



*4<sup>th</sup> Scientific Sessions  
of Sri Lanka Association of Geriatric Medicine*

**GERIATRIC MEDICINE AND  
NEURO-REHABILITATION CONFERENCE 2018**

*organized by*

**THE ASSOCIATION OF SRI LANKAN NEUROLOGISTS**

*“Adding quality to added years”*

**PROGRAMME & ABSTRACTS**

**25<sup>th</sup> - 27<sup>th</sup> October 2018  
Galle Face Hotel, Colombo**

# CONTENTS

<b>Council of the Sri Lanka Association of Geriatric Medicine 2018</b>	<b>02</b>
<b>Council photograph</b>	<b>03</b>
<b>Message from the President SLAGM</b>	<b>04</b>
<b>Message from the honorary secretary of SLAGM</b>	<b>05</b>
<b>Message from the Chief Guest</b>	<b>06</b>
<b>Message from the Guest of Honour</b>	<b>07-08</b>
<b>Programme</b>	
<b>Pre-congress Workshop</b>	<b>10-11</b>
<b>Academic Sessions</b>	<b>12-13</b>
<b>Faculty</b>	<b>15-21</b>
<b>Chairpersons</b>	<b>22</b>
<b>Abstract of the Guest Lectures</b>	<b>24-30</b>
<b>Abstracts of the oral presentations</b>	<b>32-35</b>
<b>Acknowledgements</b>	<b>36</b>

# Council of the Sri Lanka Association of Geriatric Medicine 2018

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Dr M. N. J. Gunathilake

Dr Thilanka De Silva

Dr J. B. Jayawardhena

Dr Ananda Jayalal

# Council of the Sri Lanka Association of Geriatric Medicine 2018



**Left to right seated:** Dr Chamila Dalpatadu (Secretary), Prof C.N. Wijeyaratne, Dr Chandana Kanakaratne, Dr Priyankara Jayawardena (Vice President), Dr Ruvan A I Ekanayake (Vice President), Dr Padma S Gunaratne (President), Dr Dilhar Samaraweera, Dr Lalith S Wijeyaratne, Dr Sajeewana Amarasinghe (Treasurer), Prof Nirmala Wijekoon, Prof Antoinette Perera

**Left to right standing:** Dr Kithsri Karunathilake, Dr G.K. K. Sewwandi, Dr Thusha Nawasiwatte (Assistant Secretary), Dr J. B. Jayawardena, Dr Barana Millewithana, Dr V.L Dassanayake (Assistant Treasurer), Dr W. D. Thilakaratne, Dr Pradeepa Gajendran, Dr MNJ Gunathilake, Dr Senaka Bandusena, Dr Ananda Jayala

**Absent:** Dr Achala Balasuriya, Dr Lasantha Ganewatte, Dr Anoja Rajapakse, Dr K.V.C. Janaka, Dr Upul Dissanayake, Dr. Thilanka De Silva

# Message from the President of the Sri Lanka Association of Geriatric Medicine



I am happy and feel contented to release the message for the conference book of the 4th Scientific Sessions on Neuro Rehabilitation and Geriatric Medicine organized by the Sri Lanka Association of Geriatric Medicine in collaboration with the Association of Sri Lankan Neurologists. The conference on Geriatric Medicine and Neuro-rehabilitation will be a far-reaching event at a time there is a need to have an understanding on the impact of demographic shift in age and of measures that should be implemented for successful ageing of elderly in Sri Lanka. This will be the very first Neuro-rehabilitation conference held in Sri Lanka.

In a setting where elder population is rapidly rising with 61% in the 'young – old' category of 60 – 69 years, it is essential to have a healthy elderly population who could contribute to their individual homes and socio-economic development of their societies and nation in general. In this regard, training medical professionals and allied health professionals on Geriatric Medicine along with rehabilitation is pertinent.

The 4th Scientific Sessions of the SLAGM on Geriatric Medicine and Neuro-rehabilitation have lined up plenaries and case based discussions on carefully selected topics that are relevant to day to day clinical practice of both medical and allied health professionals. As older people in Sri Lanka are unlikely to receive care from Specialists in Geriatrics who are still not available in the Government sector, the programme of the conference focuses to transform the attitudes and the approach of medical professionals to elderly and particularly to influence the decision making skills of ordinary doctor when giving care for elderly.

I, along with the council, take this opportunity to welcome all foreign and local resource persons and delegate to the conference. I fervently believe that our foreign colleagues will have some free time to enjoy beauty of our Island, Sri Lanka. While congratulating the Academic Committee for the excellent academic programme, I wish to communicate my sincere gratitude to the Organizing Committee for their commitment to make the conference a great success.

I wish Good Luck for a most successful conference in Geriatric Medicine and Neuro-rehabilitation.

***Dr. Padma S Gunaratne***

## Message from the Honorary Secretary of the Sri Lanka Association of Geriatric Medicine



It gives me immense pleasure to write to you on the occasion of the fourth academic sessions of the Sri Lanka Association of Geriatric Medicine. On behalf of the council and the organizing committee I wish to warmly welcome the distinguished panel of foreign and local resource persons, invitees, chairpersons, judges of free papers, delegates, members of SLAGM and medical and allied health professionals to this conference.

Geriatric medicine is an evolving specialty in Sri Lanka and we witness a trend to improve the services for the elders in this country. It is a great pleasure to see that the activities organized by the Sri Lanka Association of Geriatric medicine has grown to encompass a wide range; spanning throughout the country to fulfill the national requirement of promoting geriatric medicine knowledge among health professionals and general public.

This year the vibrant program we have lined up for you has included all branches of geriatric medicine with the help of our resource persons from different disciplines of medicine and allied health fields. I hope that the academic sessions of SLAGM will open up new opportunities for the trainees and be a rewarding experience to all of you.

I would like to extend my deep appreciation to the President, council of SLAGM for their generous support and the local and foreign faculty for sharing their valuable experiences with us. My sincere gratitude is extended to all the participants, free paper presenters, sponsors and organizing committee for their contribution in making this event a success.

I wish to congratulate all speakers and wish for an enjoyable and fruitful academic session.

***Dr Chamila Dalpatadu***

## Message from the Chief Guest



It is indeed a pleasure for me to pen this message for the 4th Scientific Sessions of Sri Lanka Association of Geriatric Medicine (SLAGM) and Neuro-Rehabilitation Conference. More so as we are approaching such times where Sri Lanka is going through a demographic transition and has to cater for a larger elderly population than it has done ever before. It is highly visionary, we have professionals stepping forward and directing the future course of geriatric medicine in this country.

Medicine is like a vast tree that ever branches out. Geriatric medicine is one such stem which can, and already has sprouted further twigs such as Geriatric Psychiatry, palliative medicine etc emphasizing the importance of a multidisciplinary approach to manage an elderly holistically, who may have a myriad of problems to be sorted out. This needs special interest, trained personnel, dedicated space and financial resources. It is also a challenge and responsibility that stands in front of policy makers like us to make necessary infra structure and frameworks a reality.

Though a Geriatric association, SLAGM in fact is still a very young organization and it is admirable that they are steering forward focused and forcefully. The association has organized many educational activities, oversees addition of Geriatric medicine to postgraduate curriculum and has undertaken publishing a bi annual bulletin on geriatric topics. 'Adding quality to added years' which is the theme of this year's sessions also has an endearing idea of paying back to our older genre for their services in yesteryears. I congratulate SLAGM for all its accomplishments so far and convey my well wishes for a very productive scientific sessions and many brighter years to come.

***Dr. Rajitha Senaratne M.P.***  
**Minister of Health, Nutrition and Indigenous Medicine**

## Message from the Guest of Honour



It is with great delight and pleasure that I accept the invitation of the Sri Lankan Association of Geriatric Medicine to attend their 4th Annual Academic Sessions in Colombo.

The British Geriatrics Society sends warm greetings to our colleagues in Sri Lanka. I am delighted to be able to attend this meeting. Around the world people are living longer, and our specialty is increasingly recognised as essential to successful ageing. The respect in which older people are held in your society is something many developed nations could do well to emulate, and commitment to caring for elderly relatives seen here is to be applauded. It's now the time to ensure that we educate our population about the steps they can take to reduce their risk of ill-health and frailty in old age, and to ensure they know of the benefits of geriatrics assessment if their older relative falls ill.

It's equally important to ensure that our medical and surgical colleagues also are aware of the key features of frailty and understand the significance of acute frailty syndromes such as falls and delirium. They have a duty to provide the right evidence based care for their older patients.

Thanks you once again for your generous invitation- I'm looking forwards to visiting your beautiful country.

