



N Neuroscience **NURSING** Seminar

Integrating Clinical Care, Research & Education in Neuroscience Nursing

Date: 1 November 2019

Venue: The TreeTop, Level 5, SCAPE, 2 Orchard Link Singapore 237978

Organised by:



National
Neuroscience Institute

SingHealth

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Contents

03	MESSAGE FROM CO-CHAIRPERSONS
04	GUEST OF HONOUR
04	FACULTY
04	ORGANISING COMMITTEE
04	WORKSHOP MODERATORS
05	PROGRAMME
07	ABSTRACTS
13	ACKNOWLEDGEMENTS





Message from Co-Chairpersons

The Neuroscience Nursing Seminar is held annually and organised by nursing staff from the National Neuroscience Institute (NNI), Singapore. In line with NNI's vision "We shape neuroscience care for a better tomorrow", this event provides a platform for nurses in Singapore to learn, share latest updates and participate in discussion regarding neuroscience related issue.

Into its eighth year, the seminar aims to share the experiences on Neuroscience Nursing through an inter-professional approach of translating knowledge into practices. The theme for this year is set as "Integrating Clinical Care, Research & Education in Neuroscience Nursing". The seminar comprises of a plenary session and multiple parallel sessions which hope to educate the participants on the various aspects of clinical, education and research pillars in healthcare industry. This seminar also searves as a platform to allow nurses from various medical institutes and hospitals to explore collaboration, educational and research opportunities.

Faculty members have been invited from various hospitals and professional organisations to share their experiences as well as the latest updates on neuroscience care. As neuroscience care often involve multiple healthcare professionals, the seminar also hope to equip participants with new knowledge, develop new skills and/or unfold different perspective towards neuroscience nursing care through inter-professional collaboration on top of clinical, education and research setting.

This year, the seminar also adopted different pedagogy approaches as compared to the conventional didactic lectures delivered during the past few years. Participants can opt to attend their choice of workshop which offers several choices of topics. With a smaller group workshop sessions, the Committee hope participants will benefit from a more fruitful discussion & sharing amongst one another.



Ms Ng Suan Gek
Co-Chairperson
Neuroscience Nursing Seminar 2019



Ms Tan Il Fan
Co-Chairperson
Neuroscience Nursing Seminar 2019



Guest of Honour

Ms Tan Soh Chin

Chief Nursing Officer, Ministry of Health



Faculty

A/Prof **CHAN** Mei Leng
Tan Tock Seng Hospital

Adjunct Assistant Professor
Jai **PRASHANTH** Rao
National Neuroscience Institute

