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# Brunei International Medical Journal (BIMJ)

## Official Publication of The Ministry of Health and Universiti Brunei Darussalam

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The Brunei International Medical Journal (BIMJ) is a six-monthly peer-reviewed official publication of the Ministry of Health under the auspices of the Clinical Research Unit, Ministry of Health, Brunei Darussalam.

The BIMJ publishes articles ranging from original research papers, review articles, medical practice papers, special reports, audits, case reports, images of interest, education and technical/innovation papers, editorials, commentaries, and letters to the Editor. Topics of interest include all subjects that relate to clinical practice and research in all branches of medicine, basic and clinical including topics related to allied health care fields. The BIMJ welcomes manuscripts from contributors but usually solicits review articles and special reports. Proposals for review papers can be sent to the Managing Editor directly. Please refer to the contact information of the Editorial Office.

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#### Manuscript submissions

All manuscripts should be sent to the Managing Editor, BIMJ, Ministry of Health, Brunei Darussalam; e-mail: bimjonline@gmail.com. Subsequent correspondence between the BIMJ and authors will, as far as possible be conducted via email quoting the reference number.

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Ethical considerations will be taken into account in the assessment of papers that have experimental investigations of human or animal subjects. Authors should state clearly in the Materials and Methods section of the manuscript that the institutional review board has approved the project. Those investigators without such review boards should ensure that the principles outlined in the Declaration of Helsinki have been followed.

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#### Original articles

These include controlled trials, interventional studies, studies of screening and diagnostic tests, outcome studies, cost-effectiveness analyses, and large-scale epidemiological studies. The manuscript should include the following; introduction, materials

and methods, results, and conclusion. The objective should be stated clearly in the introduction. The text should not exceed 2500 words and references not more than 30.

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These are, in general, invited papers, but unsolicited reviews, if of good quality, may be considered. Reviews are systematic critical assessments of literature and data sources on clinical topics, emphasizing factors such as cause, diagnosis, prognosis,

therapy, or prevention. Reviews should be made relevant to our local setting and preferably supported by local data. The text should not exceed 3000 words and references not more than 40.

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This section usually consists of invited reports that have a significant impact on healthcare practice and usually cover disease outbreaks, management guidelines, or policy statement papers.

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#### Case reports

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This section includes papers (i.e. how to interpret ECG or chest radiography) with the particular aim of broadening knowledge or serving as revision materials. Papers will usually be invited but well-written papers on relevant topics may be accepted. The text should not exceed 1500 words and should include not more than 15 figures illustrations and references should not be more than 15.

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## PLENARY SESSIONS

### Session 1: Dementia Diagnosis, Treatment, Care and Support I:

27<sup>th</sup> October 2023 10:00 – 11:30am  
(Dewan Musyawarah)

#### P1. I am still able to live a fulfilling life despite dementia.

Emily Ong<sup>1-3</sup>

<sup>1</sup>Alzheimer's Disease International Board Member.

<sup>2</sup>Dementia Alliance International Environmental Design SiG.

<sup>3</sup>Dementia Singapore Voices for Hope.

When I was diagnosed with young-onset dementia (YOD) in 2017 there was hardly any local awareness of YOD, much less to say, support for working aged people diagnosed with dementia. After I got over the grief of the 'loss' that I experienced in the initial two years, I decided to put my lived experience into good use that will benefit others so that they do not feel alone and unsupported. I created a Facebook account under "Living with mild cognitive impairment and YOD" in 2019 to talk about my life with dementia and how I helped myself to maintain my functioning and independence. I soon realised that my lived experience could act as a powerful story-telling tool to support others with dementia and others working in healthcare and dementia care. Since then, I embarked on the advocacy journey with the call for action to change the dementia narrative and include

people with dementia in everyday life and community participation. People with dementia might need extra support but it should not be perceived as they are incapable.