***Best wishes***

***Dr. Eileen Burns***



## Message from the Guest of Honour



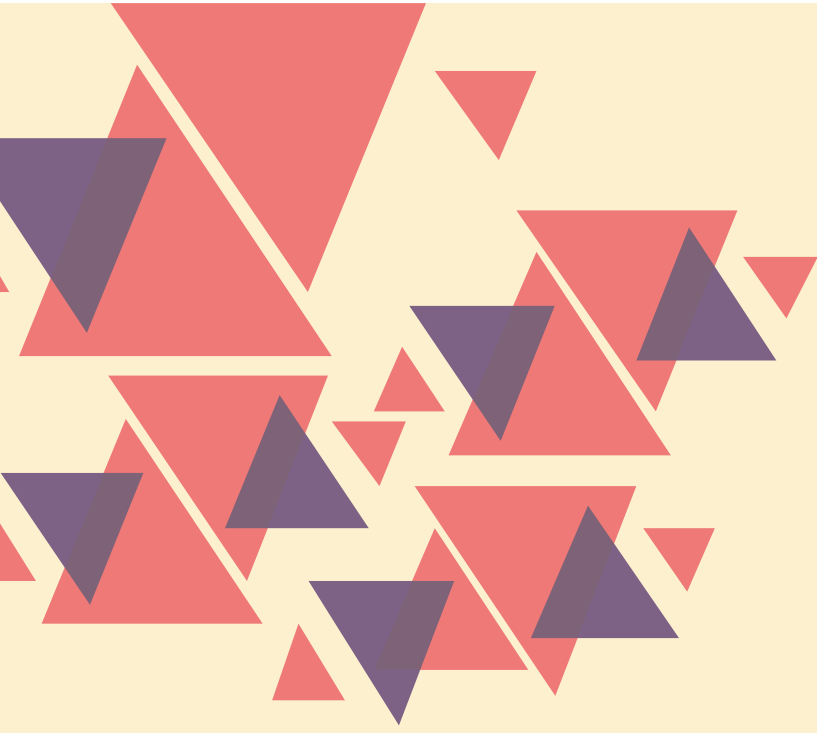
I am privileged and honoured to be the guest of Honor for the 4th Annual Academic sessions on Geriatric Medicine and Neuro-rehabilitation organized by the Sri-Lanka Association of Geriatric Medicine in collaboration with the Association of Sri Lankan Neurologists, at Colombo from 25th to 27th October 2018.

The themes running through this conference cover a vast area such as frailty, rehabilitation, dementia, falls in elderly, osteoporosis, Neuro cognitive disorders, elder-abuse and end of life decisions in older people. The pre-conference workshop on post stroke spasticity management will be an added attraction for specialists and PGs.

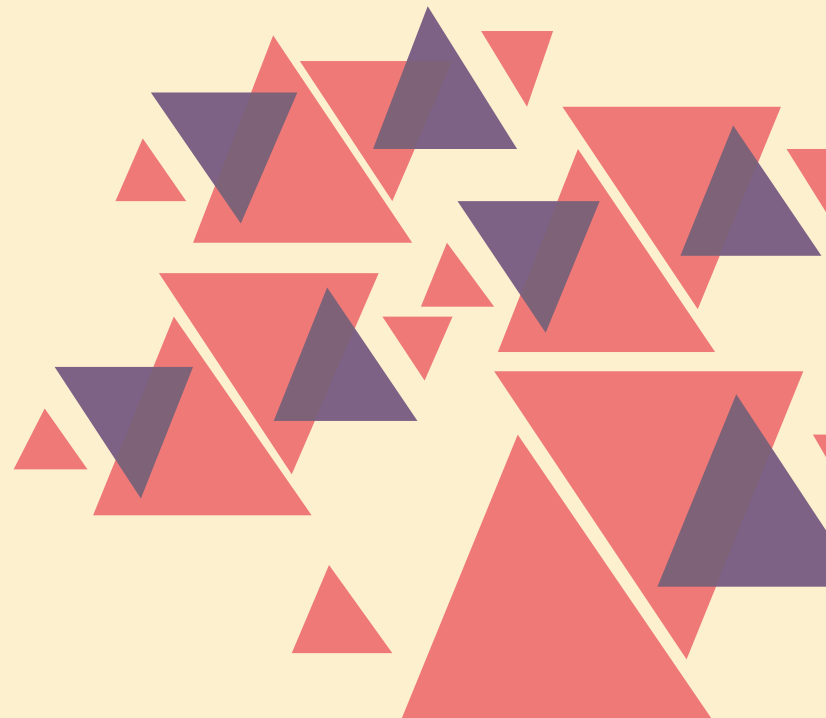
I appreciate the initiation taken by Dr. Padma S. Gunaratne, President, Sri-Lankan Association of Geriatric Medicine, Dr. Chamila Dalpatadu, secretary of the conference and their team to address the issues of Neuro-rehabilitation in Sri-Lanka.

I convey my best wishes to all stakeholders for the above congress.

***Dr. Nirmal Surya***



# PROGRAMME



# Pre-Congress Workshop 1

## Pre Congress Workshop on Spasticity management for Doctors

**Date** : 25<sup>th</sup> Thursday October 2018  
**Time** : 8.00 a.m. to 4.00 pm  
**Venue** : Auditorium, 8th Floor  
 National Epilepsy Centre,  
 National Hospital of Sri Lanka

PROGRAMME		
0800 – 0815	Welcome	
0815 – 0845	Stroke Rehabilitation in Sri Lanka	Dr. Padma Gunaratne
0845 – 0915	Post Stroke Spasticity: the spectrum and the rationale for management	Dr. Nirmal Surya, Consultant Neurologist, Mumbai, India
0915 – 0945	Assessment and Goal Setting	Dr. Nirmal Surya
0945 – 10-15	Interdisciplinary approach to managing Post Stroke Spasticity	Dr. Abhishek Srivastava, Consultant in Neurological Rehabilitation and Director, Center for Physical Medicine and Rehabilitation at KokilabenDhirubhaiAmbani Hospital, Mumbai
1015 – 1045	Tea	
1045 – 1130	Video case presentation on Post Stroke victim Panel discussion on Assessment, Goal Setting and Management Plan	<u>Panellists</u> Dr. Veena Rykar Dr. Nirmal Surya Dr. Abhishek Srivastava
1130 – 1200	Optimizing localization for Botulinum Toxin injections	Dr. Abhishek Srivastava
1200 - 1230	Panel discussion on early intervention and treatment options for Post Stroke Spasticity	<u>Panellists</u> Dr. Abhishek Srivastava & Dr. Nirmal Surya
1230 – 1315	Lunch Break	
1315 – 1400	Hands on Workshop for Upper Extremity Spasticity - Live injections	Dr. Abhishek Srivastava and Dr. Nirmal Surya
1400 – 1445	Hands on Workshop for Lower Extremity Spasticity - Live injections	Dr. Nirmal Surya and Dr. Abhishek Srivastava
1445 – 1505	Discussion	All participants -facilitated by Dr. Nirmal Surya
1505 – 1515	Closing Remarks	Dr. Arjuna Fernando, Consultant Neurologist, NHSL
1515– 1545	Tea	

# Pre-Congress Workshop 2

## Workshop on Neuro-rehabilitation (Stroke and Parkinsons Disease) For Physiotherapists and Occupational therapists

**Date** : 25<sup>th</sup> Friday, October 2018  
**Time** : 8.30 a.m. to 4.00 p.m.  
**Venue** : 1<sup>st</sup> Floor, National Epilepsy Centre,  
National Hospital of Sri Lanka

### ◆ Resource Persons:

- Dr. Veena Raykar, Specialist in Rehabilitation Medicine, NSW, Australia
- Ms. Renai Pillay, Senior Occupational Therapist Rehabilitation, NSW, Australia
- Ms. Claire Gill, Senior Physiotherapist Neurosciences, NSW, Australia

### ◆ Program

Time	Topic	Activity
<b>Morning Session : Stroke Management</b>		
8.30am – 9.00am	Introduction	Dr. Veena Raykar
9.00am – 10.00am	Physiotherapy post stroke	Demonstration
10.00am – 10.30am		
10.30am – 11.30am	Occupational therapy post stroke	Demonstration
11.30am – 12.00noon	Videos and discussion	
12.00noon – 1.00pm	Lunch	
<b>Afternoon Session: Parkinson Disease management</b>		
1.00pm – 1.30pm	Introduction	Dr. Veena Raykar
1.30pm - 2.30pm	Physiotherapy in Parkinson's Disease	Demonstration
2.30pm – 3.30pm	Occupational therapy in Parkinson's Disease	Demonstration
3.30pm – 4.00pm	Videos and discussion	

# Academic Sessions

## “Adding Quality to Added Years”

### Day 1

**Date** : Friday, 26<sup>th</sup> October 2018  
**Time** : 8.30 a.m. to 4.00 p.m.  
**Venue** : Grand ballroom, Galle Face Hotel, Colombo

7.30 am	Registration
8.15 am – 10.00 am	<p><b>Ceremonial Inauguration</b>  <b>Chief Guest - Hon. Dr. Rajitha Senarathne</b>  <i>Minister of Health, Nutrition and Indigenous Medicine</i></p> <p><b>Congress Lecture: Current status of Geriatric Neuro-rehabilitation in developing countries</b>            Dr. Nirmal Surya, Consultant Neurologist, Mumbai, India / Regional Vice President, WFNR / Chair, SIG, Developing World Forum, WFNR</p>
10.00 am – 10.30 am	TEA
10.30 am – 11.00 am	<p><b>Plenary 1: Rehabilitation and Frailty</b>  <b>Prof. Ian Cameron</b>, Professor of Rehabilitation Medicine, University of Sydney</p>
11.00 am – 12.00 noon	<p><b>Panel discussion 1: MDT care in Neuro-rehabilitation - Stroke &amp; Parkinsonism (case-based discussion)</b></p> <p><b>Panellists :</b>  <b>Dr. Veena Raykar</b>, Specialist in Rehabilitation Medicine, Australia  <b>Dr. Champika Gunawardana</b>, Consultant Neurologist, DGH Polonnaruwa, Sri Lanka  <b>Ms Renai Pillay</b>, Senior Occupational Therapist Rehabilitation, Australia  <b>Ms. Claire Gill</b>, Senior Physiotherapist Neurosciences, Australia</p>
12.00 noon - 12.30 pm	<p><b>Plenary 2: Urinary Incontinence in Older People</b>  <b>Dr. Eileen Burns</b>, Consultant Geriatrician &amp; President, British Geriatrics Society</p>
12.30 pm - 1.30 pm	LUNCH
1.30 pm – 2.00 pm	<p><b>Plenary 3: Update on dementia research and practice</b>  <b>Prof. Susan Kurrle</b>, Professor in Health Care of Older People, University of Sydney</p>
2.00 pm – 3.30 pm	<p><b>Panel discussion 2: Dementia care : caregivers’ nightmare</b>  <b>Introduction: Dr. Kapila Ranasinghe</b>, Consultant Psychiatrist, National Institute of Mental Health, Sri Lanka  <b>A caregiver’s experience:</b> Ms Morin Rajaratnam</p> <p><b>Panellists:</b>  <b>Prof. Susan Kurrle</b>, Professor in Health Care of Older People, University of Sydney  <b>Dr. Kapila Ranasinghe</b>, Consultant Psychiatrist, National Institute of Mental Health, Sri Lanka  <b>Dr. Shiromi Maduwage</b>, Consultant Community Physician, Ministry of Health, Sri Lanka</p>
3.30 pm – 4.30 pm	<p><b>Symposium 1 : The older patient who falls</b>  <b>Evaluation of the older patient who falls – Dr. Chandana Kanakarathne</b>, Consultant Geriatrician, Sri Lanka  <b>Falls prevention in older people – Prof. Ian Cameron</b>, Professor of Rehabilitation Medicine, University of Sydney</p>
4.30 pm - 5.00 pm	TEA