Ms Emily **ANG** Liling
National Neuroscience Institute

Ms Isabella **CHUA** Xuebing
National Neuroscience Institute

Ms **HU** Hong Lan
Tan Tock Seng Hospital

Ms Linda **LIM** Lay Hoon
National Neuroscience Institute

Ms **PENG** Xue Juan
National Neuroscience Institute

Ms Alison **TAN**
National University Hospital

Ms **ZHOU** Lifeng
National Neuroscience Institute

Dr **CHIEW** Hui Jin
National Neuroscience Institute

Dr **TAN** Siok Bee
Singapore General Hospital

Mr Cedric **BEE** Weng Fei
National Neuroscience Institute

Ms Aritaya
DOMRONGPOKAPAN
Tan Tock Seng Hospital

Ms Clarabelle **LIEW** Si Ying
Singapore General Hospital

Ms **LIM** Peck Kee
National Neuroscience Institute

Ms Valerie **SEE** Mei Ting
Tan Tock Seng Hospital

Ms **TEE** Lee Huan
Tan Tock Seng Hospital

Dr **HUANG** Wanping
Tan Tock Seng Hospital

Dr **ZHOU** Wentao
National Neuroscience Institute

Ms **CHAN** Wai Yee
National Neuroscience Institute

Ms **FAZILA** Binte Abu Bakar
Aloweni
Singapore General Hospital

Ms Joanne **LEE** Choon Lan
National Neuroscience Institute

Ms **NG** Hwee Lan
National Neuroscience Institute

Ms Lydia **SOON** Hse Yin
Tan Tock Seng Hospital

Ms **YOW** Chunru Fionna
Tan Tock Seng Hospital



Organising Committee

Ms **NG** Suan Gek
Co-Chairperson
National Neuroscience Institute

Ms Joanne **LEE** Choon Lan
National Neuroscience Institute

Ms Nur **NADIAH** Bte
Mohamed Yusop
National Neuroscience Institute

Ms **TAN** Il Fan
Co-Chairperson
National Neuroscience Institute

Ms **LIM** Peck Kee
National Neuroscience Institute

Ms **YANG** Mei Ling
National Neuroscience Institute



Workshop Moderators

Ms Emily **ANG** Liling
National Neuroscience Institute

Ms Joanne **LEE** Choon Lan
National Neuroscience Institute

Ms Linda **LIM** Lay Hoon
National Neuroscience Institute

Ms **ZHOU** Lifeng
National Neuroscience Institute

Ms Esther Vanessa **CHUA**
National Neuroscience Institute

Ms **LEE** Kah Keow
National Neuroscience Institute

Ms **NG** Hwee Lan
National Neuroscience Institute

Ms **FU** Liqing
National Neuroscience Institute

Ms **LIM** Peck Kee
National Neuroscience Institute

Ms **YANG** Mei Ling
National Neuroscience Institute



Programme

Time	Programme		
8.00am	Registration		
8.30am	Opening Address by Deputy Director, Nursing Division, National Neuroscience Institute Dr Ng Wai May		
8.35am	Address by Guest-of-Honour Ms Tan Soh Chin Chief Nursing Officer, Ministry of Health		
8.45am	Plenary Session		
	Neuroscience Interprofessional Education: Where Are We? What Can Be Done? Adjunct Assistant Professor Jai Prashanth Rao		
9.30am	Tea Break		
10.00am	Parallel Session 1		
	Workshop A	Workshop B	Workshop C
	Escalating Neurological Care Through Psychological Aspect	Shaping the Future Through Education	Creating a Culture of Developing Nursing Research
	Moderator: Ms Esther Vanessa Chua	Moderators: Ms Linda Lim Lay Hoon / Ms Zhou Lifeng	Moderator: Ms Lee Kah Keow
	I'm Not Crazy! Who Can Help? Dr Huang Wanping	Educator: One Minute Secret Recipe Dr Chiew Hui Jin Ms Linda Lim Lay Hoon Ms Zhou Lifeng	Using Focus Group in Nursing Research Ms Fazila Binte Abu Bakar Aloweni
	Chase My Blues Away Dr Tan Siok Bee		
12.00pm	Lunch		
1.00pm	Parallel Session 2		
	Workshop A	Workshop B	Workshop C
	Skills Up the Nursing Care to Language and Respiratory	Advancing Nursing Care Through Non-Pharmacological Way	Understanding the Brain in Black & White
	Moderator: Ms Lim Peck Kee	Moderator: Ms Fu Liqing	Moderator: Ms Yang Mei Ling
	Speak To Me! Ms Valerie See Mei Ting	Driving Assessment & Rehab Program for People with Neurological Conditions A/Prof Chan Mei Leng	Nurses Can Read Scans Too! / Neuro - Imaging Puzzle: Can Nurses Fix? Mr Cedric Bee Weng Fei
	I Can't Breathe! What Can Be Done? Ms Lydia Soon Hse Yin	Physiotherapy Management for Patients with BPPV Ms Tee Lee Huan	Unblock the Vessel: What Do You Need? Ms Chan Wai Yee Ms Isabella Chua Xuebing



Programme

Time	Programme		
3.00pm	Tea Break		
3.30pm	Parallel Session 3		
	Workshop A	Workshop B	Workshop C
	Improving Nursing Care Through Updates on Neurological Conditions	Evidence - Based Practice for Neurosurgical Care	Expanding Your Neurosurgical Skills
	Moderator: Ms Ng Hwee Lan	Moderator: Ms Emily Ang Liling	Moderator: Ms Joanne Lee Choon Lan
	Dos and Don'ts in Seizure Ms Peng Xuejuan	NPH: A Nursing Perspective Ms Alison Tan	Get Me Some Support, Please! Ms Artitaya Domrongpokapan
	Factsheets of MND Ms Lim Peck Kee	Past, Present and Future of ICH Ms Clarabelle Liew Si Yin	Save My Drowning Brain! Ms Joanne Lee Choon Lan
	Stimulator of Your Brain: DBS Ms Ng Hwee Lan	Bits & Pieces of Neuropalliative Ms Yow Chunru Fiona	My Brain Is Drowning Ms Hu Hong Lan
	Current Trend of Neuroscience Care: Community Nursing Dr Zhou Wentao	"Ouch, Back Pain": What Can I Do? Ms Emily Ang Liling	
5.30pm	End of Programme		



Abstracts



Neuroscience Interprofessional Education: Where Are We? What Can Be Done?

