continuous stream of warm medicated liquids over the forehead), and Basti (medicated enema therapy)—are explored for their ability to enhance cerebral circulation, reduce neuroinflammation, improve sleep, and pacify aggravated Vata.Medhya Rasayana herbs such as Brahmi, Mandukaparni, Shankhapushpi, and Ashwagandha are highlighted for their neuroprotective, antioxidant, and cognition-enhancing effects. Preliminary clinical observations suggest improvements in memory, attention, mood stability, daily functioning, and caregiver satisfaction.The discussion integrates Ayurvedic principles with emerging neuroscientific evidence, proposing mechanisms such as stress regulation, neuronal communication enhancement, and modulation of the gut—brain axis. The paper concludes by emphasizing the need for standardized protocols and further clinical research to support the integration of Ayurveda into dementia care pathways. This holistic approach may offer a safe and sustainable strategy for early dementia management in India.

**Keywords:** Dementia, Panchakarma, Medhya Rasayana, Ayurveda, Cognitive Enhancement, Neuroprotection, Early-Stage Dementia Management, Vata Vyadhi

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# Role And Efficacy Of Ayurvedic Nootropic Drugs In Dementia Care

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#### **Abstract**

Dementia is a progressive syndrome affecting memory, cognition, behavior, and daily functioning. Although its prevalence rises with age, it is not an inevitable consequence of ageing. Globally, dementia cases are increasing at a rapid rate, with numbers expected to reach 78 million by 2030 and 139 million by 2050. Conventional treatments primarily rely on pharmacotherapy, while Ayurveda offers holistic Rasayana-based interventions aimed at rejuvenation and cognitive enhancement.

In Ayurveda, dementia is conceptualized as Smruthi Bramsha. Medhya Rasayana (Ayurvedic nootropics) provides neuroprotective and cognition-enhancing benefits. Key herbs include Brahmi (Bacopa monnieri)—an antioxidant and acetylcholinesterase inhibitor improving learning and retention; Shankhapushpi (Convolvulus prostratus)—enhancing cholinergic activity and reducing stress; Guduchi (Tinospora cordifolia)—supporting acetylcholine synthesis; Amalaki (Phyllanthus emblica)—promoting long-term memory via CREB activation; and Haridra (Curcuma longa)—with anti-amyloid, antioxidant, and anti-tau effects.

Integrating evidence-based Ayurvedic nootropics into primary healthcare may support early management, slow disease progression, and reduce socioeconomic burden. This study places particular emphasis on evaluating the nootropic efficacy of Brahmi in dementia care.

**Keywords:** Dementia, Ayurveda, Nootropics, Medhya Rasayana, Brahmi, Cognitive Enhancement, PHC Intervention

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# Formulation And Evaluation Of An Antifungal Ointment Containing Coleus Amboinicus And Salvia Rosmarinus L.

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### **Abstract**

This study focuses on developing an antifungal herbal ointment using extracts of *Salvia rosmarinus L*. (rosemary) and *Coleus amboinicus* (Indian borage). Rosemary is rich in rosmarinic acid, camphor, and cineole, which possess strong antimicrobial and antioxidant activity. Indian borage contains carvacrol, thymol, and phenolic compounds known for potent antifungal effects. Ethanolic and aqueous extracts were incorporated into an ointment base and evaluated against a standard fluconazole ointment using the zone-of-inhibition method. Physicochemical parameters such as pH, viscosity, spreadability, and stability were also assessed. The combined extracts produced a stable formulation with notable antifungal efficacy, indicating its potential as a natural topical alternative for managing fungal skin infections.

**Keywords:** Coleus amboinicus, Salvia rosmarinus L., herbal ointment, antifungal activity, formulation

# A Comprehensive Prospective Observational Study By Clinical Pharmacist On Immediate Hypersensitivity Reactions Among Cancer Patients Undergoing Systemic Treatment Regimens

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# **Abstract**

**Background**: Immediate hypersensitivity reactions (IHRs) are important in chemotherapy with platinum, taxanes, and monoclonal antibodies. Early awareness is important, pharmacist-led monitoring may improve safety.

**Objectives**: To evaluate the incidence, profile, severity, risk factors, and drugs involved in IHRs and to assess pharmacist-led interventions.

**Methods**: This six-month prospective study was conducted at the Bharath Hospital & Institute of Oncology, Mysuru. An adult patient cohort receiving chemotherapy was monitored in one hour after the infusion. Oral chemotherapy, desensitization, and unrelated allergies were excluded.

Reactions were graded using CTCAE v5.0, and causality was determined by WHO-UMC. Pharmacists performed monitoring, education, and emergency response.

**Results**: The data was collected throughout 4,842 administrations, 86 IHRs (1.8%) occurred, and 87.2% of them were recurrent. Women were affected more than men (55.8%). Platinum agents caused most IHRs (2.6%), followed by monoclonal antibodies (2.2%) and taxanes (1.9%). Notably, while 30.3% were severe events, patients did not experience anaphylaxis or death. Pharmacists significantly improved time-to-response (15.2 $\rightarrow$ 6.8 min), and escalation did not occur in 90.7% of cases.

Conclusion: Infusion-related hypersensitivity reactions (IHRs), mostly associated with platinum compounds, were frequent and recurrent. The majority of IHRs were classified as mild, but there was a persistent incidence of severe events. Continuous monitoring, risk stratification and collaboration with pharmacists during infusions are important components of health provider practice to improve safety and highlight areas of further investigation and potential advancements in preventive strategies.

**Keywords**: Chemotherapy, immediate hypersensitivity reactions, infusion-related reactions, oncology, platinum-based agents, taxanes, monoclonal antibodies, clinical pharmacy, pharmacist intervention, patient safety, premedication, adverse drug reaction.

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# A Prospective Observational Study of Toxicity Profile Related To Immune Checkpoint Inhibitors

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#### **Abstract**

**Background**: The development of Immune-Checkpoint Inhibitors (ICIs) has signaled a new era in cancer treatment, enabling the possibility of prolong survival in patients with metastatic disease, and providing new therapeutic indications in earlier-stage settings. The toxicity profiles of ICIs differ from the side effects of cytotoxic agents and come with new toxicities like immune-related adverse events. This study, we are making an attempt to access knowledge abouts irAEs.

**Objectives:** To determine the Safety and Potential toxicity of Checkpoint Inhibitors (Immunotherapy). To analyze the causality, severity, and preventability of ADEs associated with Checkpoint Inhibitors with Lung Cancer, GI Malignancy and Renal cell Cancer, to determine the frequency and nature of ADEs associated with Checkpoint Inhibitors.

**Methods**: All relevant details of the enrolled patients were obtained from the data sources and documented in the Data The patients were interviewed to gather toxicity information due to ICIs which were documented using Immune-related adverse events (irAEs) Grading was used as per ASCO guidelines.

**Results:** A total of 78 study participants, Majority of the patients in the study were males (64.1%) when compared to females (35.9%). The most common irAEs observed were Cutaneous toxicities (n=6.4%), Fatigue (n=16.7%), Musculoskeletal toxicities (n=2.6%), GI toxicities (n=5.1%).

**Conclusion:** In this study, irAEs are observed more with combination therapy that includes chemotherapy drugs compared to monotherapy with immune checkpoint inhibitors. After evaluating the data, immunotherapy was found to have a better safety profile than combination therapy, which includes chemotherapy medications.

**Keywords:** ICIs, Toxicity Grading, Immune Related Adverse Events (irAEs).

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