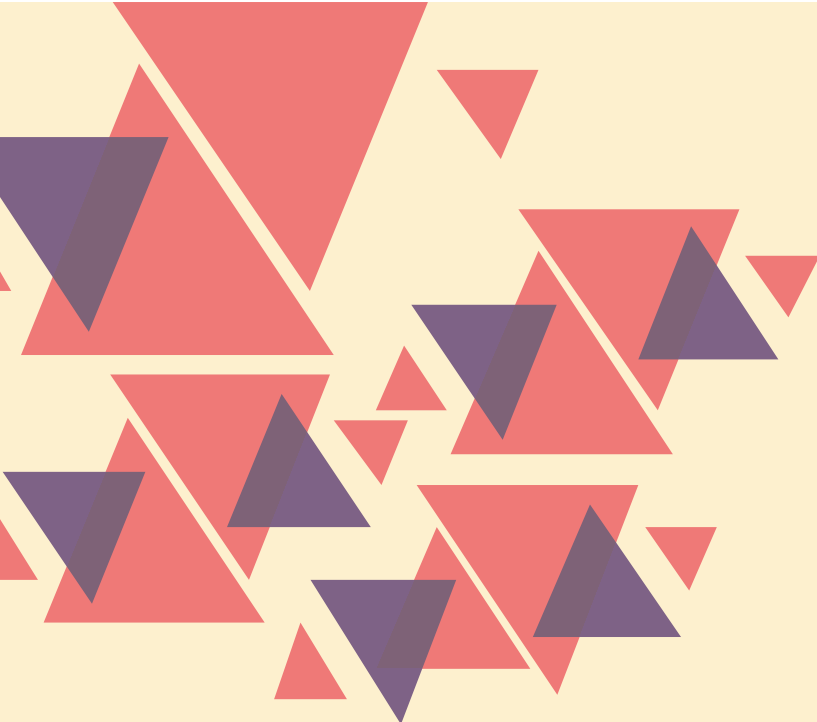
# Academic Sessions

## “Adding Quality to Added Years”

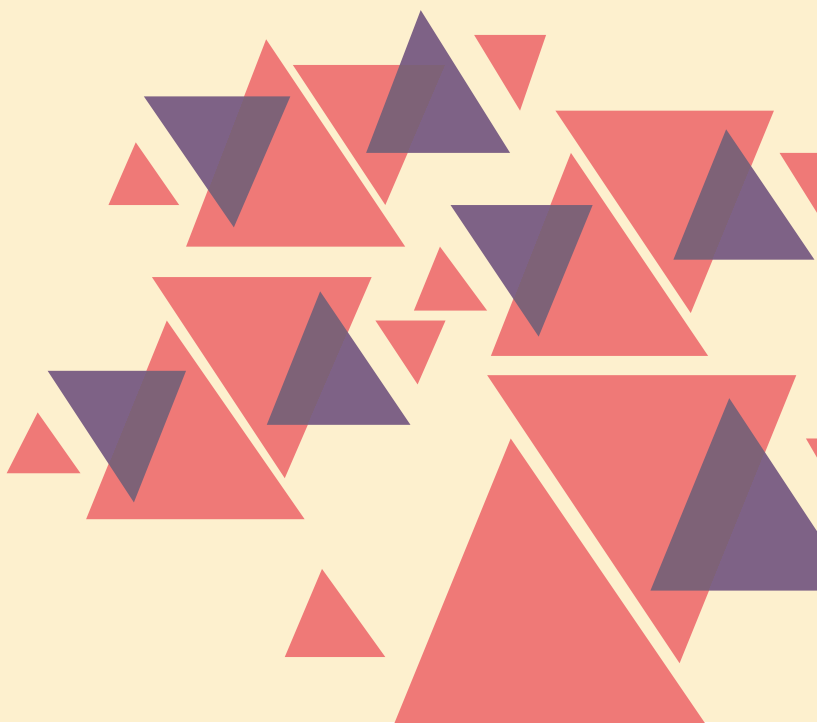
### Day 2

**Date** : Friday, 27<sup>th</sup> October 2018  
**Time** : 8.30 a.m. to 4.00 p.m.  
**Venue** : Grand ballroom, Galle Face Hotel, Colombo

7.30 am	Registration
8.30 am - 9.00 am	<b>Plenary 4 : Management of senile osteoporosis</b> Dr. Manilka Sumanatilleke, Consultant Endocrinologist, National Hospital of Sri Lanka
9.00 am – 10.00 am	<b>Symposium 2: Management of fractures in older adults</b> <b>Management of fractures in older adults: surgeon’s perspective</b> <b>Dr. Chandana Karunathilaka</b> , Consultant Orthopaedic Surgeon and Senior Lectuer, Kotelawala Defence University, Sri Lanka <b>Importance of MDT care in the management of fractures in older adults</b> <b>Dr. Chandana Kanakaratne</b> , Consultant Geriatrician, Sri Lanka
10.00 am – 10.30 am	TEA
10.30 am – 11.30am	<b>Symposium 3: Geriatric Services</b> <b>Establishing geriatric services: how it evolved</b> <b>Dr. Eileen Burns</b> , Consultant Geriatrician & President, British Geriatrics Society <b>Challenges and the way forward in Sri Lanka</b> <b>Dr. Dilhar Samaraweera</b> , Consultant Physician and Immediate Past President, SLAGM
11.30 am –12.15 pm	<b>Symposium 4: Elder Abuse</b> <b>Elder abuse: an international perspective</b> <b>Prof. Susan Kurrle</b> , Professor in Health Care of Older People, University of Sydney <b>Elder Abuse: Sri Lankan perspective</b> <b>Dr. Shiromi Maduwage</b> , Consultant Community Physician, Ministry of Health, Sri Lanka
12.15 pm – 1.15 pm	<b>Panel discussion 3: End of life decisions (case-based discussion)</b> <b>Panellists:</b> <b>Mr. Yasantha Kodagoda</b> , President's Counsel and Additional Solicitor General, Attorney General's Department, Sri Lanka <b>Dr. Panduka Karunanayake</b> , Consultant Physician & Senior Lecturer, Department of Clinical Medicine, University of Colombo <b>Dr. Arosha Dissanayake</b> , Consultant Physician & Senior Lecturer, Department of Medicine, University of Ruhuna
1.15 pm – 2.15 pm	LUNCH
2.15 pm – 3.15 pm	Free Paper Session
3.15 pm – 4.15 pm	<b>Symposium 5: NCDs in older people</b> <b>Management of diabetes in older people: is it different?</b> <b>Dr. Noel Somasundaram</b> , Consultant Endocrinologist, National Hospital of Sri Lanka <b>Management of hypertension in older people: controversies and challenges</b> <b>Prof. Godwin Constantine</b> , Professor in Cardiology & Consultant Cardiologist, Department of Clinical Medicine, University of Colombo
4.15 pm – 4.20 pm	Award Ceremony
4.20 pm – 4.45 pm	TEA



# FACULTY



# International Faculty

## Dr Eileen Burns



Dr Eileen Burns is the President of the British Geriatrics Society (BGS) and she has been a geriatrician in Leeds for twenty-two years. She was clinical director for a large teaching hospital department in the first decade of the noughties and is currently the clinical lead for integration in Leeds. She is well known amongst those BGS members who have been active on the Society's various committees, having served on several of these over the years. As a geriatrician dedicated to taking the specialty into the community, Eileen cites effective comprehensive geriatric assessment and close collaboration with community colleagues as central to ensuring high quality care for older people and obviation of unnecessary admission to hospital. She believes that this teamwork, and the rewards that it brings, needs to be promoted among potential specialist trainees.

## Dr.Nirmal Surya



Dr Nirmal Surya (MD, DNB, FIAN) is an Honorary Associate professor in Neurology at Bombay Hospital & Research centre and Honorary Neuro physician at Saifee hospital, Mumbai. He is also an Honorary Neurologist to Maharashtra Police. Dr Surya is the Chairman of Surya Neuro Centre and Founder Trustee and Chairman of Epilepsy Foundation India, which is a non-profit organisation working for the cause of epileptic patients in India. The numerous offices he has held include Regional Vice President of World Federation for Neuro Rehabilitation (since 2006), Chairperson of Developing World Forum, SIG, WFNR (2012), secretary general of Asian Oceanian Society of Neuro-rehabilitation (2015-17). He is the founder President of (IFNR) Indian Federation of Neuro-Rehabilitation (2012 onwards) and is the current president of 10th WCNR 2018 – World Congress for Neuro-Rehabilitation (2018).

Beside these he has received several awards and delivered many orations in India and across world in various capacities and has been a member of editorial boards of prominent international journals.