#### P2. Update on diagnosis, treatment and care in the Asia-Pacific.

Susan Kurrle<sup>1</sup>, Norazieda Yassin<sup>2</sup>, Maw Pin Tan<sup>3</sup>, Michelle Anlacan<sup>4</sup>

<sup>1</sup>Faculty of Medicine and Health, University of Sydney, Sydney, New South Wales, Australia.

<sup>2</sup>Department of Neurology, Pantai Jerudong Specialist Centre, Brunei Darussalam

<sup>3</sup>Division of Geriatric Medicine, Department of Medicine, University of Malaya, Kuala Lumpur, Malaysia.

<sup>4</sup>Department of Neurosciences, College of Medicine, Philippine General Hospital, University of the Philippines, Manila, Philippines.

In this session, invited speakers from the Asia-Pacific (Australia, Brunei, Malaysia and Philippines) will share about the current status of clinical services in terms of diagnosis, treatment, care and post-diagnostic support in their locality to meet the clinical needs of people with dementia. Strengths and challenges experienced in each service as well as experiences or considerations of implementing novel biomarkers and monoclonal antibodies are discussed.

**Session 2: Dementia Diagnosis, Treatment, Care and Support II:**

**27<sup>th</sup> October 2023 2:15 – 3:15pm  
(Dewan Musyawarah)**

**P3. The convergence of stroke and dementia.**

**Nurashikin Tengah.**

**Department of Neurology, Pantai Jerudong Specialist Centre, Brunei Darussalam.**

More than half of the world population lives in Asia, mainly in developing countries, where stroke remains the biggest contributor to DALYs lost. In 2015 the World Stroke Association issued a proclamation calling for the joint prevention of stroke and dementia. The connections between stroke and dementia are multiple and interactive and therefore at present, treatments aimed at mitigating stroke risk provide our most promising opportunity to reduce rates of both. This talk discusses some of the vascular mechanisms for cognitive impairment as well as strategies targeting vascular risk that may reduce cognitive decline.

**P4. Rehabilitation in dementia.**

**Ian Cameron.**

**Faculty of Medicine and Health, University of Sydney, Sydney, New South Wales, Australia.**

The World Health Organisation has published a package of interventions for rehabilitation for dementia. The presentation will overview that publication and also consider rehabilitation for people with dementia who sustain common conditions including hip fracture and stroke.

**P5. Living with my mother's younger-onset dementia: Our second story.**

**Ren Yamanaka.**

**Second Story Corporation.**

I am Ren Yamanaka from Kochi Prefecture, Japan. In 2019, my mother, Shinobu, was diagnosed with younger-onset Alzheimer's disease when she was 41. I was 18 at that time. In those days, I did not understand my mother's illness, and I was frustrated by her forgetfulness and asking me the same thing over and over. I now understand and accept my mother's condition and am less frustrated with her. Even so, I get angry at her sometimes. But I think bickering is natural for family members and may be necessary. In 2022, Shinobu and I established a day-care centre, "Happy," collaborating with many people. "Happy" is not only a day facility to provide care but also advocates for the right to work and social inclusion of people living with dementia. This is our mission, which comes from her experience and aspiration as a person living with dementia. Rather than lump all the members together, our policy is to respect each person's wishes and support them in realising these.

I will talk about my experience as a son of a mother living with dementia, my relationship with her, our present and future activities, and my thoughts about Alzheimer's disease. Through this presentation, I hope I can interact with my peers who have a parent with younger-onset dementia.

**Session 3: Dementia Risk Reduction:**

**27<sup>th</sup> October 2023 3:15 – 4:00pm  
(Dewan Musyawarah)**

**P6. Non-communicable disease burden and surveillance in Brunei Darussalam**

**Sok King Ong<sup>1-3</sup>**

**<sup>1</sup> Department of Environmental Health Sciences, Ministry of Health, Brunei Darussalam.**

**<sup>2</sup> PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam, Brunei Darussalam.**

**<sup>3</sup> JCSPHPC, Faculty of Medicine, Chinese University of Hong Kong.**

**Background:** Dementia is closely linked to noncommunicable diseases (NCDs) risk factors, many of these factors are related to cardiovascular diseases and are modifiable. NCDs account for approximately two-thirds of premature mortality in Brunei. The probability of premature death from NCDs among individuals aged 30 to 70 years in Brunei was estimated to be 19%, while the probability is about 9% for other high-income countries in the region.