Adjunct Assistant Professor Jai Prashanth Rao

Interprofessional collaboration (IPC) has been shown to improve patient care and outcomes. Interprofessional education (IPE) has been the primary methodology used to try and achieve IPC but this has produced inconsistent results in fostering collaborative practice. The talk will look at the current barriers in translating IPE into the clinical work place and increase the understanding of professional roles in these barriers.

We will look at each of the identified barriers and possible strategies to mitigate these barriers will be discussed. Even though we will focus primarily in the Neuroscience workspace the principles should apply to any healthcare setting where more than 2 professional groups are involved.

Parallel Session 1



I'm Not Crazy! Who Can Help?

Dr Huang Wanping

Coping with challenges following traumatic brain injury. This includes addressing the cognitive, behavioural and psychological sequelae commonly reported by individuals and their caregivers.

Basic principles of cognitive behavioural therapy and mindfulness, as well as strategies to cope with changes post-TBI will be discussed.



Chase My Blues Away

Dr Tan Siok Bee

A deliberate suggestion can influence how well people remember things, how they respond to medical treatments, and even how well they will perform and behave. Using positive suggestions can be a powerful tool in good outcomes. Many also think of their limitations; the power of negative suggestion is just as powerful.

is just as powerful.

Placebo treatments are interventions with no active drug ingredients, which can stimulate real physiological responses, from changes in heart rate and blood pressure to chemical activity in the brain, in cases involving pain, depression, anxiety, fatigue and other symptoms. Nocebo effect is harm that treatment may do to patients by mere suggestion. One of the ways the subconscious mind learns is through repetition. Even if someone thinks something is ridiculous, if a person hears it multiple times the subconscious mind will begin to believe it.

Thus, choosing the power of positive suggestions is helpful in healing and to stay calm and happy. Speaker will also share a simple, fast and holistic process based on acupressure points, a powerful technique that relieves stress of all forms and transforms our unconscious hard drive.



Dr Chiew Hui Jin



Ms Linda Lim Lay Hoon



Ms Zhou Lifeng

Educator: One Minute Secret Recipe

Being able to involve in clinical teaching is often a challenging task for healthcare professional especially nurses. The "WHAT", "WHERE", "WHO" and "WHY" to teach is more than often easy as nurses has the knowledge and skills in their respective areas to do so.

Opportunity and time to teach at the bedside is more limited with the increasing amount of paperwork with no additional time allocated to do clinical ground teaching. The challenges surface when "HOW" and "WHEN" to teach in a busy work day often frustrate many despite their willingness.

The One Minute Preceptor (OMP) has the intention to help nurses to increase the quality of teaching occurring in complex clinical settings and allow effective feedback. This is a brief and easy to learn teaching tool that could enhance the teaching skills of the nurse.



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Using Focus Group in Nursing Research

Ms Fazila Binte Abu Bakar Aloweni

A focus group is a deliberate gathering of selected people in order to engage in a discussion that will elicit perception about a particular topic of interest. The purpose of this workshop is to provide an overview how to conduct focus group interview and demonstrate the key process that is involved in the preparation, conducting, analysing and dissemination of focus group findings. Participants in this workshop will have a theoretical understanding of focus group methodology; discuss the activities associated with planning, organising and conducting focus group. Participants will be able to practice conducting and participating in a focus group interview.

Parallel Session 2



Speak To Me!

Ms Valerie See Mei Ting

People with severe speech or language problems may require alternative ways to help them communicate with others. You may have seen it in a person using gestures, writing in a notebook or perhaps, you have seen it through a person typing on a virtual keyboard using his/her eyes. This sharing will include a discussion on how to identify patients with possible speech or language problems and how we can improve our communication with them through the use of augmentative and alternative communication (AAC). The different types of AAC systems and devices, such as eye gaze devices with synthesized voices and communication charts, will also be discussed.