## Prof Lalith Sathkunam



Professor Sathkunam (MBBS, FRCPC) is attached to Glenrose Rehabilitation Hospital, Division of Physical Medicine & Rehabilitation, University of Alberta, Canada. He is the Medical Lead of the Spasticity Program for adults at the Glenrose Rehabilitation Hospital. Prof Sathkunam is the Chair of faculty for a mentoring program in chemo-denervation for practicing physicians and is a board member of the Canadian Psychiatrists Research and Development Foundation. He is extensively involved with undergraduate & postgraduate medical education and received the 'Award of Merit' in 2008 for his exemplary contribution to the field of Psychiatry in Canada and the prestigious 'Meredith Marks Teaching Excellence Award' in 2015, both awarded by Canadian Association of PM&R. In 2013 he received an Award of Excellence in Clinical Mentoring from the Faculty of Medicine and Dentistry at the University of Alberta. He is the past Chair of the Physical Medicine & Rehabilitation Specialty Committee at the Royal College of Physicians and surgeons of Canada.



# International Faculty

## Prof. Susan Kurrle



Susan Kurrle is a geriatrician practicing at Hornsby Ku-ring-gai Hospital in northern Sydney and at Batemans Bay Hospital in southern NSW. She has had a longstanding interest in diagnosis and management of dementia, and has developed memory clinics in both urban and rural settings. She holds the Current Chair in Health Care of Older People in the Faculty of Medicine at the University of Sydney, and she has led the NHMRC Cognitive Decline Partnership Centre since 2012. This Centre focuses on research and implementation projects dealing particularly with the care aspects of dementia and currently has 31 projects underway or completed across Australia. Recent work includes development and dissemination of national clinical guidelines for management of dementia, and implementation of a model of care for people with delirium and dementia in acute hospitals.

She has also been involved in research and practice on elder abuse for 25 years with development of protocols for recognition and management of elder abuse in clinical situations, and she is the author of the Elder Abuse Position Statement for the Australian and New Zealand Society for Geriatric Medicine.

## Dr.Nirmal Surya

Dr Veena Raykar is a Senior Rehabilitation Physician and the Supervisor of Training for Rehabilitation Registrars at Concord Hospital Sydney. She is leading the Disability Assessment and Rehabilitation team for young people with multiple disabilities (DARTYP) at Concord Hospital. DARTYP service focuses on young people with disabilities. The service is managed by the multi disciplinary team offering comprehensive management of young people with lifelong disabilities to ensure that all health care is coordinated to provide the highest level of collaborative care. She runs comprehensive neuromuscular rehabilitation clinics along with neurologists managing patients with neuromuscular diseases with the assistance of a multidisciplinary team and external patient support groups. Her main areas of interest are neurological rehabilitation especially for diseases such as stroke, multiple sclerosis, motor neuron disease, and neuromuscular diseases, Parkinson's disease, Cerebral Palsy, Intellectual Disability, and orthopedic rehabilitation. Beside these he has received several awards and delivered many orations in India and across world in various capacities and has been a member of editorial boards of prominent international journals.



## Dr. Abhishek Srivastava



Dr Abhishek Srivastava (MBBS, MD, DNB, PhD) is Consultant in Rehabilitation Medicine, Specialist in Neurological Rehabilitation and Director, Center for Physical Medicine and Rehabilitation at Kokilaben Hospital, Mumbai. He is a Triple Doctorate in Rehabilitation Medicine, First PhD in Neurological Rehabilitation in the country from prestigious National Institute of Neurosciences, Bangalore and underwent specialty training at best centers in United States, Europe and Singapore. Dr Srivastava is a Honorary Medical Staff Member at reputed Shepherd Medical Center, Atlanta, USA. He has set up the first comprehensive and largest Center for Rehabilitation in private healthcare at Kokilaben Hospital, Mumbai. He is the Founder Director of Indian Federation of Neuro-rehabilitation, Executive Committee Member of Indian Association of Physical Medicine & Rehabilitation and Editor of Newsletter of Indian Stroke Society. His clinical areas of interest are stroke, traumatic and non traumatic brain injury rehabilitation. He is an expert in 3D Instrumented Gait Analysis and multimodality spasticity management including Botulinum toxin injections. He has active research interest in recent advances in neurorecovery and neuroplasticity. He has multiple international publications in the field of neurosciences and rehabilitation.

# International Faculty

## Ms. Renai Pillay



Renai Pillay is the senior rehabilitation occupational therapist at Concord Repatriation and General Hospital. She is based on the in-patient rehabilitation ward and within the out-patient aged care and rehabilitation day hospital where she is involved in the spasticity management clinic.

Renai obtained a Bachelor of Applied Science (Occupational Therapy) from the University of Western Sydney in 2008 and a Masters of Health Science (Stroke Management Specialization) from The University of Newcastle in 2013. Renai has had experience practicing in a variety of clinical areas including general and neurological rehabilitation, medical, surgical, hyper-acute and acute stroke unit, Emergency Department and orthopaedics and has worked within a diverse range of clinical settings both within Australia and England. Renai has a strong interest in rehabilitation and continues to consider innovative therapy options to improve the rehabilitation service.

## Ms. Claire Gill

Claire graduated from the University of Sydney with a Bachelor's Degree in Applied Science (Physiotherapy) and started her career working at St George Hospital, Sydney. She has held the position of Senior Physiotherapist, Neurosciences at St George Hospital, Concord Repatriation General Hospital and at Prince of Wales Hospital, Sydney, Australia. At both hospitals, she also held the position of Clinical Educator for Neuroscience, supervising students from universities throughout NSW on practicum in the acute neurosciences setting. Claire sat on the Curriculum Advisory Panel for the new physiotherapy course at the University of Technology, Sydney and assisted with the development of some of the course material for the clinically based subjects



## Local Faculty

### Dr. Padma Gunaratne



Dr. Padma Gunaratne MD(SL), FRCP(Edin), FRCP(Glasg), FRCP(Lond), FCCP, Hon FRACP, FAAN is a Consultant Neurologist with an interest in Stroke care. She was the President of the Association of Sri Lankan Neurologists (2008), President of National Stroke Association of Sri Lanka (2009 – 2012), President of Ceylon College of Physicians (2011) and the current President of Sri Lanka Association of Geriatric Medicine. She was a member of the Board of Directors of the World Stroke Organization since 2008 - 2015 and an executive committee member of the Asia Pacific Stroke Organization since 2011- 2014. She is the founder of the Stroke Support Organization for Sri Lankans and the National Stroke Centre, Mulleriyawa. She pioneered the programme for thrombolytics for acute stroke at the National Hospital of Sri Lanka. As the president of the National Stroke Association of Sri Lanka she received the very first Gold Award for activities organized to celebrate World Stroke Day in 2009.

She was instrumental in establishing practice of total risk approach for prevention of CVD in Sri Lanka and also the Sri Lanka Stroke Clinical Registry. She has many publications in local and international journals and has written a book in Stroke Care for patients in all 3 languages. Dr Gunaratne has delivered many invited lectures at local and international fora. She is a recipient of Presidential award for research in 2009.

### Dr. Sudath Gunasekara

Dr Gunasekara MBBS, MD, FRCP (Lond), FCCP is the first board certified Consultant in Clinical Neurophysiology in Sri Lanka, attached to National Hospital of Sri Lanka. He had specialist training at Institute of Neurology, Colombo, Teaching Hospital, Peradeniya and St Bartholomew's Hospital, London.

He was Joint Secretary of the Association of Sri Lankan Neurologists (ASN) in 2011 and 2012 and President of the ASN in 2015. He is a member of American Association of Neuromuscular and Electrodiagnostic Medicine, International Clinical Neurophysiology Society and International Society for Electrophysiology of Vision. He serves as a member of the National Epilepsy Task Force, National Polio Expert Committee of Sri Lanka, and Specialty board in Neurology at Postgraduate Institute of Medicine.

His research interest include, peripheral nerve injuries, Guillain-Barre' syndrome and small fibre neuropathies. He was involved in the description of the new entity Acute Small-fibre Neuropathy. He delivered JB Peiris Oration at ASN annual congress in 2010. He received Presidential Awards for Research in 2002 and 2014.



### Dr Senaka Bandusena



Dr Senaka Bandusena (MBBS, MD, FCCP) graduated from University of Sydney in 1997 with first class honours and obtained his MD medicine in 2003. He trained in neurology at the National Hospital of Sri Lanka (NHSL), the Royal London and St. Bartholomew's Hospitals in UK. Presently he is the Consultant Neurologist at Colombo South Teaching Hospital.

## Local Faculty

### Dr.ChampikaGunawardana



Dr. Gunawardhana (MBBS, MD, MRCP, MRCP-Neuro) is currently working as a consultant neurologist in General Hospital Polonnaruwa.

He obtained his MBBS in 2002 from Faculty of Medicine Colombo with an honour pass. Then obtained MD from Post Graduate Institute of Medicine, Sri Lanka and completed post graduate training in Neurology. He also has obtained MRCP and MRCP Neurology subsequently. He underwent neurology and neuro-rehabilitation training in University Hospitals of Leicester from 2012 to 2104. Several researches on Stroke and rehabilitation were published under his name.

### Dr.Dilhar Samaraweera

Dr Samaraweera MBBS(Col),MD(Col),MRCP(UK),FRCP(Lond),FCCP, Post Graduate Diploma in Geriatric Medicine(Glasgow) is a Consultant Physician, and Chairman of the specialty Board in Geriatric Medicine. He is the founder President of the Sri Lanka Association of Geriatric Medicine. He has won many awards including the most Innovative outstation Physician of the year (2015) awarded by the Ceylon College of Physicians and has research interests in Geriatric medicine and palliative care and has published on the same.