**Methods:** National health survey on NCD risk factors surveillance were conducted on 5-year intervals among adult populations in Brunei. They were conducted in 2011, 2016 and 2022 using stratified sampling methodology to ensure national representative data was collected, also adopting WHO's STEPwise methodology for NCD risks surveillance for the surveys in 2016 and 2022.

**Results:** A significant proportion of Brunei adults were found to have NCD risk factors. About 36% of men reported smoking regularly, 94% of young adults aged 18 to 29 years old did not meet the recommended fruits and vegetables consumption, 33% of females reported insufficient physical activity, 28% of adults had BMI $\geq$ 30 or obesity. 30% of men had hypertension and about 60% of those with hypertension were either undetected or untreated.

**Conclusion:** NCD risk factors pose a significant public health challenge in Brunei. The findings from national health surveys underscore the urgency of addressing NCD associated risk factors. A significant proportion of individuals at risk of NCDs were unaware, undiagnosed, or untreated for their condition. Both population strategies and targeted group interventions are required to effectively control NCDs risk factors and reduce the associated mortality and morbidity.

## References

1: Noncommunicable diseases progress monitor 2022. Geneva: World Health Organization; 2022.

2: Cross-sectional STEPwise Approach to Surveillance (STEPS) Population Survey of Noncommunicable Diseases (NCDs) and Risk Factors in Brunei Darussalam 2016. *Asia Pac J Public Health.* 2017;29(8):635-648. doi: 10.1177/1010539517738072.

## P7. Community dementia screening in Brunei Darussalam.

**Nadzirah Rosli.**

**Geriatrics and Palliative Unit, Department of Internal Medicine, RIPAS Hospital, Brunei Darussalam.**

**Background:** Brunei has a high prevalence rate of non-communicable diseases which are risk factors for dementia but a low rate of dementia diagnosis. Dementia screening was performed to identify the prevalence of risk factors and symptoms in the community.

**Methods:** This study was a community survey with cluster sampling of older people aged 60 years and above or those aged 50 years and above with risk factors for developing dementia. Participants were recruited from the community based on where older people or people with risk factors could be reached. Participants were given a questionnaire regarding risk factors, symptoms, whether there were indications of concern and a brief cognitive assessment tool (Mini-COG).

**Results:** There were 1962 participants screened in locations such as Senior Citizen Activity Centres, Health Centres, marketplaces, public awareness and screening booths and talks, village head pension collections, dialysis centres, RIPAS hospital and various government departments or ministries. There were 1358 participants who met inclusion criteria. Median age was 60 and two-thirds were female. Approximately three quarters had at least primary school education. The common risk factors were hypertension (65.7%), high cholesterol (53.2%), diabetes mellitus (35.6%) and kidney disease (17.3%). The common symptoms of demen-



tia were misplacing things (42.6%), memory loss or forgetfulness (32.5%), visuospatial difficulties (24.2%) and mood or behaviour changes (20.8%). Among those with symptoms 14.5% thought they were getting worse, while 12% thought the symptoms affected their activities of daily living (ADLs). Based on the Mini-COG, 14.5% of the participants had possible cognitive impairment.

**Conclusion:** There was a high rate of dementia symptoms and risk factors identified. A public health approach to raise awareness of dementia symptoms and strengthening of dementia risk reduction measures is warranted in Brunei Darussalam.

**P8. Mind, body and Ashwagandha: Exploring the mind-boosting benefits for ayurveda for reducing risk of dementia.**

**Jyoti Anilkumar Jha.**

**Geriatrics and Palliative Unit, Department of Internal Medicine, RIPAS Hospital, Brunei Darussalam.**

Dementia is an umbrella term describing a range of neurological conditions affecting the brain, which gets worse over time. It involves multiple cognitive domains and deficits, leading to significant impairment in social and occupational functioning. This can be distressing for the person and their families, while care can be economically burdensome for affected individuals and family members.