I Can't Breathe! What Can Be Done?

Ms Lydia Soon Hse Yin

Patients with neurodegenerative diseases such as Amyotrophic Lateral Sclerosis (ALS), Multiple Sclerosis (MS), traumatic injury, Spinal Cord Injury (SCI) and other lung or heart pathologies often experience respiratory insufficiency and ultimately needing mechanical ventilators invasively or non invasively to assist in their breathing needs.

In the past, there were little available resources for patients' caregivers to care for patients at home. They would often have to endure stormy and prolonged stay in the hospital before they passed on. Home ventilator respiratory support service (HVRSS) was established since 2009. It is a multi-disciplinary team that provides home care for ventilator-assisted individuals aged 16 years and above. The team provides comprehensive care for adult ventilator patients from the point that patients are enrolled into the service. HVRSS team provide in-patient management, respiratory support during invasive procedures, discharge planning and assistance in equipment acquisition. Patients will be supported via phone or visits after they are discharged to home. The aim of the service is to allow ventilator-assisted individuals (VALs) to return home with caregivers and to minimize frequent re-admission to hospital.

The process of bringing a complex ventilated patient can be challenging. It requires dedication and determination of the family members and caregivers to undergo the trainings in the hospitals as well as to manage patient's care at home independently. Despite the difficulties, patient and their caregivers still remains positive.



Driving Assessment & Rehab Program for People with Neurological Conditions

A/Prof Chan Mei Leng

Driving a motor vehicle is a complex task. It requires the integration of intact visual, cognitive, perceptual and motor functions in a driver to manage a vehicle competently in a dynamic traffic situation. Driving abilities in a licensed driver can decline due to health and/or age related changes. This workshop will introduce the existing local framework in Singapore of assessing fitness-to-drive in terms of the roles of major stakeholders (licensing authorities, doctors, driving assessor therapists). Participants will be given pertinent case studies of drivers with neurological conditions to discuss and to identify how the nursing profession can complement the existing framework.



Abstracts



Physiotherapy Management for Patients with BPPV Ms Tee Lee Huan

Benign Paroxysmal Positional Vertigo (BPPV) is one of the commonest peripheral causes of vertigo. It is prevalent in the elderly populations especially those with minor head injuries. BPPV is also common in patients with traumatic brain or spinal cord injuries. When not treated, BPPV has negative impacts such as fear avoidance of movement, reduced mobility and affects normal activities of daily living (ADL).

BPPV can be identified early with simple screening through subjective and objective assessment. It can also be easily treated with appropriate repositioning treatment with good success. Early diagnosis and treatment of BPPV will promote earlier return to normal ADL, work and avoid unnecessary investigations/ medical services. Thus, improving one's quality of life and promoting value based care.

The talk will give the audience a brief overview of (1) what is BPPV, (2) simple screening for nurses to help identify BPPV to ensure early escalation of appropriate referrals and (3) common repositioning treatment for treatment of BPPV.



Nurses Can Read Scans Too! / Neuro- Imaging Puzzle: Can Nurses Fix? Mr Cedric Bee Weng Fei

This session addresses basic stroke imaging interpretation. It highlights the importance of understanding basic stroke imaging protocol involving CT and MRI modalities. There will be an interactive quiz session for the target audience.



Ms Chan Wai Yee



Ms Isabella Chua Xuebing

Unblock the Vessel: What Do You Need?

Ischemic stroke can be treated with good outcome if it was treated with clot busting agent within 4.5hours and mechanical thrombectomy while there is still salvageable brain tissue.

Mechanical thrombectomy can be done through two types of method: clot retrieving or aspiration. Which method to use will depend on the patient's condition and scan result. Early intervention with the assistance of advance technique by using either stent retriever or device aspiration, patient can be given a second chance to recovery.



Parallel Session 3



Dos and Don'ts in Seizure

Ms Peng Xuejuan

Epilepsy is a condition that affects the brain it characterise by abnormal electrical activity causing seizures or unusual behaviour, sensations and sometimes loss of awareness or consciousness.

Epilepsy has a variety of causes, ranging from genetic, metabolic, infectious, structural, immune and unknowns. Majority of the cause of epilepsy to patients are unknown.