### Dr.Kapila Ranasinghe



Dr Ranasinghe MBBS, MD (Psych) is a board Certified consultant Psychiatrist attached to the National Institute of Mental Health (NIMH). He was trained locally and then trained in old age psychiatry in the UK. He has developed and established an old age psychiatry unit at the NIMH and developed a special interest psychosexual clinic at the NHSL. He is a post graduate trainer for the P.G.I.M. and held the post of Secretary of the Board of Study in Psychiatry from 2013 to April 2015. He has several publications in local and international journals and has contributed to international book chapters. He also has written books on mental health issues of adults and old age, understanding dementia and basics of human sexuality in the local language. He regularly features in local media educating the public on the said subjects. Dr Ranasinghe is a member the LGBT subcommittee of the human right commission of Sri Lanka and Steering committee for National elderly care programme, Government of Sri Lanka.

### Dr.Shiromi Maduwage

Dr Maduwage MBBS, MSc (Community Medicine), MD (Community Medicine) works as a Consultant Community Physician in the Ministry of Health Sri Lanka. She has extensive work experience in Public Health including Elderly & Disability care. She engages in planning, implementation, monitoring and evaluation at National and Provincial level services in Sri Lanka. Dr Maduwage is a researcher with skills in conducting elderly care research and has presentations and publications of research articles at national and International level. She is a council member to the National council of elders appointed by the President of Sri Lanka. She is a founder member in Geriatric Association, Sri Lanka and a member of Palliative care and end of life care taskforce, Sri Lanka. She also was a council member and the Secretary 2016/2017 of the College of Community Physicians of Sri Lanka and a member of The International Institute on Ageing, Satellite Centre for SAARC Countries. Dr Maduwage has public health working experience at NHS Somerset, UK.



## Local Faculty

### Dr. Chandana Kanakaratne



Dr Kanakaratne MBBS, MD (Medicine), MSc (Geriatric medicine) graduated from University of Peradeniya in 1991. He obtained the MD (Medicine) in 1998 from the PGIM, University of Colombo and subsequently received the board certification in General Medicine in 2005. He had post graduate training in Geriatrics and Internal Medicine in Birmingham, UK and obtained CCT in both of them in 2006. He obtained MSC in Geriatric Medicine from University of Keele in 2005. Dr Kanakaratne worked as a Consultant Geriatrician in Sandwell hospital, West Bromwich since 2006 till 2015. He has special interests in Parkinson disease, ortho-geriatrics and Rehabilitation. He has many publications and research interests in stroke and osteoporosis and has extensive involvement of Medical education in UK.

### Dr.Chandana Karunathilaka

Dr.Chandana Karunathilaka MBBS, MRCS (Eng), MS (SL), MCh (Trauma & Orth) EDIN is a senior lecturer In Surgery at faculty of Medicine , Sir John Kothalawela Defence University, Sri- Lanka and Consultant Orthopaedic surgeon to the University Hospital KDU. He is a member of the SICOT (The Société Internationale de Chirurgie Orthopédique et de Traumatologie )-International Society of Orthopedic and traumatology. He is also a committee member for ISCoS( International Spinal Cord Society) and served in Guidelines preparing committee on management of vertebral lesions.He has done many orations and international presentations.



### Dr. Manilka Sumanathilake



Dr Sumanathilake MBBS, MD, MRCP- London, MRCP-Diabetes & Endocrinology- U.K, FRCP - Edinburgh, FACE- USA is a Consultant Endocrinologist at National Hospital of Sri Lanka. He was trained in Endocrinology at the National Hospital of Sri Lanka and St Bartholomew's Hospital, London, U.K. He is the current president of Sri Lanka College of Endocrinologists. He has many international publications and been involved in many researches.

### Dr Arosha Dissanayake

DrAroshaDissanayake is a senior lecturer in medicine at the Faculty of Medicine University of Ruhuna and a specialist physician at the Teaching Hospital Karapitiya. He has been the Secretary of the Ceylon College of Physicians and currently the editor of the Sri Lanka Society of Internal Medicine and president elect of the Galle Medical Association, He is the regional international advisor for the Royal College of Physicians, London. Academic and research interests include Toxicology and End of life care. He is also an associate member of the Trinity College of Music London and a passed finalist of the Chartered Institute of Management Accountants and worked as an investigative journalist for the Sunday Times newspaper.



# Local Faculty

## Mr. Yasantha Kodagoda



Mr Kodagoda received primary and secondary education at Ananda College Colombo, Sri Lanka where he excelled in academics and extracurricular activities being a scout, a senior prefect and lead chair of many societies. He entered Sri Lanka Law College in 1985 and having successfully completed the three Attorneys examinations, was called to the Bar as an Attorney-at Law of the Supreme Court in 1988. Mr. Kodagoda received Postgraduate legal education and Masters' Degree (LL.M.) in Public International Law (with merit) from the University College London (UCL), United Kingdom in 2003. He also obtained Postgraduate Diploma in Forensic Medicine and Sciences from the University of Colombo. He became the deputy Solicitor General in 2005 and was promoted as additional Solicitor General in 2015. He took oaths as President's Counsel in 2015. 2018 April onwards he is the second in command of the Criminal Division of the Attorney General's Department.

## Dr. Noel Somasundaram

Dr Noel Somasundaram graduated (with honours) from the University of Jaffna and subsequently trained in Endocrine Unit of St Bartholomew's Hospital, London prior to being board certified as an Endocrinologist by the Post Graduate Institute of Medicine, University of Colombo.

Dr Noel Somasundaram has more than 80 publications in the field of diabetes, endocrinology and metabolism. He is the editor of Clinical Diabetology a handbook for diabetes management and has chapters in three textbooks including Oxford Desktop Reference Guide in Endocrinology. He serves as a Consultant Endocrinologist at National Hospital of Sri Lanka. His pioneering work includes introduction of comprehensive care for patients with diabetes, obesity, pituitary tumours and Craniopharyngioma.

He serves as Project Lead for Sri Lanka Diabetes and Cardiovascular Initiative and as Chairman to the Specialty Board in Endocrinology of the University of Colombo. He is President elect of the South Asian Federation of Endocrine Societies.



## Dr. Panduka Karunanayake



Dr Karunanayake is a senior lecturer in the Department of Clinical Medicine, University of Colombo and a specialist physician. He has taught ethics in the faculties of Medicine, Arts and Graduate Studies and the Postgraduate Institute of Medicine and the Staff Development Centre of the University of Colombo, and medical sociology in the Faculty of Arts. This year he is the President of the Ceylon College of Physicians.

## Prof. Godwin Constantine

Professor Constantine (MBBS, MD) graduated from University of Jaffna in 1991 with First class in final MBBS with distinctions in Clinical Medicine and Pediatrics while winning gold Medals for Community Medicine and Clinical Medicine. He earned MD in Cardiology in 1999 and is a board certified specialist in cardiology with special training in interventional cardiology and cardiac imaging. He is a senior Lecturer in Medicine at Faculty of Medicine Colombo. He has also received a Diploma (2006) and B.A in Philosophy (2009) from University of London. Prof Constantine has a certificate in Medical education from University of Dundee and a BA in social Sciences from the Open University of Sri Lanka. He gained a MA in Tamil from University of Madras in 2015. He has over 70 international publications and won the President's Research Award in 1999, 2005-2015 and was short listed for 'The Lancet Research Award' 2001.



## Chairpersons

**Dr Nirmal Surya**  
**Dr Sudath Gunasekera**  
**Dr Veena Raykar**  
**Mr. S.K D D Padmasiri**  
**Dr. Dilanka Thilakaratne**  
**Mr J C A Perera**  
**Dr Padma Gunaratne**  
**Dr Harsha Gunasekara**  
**Dr Priyankara Jayawardena**  
**Dr Chandana Kanakaratne**  
**Dr Senaka Bandusena**  
**DR Dilhar Samaraweera**  
**Dr Arjuna Fernando**  
**Dr Nanda Amarasekera**  
**Dr Achala Balasuriya**  
**Prof Nirmala Wijekoon**  
**Dr Lasantha Ganewatte**  
**Prof AAntoinette Perera**  
**Dr K V C Janaka**  
**Dr Ruvan Ekanayake**  
**Dr Barana Millewithana**  
**DR Ananda Jayalal**  
**Dr Kithsri Karunathilake**  
**Dr Upul Dissanayake**  
**Dr Sajeewana Amarasinghe**  
**Dr Chamila Dalpatadu**  
**Prof Chandrika Wijeyaratne**  
**Dr Jayanthimala Jayawardena**



# ABSTRACTS OF THE GUEST LECTURES



## Geriatric Neurorehabilitation in Developing Countries- Dr. Nirmal Surya

### **Abstract**

Geriatric rehabilitation covers three areas – normal aging due to disuse and deconditioning, cardiovascular problems like vascular disease and stroke, and skeletal problems including osteoporosis and osteoarthritis conditions such as knee and hip replacements. Neurorehabilitation in geriatrics involve motor, cognitive, speech and language, vocational and activity of Daily Living training. The rehabilitation is done as in ward and as outpatient under a Multi-Disciplinary team which includes a Neurologist, Orthopaedic surgeon, Physiotherapist, Occupational therapist, psychologist, Social Worker. Evolution of Neurorehabilitation has made it a trendy clinical specialty due to improved survival from acute neurological injury and evidence-based practice resulting in improved outcome measures.