Alzheimer's disease, the most common type of dementia, is the 'plague of the twenty-first century', affecting many older people globally. This rise calls for finding a cure or efficient methods to prevent, manage and minimise its proliferation. Current treatment is limited to managing symptoms, while there is no treatment to prevent progression and reverse pathology of this disease. There is an immediate need to identify and develop safe therapies to manage this condition.

This review discusses a multitude of treatments borrowed from Ayurveda which finds its roots in India. This preventive medi-

cation system may delay the onset of ageing and ailments associated with it. These are used in practice since ancient times and reported to be beneficial in dementia. Ayurveda herbs mainly Ashwagandha, Brahmi, Shankhpushpi and Turmeric are extensively researched upon to demonstrate their efficacy in preclinical and clinical trials. These work mainly by acting on reactive oxygen species and oxidative stress injury by antioxidant, immunomodulation and neuro-protective mechanisms.

Neuroprotective herbs like Ashwagandha may have a place for preventing and treating dementia, and used as complementary alternative medicine for people with dementia.

**Session 4: Dementia Awareness and Friendliness:**

**28<sup>th</sup> October 2023 9:00 – 9:50am  
(Dewan Musyawarah)**

**P9. Dementia awareness and friendliness in the Asia-Pacific region.**

**Maree McCabe<sup>1</sup>, Michael Maitimoe<sup>2</sup>, Debbie Chen<sup>3</sup>.**

<sup>1</sup> **Dementia Australia.**

<sup>2</sup> **Alzheimer's Indonesia.**

<sup>3</sup> **Taiwan Alzheimer's Disease Association.**

This session aims to showcase initiatives on raising dementia awareness and friendliness in the Asia-Pacific. The three associations invited to share in this plenary session were Dementia Australia, Alzheimer's Indonesia (ALZI) and Taiwan Alzheimer's Disease Association (TADA).

**Session 5: Support for Dementia Carers:**

**28<sup>th</sup> October 2023 9:50 – 10:30am  
(Dewan Musyawarah)**

**P10. La Kopi online peer support group**

**Emily Ong<sup>1-3</sup>**

be permanent, partial or temporary. It is possible for a person to lack capacity to make one specific decision but not about another. This workshop provides an overview of the Mental Capacity Act (2008) and the Vulnerable Adults Act (2018) in Singapore. The MCA is designed to provide a regulatory framework in which a person does not have the capacity to make a decision for himself. The VAA makes provision for the safeguarding of vulnerable adults from abuse, neglect or self-neglect. Participants attending this workshop are guided to explore the fundamental principles in conducting these assessments and consider medicolegal contexts and appropriate reasons for such assessment referrals, with case discussions.

#### **LUNCHTIME SYMPOSIUM**

**28<sup>th</sup> October 2023 12:30 – 1:30pm (Bilik Sepakat 3)**

##### **Technology and dementia.**

**Jeremy Lim.**

**Quantum Leap Incorporation, Singapore.**

Amidst a rapidly ageing population and a growing number of individuals living in solitude, we are confronted with the complex task of expanding care-giving services. The scarcity of available workforce, combined with the reluctance to engage in geriatric environments and the alarming burnout rates among family caregivers, further compounds these challenges.

This topic will present the reasons behind embracing proven smart technologies as a cost-effective solution, providing security for seniors and relieving caregiver burdens in diverse settings. Furthermore, it will delve into how the exploration of integrating machine learning models in smart healthcare holds promise for early detection of health issues in isolated elderly individuals, enabling timely intervention. Through the synergistic integration of technology and compassionate

care, we endeavour to establish smarter and safer places for our seniors to live in.