Epilepsy is a treatable condition, The goal of epilepsy treatment is to prevent or decrease the frequency of seizure activity. The main treatment is the use of antiepileptic medications (AED) where up to 70% of people with epilepsy could become seizure free with one AED controlled. Certain patients may be able to stop AEDS but some patients require lifelong treatment.

Common trigger factors include lack of sleep, stress, infection, and non-compliance. Patients are advised to avoid trigger factors in order to prevent provoked seizure, not to abruptly withdraw AEDs or stop AEDs which may result in increasing seizure frequency or life-threatening consequence.

Epilepsy education is crucial to reduce admission, which includes what to avoid during a seizure, what to do during seizure, when to call for ambulance and some herbs or fruits to avoid while on AEDs.

In order to prevent injury, safety issues are very important for patients with epilepsy, which includes home safety, employment, recreation, driving and pregnancy advice.



Factsheets of MND

Ms Lim Peck Kee

Motor Neuron Disease (MND) is a rare neurodegenerative disease. Unfortunately till date, there is no treatment available to cure individual who suffered from MND. As a healthcare provider, it is important to support the patients and their caregivers as multidisciplinary approach along the journey. This workshop will enhance the nurses' knowledge on the common issues or complications experienced by MND patients and how are we as a nurse can help them.



Stimulator of Your Brain: DBS

Ms Ng Hwee Lan

Parkinson Disease (PD) is a chronic and degenerative brain disorder that results in motor impairment. Medical treatment is highly successful during early period. However, as the disease progresses, medication-induced complications can develop. Patients may become refractory to this treatment option. This can significantly affect the quality of life of the patient.

In advanced PD, when medications no longer adequately control motor symptoms, deep brain stimulation (DBS), also known as brain pacemaker, offers a powerful therapeutic alternative. DBS therapy can give PD patients additional hours of good movement control per day, compared to the best medical therapy. This can help patients to regain the ability to perform normal daily activities and to improve their quality of life.



Current Trend of Neuroscience Care: Community Nursing

Dr Zhou Wentao

Neurological conditions are leading causes of the non-fatal burden of disease that consume very high healthcare expenditure. The trend of neuroscience care is going to be evolving fast in the era of more people who are highly educated, information is widely available, and advanced medical technologies are easier accessible. The current model of care is far behind the speed of the care evolution happening around us. To better support the neurological deficit patients' complex physical-psych-social needs, a multi-dimension care approach is needed to reshape the care model to achieve the shared care goals (patients', families' and healthcare providers'). In this presentation, a new perspective of neuro-community care will be proposed and discussed.



Abstracts

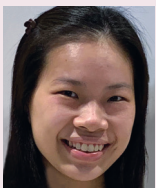


NPH: A Nursing Perspective

Ms Alison Tan

Normal Pressure Hydrocephalus (NPH) is an Idiopathic normal pressure hydrocephalus and is the common form of hydrocephalus in elderly above 60years old. There may be enlarged hydrocephalus shown in the diagnostic image but the pressure might remain normal in opening pressure when lumbar puncture was done. The symptoms of NPH can be confused as dementia.

There are few characteristics to differentiate NPH from other form of dementia which include gait disturbances, short term memory loss and urinary incontinence. Nursing play an important role to help to identify patient with these symptoms and help them to cope with the changes in their mobility by providing them a proper care plan especially in their discharge plan. Proper care plan will help to improve the quality of life.



Past, Present and Future of ICH

Ms Clarabelle Liew Si Ying

Spontaneous primary intracerebral hemorrhage (ICH) accounts for approximately 25% of all strokes in Singapore and causes significant morbidity and mortality. Recent advances in neuroimaging, medical and surgical management have improved the management of ICH. Advanced neuroimaging and surgical techniques have allowed clinicians to better assess, plan and access to provide best possible outcome for patients. Positive "Spot Sign" in the delayed phase of CT has been described to predict progression and prognostication. BrainPath is an alternative surgical technique which involves precise technology and aim to achieve successful removal of clots. The emergence of these promising clinical interventions can help us refine existing strategies and consider new approaches to the management of ICH.