The new Neuro-rehabilitation techniques and early intervention has changed the outcome even in the elderly. The common geriatric conditions requiring Neurorehabilitation are, Stroke which accounts for 40% of inpatient rehabilitation in USA, TBI is the next common neurological condition and the incidence peaks in early 20s and then rises steadily after the age of 65 years by primarily due to falls causing head injury, others include parkinsonism, motor neuron disease, Alzheimer's, peripheral neuropathy and Neuromuscular disorders. Beside primary neurological diseases there are many secondary complications common in geriatrics like aspiration pneumonia, dehydration, dysphagia, DVT, Seizures, pressure sores, UTI, Depression and falls. Also multiple comorbidities make the Neurorehabilitation process more complex requiring Neurorehabilitation to be done by a multi-disciplinary team with patient and care giver guided goals. Cognitive and swallowing Rehabilitation is challenging due to lack of experts in developing countries. Need of modification for activities of daily living are the key in elderly. Aim of Neurorehabilitation should be to provide a better quality of life and make the patient as independent as possible.

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### ***Plenary 1- Rehabilitation and Frailty***

#### **Rehabilitation and Frailty- Prof Ian Cameron**

### **Abstract**

The use of rehabilitation approaches in frailty is in its early stages of development. Frailty also shows promise as a prognostic indicator for rehabilitation programs, in a similar manner to its application in other areas of medicine. However, care should be taken not to exclude frail older people from rehabilitation as has been the case in some centres for people with cognitive impairment or very severe disability.

There are clear theoretical reasons to expect that a rehabilitation approach will be effective. Some experimental data is also available to suggest rehabilitation is effective in frail and pre-frail older people. The principles of a frailty intervention program that has been demonstrated to be clinically and economically effective are as follows. Frailty can be mitigated. Support needs are individually addressed. The interventions aim to improve physical, cognitive and social functioning. Support has to be delivered over a long period, and systems must facilitate consistent management. Most frail older people are encouraged and supported to adhere to their intervention plan. It is important to recognize the needs of family and/or carers and to engage with them.

Reference: Fairhall N, Kurrle SE, Cameron ID et al. Treating frailty--a practical guide. BMC Med.2011 Jul 6;9:83.

## ***Discussion 2: Dementia care: caregivers' nightmare***

### **Dementia care: Caregivers' nightmare- Dr. Kapila Ranasinghe**

#### ***Abstract***

Sri Lanka faces a significant rise in ageing population. This has led to the increased incidence of dementia and the associated disability. Currently in Sri Lanka most persons (73.3%) with disability from any cause are cared by family members who are informal caregivers. An informal carer includes any person such as a family member, friend or a neighbor, who is giving regular, on-going assistance to another person without receiving a payment for the care given.

The effects of being a family caregiver, though sometimes positive, are generally negative, with high rates of burden and psychological morbidity as well as social isolation, physical ill-health, and financial hardship. Care-burden is defined as the extent to which the caregivers feel that their emotional or physical health, social life and financial status have suffered as a result of caring for their relatives. They have no regular hours, often work round the clock and have significant subjective feelings of burden and are more susceptible to depression and anxiety than the normal population. When it comes to dementia care twice as many women are in the caregiving role compared to men. A high level of care-burden is associated with depression and anxiety in the carer, reduced level of care for the patient, and premature placement of patients in long term care facilities.

Hence addressing the carer burden is not only beneficial to the carers but also to general wellbeing and the long term outcome of the dementia patient. Psychosocial interventions have been demonstrated to reduce caregiver burden and depression and delay nursing home admission of the patient. Good practice in dementia care demands comprehensive management of the patient while building a partnership between health professionals and family caregivers. Dementia treatment teams are required to be sensitive about the needs of care givers and support them based on their requests. Caregivers need to be invited to discuss not only their problems but also their emotional health.

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## ***Symposium 1: The older patient who falls***

### **Evaluation of the older patient who falls – Dr. Chandana Kanakarathne**

#### ***Abstract***

Falls are common in old age. The risk of falls gets worse as they age further. Falls are important especially in elderly because of the grave consequences that may follow them. Head injuries and major fractures may cause death in addition to the disabilities and difficulties they incur on a person's life. People may lose their independence and confidence. Some develop of 'fear of falls', which will interfere with their ability to carry out activities of daily living. Existing medical conditions may get worsened and new medical issues such as myocardial infarctions, infections, thrombo-embolic diseases and delirium may occur. Therefore falls in elderly need to be taken seriously.

There are many risk factors which make elders vulnerable for falls. They can be intrinsic, extrinsic, or situational. Among the intrinsic factors the advancing age with many ageing related issues becomes a major factor making one prone for falls. Other factors such as mobility and stability issues, medical issues such as diabetes, Parkinson's disease, seizures, neuropathies, arthritis, syncopal episodes then, multiple medications, cognitive and mood disorders, reduced muscle strength and low body mass are among the other intrinsic factors. Many Extrinsic factors such as loose rugs, humps and bumps, assistive devices, weather conditions, footwear, spectacles also contribute heavily to falls. Falls are multi-factorial.

Asking for a falls history from any elder coming to contact with health care system will help to identify those at risk of falls. After brief screening, patients may undergo 'Comprehensive Geriatric Assessment' with a view to falls evaluation, which will identify the risk factors and offer guidance to rectify them. In view of multi-factorial Nature of the falls, their evaluation and interventions should be multi-disciplinary.

## Falls prevention in older people – Prof. Ian Cameron

### **Abstract**

Falls are common with generally accepted rates of 30% per year in community living older people and 50% per year in older people living in nursing homes. Fortunately falls causing injury are less common but they still cause substantial mortality and morbidity due to fractures and traumatic brain injuries.

The research literature about falls prevention is now very large and it demonstrates that falls and fall injuries can be prevented. Applying this to an individual older person, however, is a complex process because of the very broad range of factors that influence falls risk.

Screening for risk of falls is commonly undertaken but has not conclusively been shown to be effective. The emerging strategy is to accept the professional judgment of health care providers that the older person is at risk of falls (usually due to slow and unsteady walking or transfer ability, but sometimes due to erratic behaviour related to dementia) and then apply evidence informed strategies to lower the risk of falls.

For clinicians use of the AGS / BGS approach is reasonable, but in hospitals and nursing homes this should be supplemented by consideration of environmental factors, such as staffing issues.

Exercise appears to be an effective falls prevention intervention but this needs to be approached with care. Reduction of psychotropic (and other) medications is also likely to be effective. In frail older people use of a vitamin D supplement is also likely to be effective. Depending on individual risk factors a range of other interventions are effective in particular settings.

There are also injury prevention, rather than falls prevention, strategies that are appropriate in some settings. These are best illustrated by the use of hip protectors.

Falls prevention is increasingly being linked with fracture prevention through improving bone health and also with interventions for frailty.

Reference: American Geriatrics Society and British Geriatrics Society. Updated Clinical Practice Guidelines for the Prevention of Falls in Older Persons, 2010 are available from [www.legacyofwisdom.org/dms/articles\\_brochures/JAGS-Falls-Guidelines/JAGS.Falls.Guidelines.pdf](http://www.legacyofwisdom.org/dms/articles_brochures/JAGS-Falls-Guidelines/JAGS.Falls.Guidelines.pdf)

***Symposium 2: Management of fractures in older adults*****Management of fractures in old age: Surgeon's perspective-  
Dr Chandana R. Karunathilaka*****Abstract***

Ageing is related with changes in the musculoskeletal system. Increased fragility of bone can lead to a fracture even in a minute trauma. And it is contributed with associated medical comorbidities like poor vision, hearing, changes in postural balance and reduce senses. By 2050, more than 6.25 million will suffer fragility fractures all over the world.

Common fractures in elderly are distal radius fracture, fracture neck of femur, spinal (vertebral) fractures, and proximal humoral fractures. These fractures occur in related to a specific age group which is called as tri-model pattern of fragility fractures.

Distal radius fractures in the elderly are one of the commonest fractures and most manage conservatively with manipulation and casting. Surgical fixation is better with the functional outcome. The very old and frail, dependent or demented patient is benefited with simple cast immobilization and do not require anatomical reduction.

Hip fracture is a debilitating fracture in the old age. Postoperatively about 20% die within 1 year and in non-operated cases, mortality increases up to 30% to 35%. When the femoral head blood supply is disturbed it needs replacement with hemiarthroplasty or Total hip replacement. When the blood supply is retained as in extra capsular fractures, it can be fixed with either extramedullary or intra-medullary fixation.

Most vertebral fractures occur after a trivial fall. Majority of cases, the neurology is not affected and can be managed conservatively. Kyphoplasty (filling the vertebral body with bone cement) is an emerging treatment. Common problems associated with the fragility fractures are affected mobility, reduced functional capacities such as nutrition, self-care, sanitary activities, affected social & recreational activities, psychological weakness and depression. Management of fragility fractures should be a holistic approach to the whole patient. Overall it is a high time to prepare for a national fragility fracture management programme for Sri Lanka.

**Multi-disciplinary care in the management of fractures in older adults -  
Dr Chandana Kanakarathne*****Abstract***

Fractures are not just broken bones. They can break many aspects of one's life. Fixing a broken bone alone never fixes one's life after a fracture. Therefore it's so important to look at the reasons that lead to the fracture and the consequences that follow the event.

Many issues arise after a fracture. What were reasons for the fall? What were the reasons that made bones friable? What are the impacts of the fracture on medical, psychological, functional and social well-being of the individual? There are issues at each level. Unless they are identified, predicted and anticipated, and offer workable solutions at this event itself, life will never be the same. Preventing further falls as much as possible and, attempts to rectify friable bones with appropriate interventions play major roles. Functional difficulties will need patient centred rehabilitation programmes to offer realistic hope to achieve independence. Optimising

medical and psychological well-being is essential for a successful rehabilitation programme. These issues need to be assessed and intervened from different angles with the help of a multiple professionals working together in a coordinated manner. Multi-disciplinary care improves the outcomes after a fall.

The speciality of ortho-geriatrics came to surface to fulfil this requirement, where orthopaedic surgeons work hand in hand with geriatricians and multi-disciplinary teams consisting of physiotherapists, occupational therapists, orthotics, dieticians, nurses, and many others to achieve the best quality of life for patients.