#### **FEATURED BREAKOUT SESSIONS:**

##### **Session1: Youth Engagement.**

**27<sup>th</sup> October 2023 4:30 – 6:00pm  
(Dewan Musyawarah)**

##### **FBS1. Youth engagement: What you(th) can do.**

**Fatin Aimuni binti Hj Suffian<sup>1</sup>, Fatin Ari-fin<sup>2</sup>, Pg Hj Ahmad Fadillah Akhbar Pg Hj Sellahuddin<sup>3</sup>, Noor Hafizah Rashid<sup>4</sup>.**

<sup>1</sup> **CIC Group.**

<sup>2</sup> **Young Professional Network.**

<sup>3</sup> **Projek FEED.**

<sup>4</sup> **Big Bwn Project.**

The Youth Engagement is a talkshow style discussion focusing on the topic of "What You (th) Can Do?" It is a dynamic platform dedicated to empowering the youth and promoting community engagement.

This talkshow is not just about discussions; it's about action, impact, and change. Our vibrant team of young volunteers is committed to creating unity and raising awareness on active community.

##### **Session 2: Stroke and Dementia.**

**27<sup>th</sup> October 2023 4:30 – 6:00pm (Bilik Sepakat 3)**

##### **FBS2. Stroke and Dementia Forum.**

**Anas Naomi DP Hj Harun<sup>1</sup>, Anni@ Nik Ani Afiqah Hj Mohamad Tuah<sup>2</sup>, Mona Irmiana Dato Paduka Hj Mohd Alimin<sup>3</sup>.**

<sup>1</sup> **Neurology Department, Pantai Jerudong Specialist Centre, Brunei Darussalam.**

<sup>2</sup> **PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam.**

<sup>3</sup> **Rehabilitation Department, Pantai Jerudong Specialist Centre, Brunei Darussalam.**

This forum aims to highlight the co-existence of stroke and dementia especially with the huge burden of stroke in the Asia-Pacific region considering more than half of the world population lives in Asia, mainly in developing countries. The impact of stroke in this region includes decreased quality of life and higher average mortality rate compared to Europe and America. Post-stroke cognitive impairment can affect up to one-third of stroke survivors and has become a significant public health concern that is often neglected despite its increasing prevalence. The panel will explore some of the challenges with regards to the diagnosis and management of people with both stroke and dementia as well as discuss what can be done to mitigate this.

The forum discussion will start with an oral abstract presentation followed by panel discussion.

**FBS3. An audit of 1 year prevalence of MCI and dementia post-stroke.**

**Dk Nurul Hazimah Binti Pg Mohin, Nurul Zafirah Binti Hj Awg Mahli, Kyaw Zay, Pg Hjh Siti Nur'Ashikin Binti Pg DP Hj Tengah.**

**Brunei Neuroscience Stroke & Rehabilitation Centre (BNSRC), Pantai Jerudong Specialist Centre (PJSC), Brunei Darussalam.**

The Global Burden of Disease study (2019), projected a significant rise in dementia cases in Brunei from 1574 to 7317 cases by 2050. 20% of stroke patients develop dementia and 40% exhibit mild cognitive impairment (MCI) within one-year post-stroke according to the Sydney Stroke Study. The progression from MCI to dementia post-stroke is primarily attributed to multiple stroke events. Other risk factors include smoking, high body mass index and diabetes. There is no previous study of post-stroke dementia in Brunei. The objective of this study was to audit the documentation of dementia and MCI in the electronic health record of a cohort of patients one year

after stroke. 326 stroke patients admitted from 1st January to 31st December 2020 were identified from BNSRC stroke list. Case notes were reviewed for demographics, diagnosis of dementia/MCI and utilisation of cognitive assessment tools. Patients' mean age was 61 years (male 201, female 125). Only 200 had one-year follow-up documentation of which 5% and 23% were diagnosed with dementia and MCI respectively. However, cognitive assessment tools were administered to less than 55% of diagnosed patients. There was a higher prevalence of CI in men, with male-to-female ratio of 1.62. Identified risk factors included smoking (36%) and previous history of stroke (13%). Study limitations include patients lost to follow-up and delayed reviews due to COVID-19 pandemic. There was a lack of standardised assessment tools, inadequate documentation, and limited evaluation by clinical psychologists. These findings emphasised the importance of enhanced utilisation of a standardised cognitive assessment tool, consistent patient follow-up and systematic documentation of CI. In conclusion, dementia and MCI were less frequently diagnosed than expected one-year post-stroke. This audit provides insights into areas for improvement to optimise patient care in post-stroke dementia in Brunei.