Bits & Pieces of Neuropalliative

Ms Yow Chunru Fionna

Communicating care and concern for critically ill patients and their families in the Intensive Care Unit (ICU) is an important and intrinsic part of nursing philosophy. Nurses play an integral role caring for the dying patients in ICU in delivery good end-of-life care and addressing the physical, emotional and spiritual needs of the patients and their loved ones. A peaceful death often brings comfort for the living. This talk will share with you the important role of a nurse in the journey of caring for the dying and their loved ones, both in the Neuro-ICU and in the post-ICU period.



"Ouch, Back Pain": What Can I Do?

Ms Emily Ang Liling

Low back pain remains a common problem for patients presented at outpatient clinics and hospital admission. Its prevalence crossed all ages, genders and socioeconomic status. It is also one of the top causes for disability according to Health Data for Singapore from 2007 - 2017. Pain is the main vital parameter reported by patients with low back pain and could aggravate a person's quality of life. It may sometimes be associated with numbness, weakness, unsteady gait and urinary/bowel incontinence. Other warning sign, which is indicative for an emergency surgery is cauda equina syndrome.

Low back pain is commonly stems from degenerative, trauma and mechanical heavy object lifting. Other less common causes are sport injury, tumour, infection and vascular cause. Xrays, Computed Tomographic and Magnetic Resonance Imaging (MRI) scan are common investigation for further evaluation. Most of the treatment is conservative with multi-modality analgesics and physiotherapy. Surgical treatment is considered in selective patients when medical therapy fails.

Nurses continue to play an important role in performing accurate assessment and documentation of patient's pain report in the scheme of pain management and their recovery in functional status. The importance roles comprised of understanding pain pathway, identifying the cause in low back pain, administration of multi-modality analgesics, coordination with multidisciplinary team example Physiotherapy, Occupational therapy and patient education to empower patient in their own recovery and to gain better control over low back pain and improved quality of life.



Abstracts



Get Me Some Support, Please!

Ms Artitaya Domrongpokapan

Our Prosthetics & Orthotics Service located within the Foot Care & Limb Design Centre (Tan Tock Seng Hospital). We provide prosthetic and orthotic services to patients. Our specialised workshop enables on-site fabrication and fitting of customized prostheses and orthoses. The services provided by our department include assessment, prescription, measurement, fabrication and fitting of orthoses, prostheses, and custom-made shoes.

Orthotic Management of Neuromuscular Conditions

Patients with neuromuscular conditions are seen by Orthotist for assessment and fitting of suitable orthoses to meet their functional needs. An orthosis (brace) is a supportive device that helps to

- Control biomechanical alignment
- Prevent injury
- Provide support following injury
- Assist in rehabilitation
- Reduce pain
- Increase mobility and independence

The orthosis can be either pre-fabricated or custom-made to suit the patient's requirements. For patients with neuromuscular conditions, their presenting symptoms may vary. This may include muscle weakness in the early stages. As the disease progresses, these symptoms will become more significant, and the orthotic design and prescription may vary accordingly.



Save My Drowning Brain!

Ms Joanne Lee Choon Lan

Permanent shunt insertion is a surgical intervention to help patients with hydrocephalus. Most neurosurgeons prefer programmable shunt valve as it has the flexibility of reducing the risk of over-shunting or under-shunting and managed in a non-invasive method.

Introduction to CSF production and Ventricle system

- To know the types and causes of hydrocephalus
- To know the types, routes and component of shunt

Care of patients with shunt inserted

- To know the signs & symptoms of shunt complications
- To know about care of shunt and shunt precautions

Hands on shunt check and shunt adjustment



My Brain Is Drowning!

Ms Hu Hong Lan

An external ventricular drainage (EVD) or extra ventricular drain is commonly used in neurosurgery as a temporary measure to relieve intracranial pressure or as a treatment for hydrocephalus. It is usually inserted by a neurosurgeon in the operating theatre. The purpose of the EVD is to divert fluid (CSF and or bloods) from the ventricles. EVD system can also be used to monitor intracranial pressure (ICP). As EVD is a foreign object inserted into the brain, potential serious complications like infections, tube migration & haemorrhage may occur.



Acknowledgements

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National Neuroscience Institute
11 Jalan Tan Tock Seng
Singapore 308433
Tel: (65) 6357 7163 / 7541
Email: eventsecretariat@nni.com.sg
Website: www.nni.com.sg