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### ***Symposium 3 : Geriatric Services***

#### **Challenges and the way forward in Sri Lanka - Dr. Dilhar Samaraweera**

##### ***Abstract***

One out of four will be elderly (over 60 years) in 2041 in Sri Lanka. The country is faced with the challenge of catering to the needs of the increasing proportion of the elderly population.

Our country has many achievements in the care of the elderly. There has been much progress in the sphere of education in Geriatric Medicine. Sri Lanka Association of Geriatric Medicine was initiated in 2014 with a vision to enhance knowledge in Geriatric Medicine among the medical fraternity. The Diploma in Elderly Medicine was initiated in the year 2013. The MD Medicine program was started in 2017. We have 4 trainees in Geriatric Medicine at present.

The Ministry of Health has taken initiatives to train nurses in Elderly Care, the care giver training is being streamlined. Development of a National training centre in Elderly Care and upgrading of wards in selected peripheral hospitals as Elderly Care units is in progress. The Ministry of Social Services was instrumental in establishing the National Secretariat for Elders which is actively involved in improving quality of life in elders by the establishment of village level elder's committees, day centers and issuing of free hearing aids, eye lenses and identity cards for senior citizens.

However, provision of comprehensive Assessment of the Elderly in the hospitals has been unachievable despite yeoman efforts by many eminent physicians for many years. Reorienting and restructuring of the health services in the hospitals and the community as elderly friendly is needed. Providing multidisciplinary teams to care for the elderly in hospitals and community, strengthening Primary Care, linking social services with the health care services enabling the patient to receive the benefits of a comprehensive Geriatric Care in a timely and efficient manner are challenges to be met.

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### ***Symposium 4: Elder abuse:***

#### **Elder Abuse ; Sri Lankan Perspective-Dr. Shiromi Maduwage**

##### ***Abstract***

Sri Lanka has a rapid increasing ageing population. Currently the proportion of the population aged 60 years and above has become 12.5% and it is estimated that by 2021 it would be 16.7% . One in every four Sri Lankan is expected to be an elder by 2041.

Proportion of elders of aged 80 years and more are increasing in the country and prevalence of non communicable diseases and disabilities are high among these elders. They are more dependent on caregivers for their Activities of Daily Living. It is evident that such elders are more prone to be victims of elder abuse.

Magnitude of an elder abuse is still hidden in the community. Mainly it is in the position of under reporting. Evidences have shown that culture and traditional practices play a major role to keep elder abuse unreported. Female elders are more prone for elder abuse than males in the society. It is evident that emotional abuse is more common than physical abuse among female elders and financial abuse is more common than physical abuse among male elders.

Service providers, caregivers need to have a sound knowledge on early identification and early intervention to prevent elder abuse. Of the legal documents for wellbeing of elders in the country, Act No.9 of 2000 provides legal provision to protect and promotion of rights of elders. Although there are mechanisms to prevent elder abuse, many service providers and caregivers do not follow mechanisms mainly due to lack of awareness & poor attitudes.

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### ***Panel discussion 3: End of life decisions***

**Mr Yasantha Kodagoda, Dr Arosha Dissanayake, Dr Panduka Karunanayake**

End of life care provision requires doctors to make difficult decisions. These relate to making the diagnosis of patients entering the last few months of their lives, shared decision making with patient and relatives regarding shift of focus to palliative care, DNA-CPR decision making and sharing that with patients and relatives, determining ceilings of care, decisions related to ensuring physical, psychological, social and cultural aspirations are fulfilled, diagnosing the dying patient entering the last few hours of life, withdrawal of futile life prolonging medication and whether it is in hospital or at home, the patient is going to die. In the session on ethical and legal aspects of end of life decisions, three case scenarios relating to DNA-CPR decision making, Withdrawal of futile treatment including whether or not to continue invasive ventilation, Role of family in making decisions in patients no longer having capacity and the concept of 'collective autonomy' will be explored. In view of the efforts by a number of professional bodies to establish sound palliative care practices as well as drawing up guidelines for healthcare professionals on palliative and end of life care, the session is expected to highlight both medical and legal landscape and boundaries and provide an opportunity for the participating doctors, to share their concerns, beliefs and attitudes to determine the way forward.

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### ***Symposium 5: NCDs in older people***

**Management of diabetes in older people: is it different? - Dr. Noel Somasundaram**

#### ***Abstract***

Diabetes is an important health condition for the aging population; more than 30% of people over the age of 65 years have diabetes. Glycemic goals and management strategies should be individualized in them considering followings.

- Cognitive dysfunction - difficult to do glucose monitoring, changing insulin doses or maintain timing or content of diet
- Functional impairment
- Depression
- Vision and hearing impairment

Table: Guide to individualized glycemc goals

Patient characteristic	Reasonable HbA1C goal
Healthy	<7.5%
Multiple coexisting chronic illnesses, several ADL impairments or mild to moderate cognitive impairment	<8.0%
Long-term care, end-stage chronic illnesses, moderate to severe cognitive impairment, ADL dependencies	<8.5%

Special care should be exercised in prescribing drugs and insulin:

- Metformin – low risk of hypoglycaemia. Caution in renal impairment or heart failure
- Thiazolidinediones – fluid retention, exacerbate heart failure and increase the risk of fractures- may not be the best choice
- Sulphonylureas – risk of hypoglycaemia, especially with drugs with a long t 1/2 (e.g.do not prescribe Glibenclamide if > 60 years of age)
- Alpha-Glucosidase Inhibitors - targets postprandial hyperglycemia and have low hypoglycemia risk, attractive for older patients. However gastrointestinal intolerance may be limiting its usage
- GLP 1 agonists – low risk of hypoglycemia, but associated nausea and weight loss may be in frail older patients
- Dipeptidyl peptidase-4 inhibitors - useful for postprandial hyperglycemia, impart little risk for hypoglycemia, well tolerated, therefore potential benefits for older patients
- SGLT2 Inhibitors- little or no hypoglycemia risk when used alone or in combination with metformin or DPP4i. Genito Urinary tract infections, weight loss, risk of acidosis may be limiting factors particularly in the frail.
- Insulin therapy- hypoglycemia risk should be considered. Use requires that patients or caregivers have good visual and motor skills and cognitive ability.

In addition in elderly all drugs should be started at the lowest dose and titrated up gradually. Polypharmacy may affect compliance, cause drug interactions and worsen adverse effects such as hypoglycaemia and hypotension.

## Management of hypertension in older people: Controversies and challenges - Prof. Godwin Constantine

### **Abstract**

Hypertension is an important risk factor for cardiovascular morbidity and mortality in the elderly. It is a common and often asymptomatic chronic disease, which requires optimal control and good compliance to prescribed medication to reduce the risks of various complications.

As our population ages, the importance of hypertension as the leading risk factor for death in adults becomes increasingly being appreciated. One major reason for this trend is the patterns of BP changes and increasing hypertension prevalence with age. Studies have shown more than 90% of individuals who are free of hypertension at 55 years of age will develop it during their remaining lifespan. Prevalence of hypertension is less in women than in men until 45 years of age, and becomes similar in both sexes from 45 to 64 and increases to much higher in women than men over 65 years of age.

Multiple trials have demonstrated that it is safe to treat hypertension in the elderly and it will decrease stroke, HF, myocardial infarction and all-cause mortality in this population. Hypertension treatment also reduces the occurrence of cognitive impairment and dementia in the elderly.

Hypertension treatment should be individualized and guided by the presence of concomitant cardiovascular risk factors. The assessment of subclinical end organ damage will necessitate an earlier onset of antihypertensive therapy leading to a reduction of the total cardiovascular risk.



# **ABSTRACTS OF ORAL PRESENTATIONS**



## ABSTRACT OP: 01

### Temporal trends in morbidity among older persons hospitalised to public inpatient facilities in Sri Lanka

Dharmagunawardene PVDS<sup>1</sup>, Kularatna MSM<sup>2</sup>, De Alwis AKSB<sup>1</sup>, Prabhath LAN<sup>3</sup>, Thilakarathna WD<sup>3</sup>, Herath HMJR<sup>4</sup>, Gunathilake R<sup>5</sup>

1. Education, Training and Research Unit – Ministry of Health
2. Australian Centre for Health Services Innovation, Queensland, Australia
3. Post Graduate Institute of Medicine, Colombo
4. Department of Geography, University of Sri Jayewardenepura
5. University of Newcastle, Callaghan, New South Wales, Australia

**OBJECTIVES:** Sri Lanka has experienced an increase in ageing population with proportion of 60+ aged persons almost doubled from 5.4% in 1946 to 10% in 2001. It is projected that 60+ aged persons will account for nearly 22% of the population by 2031. Ageing is associated with a higher prevalence of chronic diseases. The study objectives were to identify major morbidity patterns and their associated factors of elderly (70+ years) population in Sri Lanka from 2006 to 2015. We also aim to forecast morbidity patterns for identified major diseases for a six-year period from 2016 to 2022.

**METHODS:** Data were collected from Annual Health Bulletins, Central Bank Annual Reports, publications of Department of Census and Statistics, Ministry of Environment and Alcohol and Drug Information Centre from 2006 to 2015. Total disease burden, 70+ disease burden and proportions of the disease burden of the total population were considered in the analysis.

**RESULTS:** Disease burden of the total population and disease burden of total 70+ population increased from 22% to 30% and from 53% to 70% respectively between 2006 and 2015, except for following diseases i.e. viral diseases, malaria, helminthiasis, snake bites, rheumatic fever, hypertension, burns and pesticide poisoning, which had decreasing trends. A significant correlation was observed between the 70+ disease burden and inflation, unemployment, trade deficit, and alcohol consumption.