**Session 3: Dementia risk reduction.**

**27<sup>th</sup> October 2023 4:30 – 6:00pm (Bilik Sepakat 4)**

**FBS4. WW-FINGERS: Building the evidence base for multimodal interventions for Alzheimer and dementia risk reduction through international collaborations. Francesca Mangialasche<sup>1,2</sup>.**

**<sup>1</sup> Division of Clinical Geriatrics, Centre for Alzheimer Research, Karolinska Institute.**

**<sup>2</sup> Karolinska University Hospital, Medical Unit Aging, Stockholm, Sweden.**

The successful FINGER multimodal intervention model combined five lifestyle-based components: dietary guidance, exercise, cognitive training, social activities, and cardiovascular risk monitoring. It highlighted the importance of targeting several risk factors and mechanisms simultaneously for an optimal preventive effect. The FINGER model is being tested and optimized in the World-Wide FINGERS (WW-FINGERS) network of multimodal dementia prevention trials (60+ countries). Advanced FINGER 2.0 models combine lifestyle interventions with putative disease-modifying drugs (DMD) using precision prevention approach. New long-term data will be presented from FINGER, as well as new achievements and developments in the global collaborative network.

**FBS5. AGELESS Study: An overview.**

**Maw Pin Tan.**

**Division of Geriatric Medicine, Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia.**

The Transforming Cognitive Frailty into Later-Life Self-Sufficiency (AGELESS) longitudinal study of ageing is a 10-year study which subsumes three pre-existing longitudinal study of ageing studies: Towards Unusual Ageing (TUA), Malaysian Elders Longitudinal Research (MELoR) and Prevent Elder Abuse and neglect initiative (PEACE). Participants were recruited between 2013-2016 from electoral rolls and sampling frames. Baseline characteristics obtained included cognition, psychosocial, physical performance, healthcare utilisation, medical history and medications. AGELESS wave 1 (2020-2022) was completed during the pandemic, using virtual interviews followed by physical assessments. The second wave has now commenced and is expected to end in Q3 2024. Imaging, EEG, caregiver burden and socioeconomic substudies are planned and ongoing. It is hoped that the AGELESS study will provide invaluable solu-

tions towards early accurate diagnosis, resource allocation, caregiver support and reduction of the burden of dementia and related negative outcomes in our region. (<https://web.facebook.com/agelessresearchmy>).

**FBS6. AGELESS study: Risk reduction intervention for dementia.**

**Suzana Shahar.**

**Centre for Healthy Aging and Wellness, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Malaysia.**

AGELESS Trial was conducted with the aim to determine the effectiveness of a 24-month multidomain intervention on reversal of cognitive frailty (CF), to evaluate its cost and to evaluate factors influencing adherence towards our intensive intervention. Community dwelling older adults, aged 60 years old were screened for cognitive and physical impairment using Clinical Dementia Rating and FRIED criteria. A number of 957 older adults were screened and 372(38.9%) met eligibility criteria and 28.5%(n=106) agreed to participate and were randomised to either intervention (n=53) or control (n=53) group. Individuals with multimorbidity, had a higher BMI, SMI, BP(systolic) and hypercholesterolemia had a higher fat free mass and physical activity level and also a faster walking speed are more likely to participate ( $p < 0.05$  for all parameters). At baseline, the intervention group apparently had a higher BMI, MUAC and waist circumference. At 12 months, 52.8% adhered at a rate of 50% and 32.1% adhered  $\geq 75\%$  of the intervention. Adherence is the least for exercise (53%) and cognitive (53%), followed by nutrition (58%), psychosocial (60%) and vascular management (91%). Preliminary findings indicated that at 12 months, the intervention showed promising results for improvement of selected cognition, physical function, nutrient intake and brain activation. In conclusion, illness or health perception influenced interest to participate in the lifestyle medication program

and adherence is the least for extensive mode of intervention.