**CONCLUSION:** In Sri Lanka elderly disease burden is increasing except for few disease categories and is related to economic indicators. Projected values for the next 4 years will be presented after further analysis.

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## ABSTRACT OP:02

### Association between engagement in leisure activities and cognition among elderly people living in elderly care institutions in Southern Province

Gamage MWK<sup>1</sup>, Hewage DC<sup>2</sup> and Pathirana KD<sup>3</sup>

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<sup>3</sup>Department of Medicine, Faculty of Medicine, University of Ruhuna

**OBJECTIVES:** Population ageing is a 21st century characteristic. With ageing, there is a cognitive decline. Measures to preserve cognition has attracted the interest of researchers. This study was aimed to assess the association between engagement in leisure activities and cognition among a sample of elderly people living in elderly care institutions (ECIs).

**METHODS:** A descriptive cross sectional study was carried out with 421 elderly people living in ECIs in Galle&Matara Districts in Southern Province. Cognitive status was assessed using Mini Mental State Examination (MMSE).Elderly people with severe cognitive impairment were excluded from the study (MMSE score less than 11). Independent sample t testwasused to assess the association.

**RESULTS:** The mean age of the study sample was 71.87±6.73, of which65.8% (n=277) were females.Mean MMSE score was 22.91±4.91. Out of total study population, 56.3% (n=237) had normal cognition while 43.7% (n=184) had mild to moderate cognitive impairment based on MMSE score.The proportion of study population who had engaged in leisure activities were 86.9% (n=366). Among them, 48.2% had engaged only in indoor activities such as watching TV, listening to radio, reading, religious activities and craftwork.Thirty seven(8.8%)had engaged in outdoor activities as gardening and exercise performance while 29.9% had engaged in both indoor and outdoor activities. Watching television was the most famous leisure activity (36.3%). Those who engaged in leisure activities had significantly higher MMSE score than who did not (p<0.001\*). Elderly people who engaged in indoor activities, outdoor activities and both indoor and outdoor activities had a significantly higher MMSE score than who did not (p<0.001\*). Those who engaged in both types of activities had significantly higher MMSE score than who engaged only in indoor leisure activities (p<0.01\*).

**CONCLUSIONS:** There is a significant association between engagement in leisure activities and cognition among elderly people living in ECIs in this study population.

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## ABSTRACT OP: 03

### Medication-related causes for uncontrolled hypertension in elderly patients attending a medical clinic of a teaching hospital

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**OBJECTIVES:** Hypertension is common among elderly and control is not optimal in many. We aim to describe medication-related causes for uncontrolled hypertension in a group of elderly patients attending a medical clinic of a teaching hospital in Sri Lanka.

**METHODS:** This was a cross-sectional study. Consecutive patients aged ≥60years who were on treatment for hypertension, had two readings of blood pressure (BP) 1-2 minutes apart. Lower of the two was taken as the current BP. All patients not achieving target BP based on age and co-morbidities were included in the study. Socio-demographic and clinical data were collected by an interviewer-administered questionnaire. Level of medication-adherence was assessed by Voils two-part measure of medication non-adherence.

**RESULTS:** 189 patients were studied (women:62.4%; mean age:69.3±6.7years). Mean systolic and diastolic BP were 162.2±16.9mmHg and 90.3±11.4mmHg, respectively. Mean duration of treatment was 9.1±7.6years. Mean number of anti-hypertensive medications per patient was 2.2±0.9. Medication non-adherence rate was 72%. Non-adherence was significantly lower among those with higher level of education (p=0.038) and with longer duration of hypertension (p=0.042). There was no difference in adherence based on number of anti-hypertensive medications, co-morbidities or gender. The two mostly reported causes for non-adherence were being busy (47.1%) and forgetfulness (41.8%).12.7% were on co-medications (6.3%-NSAIDs) known to increase BP.

**CONCLUSIONS:** In this population with uncontrolled hypertension, adherence to anti-hypertensive medications was poor. Most frequently reported reasons for non-adherence were being busy and forgetfulness. Concomitant use of medications known to increase BP was seen in more than one tenth. It is worthwhile studying whether clinical pharmacy interventions could improve BP control in the elderly in Sri Lanka.

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## ABSTRACT OP:04

### Are we 'FAST' enough? - knowledge and attitudes on symptom identification of Stroke among patients with diabetes attending the diabetes clinic at NHSL

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**OBJECTIVES:** Early detection of stroke and timely and appropriate treatment are essential components of stroke care. Objectives were to assess knowledge regarding early symptoms & signs, attitudes regarding early treatment, resource availability, and individual stroke risk (Stroke Risk Score card of National Stroke Association USA, 2015).

**METHODS:** Cross sectional analytical study regarding knowledge and attitudes on symptom identification of stroke was done among 127 patients with diabetes attending Diabetes Clinic, National Hospital Sri Lanka, using an interviewer administered questionnaire after informed written consent.

**RESULTS:** 15.2% identified stroke by "Aagathaya" (Sinhala term for stroke) .82.4% recognized stroke by "Anshabhagaya" (Sinhala term for hemiparesis). 17.3% identified brain as the organ affected in stroke. Unilateral limb weakness was identified by 93.7% as a symptom of stroke. 80.3% identified all three symptoms (drooping of face, arm weakness, difficulty in speech) in FAST awareness campaign (launched in 2009 by Department of Health, England). 88% wouldn't contact emergency ambulance service at onset of symptoms. 12.0% would contact an emergency ambulance service. 33.8% knew the contact numbers of free emergency ambulance service. 15% of hospitals which are accessed by patients for emergency treatment had facilities for thrombolysis. The commonest source which patients got information was from friends/ family with stroke. 36.2% were educated by their doctors. There was no statistically significant correlation between knowledge score and risk level. Most patients knew stroke warning symptoms/signs and recognized the key symptoms of the FAST message. Most first contact healthcare institutions were not equipped to provide optimal stroke care.

**CONCLUSIONS:** Implementation of stroke care services, effective public education and utilization of emergency services remain essential in the management of stroke.

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## ABSTRACT OP:05

### Demographic and Clinical Characteristics of Stroke in Sri Lanka

Jeevagan V, Gunaratne PS, Bandusena S, Ziyad AIA, Wickramasingha C

**OBJECTIVES:** To study demography and clinical characteristics of stroke in Sri Lanka

**METHODS:** Sri Lanka Stroke clinical registry (SLSCR) is an online registry established in October 2015 to study stroke in Sri Lanka. Data of all stroke admissions of the National hospital of Sri Lanka (NHSL), Colombo South Teaching Hospital (CSTH) and Teaching Hospitals in Jaffna (THJ), Karapitiya and Kandy were entered to the registry using hand held computers at the point of care. The registry over six months commencing from 1st November 2016 are analyzed and presented.

**RESULTS:** There were 2735 total stroke admissions with 562, 577, 716, 558, 332 from NHSL, CSTH, and TH Kandy, Karapitiya and Jaffna respectively. 57.4% were males. 33% were less than 60 years of age. 80% were ischemic and 20% were haemorrhagic stroke. 7% were young stroke, less than 45 years. 9% were TIAs. Paralysis (85%) and speech disturbance (63%) were the most common symptoms. Hypertension (69%) was the most common risk factor while Diabetes, smoking and alcohol were seen in 36%, 16%, and 18%. 16% were admitted within 3 hours of symptom onset and 3% of ischemic stroke received thrombolytics. Mean duration of hospital stay was 5 days and only 3% received stroke unit. 9% died at the initial admission and another 16% died over next 3 months. 55% were left with poor outcome (MRS 3-5).

**CONCLUSIONS:** Mean number of patients admitted to any of the hospitals studied per year was 1094. Out of these, majority failed to present to hospital within 3 hours (16%) and only few received thrombolytics. 97% did not receive stroke unit care nor did stay in hospital for an adequate period (Mean 5 days). 16% died after acute stage probably following complications. Registry confirmed that there is vast room for improvement of stroke care in Sri Lanka.

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## ABSTRACT OP: 06

### Caring for caregivers- Screening and training programme for caregivers of patients with dementia and establishment of a caregiver group at the University Psychiatry Unit, NHSL.

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**OBJECTIVES:** Dementia is a disorder associated with significant caregiver burden. The objectives of the programme were to establish a caregiver group, to screen them for non-communicable diseases, to train them to manage their own health and their patients at home.

**METHODS:** The programme was conducted on 15th and 16th of August 2018 at the University Psychiatry Unit, NHSL. Pre-interventional evaluation was done using Zarit Care Giver Burden Interview and questionnaire to assess the knowledge on dementia. First day activities consisted of health screening programme, educational sessions on promotion of own health and group discussion on dementia. Second day activities included session on management of behavioural and psychological symptoms of dementia and establishment of a caregivers group. Post-intervention evaluation was done by repeating the same questionnaire on the knowledge. Sustainability will be ensured by having caregiver group meetings every two months and the formal programme every 6 months.

**RESULTS:** There were 14 participants. Majority was females (n=9; 64.3%). Majority had pre-existing medical comorbidities; 8 (57.1%) had dyslipidaemia, 6 (43%) had hypertension and diabetes. Medical comorbidities were newly identified in 7; 2 had diabetes, one had hypertension, three were overweight and two were underweight. Two were diagnosed with depression and mild cognitive impairment was identified in three. Five (35.5%) had moderate to severe caregiver burden. Pre-intervention average knowledge score on dementia was 25% and post-intervention score was 50%. Caregiver group was established as a self-help group.

**CONCLUSIONS:** The screening detected that a considerable proportion had medical and psychiatric morbidities, caregiver burden and poor knowledge on dementia. Following the intervention there is a significant improvement in the knowledge. This model can be used to develop interventions and support for dementia in Sri Lanka.

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