**FBS7. Voices of Asia: A collective narratives from the people affected by dementia calling for change and improvement. Emily Ong<sup>1,2</sup>, LiYu Tang<sup>3</sup>, Jacqueline Wong<sup>1,4-8</sup>.**

<sup>1</sup> **Dementia Alliance International.**

<sup>2</sup> **Alzheimer's Disease International.**

<sup>3</sup> **Taiwan Alzheimer's Disease Association, Taiwan.**

<sup>4</sup> **Demensia Brunei, Brunei Darussalam.**

<sup>5</sup> **CommonAge, The Commonwealth Association for the Ageing.**

<sup>6</sup> **International Institute on Ageing United Nations-Malta.**

<sup>7</sup> **Civil Society Policy Forum Working Group, World Bank Group, International Monetary Fund.**

<sup>8</sup> **Social Justice, Inclusion & Equality – Open Resilient Societies Working Group, Civil Society 7, G7 Japan.**

Over 57 million people are living with dementia globally, and 68% are living in the Asia and Pacific regions and mostly in low and middle-income countries (LMICs). Dementia is a heavily stigmatised condition in these countries due to a lack of awareness and cultural context that denies its existence and the assumption that dementia is a natural part of ageing and not a result of an underlying disease. Furthermore, the inadequate preparedness of the healthcare systems in resource-poor settings worsen the situation. Therefore, there is a need to provide a platform for those living with dementia and informal carers/care partners to have their narratives to be shared and heard by those in policy-making, healthcare, social services and society as a whole. The eBook project aimed to provide a safe and collective strength to step up and advocate for change in attitudes towards dementia; raise dementia awareness to lift the silence, reduce stigma and discrimi-

nation; create a sense of comfort in talking about dementia; and work together to tackle this global health issue.

**Session 5: Environmental Design Special Interest Group.**

**29<sup>th</sup> October 2023 11:00 – 12:30pm (Bilik Sepakat 4)**

**FBS8. More meaningful experiences and participation for people living with dementia and older people through enabling design.**

**Emily Ong<sup>1,2</sup>, Jacki Liddle<sup>1,3</sup>, LiYu Tang<sup>4</sup>, HE Yanty<sup>5</sup>, Jacqueline Wong<sup>1,6-11</sup>, Jeremy Lim<sup>12</sup>.**

<sup>1</sup> **Environmental Design Special Interest Group, Dementia Alliance International.**

<sup>2</sup> **Alzheimer's Disease International.**

<sup>3</sup> **School of Health and Rehabilitation Sciences, The University of Queensland and Occupational Therapy Department Princess Alexandra Hospital, Brisbane, Australia.**

<sup>4</sup> **Taiwan Alzheimer's Disease Association, Taiwan.**

<sup>5</sup> **ASEAN Inter-Parliamentary Assembly (AIPA), Brunei.**

<sup>6</sup> **Demensia Brunei, Brunei Darussalam.**

<sup>7</sup> **CommonAge, The Commonwealth Association for the Ageing.**

<sup>8</sup> **International Institute on Ageing United Nations-Malta.**

<sup>9</sup> **Dementia Alliance International.**

<sup>10</sup> **Civil Society Policy Forum Working Group, World Bank Group, International Monetary Fund.**

<sup>11</sup> **Social Justice, Inclusion & Equality – Open Resilient Societies Working Group, Civil Society 7, G7 Japan.**

<sup>12</sup> **Quantum Leap Incorporation, Singapore.**

The ways in which communities, technologies and buildings are designed can make older people and people living with dementia feel